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PART ONE
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Introduction to Economics

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CHAPTER I

INTRODUCTORY

§1. **Definition and scope of economics.**—'Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being. Thus it is on the one side a study of wealth, and on the other, and more important side, a part of the study of man. For man's character has been moulded by his everyday work, and the material resources he thereby procures, more than by any other influence' (Marshall).

Different writers on economics describe their subject-matter in different words. Some of the definitions, such as the one given by Marshall, are elaborate and others comparatively simple.¹ It matters little which of these definitions we adopt, so long as it serves to bring out two fundamental points, namely that (i) economics is a *social science*, that is, it considers man not in isolation, but as a member of a group; and that (ii) it considers only that part of his activities which is related to the acquisition and enjoyment of *wealth*.

§2. **Is economics a science or an art?**—The full title of Adam Smith's famous treatise is *An Inquiry into the Nature and Causes of the Wealth of Nations*. This seems to suggest that he wanted, in the course of his study, to elaborate canons of practice that might be useful to practical statesmen. And as a matter of fact, he does not draw a clear distinction between the study of political economy regarded as a science and the study regarded as an art. Later writers have generally emphasized the character of economics as a science. This means that we are more concerned to discover laws (uniformities and sequences) than to lay down rules of conduct for statesmen or practical men of business.

¹ Here are a few more definitions:

'Economics is the science of getting and spending wealth.'

'Economics is the science which treats of those social phenomena which are due to the wealth-getting and wealth-using activities of man.'

'Economics is the study of the making, exchanging, sharing, and using of wealth.'

Our business is to *describe* more than to *prescribe*. Our standpoint is positive and scientific rather than practical or ethical.

§3. **Practical value of a study of economics.**—The economist does not set out with any definite intention of laying down rules of practical conduct. But this does not mean that his investigations have no practical value. As a matter of fact they are of the highest practical value. If the economist discovers that such and such causes lead to the increase of national wealth, and that such and such other causes lead to the decline of national wealth, the practical statesman will naturally encourage the former set of causes and avoid the latter. One of the most practical questions of the day is whether it is possible to abolish poverty and to give everybody the means of leading a comfortable and cultured life. And since the economist rightly believes that his studies go, if not the whole way, at least a long way towards answering this question, the science of economics must necessarily be helpful to the social reformer. The statesman, the business man and the worker will all benefit similarly by a sound knowledge of economics. It will broaden their vision and it will stimulate their faculty of sympathy. The difficulties between capitalists and workers, for example, will be lessened if either party learns to appreciate at its true worth the part played by the other in the joint task of wealth-production. We have said enough to help the student to realize that the study of economics, besides providing a valuable mental discipline (being in this respect comparable to mathematics), possesses a high practical value. It is indeed true that there are many important questions affecting our happiness involving other than economic considerations, and obviously economics can have no voice in settling these. On the other hand, economic considerations have to be taken into account, along with other considerations, in deciding many equally important questions; and there are questions where economic considerations alone count, and have to be admitted as of predominant importance.

§4. **Assumptions of economics.**—In order to obtain exact results, hypothetical and abstract economists have used the conception of the Economic Man. It is assumed that the Economic Man always seeks pleasure and avoids pain; that, for him, pleasure consists in the pursuit of wealth, and pain in doing the necessary work for obtaining wealth. Such a person is further held to be subject to *free competition*, and to move freely from place to place, and from one occu-

pation to another, as directed by self-interest. Certain familiar statements which are laid down by economists follow from these simple assumptions; for instance, the statements that capital will flow in the direction of the highest interest, that labourers will move readily to places or occupations where they can earn the highest wages, and that there can be only one price for the same commodity in a given market at any given time.

These assumptions are not entirely true. But they are sufficiently true to serve as starting-points, and that is why the conclusions drawn from them have been found by experience to be useful as guides to the understanding of economic phenomena. Whether we like it or not, we have to admit that there is no other motive which exercises such a powerful and continuous influence on human conduct as the economic motive. To the question whether this characteristic of human nature is not deplorable, the strait-laced economist has no answer as an economist. He will say: 'I am concerned with "what is" and not with "what ought to be",—with *facts*, not with *ideals*. It is not for me to approve or to disapprove, but to take facts as they are and argue on their basis.' However, if pressed for an answer, he will say that the motive of economic betterment which wields such a universal power over civilized mankind, is not necessarily a selfish or ignoble motive. In modern society it commonly expresses itself in the desire for the acquisition of money, which gives its possessor a command over wealth or the good things of life. If a man wishes to earn money in order to gain independence and to be able to lead a cultured and refined life, we must regard this as a laudable desire. As Marshall puts it: 'Money is a means towards ends, and if the ends are noble, the desire for the means is not ignoble. The lad who works hard and saves all he can, in order to be able to pay his way afterwards at a University, is eager for money; but his eagerness is not ignoble. In short, money is general purchasing power, and is sought as a means to all kinds of ends, high as well as low, spiritual as well as material.' Marshall further points out that the desire for money does not exclude other influences such as the pleasure afforded to a person by work which brings him money, the instinct of power which is satisfied by the possession of money, the desire to provide adequately for one's family, or motives of philanthropy.

But to return to our point. Strictly speaking it is not the business of the economist to pass moral judgement on the

universal prevalence of the economic motive. He notes the fact that it exists, and makes a special study of it. He is, however, far from holding that human conduct is (or ought to be) under the sole dominion of the economic motive, and from time to time he finds it necessary to call attention to the fact that strictly economic conclusions require modification so as to allow due weight to the operation of other influences. If money is the point on which the main interest of the economist converges, this is because he, like every other specialist, is entitled to mark out his own particular field of investigation, and secondly because 'in this world of ours it is the one convenient means of measuring human motive on a large scale' (Marshall).

§5. **The question of method.**—There are two well-known methods adopted in pursuing scientific investigations: the *deductive* and the *inductive* method. In the deductive method we proceed from a few simple well-established propositions or assumptions such as those referred to above. From these we draw a number of conclusions and see how far they are supported by actual facts. If the facts do not support our conclusions, we shall be impelled to find out the reason, and may succeed in discovering the existence of counteracting causes; or perhaps we may find it necessary to accept a certain correction or rectification of our original assumptions.

In addition, we draw upon economic history, statistical records or personal observation, and collect what appears to us to be a sufficient number of particular instances, from which we proceed to generalize. These generalizations may again be tested by referring to actual experience, and amended as may be necessary.

In economics, as in most other sciences, we find that the most serviceable results are reached by a judicious combination of both these methods. Marshall says we may best begin our study of economics with a preliminary simplification, by drawing a ring-fence round the particular phenomena to be studied and regarding them in temporary isolation. In the beginning we may chiefly use deduction, but induction must soon follow, and every step and conclusion must be compared with the infinite variety of real life.

✓ §6. **Nature of economic laws.**—The laws of all sciences are hypothetical or conditional. They state that, given certain conditions, certain results follow. The laws of economics are also similarly hypothetical or conditional. If the conditions are there, the stated consequences will follow.

For example, if prices rise, demand will contract. It may, however, sometimes happen that even if prices rise, demand may remain the same as, or may even be greater than, before; and this may be due to the fact that demand also has risen at the same time as prices. Because there is no actual contraction in demand as the statement of the law leads us to expect, it would not be right to say that the law is invalid. What we ought to recognize is that, though the law is perfectly valid, its appropriate effect is masked or cancelled by the operation of another equally valid economic law, which says that 'if demand rises, prices rise also'. When two separate causes, each operating in a different direction, are at work simultaneously, the final result, as actually experienced, will depend on the relative strength of the two causes. If an object is being pushed and pulled at the same time, it will remain stationary if the two forces applied are equal in strength; otherwise it will move forward or backward according to whether the pushing or the pulling is the more vigorous. This analogy applies fully to the operation of economic causes. In order to draw attention to possible counteracting causes, we usually say in economics that such and such causes *tend* to produce such and such effects. Or the same object is served by adding a qualification to the statement of a law such as 'other things remaining the same', or 'in the absence of counteracting causes'. All scientific laws are in this sense merely statements of *tendencies*, and it is a mistake to suppose that this characteristic belongs only to economic laws. There is, however, a sense in which economic laws differ from scientific laws proper. They are more liable to refuse to fit in with actual facts, because they deal with human behaviour, and since human beings (unlike natural forces) have a will of their own, we can never be quite sure that they will always react in a particular manner to certain given conditions.¹ This element of uncertainty would have been very much greater if we had been dealing with the behaviour of *individuals*. But in economics we deal *not with individuals but with groups*, and it is possible to be more confident about the behaviour of groups than of individuals. We may not feel certain about

¹ Another reason is that the scope for experiment (for isolating causes in order to observe their effects) is very limited in economics. If we want to observe the effects on the wages of labourers if their numbers are reduced by half, we cannot kill off half the labouring population or deport it to another planet.

an individual, that because the price of a commodity has fallen he will buy more of it. But we can make such a statement with considerable confidence with regard to a market or a whole group of buyers.

While, owing to reasons indicated above, economic laws are not so exact as those of the physical sciences, they possess greater exactitude than the laws of the other social sciences. This is due to the fact that the particular human motives with which economics is concerned are *measurable in terms of money*. As the other social sciences do not possess any such measure, their conclusions are necessarily vaguer and more indefinite. Economic laws being *hypothetical* statements, must not be confused with statutory, moral, customary or religious laws, which are commands. Any citizen proved to have disobeyed any command of the State has to suffer the appropriate punishment. Society has also its own more or less effective way of punishing breaches of moral, customary or religious laws by mere disapproval or, in more serious cases, by fines or social ostracism. Economic laws on the other hand, are not commands in this sense. They are in the indicative mood and not in the imperative mood. They do not say: 'Do this' or 'Do not do this', but assert that certain causes are followed by certain effects. If we do not desire the effects, then it is open to us to avoid the causes or to counteract them. There is no such thing as 'disobeying' or 'acting contrary to the laws of political economy', for the simple reason that these laws do not command us to act or refrain from acting in a particular way. We may of course act in ignorance of these laws or fail to understand them, just as we may fail to understand a proposition of Euclid. Yet we do not talk of disobeying a proposition of Euclid, and strictly speaking it is quite as absurd to talk of disobeying or acting contrary to an economic law.

§7. **Principal divisions of economics and the inter-relation between them.**—Economics, as said above, deals with man in relation to wealth. In the complex economic organization of modern society the activities of man in relation to wealth have to be studied from various points of view, namely, consumption, production, exchange, and distribution of wealth. These give us the four principal branches or divisions of economics. In view, however, of the important role played by modern States in the economic life of the community, State economics or the economics of government, of which public finance is the most vital aspect, may be added as the fifth division of economics.

It is necessary to emphasize that none of these divisions can be altogether isolated from the others. Let us see how they are interrelated and interdependent. We shall also thereby gain a general idea of the principal topics of economics.

(i) *Consumption of wealth*.—Since the existence of our wants is the starting-point and basis of all economic activity, logically perhaps the theory of wants, or consumption of wealth, ought to be treated first.¹

By 'consumption of wealth' we mean the use of wealth for the satisfaction of our various wants and desires for material and non-material things. Consumption is negative production. Just as man can produce only utilities, so he can consume nothing but utilities. Often consumption is nothing more than *usage*, as when we *use* furniture or houses or enjoy pictures. The study of consumption, which will be undertaken in detail later, includes a consideration of various questions, such as the characteristics and classification of wants, the Law of Diminishing Utility, the principle of equimarginal utility, Engel's Law of Family Expenditure, consumer's surplus, the Law of Demand, etc.

(ii) *Production of wealth*.—Next follows the study of production of wealth. It is obvious that man cannot create matter any more than he can destroy it. He can, however, create *utilities*, which is a very different thing. This means that he can transform, adjust and arrange matter or materials supplied by nature so as to endow them with utility, i.e. to bring them into a condition in which they can be used for the satisfaction of his wants. Production therefore means the creation of utilities.² Under Production we discuss the main factors of production, namely land, labour, capital and organization; the different branches of production, e.g. agriculture, manufactures and mining; the Laws of Returns, namely diminishing, increasing and constant returns; and industrial organization including combinations, trusts and cartels, division of labour and localization of industry.

Relation between consumption and production.—All wealth that is produced is sooner or later consumed; in fact

¹ This subject was until recently neglected by economists. Thanks however to the psychological studies of human desires and wants by economists of the Austrian school and other modern economists like Marshall, the theory of consumption is now receiving greater attention.

² Production involves the creation of one or other of three kinds of utilities: *form utilities*, *place utilities* and *time utilities*. See ch. v, §1.

consumption is the sole purpose of production. Production is the means and consumption is the end. Being the source of all economic activity, consumption directs the course of production. Production in its turn influences consumption for the obvious reason that the volume of production sets a limit to the amount of consumption and determines the standard of life of a people. Economically advanced countries like the United Kingdom or the United States have a much higher standard of life than economically backward countries like India and China with their low production. Again, whether consumption is rational or not has an obvious bearing on economic efficiency and ultimate welfare.

In a sense the production of wealth involves the consumption of commodities or energy. However, this is not consumption proper. For example, the consumption of coal by an engine is really an act of production. This is sometimes referred to as 'productive consumption'. On the other hand, consumption of wealth ('final consumption') as such leads to the *direct* satisfaction of human wants.

(iii) *Exchange of wealth*.—Under the present economic organization no one is self-sufficient. Each individual is ordinarily dependent on others for the satisfaction of his needs, because each specializes in the production of some particular commodity or service. What he does not produce himself he must obtain from others in exchange for what he does produce. Exchange is thus a vital part of our present economic system, and we shall have to consider various problems such as the basis of exchange and valuation, the mechanism of exchange-markets, money, credit and banking, and international trade.

Relation between production and exchange.—Most production nowadays being for the market and ordinarily not for the direct satisfaction of the producer's own needs, production and exchange are closely interrelated. Indeed exchange may be regarded as the last link in the chain of production, which is not complete unless the commodity or service that is produced is placed in the hands of the consumer. Exchange thus is the connecting link between production and consumption in modern economic society. Nevertheless value and exchange raise so many complex and far-reaching issues that they demand separate treatment.

(iv) *Distribution of wealth*.—The apportionment of the wealth that is produced among the various factors of production that have collaborated in its production is called the distribution of wealth. Four principal shares may be distin-

guished : (a) Rent, the share of nature or land, (b) Wages, the reward of labour, (c) Interest, the income of capital and (d) Profits, the remuneration of enterprise. In our complex economic organization, it is by no means easy precisely to determine these respective shares. In fact, the subject of distribution of wealth is the most controversial one in the whole field of economics, and impinges upon some of the most important current problems and controversies, e.g. the struggle between capital and labour, and the issues raised by the criticisms of the existing economic system in general and that of distribution of wealth in particular, by the various schools of socialism. We shall consider some of these questions in Chapter XVI.

Relation of distribution to consumption of wealth.—Distribution is connected with consumption since it determines the relative standard of living of the various productive classes.

Relation of distribution to production of wealth.—The volume of production determines the magnitude of the various shares in the aggregate. The national dividend available for distribution and the shares of the various factors depend on the efficiency of the productive system. But production in its turn is influenced by distribution : for example, a defective and unjust system of distribution of wealth would impoverish production, besides leading to other undesirable social consequences.

Relation of distribution to exchange of wealth.—Distribution and exchange (and value) are also connected with each other. It is instructive to consider distribution as an illustration of the theory of exchange-value. The various shares—rent, wages, interest and profits—may be looked upon as the values or prices paid for obtaining the services of the respective factors of production, though we must also pay some attention to the historical aspect of distribution. The different factors of production have certain peculiarities which distinguish them from ordinary commodities, and we must also consider the institutional basis of distribution, e.g. the system of private property and inheritance. All these special problems make it necessary to consider the subject of distribution of wealth separately. We cannot treat it merely as part of the problem of value.

(v) *Economics of government.*—We have already explained above why the economics of government, or public finance, is considered today as the fifth division of our subject. The abandonment of the *laissez-faire* creed, the growing

range of the economic functions undertaken by modern States under socialistic influences, the complex problems of public finance in general and of war finance in particular, the increasing importance attached to economic planning by the State—all these considerations emphasize the need for a study of this branch of economics in any systematic treatise. It must include a study of the theory and practice of the economic functions of modern governments, the principles of taxation and public expenditure, public debt, etc.

§8. **Relation of economics to other social sciences.**—

Economics being a study of man (in relation to wealth) as a member of society, is closely related to other social sciences, such as sociology, politics, jurisprudence and ethics.

(i) *Economics and sociology.*—At the outset we may refer to the view put forward by Comte and other writers that economics is merely a branch of sociology, which is the general science of man and of society or social relations. They argued that all aspects of social life are so closely connected that a special study of any one of them must be futile. They urged on the economists the necessity of abandoning their special study of economics and devoting their energies to one unified and all-embracing social science. But as Marshall points out, a unified social science, however desirable, is unattainable, for the whole range of man's actions in society is too wide and too various to be analysed and explained by a single intellectual effort.¹ While Comte showed well the evils of extreme specialization, he failed to prove that there should be no specialization at all. No doubt, the social forces act and react upon one another and therefore no science has absolutely clear-cut boundaries. It is also true that wealth, the subject-matter of economics, cannot be treated in isolation from the social phenomena connected with Church and State, standards of morality, the system of jurisprudence and so on, particularly when the economist proceeds beyond mere wealth and touches on the practical problems of welfare.² We may further remind ourselves that in our final decision in regard to many social problems,

¹ A. Marshall, *Principles of Economics*, 8th ed., Appendix C.

² cf. 'Economics is not a complete philosophy of society, it does not give a complete account even of that part of human conduct which it studies. The social relations to which business gives rise are the subject-matter not only of economics, but also of the science of politics, the study of social action in general, and of ethics, the study of conduct in general.'—H. Clay, *Economics for the General Reader*, p. 16.

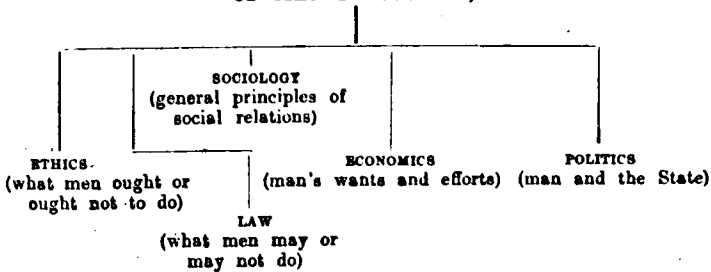
economic considerations may have to yield to political or ethical ones.

The best plan would therefore be, while treating economics as a separate social science, to discuss its points of contact with other allied social sciences. The separation of economics is essential for economic investigation and for a proper comprehension of economic principles; while the study of its relations to other sciences enables us to view it in its proper perspective in the scheme of social sciences.¹

(ii) *Economics and politics*.—Economics as we know deals with man's activities in pursuit of wealth; while politics deals with government and the relations of the citizens to the State. Since economic activity is carried on within the framework of the State, it is possible for the latter consciously to modify economic conditions by its policy and laws in relation to trade, taxation, labour conditions and land. On the other hand, economic conditions of production and distribution considerably influence the forms and functions of government. Thus the structure and the functions of the Government of a pastoral country are naturally quite different from those of a highly industrialized country. Finally, there are certain problems common to both the sciences (e.g. the problems of State industries, currency and taxation) though their viewpoints are different, the viewpoint of politics being administrative, whereas economics is concerned with wealth and economic efficiency. The wide extension of the economic functions of the State in recent times has increased the points of contact between

¹ The scope of the different social sciences is roughly indicated by the following diagram:—

SOCIAL SCIENCES (DEALING WITH THE VARIOUS RELATIONS OF MEN IN SOCIETY)



—Sir Henry Penson, *The Economics of Everyday Life*, Part I, p. 6.

economics and politics and there is a better appreciation of each other's point of view on the part of the politician and the economist.

(iii) *Economics and jurisprudence*.—Much the same relationship also subsists between economics and jurisprudence, the science of law which seeks to lay down what an individual may or may not do. Legislation is moulded largely by social and economic conditions, which in their turn are influenced by law. Thus while factory legislation is the outcome of the Industrial Revolution, the Law of Primogeniture leads to concentration of land in a few hands, and the principle of equal inheritance ensures a widespread division of property although it also leads to a minute fragmentation of land.

(iv) *Economics and ethics*.—The relationship between economics and ethics has been the subject of a prolonged and bitter controversy. Some writers have imagined a perennial conflict between economics (the 'science of the purse') and ethics (the 'science of conscience'). Writers like Ruskin have given many hard names to economics, calling it a 'bastard science of darkness', and a 'dismal science of "illth" rather than wealth'. Such an attack on economics was perhaps not altogether unjustified at the time it was delivered, because in the name of economic laws writers on the subject did seem to support the view that the State must not intervene to stop the abuses of capitalistic power or to prevent the exploitation of the workers by employers. This opposition to beneficent legislation like the Factory Acts was, however, based on a grievous error, as modern economists have abundantly recognized. The strictures of Ruskin and others apply to economics in error and not to economics as correctly expounded. At the present moment they would be grossly unfair. As already hinted, economics does not inculcate the love of money, but merely explains how all men are moved by the desire to live well and therefore to seek the acquisition of material objects essential for life. At the worst, the standpoint of economics may be regarded as unmoral or a-moral (i.e. ethically neutral), but not immoral. It is true that there is no perfect agreement as to the extent of the friendly contact between these two sciences. Both being essentially social sciences studying the welfare of society, we obviously cannot divorce one from the other, and there is a considerable justification for the view that 'what is economically advantageous must in the long run be right, and what is correct in ethics must in the end also be profitable to the

business world'.¹ Thus 'Honesty is the best policy' is as much a maxim of business as of ethics. Nevertheless we can never with profit conjoin the two sciences. For 'ethics is at once a science and an art: its function is to investigate the laws of morality and to formulate rules of conduct. . . . Plainly the scope of ethics is wider than that of economics'.² Economics, on the other hand, is mainly a positive science explaining economic facts and phenomena as they are and as a rule not sitting in judgement on them. While no economist can altogether ignore ethical considerations when discussing many economic problems, particularly those of the distribution of wealth, he is not justified in encroaching upon the province of ethics and in insisting on the application of ethical ideas to economic concepts. We must, however, admit that recent economic thought is coming more and more under the influence of ethics.

§9. **Relation of economics to some other sciences.**—

Economics has points of contact with some other sciences also. Thus the facts of the physical world and important scientific discoveries and inventions obviously influence economic conditions in a country. But as a matter of scientific classification the investigation of these physical facts belongs not to economics but to the various *physical sciences*. The conclusions of these other sciences are taken as the basis of economic reasoning, but they are not in themselves economic laws.

More intimate are the relations of economics to *psychology*. Many of the basic postulates of economics in relation to the study of man's desires, efforts and satisfactions are essentially psychological. The increasing attention that industrial psychology is receiving in our own times points in the same direction. Here again, a complete assimilation of economics and psychology is neither possible nor desirable. The economist simply avails himself of certain fundamental principles and conclusions of psychology.

Economics is also related to *mathematics and statistics*, but largely as to the method followed. Thus the mathematical school has applied mathematical concepts to economic problems, making extensive use of algebraic formulae, equations, diagrams and graphs. Some of the economic problems such as market value, the quantity theory of money, or the Law of Diminishing Utility deal with quantitative relations

¹ E. R. A. Seligman, *Principles of Economics*, p. 35.

² Sir John Marriott, *Economics and Ethics*, p. 10.

and can be treated as equations of supply and demand and illustrated by means of graphs. Such a presentation helps our understanding and makes for precision and accuracy. However, as Seligman remarks, 'the advocates of the Mathematical method (like Cournot, Jevons and Marshall) are apt to overshoot the mark. . . . The mathematical method is the abstract method pushed to the extreme.' Human aspirations and human needs cannot be pent up within the limits of a mathematical formula'.¹ The mathematical method has obvious limitations and should be used with caution.

As regards statistics, while the use of the statistical or inductive method of reasoning is very helpful for purposes of illustration, it cannot be depended upon for helping us to formulate economic laws. The danger of the statistical or the concrete method is opposite to that of the mathematical method. Statistics may simply encumber economics with masses of figures without helping us to deduce any general principles from them.

SUMMARY

Economics is the study of mankind in the ordinary business of life, i.e. the business of acquiring and spending wealth. It is concerned with man as engaged in this kind of activity. However, what it considers in this connexion is not *individual* human action but the action of groups of human beings.

In economics our primary business is to understand things as they are, to explain the forces actually in operation in the economic sphere. We are not concerned with laying down rules of conduct for the individual or the nation. That is to say, *economics is more a science than an art*. The line dividing the two is, however, a thin one, and economics is tending to have a rapidly increasing influence in shaping practical affairs. A sound knowledge of economics is of great use to the statesman, the business man and the worker and should be helpful in promoting social harmony.

Economic reasoning is based on several assumptions. One of these is that of the *Economic Man*, supposed to be always moved by the motive of getting the maximum of wealth with the minimum of effort—able and willing to transfer his labour or capital freely as dictated by this motive. These assumptions are not wholly correct but sufficiently correct, so that conclusions drawn from them are sufficiently valid.

The economist neither welcomes nor regrets the predominance of the *economic motive*. He takes facts as they are. (The motive of making money is not necessarily a sordid motive. It is mean or noble according to the uses to which money is put.) Nor does the economist hold that the *economic motive* is or ought to be the sole motive of human conduct. He admits (and often rejoices at the fact) that non-economic motives sometimes

¹ Seligman, op. cit., p. 31.

exercise a powerful influence on human conduct; and he may even find it necessary to modify his conclusions or his assumptions so as to make them consistent with the actual facts of life.

But in the main his arguments take it for granted that man is guided by his ideas of self-interest.

In economics, as in most other sciences, the most satisfactory results are reached by using both *induction* and *deduction*, supplementing and checking each of these methods by the other.

The laws of all sciences are hypothetical. *Economic laws* are not an exception to this rule. They are statements of *tendencies*. They state that certain effects will follow from certain causes in the absence of counteracting or modifying causes. If counteracting causes are present, the effects may not be visible or may be only partially visible.

One special element of uncertainty in economic laws is that they deal with human behaviour, and the behaviour of men is uncertain. Fortunately, however, the behaviour of *groups* of human beings, with which alone economics is concerned, is more calculable than the behaviour of *individuals*, with which economics has nothing to do.

Because economics has to do with human behaviour and because in the sphere of economics there is hardly any scope for experiment, economic laws are less exact than the laws of the physical sciences. But they are more exact than the laws of other social sciences, the reason being that economic motives can be measured by money. No such measure is available to the other social sciences, like ethics and politics.

Economic laws must not be confused with statutory, moral or customary laws, which are commands and not mere statements telling us how certain causes are followed by certain effects.

The principal divisions of economics are Consumption, Production, Exchange and Distribution of Wealth. Public Finance, in view of its present-day importance, may be regarded as a fifth division.

These divisions, however, are more or less *closely interrelated* with one another.

Consumption, i.e. the satisfaction of human wants through the use of wealth, is the ultimate aim of all economic activity, so that it is connected in a vital manner with all the other branches of economics. It is clearly connected with production, as the end is connected with the means: such things are produced as are required to be consumed. Consumption also reacts on production in the sense that rational consumption increases, as irrational consumption injures, the productive capacity of a community. On the other hand, the volume of production determines the standard of living (consumption).

By *production* we understand the creation of economic utilities, as by consumption we understand the use of economic utilities for the satisfaction we derive from them.

Production and exchange.—Under our present economic system production is generally for sale (i.e. exchange). In fact until what is produced reaches the hands of the consumer (i.e. until it is sold), the process of production is strictly speaking not complete. Production and exchange are thus closely linked together.

Distribution.—Every act of wealth-production involves the coöperation of those who possess the four 'factors' or 'agents' of production, namely Land, Labour, Capital and Organizing Ability. The wealth that is produced by their coöperation is shared by them and goes out as Rent, Wages, Interest and Profit. Under Distribution we explain the manner in which these shares are determined.

Distribution and consumption.—Distribution is related to consumption because it determines the relative standard of living of the four productive classes.

Distribution and production.—Production influences distribution for the same reason that it influences consumption. The amount of what is produced is also the amount available for distribution, and determines the possible magnitude of the different shares.

Distribution in its turn reacts on production. For instance, any prevalent system of distribution may result in each of the factors receiving its due, in which case wealth will be produced satisfactorily. Otherwise, if any of the factors gets less than its due it will not be willing or able to make its contribution effectively, and consequently the aggregate wealth produced will be less than before.

Distribution and exchange.—Rent, Wages, Interest and Profits, however, can be regarded as cases of value (or exchange). Thus wages are the value of labour, rent is the value of land and so on.

Although these different departments of economics are related to each other, they cannot all be merged into one single department. We have to treat them separately because such separation helps us in economic analysis. Besides although each of these departments has affinities with others, each also has its own special problems which are best treated separately.

Economics and sociology.—Sociology is a general science of man and social relations. Although all aspects of social life are closely interrelated, it is not desirable to treat economics, politics, etc. as mere branches of sociology, since one single science cannot do justice to the whole range of man's actions in society. The best plan is to treat economics as a separate social science and at the same time to bear in mind that it has points of contact with other social sciences.

Economics and politics.—Economics is closely related to politics, which deals with government and the relations of the citizens to the State. While economic conditions are modified by the policy of the State, the structure and functions of the Government, are in turn influenced by conditions of production and distribution. Lastly, both economics and politics have certain common problems, such as currency, taxation and State industries, though the viewpoints of the two sciences are different.

Economics' and jurisprudence.—A similar relationship exists between economics and jurisprudence, which is the science of law. While legislation is moulded by economic conditions, these in turn are influenced by law.

Economics and ethics.—Some writers like Ruskin have condemned economics as a dismal science which is in conflict with ethics. This charge is, however, unfair. Economics does not inculcate the love of money, but merely explains how men are moved by the desire to live. At the worst economics may be regarded as an *unmoral*, but not an *immoral*, science.

Since both economics and ethics as social sciences are interested in the welfare of society, one cannot be divorced from the other. At the same time, complete fusion of the two sciences is to be deprecated. The economist is not justified in unduly encroaching on the province of ethics and in constantly applying ethical ideas to economic concepts.

Relation of economics to some other sciences.—Economics is also related to other sciences, for instance to the physical sciences which deal with the facts of the physical world influencing economic development.

Economics is more intimately connected with psychology, since many of the assumptions of economics in relation to man's desires, efforts and satisfactions are essentially psychological.

Economics is also related to mathematics and statistics largely by reason of the method followed. The analytical mathematical method—applied with due attention to economic problems like value, is useful for a better understanding of these problems. The statistical method is helpful for illustrating economic laws but not for discovering them.

CHAPTER II

LANDMARKS OF ECONOMIC DEVELOPMENT

EARLIER STAGES OF DEVELOPMENT

§1. **Root-grubbing and hunting stages.**—The following usual classification of the stages in economic development is helpful, especially for the understanding of earlier economic life: (i) the Hunting stage; (ii) the Pastoral stage; (iii) the Agricultural stage; (iv) the Commercial stage; and (v) the Industrial stage.¹

In the remote past savage man lived on wild roots and fruits, and in many cases practised cannibalism. He had no more needs than the brute animal, like whom he lived a precarious existence. The root-grubbing stage was followed by the hunting stage, the transition being facilitated by the abundance of game and the use of weapons, as civilization progressed from the early Paleolithic to the New Stone age and later to the Bronze and Iron ages. The earliest weapons consisted of objects ready at hand—wooden sticks, animal bones, tusks and teeth, pieces of stone and combinations of these. The invention of fire and the employment of metals led to an immense improvement in tools and weapons—arrows, knives, javelins, hammers, mill-stones, daggers and saws. The hunting tribes would constantly move from one game area to another as the older areas were exhausted. Where conditions were favourable, men took to fishing and developed the skill and the methods connected with it.

§2. **The pastoral stage.**—With the growth of population the need for a less precarious and more abundant food supply was felt, and domestication of animals partially took the place of destruction of animals by hunting. The tending of flocks of sheep and herds of cattle was now extensively practised to secure a more permanent supply of food, and incidentally to obtain clothing and transport facilities. The pastoral stage was incompatible with settled abodes. In this stage, as cattle came to be highly prized, the conception of private property in them arose, and inequality of wealth emerged owing to differences in the number of cattle owned.

¹ See Seligman, *op. cit.*, pp. 69-70.

§3. **The agricultural stage.**—The transition to this stage was gradual. Even in the hunting stage, there was a primitive type of agriculture practised by the womenfolk. Side by side with the domestication of wild animals, we have domestication of wild plants, and in course of time agriculture appears with regular cultivation of land and settled abodes. There were more assured and growing supplies of food for man and cattle, and it became possible to support a larger population on a given area of land. Men came to be organized in patriarchal families, and the need for hard work on the land and for protection led to the use of captives in warfare as slaves. Land was held in communal ownership, but houses and moveables were the property of the family. These agricultural households or families were largely self-sufficing and had hardly any occasion to deal with the outside world. Gradually, a collection of such families gave rise to villages or village communities leading a simple, self-sufficient life. Villages sometimes developed into towns, where commercial, religious or political factors favoured such a development.

§4. **Transition to commercial and industrial stages.**—No dogmatic statement can be made regarding the exact chronological sequence of the stages so far described. It is even less safe to be dogmatic about the sequence in the case of the later stages. Sometimes, the commercial stage followed and at other times preceded the agricultural stage. 'In the case of many coastal peoples, the fishing and commercial stages appear at the same time without the intervention of agriculture' (Seligman). It is also clear that the agricultural stage was not altogether superseded by the later commercial and industrial stages, although of course it was greatly modified. For example, extensive cultivation gave place to more intensive methods of cultivation, and in recent times agriculture is getting mechanized or industrialized so that its organization is becoming akin to large-scale industrial organization.¹

Instead of laying down any invariable order in which one stage follows another, it is more instructive to study economic development, especially in its later stages, from the fundamental point of view of the relation between producer and consumer. This involves the study of the improving technique of production, the growing division of labour, the widening of the markets, and the introduction of money and credit economy.

¹ See ch. viii, §§23-4.

LATER STAGES OF DEVELOPMENT

§5. **Stages of industrial evolution.**—We may roughly distinguish four successive stages or types of industrial evolution: (i) Family Economy; (ii) the Guild or Handicraft System; (iii) Domestic Industry; and (iv) the modern Industrial or Factory System (Capitalist or Industrial Economy). We shall now proceed to describe the salient features of each of these stages.

§6. (i) **Family Economy.**—In Europe, broadly speaking, until the beginning of the Middle Ages the self-sufficing family system prevailed. The family unit, which was generally large and often included slaves and serfs, produced all that it wanted and consumed all that it produced. Collective production and consumption with a simple division of labour among the various members of the family was its main characteristic. Thus the family raised its own food, made its own clothing, put up its own houses, and met its other needs from its own resources. Naturally, in the more conservative atmosphere of agriculture in the villages, this self-sufficing family system survived longer than in the industrial and commercial towns.

§7. (ii) **The Guild (Handicraft) System.**—Gradually the self-sufficiency of the family broke down, and a body of professional craftsmen came into existence. To begin with, the family group took the occasional help of outsiders or itinerant workers, such as carpenters and cobblers, who were supplied with the necessary materials by the family groups who invited them. With decay of slavery and the extension of economic activity, the itinerant workers were transformed into permanent autonomous craftsmen who began to work in their own houses with their own tools and on their own raw materials, and disposed of their goods in their own shops: they often continued to cultivate their small holdings also. Production in this stage is still on a small scale and there is as yet no intermediary between producer and consumer. The market is small and near at hand, and the producer (smith, cobbler, carpenter, potter, weaver, etc.) is in direct touch with the consumer. An important feature of the handicrafts system was the association of the members of a trade or occupation into crafts or merchant guilds with their apprentices, journeymen and master-craftsmen. Religious motives (e.g. worship of a common saint) and community of professional interest were the ties holding together these functional groups, which regulated the quality

of the products and their price, and also looked after the welfare of their members. Each guild was keen on maintaining its monopoly of a particular trade. This is the famous guild system which flourished in Europe in the Middle Ages. At one time the guilds acquired political domination and the manors sank to the position of purveyors of raw materials to the town guilds. In India also, the various caste groups, or caste *panchayats*, for a long time performed functions similar to those undertaken by the European craft guilds.¹

The guild system could work only so long as the market was local and narrow. But it gradually broke down as commerce began to extend towards the close of the Middle Ages and distant markets had to be catered for. Another cause of its decay was the abuse of their monopoly and privilege by the richer guilds, which resulted in shutting out the majority of workmen from the prospect of ever becoming master-craftsmen.

§8. (iii) **The Domestic System.**—'The next stage is marked by the advent of various kinds of commercial middlemen, who act as intermediaries between the actual workers in their small domestic workshops and the final purchasers; the widening of the market being both the cause and the result of their appearance.'² The workman was thus differentiated from the capitalist employer and partially lost his economic independence, since he was now supplied with raw materials by the employer, who also disposed of the finished product. It is however called the domestic system since the worker still continued to work in his house and usually with his own tools, unlike in the succeeding factory system. Division of labour in this stage proceeds a step further under the supervision of the capitalist middleman. This was the prevailing type of industrial organization on the eve of the Industrial Revolution in England about the middle of the eighteenth century. In India, the domestic system of industry still largely survives, though it is being gradually displaced by the factory system.

§9. (iv) **The Factory System.**—The Industrial Revolution, the advent of machinery, large-scale production and world-wide markets—all these are closely connected with the establishment of the factory system which is the typical form of modern industry. The capitalist employer now acquires

¹ See Part II, ch. i, §23.

² Sir W. J. Ashley, *The Economic Organization of England*, p. 36.

complete control over the industry, which is conducted in his own workshop or factory with the help of hired labour. The workman of course is too poor to own either the machinery and the factory or the raw materials, and is now reduced to the position of a mere wage-earner, providing only the labour-force in return for a stipulated wage. The owners as controllers of capital not only find the market for their goods, but themselves organize and regulate the processes of manufacture. The most recent phase of the factory system is seen in the present tendency towards consolidation and integration of industry by the formation of vast industrial combinations, such as trusts and cartels.¹ Perhaps the most important feature of the factory system is production in anticipation of demand. We have also a very complex division of labour and the rule of competition instead of custom. Also, barter has been displaced by a money and credit economy and markets have become national and international in scope.

§10. **Survivals of the domestic system.**—While the factory system is the typical form of business enterprise today, it must not be supposed that other forms have been completely supplanted by it. The domestic system is still prevalent, especially in certain trades, such as ready-made clothing, weaving, lace-work, hosiery, glove-knitting, clock-making, and cane-work. It also exists in the so-called 'sweated trades' which are a blot on the present economic system and in which employers exploit the worst-paid labour of women, aliens and other necessitous persons who are content to work for the smallest addition to their income.

Small-scale industry or domestic industry is still the predominant type in India, and it is discussed in Part II under the heading of Cottage Industries.²

THE INDUSTRIAL REVOLUTION IN ENGLAND

§11. **Meaning of 'Industrial Revolution'.**—The last stage in economic development is compendiously described by the term 'Industrial Revolution'. This term is used to indicate all those changes in the conditions of life and labour brought about by the application of power to industry and transport, and the consequent substitution of the factory for the older domestic system, the introduction of new methods of production and of transport, and generally the progressive control over the forces of nature, which have

¹ See ch. viii, §31.

² Ch. iv, §14.

been made to yield increasing quantities of wealth as well as more and more varieties of it. The period of English economic history covered by the Industrial Revolution roughly extends over a century, from 1750 to 1850.

While the Industrial Revolution in England was catastrophic in one sense (since it involved changes in social and economic life so complete and so rapid as to be properly indicated by the term 'Revolution'), in another sense it was merely a culmination of the movements which had been in operation for nearly two hundred years. These movements came to a head and acquired a sufficient momentum about the middle of the eighteenth century to cause those spectacular changes with which the name Industrial Revolution is particularly associated. The Industrial Revolution first made its appearance in England, but subsequently other countries passed through it with more or less similar results. It is thus a world-wide phenomenon. It may be said to have started in India since about the middle of the nineteenth century and in Part II we shall describe in some detail its effects on the economic structure of the country.

§12. **England before the Industrial Revolution.**—Before the Industrial Revolution in England, the conditions of economic life in agriculture, industry, trade and transport were not unlike those prevailing in India in the beginning of the nineteenth century. England was then mainly an agricultural country, and both agriculture and industry were carried on on a small scale by yeoman and artisan. The transport system was primitive, and enforced a life of self-sufficiency on the local units. Trade was not much developed and the bulk of the internal trade was conducted at weekly markets and fairs.

(i) *Agriculture.*—Agriculture was conducted in the peasant village (known as the manor in the Middle Ages). Land was unenclosed and was under the primitive tillage of the common field system. The agrarian system of the Middle Ages was still in force. The arable land of each village was divided into three great strips, subdivided by 'baulks' three yards wide. The holdings of the peasants lay dispersed all over these strips and they were all bound to follow the same customary tillage; one strip was left fallow every year and on the other two were grown wheat and barley and sometimes oats. The meadows were also held in common, and the householders had common rights of grazing on the land.

(ii) *Industries.*—Industry was conducted on a small

scale by the artisans in their own houses under the domestic system of industry. Already, however, various sorts of commercial middlemen had made their appearance between the worker and the consumer, although in some centres of the woollen industry (the principal manufacturing industry of the time), such as the West Riding of Yorkshire, the non-capitalist domestic industry still survived. Another industry of the time was the iron trade, then languishing owing to the exhaustion of the forests, which were drawn upon for charcoal: coal had not as yet come to be used for smelting iron ore. The other trades were the hardware trade in Sheffield and Birmingham, linen at Dundee, and the pottery, hosiery and silk trades. The cotton trade of Lancashire, now so famous throughout the world, was at this period quite insignificant. Adam Smith mentions it only once—and that merely incidentally—in his *Wealth of Nations*. The mechanical arts were in a backward state. Even in the woollen trade, which was the staple industry of the country, the division of labour was still simple, although certain improvements, notably the fly-shuttle invented by Kay in 1738, had been adopted. The division of labour was necessarily limited because of the limited extent of the market due to undeveloped transport and communications. England, however, had certain advantages over other European nations in this respect since special facilities for water carriage were afforded by her rivers, and there were no internal barriers to trade, as there were for example in France. A feature of the industry of the time was the combination of agriculture and industry. The artisans and small master-manufacturers combined the pursuit of their handicrafts with the culture of small freehold pasture farms. Already, however, there was a tendency for the capitalist to extend his control over industry, and there were cases where factories of hand-loom were established by an industrial capitalist on his own premises, where the workers had to go for their work.

(iii) *Transport system and exchange*.—In respect of transport, eighteenth-century England was one of the most backward of European countries. The roads were 'execrable' according to Arthur Young, being often mere horse-tracks across a miry common, or a watery hollow lane. During winter, communication was seriously interrupted. Wheeled traffic was slow, and in many places impossible. Pack-horses had to be extensively used. The coach service was slow and infrequent. There was risk to life and property on the roads, which were infested by highwaymen. Agriculture

and trade were thus greatly hampered. Markets were narrow and uncertain, and severely limited the scope for division of labour. Little wonder, therefore, that England was divided into a number of self-sufficient and isolated units and communities. Commerce was confined to a few articles of small bulk and great value, and the English village had to satisfy locally most of its wants in food, clothing, pottery, implements, etc. In the country at large there were great annual fairs, held at certain places like Stourbridge (near Cambridge), where men from all over the country and even from the continent met to buy and sell. There were also local markets for certain industries, and some internal commerce was conducted by travelling merchants and pedlars. Shops existed only in towns.

(iv) *Population*.—The growth of population was at the rate of 5·6% annually as compared with 14% during the next fifty years, and this slow growth was a reflex of the slow development of agriculture and industry. The south was by far the most populous and the richest part of England, and the shifting of the centres of population from the south to the north, which was such an important feature of the new industrial epoch, had only just begun to show itself. England was still mainly an agricultural country.

(v) *Economic policy*.—The economic policy of the State throughout the seventeenth and eighteenth centuries was that of detailed State regulation of the economic life of the nation in its external as well as internal aspects. Under mercantilist influences, the foreign trade of the country was subjected to severe restrictions, especially on the import side; the objects aimed at being national strength (which was thought to consist in a very special manner in the abundance of precious metals) and the protection of home industries like the woollen industry, and of agriculture, against foreign competition. Internally also, ever since the Tudor period, the State had attempted, through the Justices of the Peace, to control trade by the determination of wages, regulation of apprenticeship, supervision of the quality of wares, poor relief, etc.

§13. Why the Industrial Revolution first took place in England.—There are many circumstances in the history of England which serve to explain why the Industrial Revolution made its appearance there first. The commercial revolution of the sixteenth and seventeenth centuries, caused by the discovery of America and the all-sea route to India, was the necessary preliminary to the later Industrial

Revolution, since it transformed and extended the scope for internal commerce. Wide markets came into existence to absorb the mass-production of the Industrial Revolution. In the struggle for colonial and naval supremacy with Holland and France, England ultimately emerged victorious, and this enabled her to derive the largest benefit from the new commerce. Various other factors favoured the progress of the new movement in England, such as her insular position, internal free trade, the establishment of a Parliamentary form of Government dominated by a landed aristocracy with a strong industrial and commercial bent, the healthy mistrust of State regulation engendered by the memories of the Stuart despotism, a policy of religious toleration which welcomed the immigration of skilled foreign artisans, and the opportune development of banking and credit. The lull in religious and political controversy and excitement further helped to concentrate attention on industry, and stimulated mechanical inventions, into the service of which were pressed the ardour and imagination already fired by the discoveries of physical science and the revival of mathematics.¹

§14. **Four main aspects of the Industrial Revolution in England.**—The English Industrial Revolution had four main aspects, namely revolution (i) in Agriculture, (ii) in Transport, (iii) in Industry, and (iv) in Economic Thought and Policy.

(i) *Revolution in agriculture.*—The change began in agriculture. The wasteful common field system was supplanted by a new system of land tenure and a much more efficient agriculture, using new crop manures and implements thanks to the advance in agricultural science. Land was enclosed; but the Enclosure Movement, facilitated by a Parliament dominated by landlords, resulted in the disappearance of the yeomanry and the emergence of a class of landless labourers and of capitalist tenant farmers employing them. Thus arose the present triple division of the big landlord, the capitalist farmer, and the landless agricultural labourer.

(ii & iii) *Revolution in transport and industry.*—The Industrial Revolution manifested itself also (a) in the improved means of communication, such as turnpike roads and navigable canals, (b) in the introduction of a variety of inventions in the coal, iron and textile industries [notably Hargreaves' Spinning Jenny (1770), Arkwright's Water Frame (1769), Crompton's Mule (1779), Watt's Steam En-

¹ J. L. and B. Hammond, *The Rise of Modern Industry*, pp. 64-5.

gine (1769) and Cartwright's Power-Loom (1785)] and (c) in the establishment of the factory system, which involved production on a large scale and extensive use of machinery in place of human labour. About 1825, started another revolution in transport methods and communication, which in the fulness of time brought the railway, the steamship and the telegraph. This further transformed the economic life of England, which soon came to depend upon the exchange of her mineral wealth, manufactured goods and shipping services for food-stuffs and raw materials imported from abroad. She thus definitely lost her old national self-sufficiency, and her existence came to depend chiefly upon the maintenance of her vast foreign trade. Starting with the textile, coal-mining and iron industries, the Industrial Revolution gradually spread to other manufactures, and its progress was facilitated by the organization of joint-stock companies with limited liability, and by the extension of credit and banking.

(iv) *Revolution in economic thought and policy.*—In sympathy with these changes, economic thought took a new direction from the time of Adam Smith onwards. It now came to be based on the principle of natural liberty and individual enterprise as opposed to the old system of detailed State regulation, against which Adam Smith's *Wealth of Nations* was in great part a well-reasoned and powerful protest. The new economic school adopted *laissez-faire* (let alone) as its motto and was responsible for the wholesale repeal of the old Elizabethan regulations and statutes in regard to wages, apprenticeship, etc., thus removing all obstacles in the way of capitalistic enterprise and free competition and greatly hastening the pace of the Industrial Revolution. It must be remembered, however, that the *laissez-faire* policy, while it accelerated the pace of the Industrial Revolution, aggravated the evils of the period of transition, inseparable from any revolutionary change, and postponed the redress of the many social and economic grievances which had arisen mainly from the Industrial Revolution. The agitation in favour of the removal of all restrictions on foreign trade took a longer time to bear fruit. It was only about the middle of the nineteenth century that the Corn Laws—the last stronghold of Protectionism—were repealed.

§15. *Results of the Industrial Revolution.*—Such far-reaching changes in the technique of production, economic organization and thought could not fail to produce striking results, both desirable and undesirable.

(i) In the first place, there was an immense increase in the production of wealth, a vast extension of internal and external trade, and expansion of credit and banking.

(ii) Secondly, the position of the population of England underwent fundamental changes. There was a rapid increase in total numbers as also a tremendous movement of the population from the south to the midlands and the north, which became now the beehive of modern industry. There was also a big increase in the urban population.

(iii) Thirdly, there were fundamental changes in the social and economic organization of the country, with the balance of social and political power turned in favour of the capitalist classes, to the detriment of the working classes, both in industry and in agriculture.

(iv) Fourthly, domestic industry was supplanted by the large-scale factory with its thousands of 'hands' (factory labourers). They were connected with the capitalist by no other bond than the cash nexus which took the place of the old human relations between master and workmen.

(v) Fifthly, the concentration of capital and the instruments of production in the hands of a small moneyed class led to the divorce between the working and owning classes, and split society into two hostile camps at war with each other.

(vi) Sixthly, the insecure and precarious life of the labourer living under an ever-present threat of unemployment, the frequent strikes and lockouts throwing society out of gear, and the dislocation of the economic equilibrium due to recurrent crises, came to be the features of the new industrial order, and society was faced with new and complex social, political and economic problems. In short, the Industrial Revolution created the new problems of wealth without welfare and of economic instability, which are yet far from being solved. Modern socialism may be regarded as a protest against the glaring defects of the new economic system, especially on its distributive side, and against the evils of the control of the system by private capitalists. It has succeeded in discrediting the old *laissez-faire* policy and in persuading modern States to undertake measures of amelioration. Factory or labour legislation, to which every modern State has resorted more or less wholeheartedly, has necessarily meant the curtailment of the liberty of the employer, by limiting the hours of work, and the age of employment, by prohibiting the employment of women at night, etc. It has also secured various advantages to the workers,

such as the privilege of forming Trade Unions, a system of insurance against unemployment and sickness, compensation for injuries received in the course of employment, maternity benefits and old age pensions.¹ State regulation of the economic affairs of the nation has once again become a normal feature, although it is obvious that its aims, ideals and methods are not the same as before.

SUMMARY

Economic life, as at present lived by civilized man, is the outcome of prolonged process of evolution.

In the earliest stages man lived on wild roots and fruit and in this 'root-grubbing' stage there was nothing to distinguish his manner of living from that of any other wild animal.

The next stage was the *hunting stage* in the course of which man learnt to fashion and use various crude weapons, which improved with the invention of fire and the employment of metals.

The third stage, known as the *pastoral stage*, was characterized by the domestication of animals which provided the means for a more reliable and more plentiful food supply than before.

The *agricultural stage*, which was the next advance, was marked by the organization of men in patriarchal families which settled down in definite localities for regular cultivation of land. The old mode of life, which involved constant wandering over 'the surface of the earth, was discovered to be unsatisfactory. Land was held in communal ownership and the need for hard work and protection led to the institution of slavery. These agricultural households became eventually enlarged into self-sufficing village communities.

While it may be permissible to distinguish the different stages of economic evolution as more advanced and less advanced, we must guard against any assumption as to an invariable order in which one stage was succeeded by another. The sequence is not always the same. In some cases some intervening stage may be missed altogether. And more than one stage may exist together side by side.

The later development of economic life takes us to the different *stages of industrial evolution*.

First we have the *Family Economy* under which the family unit, large in size and including slaves and serfs, produced everything it wanted and itself consumed everything that it produced.

Secondly, we have the *Handicrafts System* under which a body of professional craftsmen or specialists came into existence. These autonomous craftsmen necessarily worked on a small scale and catered for a limited market in which the producer was in direct touch with the consumer.

An important feature of the handicrafts system was the association of members of an occupation into guilds.

¹ See also ch. xvi, §§9-13.

This *guild system* flourished in Europe in the Middle Ages. But it broke down towards the close of the Middle Ages when commerce assumed an international aspect.

The next system, known as the *Domestic System*, was marked by the advent of various kinds of middlemen who appeared as capitalistic employers of the craftsmen toiling in their small domestic workshops, now separated from the final purchasers. However, though the workman lost his independence, he continued to work in his own house, and usually with his own tools. Under the supervision of the capitalistic middleman a certain amount of division of labour did take place, but it was rather rudimentary.

The last stage is ushered in by the appearance of the *Factory System* after the Industrial Revolution with its machines, its large-scale production and its world-wide markets. The semi-autonomous worker was transformed into the factory wage-earner. Production now is in anticipation of demand. And the division of labour becomes very complex.

The establishment of the factory system was the result of the *Industrial Revolution* which, owing to certain favourable physical, political and social conditions, first occurred in England and roughly covered the period from 1750 to 1850. The Industrial Revolution completely transformed conditions of economic life.

In *agriculture* the wasteful common field system with its dispersed holdings gave place to a more efficient system. Some of the important phases of this evolution were the enclosure of land, the disappearance of the old yeoman class and finally the emergence of a class of landless labourers working for a wage under capitalist employers who secured land on lease from the big landlords.

An important aspect of the revolution was a rapid improvement in the system of *transport and communication*. Better roads and canals and later the railway, the steamship and the telegraph—all these enormously widened the scope of internal and international commerce.

The introduction of a *variety of intentions* in the coal, iron, and textile industries, joint-stock companies, the development of credit and banking, were some of the factors which made England the workshop of the world. England hereafter found it enormously profitable to concentrate on manufactures which flooded the whole world, and in return for her manufactures to import food and raw materials from abroad.

Before the Industrial Revolution, England was divided into a number of isolated and self-sufficient towns and villages with industry organized on the lines of the domestic system, and carried on with the aid of comparatively simple implements. During the seventeenth and eighteenth centuries detailed regulation had characterized the policy of the State towards industry and trade. It came to be felt as unduly restrictive, and Adam Smith's powerful advocacy of natural liberty in his *Wealth of Nations* helped materially in making a clean sweep of all this restrictive regulation and giving complete freedom to capitalistic enterprise and to domestic as well as international trade. The new *laissez-faire* policy greatly accelerated the pace of the Industrial Revolution. It also, however, brought in its train a number of very serious social evils.

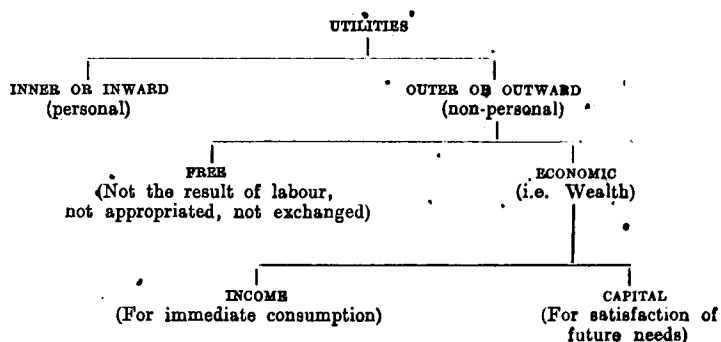
The *results of the Industrial Revolution* in England were: (i) an immense increase in prosperity; (ii) a rapid increase of population and a great shifting of it from the south to the midlands and the north; (iii) the concentration of political and social power in the hands of the capitalistic class and a lowering of the status of the worker in agriculture as well as in industry; (iv) the substitution of large-scale production for the domestic-industry type of production; (v) the splitting of society into two hostile camps, the owning employer class and the wage-earning class; and (vi) added insecurity of the economic life of the worker, industrial disharmony and recurrent economic crises.

CHAPTER III

SOME FUNDAMENTAL CONCEPTS OF ECONOMICS

✓ §1. **Utility.**—The student will find the following scheme very helpful in understanding certain fundamental economic concepts which we are now about to discuss :

CLASSIFICATION OF UTILITIES¹



Economic utilities have three distinctive marks : (i) labour, (ii) appropriation, and (iii) exchange-value. When we talk of utilities (or goods) we mean things that possess utility (or value-in-use, as it is sometimes called).²

Utility is the capacity to satisfy a human desire or serve a human purpose. From a moral point of view it is a colourless word. When we say a certain object has utility, we do not mean that it *ought* to be valued. We simply refer to the fact that, rightly or wrongly, it *is* valued, that people desire to possess it.

As the classification given above shows, all utilities are not economic, i.e. are not wealth. Utilities like air and light, which are given free by nature and in unlimited quantities, however vitally useful they may be and although recognized as such by human beings, are nevertheless not wealth.

¹ See J. S. Nicholson, *Principles of Political Economy*, vol. I, p. 31.

² 'Utility' may mean the quality which makes a thing desirable, or it may signify the desirable thing itself. From the context the reader can easily find out which meaning is intended.

§2. **Characteristics of wealth.**—Let us enumerate the characteristics of wealth :

(i) In the first place it *possesses utility*.

(ii) Secondly, it is *limited in quantity*. (Because it is as a general rule the result of human labour; and human labour as well as the natural resources on which it operates to produce wealth are limited. There are a few cases of wealth where human labour or sacrifice is not involved but where the term 'wealth' is justified because of the presence of other characteristics like limitedness of quantity and utility.)

(iii) Thirdly, *wealth is transferable*. It is not necessary that it should be bodily shifted, but at least the right to it should be transferable. For example, a house cannot itself be transferred, but the right to it can be.

(iv) *Wealth possesses exchange-value*. That is, it can be exchanged for other forms of wealth.

(v) *Wealth should be capable of being appropriated*. That is, one should be able to possess or enjoy it, to the exclusion of others. Unless it can be made the subject of private property, nobody will pay anything for it, that is, it will possess no exchange-value.

Having stated the characteristic attributes of wealth, let us now apply our knowledge to a few sample instances.

Is the love of a mother for her child wealth? Although one of the most valuable things on earth, it is not wealth. It is not bought and sold, nor are the many voluntary services which are rendered freely by the affectionate mother to her child.

There is nothing in our definition of wealth to suggest that it consists only of *material* things. The *services* of a servant or labourer for which wages are paid, the services of a manager or official for which he gets a salary, the professional services of a lawyer and doctor for which fees are paid, are all wealth. So are the services of a singer whom you have to pay to hear.

A man's *internal qualities and aptitudes* (e.g. the special skill of a surgeon or the singer's vocal chords) are *not wealth*, because although they may be a source of wealth they are not themselves transferable.

Non-material external goods consisting of relations beneficial to a man with other people are wealth because they can be bought and sold. Thus when a business changes hands, very often the sale price includes not only the value of the tangible assets but also the value of what is known as the

'goodwill' of the business, which consists of the advantage which the business has acquired and the probability of continued custom owing to the reputation already established. In the same manner a retiring doctor or lawyer may sell his practice.

§3. **Classification of wealth.**—The following classification is given by Marshall.¹ It will assist the student in clarifying his ideas. He should study it and compare it with Nicholson's classification quoted at the beginning of this chapter.

Goods are	i. External	{	material	{	Transferable (house, furniture).
			personal		Non-transferable (sunlight, climate).
	ii. Internal	{	personal	{	Transferable (goodwill of a business).
			personal		Non-transferable (i.e. that part of a person's business connexion which depends on personal trust in him).
					Non-transferable (i.e. a person's qualities and faculties for action and enjoyment, e.g. business ability, professional skill, etc.).

§4. **Wealth of an individual.**—We may now proceed to suggest an answer to the questions (i) what is the wealth of an individual, and (ii) what is the wealth of a nation?

The *wealth of an individual* comprises the following principal items:

(a) In the first place, there are the material possessions exclusively owned by the individual, such as his house and farm, furniture and books. These are of course all transferable and exchangeable. Individual wealth also includes any shares in public companies, debenture bonds, mortgages and other obligations which a person may hold requiring others to pay money or goods to him. On the other hand, in order to ascertain his true net wealth we must deduct the debts which he owes to others.²

(b) Secondly, we have those non-material goods

¹ Marshall, *op. cit.*, p. 55.

² *ibid.*, pp. 56-60.

belonging to an individual which are external to him and which enable him to acquire material goods, e.g. his business or professional connexions, and especially that goodwill of his business which can be transferred by sale to a newcomer. But as a general rule, we exclude all his personal qualities and faculties, such as his personal skill, because they are internal to him and not transferable.

(c) Finally, a man enjoys certain goods in common with his neighbours. They do not belong to him alone. These include civil and military security and the right to make use of public property and institutions—such as roads, street-lights, public parks and museums,—rights to justice and free education. We are thus led to consider collective, national, or social wealth.

✓ §5. **National or social wealth.**—(i) In the first place, the wealth of a nation includes the aggregate wealth of its members and citizens as defined above. All internal debts due from one member of the nation to another should be omitted in order to avoid double counting of the same item. We must, however, deduct bonds held by foreigners from the national wealth, or any other external debt of the country. We must at the same time add bonds and shares held abroad by the citizens of a State.

(ii) Secondly, national wealth includes *public* material property of all kinds, such as roads, canals, buildings. There is, however, usually a heavy item of 'negative' wealth in the form of a large public debt to be set against this collective wealth.

(iii) Thirdly, some economists like Marshall reckon for many purposes some of the more important free gifts of nature which influence national wealth. So the Thames may be regarded as part of England's wealth and the Ganges and the Himalayas as part of India's wealth. On the other hand, other writers like Seligman are rigidly logical and contend that these free gifts are the *basis* of wealth, not wealth itself.

(iv) German economists have emphasized the non-material elements of national wealth; for example, the organization of a free and well-ordered State or the industrial faculties of the people. While we can count as the wealth of a nation advantages which it enjoys over other nations, we must exclude whatever is cosmopolitan in character, e.g. scientific skill which, although it may originate in one nation, tends nowadays to be quickly copied by rival nations and thus becomes universal or cosmopolitan.

§6. **Cosmopolitan wealth.**—This notion follows from the extension of the concept of national wealth to the whole globe. It is obvious that we must omit international debts in estimating cosmopolitan wealth. Under cosmopolitan wealth, we may include such things as the ocean which facilitates commerce and must be regarded as one of the most valuable assets of the world. As already observed, scientific skill and mechanical invention are nowadays cosmopolitan in their character and form part of the cosmopolitan wealth, or the wealth of the whole world.

§7. **Income.**—The concept of wealth leads to that of *income*. There are two measures of wealth: (i) income and (ii) capital. Income means a flow or stream of satisfactions, while capital means a stock or fund of a series of satisfactions. We may thus say that a man is worth Rs. 10,000 or that he is worth Rs. 500 *a year*. The income-measure psychologically and fundamentally means pleasure and benefit income, but because nowadays we are all living under a system of money economy and exchange, income has come to mean primarily money income. It is on the whole more satisfactory to measure national wealth with reference to income than with reference to capital. If a person is engaged in business, his net or true income is found by deducting from his gross income 'the outgoings that belong to its production'. Services rendered to oneself, e.g. ironing one's own clothes, or services rendered to one's family, like those of the housewife, are not included in this income, since they are free.

§8. **National income.**—By 'national income' or 'national dividend' we mean that part of the net income of a country which can be measured in money. Marshall's definition is classical: 'The labour and capital resources of a country acting on its natural resources, produces annually a certain net aggregate of commodities, material and immaterial, including services of all kinds. This is the true net annual income or revenue of the country or the national dividend.'¹

§9. **Value.**—The concept of value is ultimately connected with that of wealth and demands some consideration in this chapter, although a great deal more will be said about it in Chapter IX. Value is the central concept of economics as well as its greatest puzzle. It cannot be neglected in the study of production of wealth, because much that is produced is in anticipation of demand at a certain *price*. It cannot

¹ See ch. xiii. §2.

be understood apart from consumption. It underlies the study of distribution of wealth, and its intimate connexion with exchange is obvious. If, after Seligman, we define wealth as consisting of things possessing value, we may define economics as the 'science of value'.¹

The term 'value' is ambiguous. It is sometimes loosely used to signify utility. When we talk of *value-in-use* we mean the actual satisfaction which may vary from individual to individual. Similarly *intrinsic value* means the inherent capacity possessed by an object of yielding satisfaction, or the esteem in which we *ought* to hold things in accordance with some semi-ethical standard of judgement, and we contrast 'value-in-use' and 'intrinsic value' with value that is current—the value that is expressed by the actual rate of exchange. Strictly speaking, however, in economics we ought always to use the term 'value' in the sense of *value-in-exchange*. The concept of exchange-value dominates the whole of our science, as we are living under a system of constant exchange or interchange of wealth or possessions. The exchange-value of one thing in terms of another at any given time and place is the amount of the second thing which can be had there and then in exchange for the first. It means its rate of exchangeability.

Value is the result of the *social* estimates of goods effected by transferring them in exchange. We often say that we never know the value of anything until we have to do without it. This partially expresses the essential truth of the idea of value, which is, that we never know how much we value a thing till we come to *exchange it for something else*.²

§10. *Price*.—Since exchange-value means relative exchange power we can measure the value, say, of a house in terms of any other commodity, like cows, sheep, rice or salt, and we may say that its exchange-value is 10 cows, or 100 sheep, or 5 maunds of rice, or 500 maunds of salt. We are, however, no longer living under a system of barter or direct exchange of goods for goods. Exchange is now effected by money (gold or silver coins or notes), that is by a common medium of exchange, which also functions as a common measure of values.³ This leads us to the conception of *price*, which is defined as exchange-value expressed in terms of money. Thus we may say that the price of a house is

¹ Seligman, *op. cit.*, p. 11.

² J. A. Todd, *The Science of Prices*, 2nd ed., p. 17.

³ See ch. x, §§1-3.

Rs. 500, or that of a coat is Rs. 10, or of a pen, As. 2, and so on. If we know these prices, we also know their relative values. Thus we can say that the value of the house is 50 coats or fifty times as much as that of the coat. 'Value' and 'price' are often used as interchangeable terms. But this is not correct. (All values (i.e. exchange-values) cannot rise or fall together. If for example the exchange-value of a house falls from 100 sheep to 70 sheep it means that the value of sheep has risen. All *prices* may rise or fall together, but not all *values*.) If the prices of *all* things rise this means that their *value* in terms of money has gone up, i.e. the *value of money* has gone *down* in terms of commodities.¹

§11. **Value and utility.**—While no article can possess any value unless it has utility, the two terms must be carefully distinguished. The concept of value is more complex than that of utility. In the first place, value is a relative notion of the same order as weight or size.² It necessarily implies a comparison between two or more objects and expresses a relation between them at a particular place or time. Utility is a simpler concept and it does not imply comparison between one object and another. In the second place, value implies scarcity, i.e. insufficiency of quantity in relation to demand, or difficulty of acquisition. That is why air, while it has infinite utility, has no value since it is unlimited in supply, while articles like gold or a diamond, which are scarce in relation to the demand for them, command a high value in exchange.³ This was what the old economists had in mind when they said that air has great value-in-use (i.e. utility) but no value-in-exchange.

SUMMARY

Utility means the capacity to satisfy a human desire or serve a human purpose. Things possessing this capacity are called 'utilities' or 'goods'.

Utilities are divided into:

- (i) 'Free utilities' and
- (ii) 'Economic utilities' or 'Wealth'.

Wealth possesses the following characteristics:

- (a) It has utility.
- (b) It is limited in quantity, and is generally the result of human labour.
- (c) It is transferable.

¹ See ch. x, §26.

² C. Gide, *Principles of Political Economy*, p. 45.

³ See also ch. iv, §5.

- (d) It possesses exchange-value.
- (e) It is capable of being appropriated.

Wealth consists of *material as well as non-material external goods*.

Individual wealth must be distinguished from *national wealth*.

Individual wealth:

(i) Material possessions (including evidences of debts owing from others) owned *exclusively* by the individual.

(ii) The individual's external, transferable *non-material* goods (like the goodwill of a business). We may also say that *his share* of common goods like public parks is part of his wealth.

National wealth:

(i) But such common material property *as a whole* is part of collective or *national wealth*.

(ii) The wealth of a nation also includes the aggregate wealth of its citizens (omitting their debts to one another) *minus* their debts to foreigners, *plus* any debts which foreigners owe them.

(iii) Gifts of nature—like the Ganges—which are the *basis* of the national wealth are not always regarded as being themselves part of national wealth.

(iv) Superior political organization and higher economic faculty and efficiency as compared with other nations are important *non-material* elements of national wealth.

Any advantages of direct, or indirect economic importance owned by all the nations in *common*, e.g. the ocean as a highway of commerce, progress of scientific invention, etc., may be said to constitute *cosmopolitan wealth*.

National wealth or capital can be conceived of as a *fund or stock* from which various satisfactions are derived. The actual *stream or flow* of satisfactions issuing from this fund or stock over a period, say, of a year, is the *national income or national dividend*.

National income is a better measure of economic progress than *national capital*.

Value is a central concept of economics. By 'value', in economics, we mean 'value-in-exchange', that is, the power of getting in exchange other commodities.

Value expressed in terms of money is called '*price*'.

Value expresses a relation and is therefore a relative term.

All values cannot rise or fall together, but all prices may rise or fall together.

The concept of value is more complex than that of utility, and is of the same order as weight or size. Value implies scarcity, or difficulty of acquisition.

CHAPTER IV

CONSUMPTION : THE THEORY OF WANTS

§1. **Consumption the end of all economic activity.**—The existence of human wants is the starting-point of all economic activity, and the satisfaction of human wants, i.e. consumption, is the end of all economic activity. All wealth that is produced is sooner or later consumed. Production is justified not in itself but only in so far as the wealth that is produced is consumed. Production is subordinate to consumption, production being the means, and consumption the end. The primary importance of consumption is, however, obscured because under our present economic system production is conducted mainly for profit and not for the direct satisfaction of the needs of the producer himself. The vital connexion between production and consumption is obvious, and difficulties arise at once if production is out of relation with consumption, i.e. if more or less is produced than can be effectively disposed of.

§2. **Human wants and their characteristics.**—Economic activity is due to the fact that human beings have a number of wants which cannot be satisfied without effort. The great characteristic of these wants is that there is no limit to them. *The insatiability of human wants in general* has always been one of the principal themes of the preacher and the moralist. When we have got one thing we desire to possess something else, and then a third thing, and so on indefinitely. Every step in human progress is marked by a growth in the number and variety of wants. We are constantly becoming acquainted with new ways of enjoyment, and as we get used to them, we come to think of them as necessities.

Although wants in general are insatiable, with very few exceptions¹ *every single want is satiable.*

¹ As an instance of *insatiable* wants it is usual to cite the case of the stamp-collector whose desire for more increases with every addition to his stock, because what he is aiming at is a bigger collection than anybody else's. Another common instance is that of the miser whose desire for money increases with the growth of his accumulation. It may be objected that since money is a means of satisfying wants in general and since wants in general have no limit, the miser's case is after all not an exception. This objection would have been valid if the miser had intended

Wants may sometimes be *complementary* and joined together: for example, desire for tea involves at the same time desire for milk and sugar. Another instance is desire for things which are sold in pairs like shoes, one shoe being useless without the other.

Many wants are such that their satisfaction can be secured by making use *alternatively* of more things than one. Thus hunger can be satisfied by consuming any of the numerous things that are eatable. The desire for a mild stimulant may be satisfied by tea or coffee. The desire for amusement may be satisfied by the cinema or perhaps by a novel.

§3. **Law of Diminishing Utility.**—The fact noted above that each single want is completely satiable sooner or later has given rise to the familiar statement known as the Law of Diminishing Utility. Marshall expresses it thus: 'The *total utility* of a thing to anyone (that is, the total pleasure or other benefit it yields him) increases with every increase in his stock of it,¹ but not as fast as his stock increases.'² In simple language all that this means is that the more of a thing we have, the less we want it.

The Law of Diminishing Utility holds good for all kinds of satisfaction but subject to the following qualifications:

(i) Up to a point every addition may yield not decreasing but increasing satisfaction. To a very thirsty man, for example, an excessively small quantity of water will bring a greater craving for water and for some time every addition will be attended with greater and greater satisfaction.

(ii) It is assumed that the units are consumed in quick succession. If a man has drunk glass after glass of water until his thirst is fully assuaged, he will refuse to drink more for the time being. But this does not mean that he will equally refuse it after the lapse of a considerable interval, when he may be thirsty again.

(iii) We also assume that the intervals are not so long as to admit of any radical change in the person himself. A partly educated man, for instance, after repeated readings

to spend his accumulations on various objects of desire. But as he values money and hoards it for its own sake, it is on the whole better to admit his case as an exception to the general rule.

¹ It should, however, be noted that after a point every further increase in the stock or every additional unit consumed will not only yield no further satisfaction but will cause positive inconvenience or pain, e.g. an additional chair in an already overcrowded drawing-room, or an additional morsel of food on a full stomach.

² Marshall, *Principles of Economics*, 5th ed., p. 93.

of a piece of first-class poetry, may get tired of it. Years afterwards, during which his education has progressed and his faculty of appreciation has been rendered keener, he may read the same piece of poetry again but this time with infinitely greater pleasure than he ever experienced before.

The Law of Diminishing Utility is best explained by a diagram (Fig. 1). The equal divisions along the horizontal

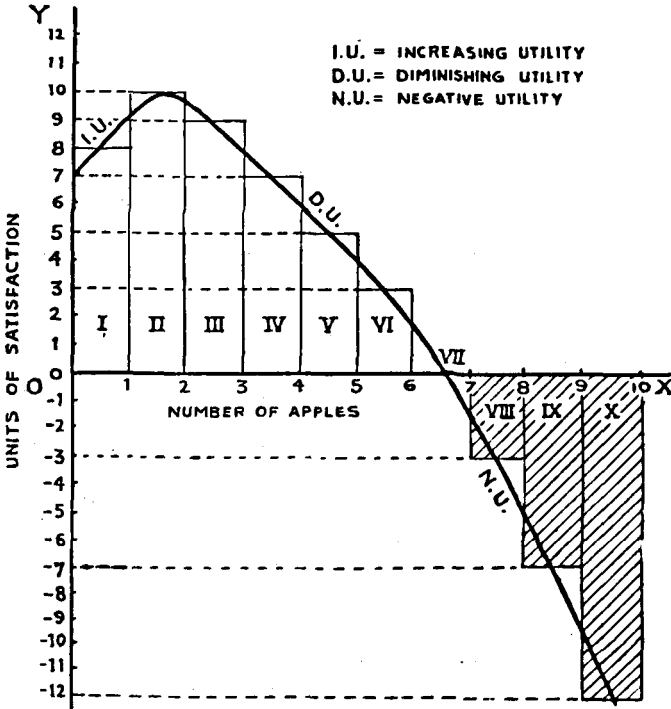


FIG. 1.—DIAGRAMMATIC REPRESENTATION OF THE LAW OF DIMINISHING UTILITY

axis OX represent equal successive units of a commodity say apples, consumed or purchased by a person, while the equal divisions along the perpendicular axis OY represent equal units of satisfaction. Rectangle I represents the utility derived from the first apple, rectangle II the utility from the second, and so on. The utility from every additional unit may be higher and higher instead of lower and lower for a time, so that the curve may at first slope upwards as in the

diagram (I.U.), but sooner or later it steadily begins to diminish (from utility 10 of the second unit to utility 0 in the case of the seventh unit, which is on the border-line between utility and disutility). Any further increment of the supply will only result in disutility or negative utility (the shaded rectangles in the diagram),

Let us assume for the sake of clarity that each unit of satisfaction to the consumer is represented by one anna. Then if the price of an apple were 3 as. the consumer would just be induced to purchase the sixth apple, whose utility, 3 units (which will just balance the utility of the price paid, 3 as.), will be the marginal utility, while the total utility of the supply of six apples will be $8+10+9+7+5+3=42$ units.¹

§4. Distinction between total and marginal utility.—

We must carefully distinguish between total utility and marginal utility. *Total utility* means the aggregate utility of a stock of similar goods, while *marginal utility* means the utility attaching to a particular portion of it, namely, to the unit of it that is consumed last. The total utility of a stock is obtained by adding the utilities of all the units concerned. Thus in Fig. 1 the total utility (or satisfaction) obtained by consuming six apples is, $8+10+9+7+5+3=42$ units. The *total utility* of a stock of goods increases with the addition of every unit, but it increases at a diminishing rate until the point of satiety is reached, and thereafter it falls. The *marginal utility* means the addition made to the total utility by the addition of the last increment consumed. Thus if our consumer thinks it just worth his while to buy the sixth apple, the utility of that unit, namely 3, is called the marginal (or final) utility. The utility is called marginal because at that point the consumer is on the margin of doubt as to whether it would be worth his while to consume any more of the commodity or whether he would secure greater satisfaction by consuming something else. It is, however, necessary to add that the marginal unit is not fixed unalterably. The number of units consumed depends, for example, on

¹ Since the consumer has to pay for the apples he does not carry their consumption to the stage of zero or negative utility (disutility), except by mistake or under compulsion respectively. If on the other hand, the price of an apple were 5 as. instead of 3 as., the consumer would buy only 5 apples, and the utility of the fifth apple (5 units) will be its marginal utility, which just balances the utility of the price paid (5 as.), and so on. If, however, apples were free altogether, they would be consumed up to the point of zero utility. This does happen in the case of free goods like air or water.

price. If price falls, more will be consumed; and if price rises, less will be consumed. The amount consumed also depends on intensity of demand. A man may come to desire a thing more or less intensely and will accordingly require more or less of it than before, even though the price may remain the same. Thus since the amount consumed is variable according to these conditions of supply or demand, what we call the last or the marginal unit is also variable. (But whatever the amount consumed, the last unit consumed under any given set of conditions is the marginal unit.

Another point that must be made clear is that the utility of every unit in a given aggregate is the same and is equal to the marginal utility. Let us suppose that the six apples in our example are labelled *A, B, C, D, E* and *F*. All the apples, it must be remembered, are of exactly the same size and quality. Let us suppose now that one of them, *A*, is lost. In that case, the five that remain will yield utilities as in the example. The first one that is consumed will yield utility 8; the second one 10; the third one 9; the fourth one 7; and the fifth one 5. If a sixth had been there the additional utility realized would have been 3. Thus by losing *any one* of the apples *A, B, C, D, E, F* the loss of utility incurred will be 3. Therefore, the utility of every single one of these apples *considered as one of an aggregate of six* is the utility of the marginal, i.e. the sixth unit. If we consume something up to the point of complete satiety, its marginal utility will sink to zero.

§5x **The relation between marginal utility and value or price.**—When we speak of the value of a commodity, we do not think of its utility or usefulness in general, but of the utility of a definite quantity. As has just been explained, the utility of every unit of a given quantity of a commodity is equal to its marginal utility, since all the units are interchangeable and alike and any one of them can be considered to be the marginal unit and will be parted with on the same terms as any other. Value then is not the expression of utility in general, or even of total utility, but of marginal utility. Thus air in general has infinite utility and great total utility, but does not command any value, since owing to its unlimited stock it (i.e. any particular unit of it) has zero utility. On the other hand, gold possesses great value, since although its utility in general or total utility is less than that of air or water, its marginal utility (the utility of a particular unit of it) is very high owing to its limited supply. Utility is an essentially subjective concept. But the

only way we know of measuring it is by the price which a person is willing to pay for a thing he desires to buy or consume. The objective test of satisfaction is the readiness to pay a certain price or amount of money. The price which a person actually pays for a thing measures its marginal utility to him. Marginal utility and price are closely connected with each other. Both would rise if the quantity were to decrease, both would fall if it were to increase. Value or price depends in this sense upon marginal utility. We can, however, equally well say that marginal utility depends upon value. If this value or price is high, smaller quantities would be purchased and marginal utility would be high. Similarly if the price were low, marginal utility would also be low. As a matter of fact both go together and are themselves influenced by the magnitude of the supply of a commodity in relation to the demand for it. All that we are entitled to say is that value or price tends to coincide with marginal utility.¹

§6. **The marginal utility of money.**—Money is also subject to the Law of Diminishing Utility, although the fall in its utility is slow and the point of satiety is very much more remote than in the case of an ordinary commodity; for money is not one commodity, but represents all the commodities it can buy. Every increase in the income of a person results in diminishing additions to utility or satisfaction. Those who possess very large incomes therefore have low marginal utility of money (i.e. the utility of goods purchased by the last addition to their income) as compared with those who have small incomes. Thus the marginal utility of a rupee to a person with Rs. 100 a month is higher than to a person with Rs. 1,000 a month. In the former case the last rupee stands for the satisfaction of more urgent wants than in the latter case. Similarly, the sacrifice of utility caused by equal diminution of income would be greater in the case of the poor than in the case of the rich, since in the former case some of the necessities of life would have to be sacrificed, while in the latter case comparatively less urgent wants would remain unsatisfied. This has a bearing on certain problems of taxation.²

§7. **Law of Equimarginal Utility (Returns) or the Law of Substitution.**—We have seen that according to the Law of Diminishing Utility every successive unit of a commodity yields less and less utility after a point. We should, of course, continue to consume each commodity so long as we

¹ This topic is discussed further in ch. ix.

² See ch. xvii, §9.

derived *some* little utility from it, if we could have unlimited quantities of everything without any sacrifice. But most of the commodities we require cost effort to produce them and have therefore to be paid for. A millionaire may conceivably be in a position to carry the consumption of every single commodity to the point of complete satiety. But the great majority of us are not millionaires, and the problem for us is how to lay out a *limited* income on the numerous utilities that are offered for sale in the market. A sensible man thus circumstanced will carry the consumption of each article up to a point, i.e. until he feels that after that point the money he has still available would give more satisfaction if spent on something else. Guided by this consideration and comparing at every stage the relative utilities to himself of different things, he passes on from one commodity to another until the amount he can spend is exhausted. If on reviewing his expenditure he feels that he would have gained greater satisfaction by spending less on one thing and more on another, he regulates his expenditure accordingly in future. So far as we are consciously rational we endeavour to purchase such quantities of various things that the marginal utility of the money spent in each case is the same. We go on substituting one thing for another until we feel that this object has been achieved. This principle, which governs the conduct of every ordinarily reasonable person, is known in economics as the Law of Equimarginal Utility (Returns) or the Law of Substitution.

Let us suppose a person has Rs. 9 to spend and there are three commodities *A*, *B* and *C* on which he can spend. For the sake of simplicity let us assume that the market price of all three is Re. 1 per unit. The utility of successive units of the three commodities for the person in question goes on diminishing in the manner represented by the curves in Fig. 2. Thus in the case of *A* the utility of the first unit is *cd*; the utility of the second is *ef*, and of the third *gh*. As the figures show, $gh = op = uv$. On these assumptions, the maximum satisfaction can be reaped by the person in question if he spends Rs. 3 on *A*, Rs. 4 on *B*, and Rs. 2 on *C*, because by so doing the marginal utilities are made equal ($gh = op = uv$). Any other way of distributing the available Rs. 9 would result in a decrease of satisfaction. Suppose, for example, that instead of buying 4 units of *B* and 3 units of *A*, 3 units of *B* and 4 units of *A* are bought. Then the additional (fourth) unit of *A* gives satisfaction *xy*, which is less than *op*, i.e. the satisfaction which could

have been obtained *at the same expense* by buying the fourth unit of *B*. In ordinary life nobody attempts to calculate in this precise manner the utilities of various things. Nevertheless we do find people weighing the relative advantage of

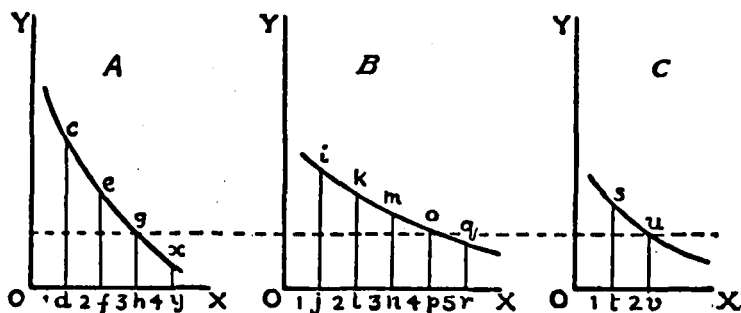


FIG. 2.—DIAGRAMMATIC ILLUSTRATION OF THE LAW OF EQUIMARGINAL UTILITY (RETURNS)

this or that mode of expenditure, spending more on one, less on another and in this manner trying to realize the maximum utility from a given limited income.

The principle is found to have an application in many other spheres besides that of ordinary expenditure. Take the case of a business man who owns a cotton mill. He has a certain limited amount of capital. He must spend some of it on labour and some on machinery. There is no fixed unalterable proportion between the outlay on these items, and each person has to find out the proportion which suits him best. When he is considering whether he had better utilize a given amount of money in employing additional labour or in buying such and such a new machine, the principle from which he is really seeking guidance is the Law of Equimarginal Returns or Substitution. This principle will be found to be in operation whenever there is a question of putting, not only money, but anything that is limited, to a number of possible uses. Suppose I employ a labourer at so much per day and can use him for domestic purposes as well as for work in my field. I use him for each of these purposes in accordance with the principle we are discussing. To take one final example, each of us has only twenty-four hours to spend every day. We do not use all the twenty-four hours in soul-clogging slumber. We sleep for only, say, eight

hours, devote nine hours to work, three to play and four to other necessary activities—in such a manner that we can say with reasonable confidence that the respective (marginal) utilities of the eighth hour of sleep, the ninth hour of work, the third hour of play and so on are all equal.

It may be added that we are not concerned here with the question whether people *ought* to attach the relative importance to various desires that they do in fact attach. We take the intensities of people's desires and their personal estimates of the utilities of various things as we find them.

Lastly, it may be pointed out that as regards perhaps the most important part of their expenditure, people may feel compelled to follow the dictates of custom or fashion even against their own better judgement. Expenditure on marriage and other ceremonies in India and expenditure on clothes, especially women's clothes, in the west, are examples of this. In so far as people obey the dictates of society in these matters even against their will, the satisfaction or utility they derive from what they themselves consider as unreasonable modes of expenditure is of a negative character, namely an escape from social obloquy and criticism. But since we are concerned with the facts of people's preference and not the motives for them, the exposition of the principle as given above may be allowed to stand.

§8. **Classification of wants.**—Wants (or the things that satisfy them) are classified into (i) Necessaries, (ii) Comforts, and (iii) Luxuries.

(i) *Necessaries*.—We may take a rigidly narrow view of necessaries, and include under the term only such things as are absolutely necessary for holding body and soul together (*necessaries for life*).

A broader view would include such additional things (*necessaries for efficiency*) as are required not only for bare existence but for maintaining efficiency, which would, for instance, mean sufficient food of reasonably nutritive value for the labourer and his family, satisfactory shelter and clothing, provision for sickness and old age, and opportunity for giving the labourer's children the training requisite to start them in life at least as well as himself.

Under *conventional necessities* we include items not strictly necessary for efficiency but expenditure on which is nevertheless incurred because it is dictated by social convention. In India important items under this heading are expenses on caste dinners, marriage and funeral ceremonies,

(ii) and (iii) *Comforts and Luxuries*.—Comforts and luxuries are terms which seem to explain themselves. The dividing line between comforts and luxuries is however not always clear. Whether a thing is a comfort or a luxury depends on how well-off a man is and what particular class of society he belongs to. To a poor peasant butter and ghee are luxuries. To the middle-class man on the other hand they are comforts, if not necessities. If an ordinary cultivator uses scents (*attar*) they would be regarded as a luxury in his case; not so, however, in the case of a big zamindar.

Sometimes things that we call comforts are found to have an even greater hold on people than necessities. Many a labourer, for example, would stint himself in the matter of food rather than forgo his customary indulgence of tobacco, *pan* and betel-nut.

The end of all economic activity is to provide mankind with the means of a happy and comfortable life. Civilized society in the west has outgrown the old Puritanic ideal which appeared to exalt unpleasant labour for its own sake. Even in India, the notion that it is sinful for man to enjoy life is gradually losing its ascendancy over the minds of men, and we are beginning to recognize that it is perfectly legitimate for people to try to distil all the good that this earthly life is capable of yielding. In the name of common prudence it is of course important that everybody should try to keep his expenditure within the limits set by his income. But there is nothing wrong in a person aiming at as high a standard of comfort for himself as he dare. On the contrary it will make him exert himself strenuously to attain this standard. Such purposeful activity can in itself be a great source of enjoyment, and a country whose inhabitants show this restless ambition is likely to be wealthier and more progressive than another where the people are content with too little and are therefore supine, inert and lazy. The rapid increase in the wants of people is far from being an evil; it is indeed the first condition of economic progress. We must, however, not forget that true human welfare depends on the nature of the wants that may arise. These wants should be such as to make their satisfaction a means of raising mankind higher and higher in the scale of civilization. As knowledge grows and as the moral and aesthetic perceptions of people become more and more refined, they will learn to desire things which really serve to enrich and beautify life, and avoid those that degrade life and yield only a fleeting and frivolous kind of

satisfaction. In India, at least as much as in any other country, there is urgent need for a popular awakening in this respect. The masses must be taught to feel the want of more things and better things—so that they will exert themselves to obtain them. Only thus can the country grow in wealth and provide the necessary conditions for a satisfactory existence for its people.

§9. **Standard of living (or standard of comfort).**—The aggregate of necessities, comforts and luxuries to which a class of people have been accustomed, is spoken of as their 'standard of living'. Wants when repeatedly satisfied over a sufficiently long period pass into habits, and the standard of life thus formed becomes characteristic of an individual and of the class to which he belongs. Different classes have different standards, and each one comes to look upon certain things as constituting the normal requirements of its everyday life. Each class strives to attain its particular standard, and having attained it to keep it up and if possible to raise it. The standard of life is not rigidly fixed. It varies not only from nation to nation, from class to class, from individual to individual, but also from one period to another with the same individual or class or nation. Diverse forces, such as financial circumstances, habit, education, imitation—deliberate and unintentional—and ambition influence the standard of living.¹ Thus the present standard of living in England is much higher than it was in the eighteenth century, and is higher than in India today. The average English worker is accustomed to a certain standard in respect of food, clothing, housing, recreation, etc. He must appear in a particular style of Sunday clothes, must have his pipe and tobacco and newspapers to read, and he thinks he ought to be able to visit the cinema a certain number of times every month. By his desire to maintain this standard of living he is led to

¹ 'The standard of life of a class comprises the common habits of its members with reference to spending and working. Most of them tend to spend and work in pretty much the same way. Any two families of the same size with the same wage, if they work at the same trade in the same locality, will usually live similar lives. They will dress similarly, spend roughly equal amounts on rent and holidays, visit the same entertainments, despise the same things and reject the same food.' The despotism of the class idea ('public opinion') 'is beneficent in so far as it ensures a minimum of decency, culture and sociability, but maleficent if it suppresses all individuality and retards change for the better'.—S. J. Chapman, *Outlines of Political Economy*, p. 13.

resist by organized action proposed cuts in his wages, or to enhance his efficiency, or again to restrict the size of his family. Thus the standard of living exercises a far-reaching influence upon the worker and has a deep social and national significance.

The standard of living in India is very low, especially in the rural areas. Though it is not possible to generalize owing to the great variety of standards of consumption, greatly influenced as they are in India not only by economic conditions but also by religion and caste, there can be no two opinions regarding the general low standard of living. Various intensive inquiries have been made in different parts of the country into the economic condition of villages, and different estimates have been made from time to time of the national wealth and the *per capita* income of India.¹ Also working-class budgets have been studied in industrial cities like Bombay.² All the evidence thus collected confirms the impression that the standard of living of the masses in India is very unsatisfactory. The food eaten by the average Indian is not only inadequate, but it is poor in nutritious qualities. He is also badly clothed and housed, badly taught and doctored. He knows hardly any luxuries except the luxury of extravagant expenditure on a few occasions in his life on marriages, pilgrimages and social feasts. But during the greater part of his life the bulk of his income is absorbed by the bare necessities of life. The ideas of people, especially of those living in towns, regarding the necessary minimum standard, are gradually changing under modern influences, and the desire to raise the standard is slowly becoming effective, although the prolonged economic depression, which has fallen with particular severity on primarily agricultural countries like India, has checked the general improvement in the standard of living.

§10. Relation between saving and spending.—Spending means the application of income for the immediate satisfaction of our daily wants. In society as at present organized, most of our wants are satisfied through expenditure of income. But the whole of the income is not available for this purpose. In the first place, a part is required for social purposes, for voluntary payments by way of charity and compulsory payments by way of taxation. Also those who are able to, generally save some of their income for the

¹ See Part II, ch. viii, §1.

² See §12.

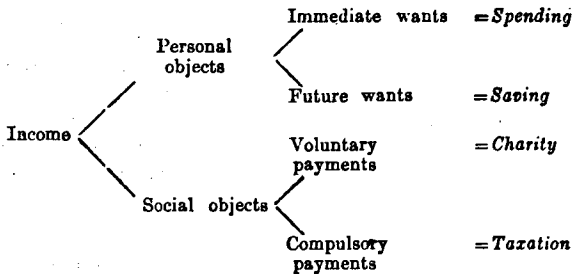
satisfaction of their future wants instead of spending it all on their immediate wants.¹

Unless people exercise such forbearance, and take care to put aside a part of it as provision for the future, they will suffer as individuals, as also will the society in which the large majority of people are reckless spendthrifts. In the economically advanced countries, these individual savings are in the first instance entrusted to banks. The banks lend them to industrialists and business men, in whose hands they are transformed into plant, machinery and other aids to further production of wealth. The capital equipment of society is thus maintained and enlarged.

There is in reality no conflict between spending and saving; both enable us to satisfy our wants and add to our material welfare. Spending secures for us goods and services for the direct satisfaction of our immediate needs. Saving adds to the stock of production or capital goods and thus promotes the production of future wealth and satisfies our future wants. Saving and spending are thus complementary to one another. Both are essential for economic well-being and prosperity. If we recklessly spent all our income on the satisfaction of our immediate needs we should not be able to maintain, much less increase, our capital equipment, and there would be a deficiency of consumable goods in the future. If, on the other hand, we unduly stressed the importance of saving and stinted ourselves too much and added to the stock of machinery, raw materials and factories, we should soon find ourselves submerged beneath a flood of goods, for which there was no demand. The whole productive system would collapse in the absence of the stimulus of demand.

We need not, therefore, mark out either spending or saving for exclusive praise or exclusive condemnation. What is wanted is a proper proportion or balance between the two.

¹ Sir Henry Penson (op. cit., Part II, p. 48) gives the following diagram:



Immediately after the war of 1914-18, saving rather than spending was necessary to repair its ravages and to revive the productive system. But apparently the process was carried to excess, and some economists hold the view that the present depression is due to over-saving or under-consumption. Within proper limits, saving of course confers blessings both on the person who saves and on society, which benefits by adding to the stock of its capital goods and thus increasing its future wealth. In recent times, however, economists have learnt to emphasize the truth that all saving and no spending is bad for the individual as well as for society as a whole.

§11. **Engel's Law of Family Expenditure.**—Statistics of consumption by classes have received much attention in recent years. It is of some interest to ascertain the proportion in which the different classes of society distribute their expenditure between necessaries, comforts and luxuries. In this connexion, we may mention the generalization known as Engel's Law. This law states that the smaller the income the larger the percentage of it spent on food and subsistence. Ernst Engel was a German statistician who lived about the middle of the nineteenth century; he studied a large number of family budgets (i.e. lists of items of the expenditure of families) of different classes of people in Saxony and constructed the following table :

Table illustrating Engel's Law

Items of expenditure	Proportion of Expenditure (to income) of the family		
	Working (or poor) class	Middle class	Well-to-do (or rich) class
Food	62	55	50
Clothing	16	18	18
Lodging (rent)	12	12	12
Light and fuel	5	5	5
	95%	90%	85%
Education	2	3.5	5.5
Legal protection (taxation)	1	2	3
Care of health	1	2	3
Comforts and recreation	1	2.5	3.5
	5%	10%	15%
Total	100	100	100

From these figures Engel concluded that as the income of the family unit increases :

- (i) the proportion spent on food decreases;
- (ii) the proportion spent on clothing remains approximately the same;
- (iii) the proportion spent on fuel, light and rent remains fairly constant; while
- (iv) the proportion spent on what may be called the comforts of life, such as education, health and recreation, tends to increase.

Thus the smaller the family income the greater the proportion of it absorbed by food and other elementary necessities (95% in the above example); and the greater the family income, the higher the proportion spent on comforts and luxuries (15% in the above example).

This law is also confirmed in a general way by the study of working class budgets in Bombay made by the Labour Office. The average income of the worker in India being very small, a very high percentage of it is spent on food and other necessities, and this percentage decreases with the increase in the size of the income. In the city of Bombay, for example, the expenditure on food varied in 1921-2 from 60.5% in the case of incomes below Rs. 30 per month, to 52.6% in the case of incomes between Rs. 80 and Rs. 90 per month.¹ In countries with a high standard of living like England and the United States, a comparatively much smaller proportion of the wage-earner's income is absorbed by food and the other elementary necessities of life, and more is left over for conventional necessities and luxuries.

§12. Family budgets.—In order to give the student some idea of a family budget, we give below (i) the average monthly budget of working class families in the Bombay City for the period from May 1932 to June 1933, and (ii) the average annual budget of six tenant cultivators in the Lyallpur district (Punjab) in 1933-4.

¹ G. Findlay Shirras, *Working Class Budgets in Bombay* (Bombay Labour Office), 1923.

(i) Average monthly budget of working class families in Bombay city¹

Items	Average monthly Expenditure	Percentage to total
	Rs. as. ps.	
Food		
Food Cereals—		
Rice	4 9 10	10.04
Patni	1 5 8	2.94
Wheat	0 11 3	1.53
Jowar	0 2 11	0.40
Bajri	0 14 0	1.90
Other	0 1 0	0.14
Total cereals ...	7 12 8	16.95
Pulses—		
Turdal	0 7 10	1.06
Gram	0 0 8	0.09
Other	0 9 3	1.26
Total pulses ...	1 1 9	2.41
Other Articles of Food—		
Sugar (raw)	0 0 2	0.02
Sugar (refined)	0 14 8	1.99
Tea	0 6 7	0.90
Sweetmeats	0 7 8	1.04
Fish	1 9 8	3.49
Mutton	0 13 10	1.88
Other Meat	0 3 4	0.45
Milk	1 3 9	2.69
Ghee	0 5 0	0.68
Salt	0 2 11	0.40
Chillies	0 1 10	0.25
Condiments and spices	1 2 9	2.55
Potatoes	0 2 11	0.40
Onions	0 2 7	0.35
Vegetables	2 2 8	4.71
Coconut Oil	0 4 3	0.58
Gingily Oil	0 7 10	1.06
Other Oils	0 0 2	0.02
Readymade tea	0 5 5	0.74
Refreshments bought and consumed away from home	0 11 3	1.52
Other foodstuffs	0 11 2	1.52
Total other articles of food ...	12 8 5	27.24
Total all food articles ...	21 6 10	46.60

¹ The Bombay Labour Office conducted a working class Family Budget Inquiry during the course of which 1,469 family budgets were collected. The period covered by the inquiry was from May 1932 to June 1933. The average number of persons per family was 3.70.—*Report on an Enquiry into Working Class Family Budgets in Bombay City* (1935).

(i) *Average monthly budget of working class families in Bombay city—(contd.)*

Items	Average monthly Expenditure	Percentage to total
FUEL AND LIGHTING		
	Rs. as. ps.	
Charcoal	0 15 6	2-11
Firewood	1 10 10	3-65
Kerosene Oil	0 8 3	1-12
Match boxes	0 0 10	0-11
Other fuel and lighting	0 0 11	0-12
Total fuel and lighting ...	3 4 4	7-11
HOUSE RENT		
	5 14 3	12-81
CLOTHING		
<i>For men—</i>		
Dhotis	0 6 10	0-93
Pants and vizars	0 1 2	0-16
Pagris and caps	0 1 10	0-25
Bandis	0 1 6	0-20
Pahirans and shirts	0 7 10	1-06
Ganjifrocks	0 1 8	0-23
Coats	0 5 0	0-69
Other	0 0 4	0-05
Total men's clothing ...	1 10 2	3-56
<i>For women—</i>		
Saris	0 15 0	2-04
Cholis and polkas	0 3 9	0-51
Other	0 0 7	0-08
Total women's clothing ...	1 3 4	2-63
Total male children's clothing ...	0 3 6	0-48
Total female children's clothing ...	0 2 8	0-36
Total all clothing ...	3 3 8	7-03

(i) Average monthly budget of working class families
in Bombay city—(contd.)

Items					Average monthly Expenditure	Percentage to total
					Rs. as. ps.	
UMBRELLAS	...	...	...	...	0 2 0	0-27
SHOES OR SANDALS						
For men	...	...	...	...	0 3 0	0-41
For women	...	...	...	...	0 0 2	0-02
For children	...	...	...	...	0 0 2	0-02
Total shoes or sandals					0 3 4	0-45
BEDDING	...	...	...	...	0 0 2	0-02
HOUSEHOLD NECESSARIES						
Tinning	...	...	...	...	0 0 8	0-09
Other	...	...	...	...	0 0 2	0-02
Total household necessities					0 0 10	0-11
MISCELLANEOUS						
Barber	...	...	...	...	0 13 9	1-87
Dhobi or soap	...	...	...	...	0 9 3	1-26
Hair oils	...	...	...	...	0 2 8	0-36
Medical fees and medicines	...	...	...	...	0 3 1	0-42
Pansupari	...	...	...	...	1 9 6	3-47
Chewing tobacco	...	...	...	...	0 2 6	0-34
Bidis and cigarettes	...	...	...	...	1 5 11	2-98
Liquor	...	...	...	...	1 3 8	2-67
Toddy	...	...	...	...	0 7 7	1-03
Amusements	...	...	...	...	0 2 0	0-27
Bangles and combs	...	...	...	...	0 2 2	0-30
Postage	...	...	...	...	0 1 11	0-26
Travelling to and from native place	...	...	...	...	1 11 2	3-69
Payments to dependents	...	...	...	...	2 1 11	4-61
Newspapers	...	...	...	...	0 1 4	0-18
Other	...	...	...	...	0 13 11	1-89
Total miscellaneous					11 12 4	23-60
Total expenditure on all items					45 15 9	100-00

(ii) *Average (annual) family budget of six tenant cultivators in the Lyallpur District (Punjab) 1933-4¹*

Item	Average per family			Average per adult unit			Percentage to the total
	Rs.	as.	ps.	Rs.	as.	ps.	
Housing (repairs done) ...	1	6	3	0	3	9	0.3
<i>Food articles—</i>							
Wheat	145	5	6	24	6	10	31.4
Maize	1	12	8	0	4	10	0.4
Milk and milk products ...	111	2	5	18	10	11	24.0
Sugar	21	2	0	3	8	10	4.6
Rice	6	3	9	1	0	9	1.4
Meat	3	5	10	0	9	1	0.7
Pulses	3	5	4	0	8	11	0.7
Vegetables	3	3	7	0	8	8	0.7
Fruits	3	1	6	0	8	4	0.7
Salt	1	6	2	0	3	9	0.3
Miscellaneous	13	7	4	2	4	2	2.9
Total Food ...	313	8	1	52	11	1	67.9
Fuel	75	10	8	12	11	6	16.4
Dress	4	10	1	0	12	5	1.0
Medicine	5	8	5	0	14	10	1.2
Light	1	3	10	0	3	4	0.3
Education	11	4	8	1	14	4	2.4
Religion	27	2	0	4	8	11	5.9
Travelling	9	0	6	1	8	4	2.0
Social	3	13	5	0	10	4	0.8
Amusements and luxuries ...	8	8	3	1	6	11	1.8
Miscellaneous	461	12	2	77	9	9	100.0

The above budget relates to the period 1 June 1933 to 31 May 1934. There were on an average 8.2 members per family.

Food is the largest item of expenditure as it comprises 67.9% of the total domestic expenditure. The second most important item is dress (16.4%). Travelling, religion, social functions, medicine, light, amusements and luxuries form 5.9%, 2.4%, 2.0%, 1.0%, 1.2% and 0.8% respectively. Last

¹ *Family Budgets 1933-4 of Six Tenant Cultivators in the Lyallpur District (The Board of Economic Enquiry, Punjab), 1935.*

come housing and education, each accounting for 0·3% of the total expenditure. Housing includes the cost of repairs and furniture made during the year, and of petty articles of furniture purchased, but does not include the rent or depreciation on the value of the houses which are provided to their tenants free of cost by the landlord. Education is one of the smallest items of household expenditure, and forms only 0·3% of the total.

59·0% of the goods consumed were furnished by the farm and 41·0% bought from outside. 81·4% of the food and 11·2% of the dress material were produced on the farm.

Articles used as fuel by the families are loppings from trees, cotton sticks, dung cakes. The tenants get loppings of trees free of charge. Cotton sticks have no market value. As the value of the manure produced by cattle has not been deducted from the cost of their upkeep it is not proper to count it in the household expenditure.

§13.* **Consumer's surplus.**—Marshall explains the idea of consumer's surplus in the following words: 'The benefit which a person derives from purchasing at a low price things for which he would rather pay a high price than go without, may be called his Consumer's Surplus.'¹ This doctrine is based on the distinction between total utility and marginal utility as already explained. We know that at any given time there is some fixed price at which an article, say tea, is selling. Now suppose the current price is Re. 1·8 per lb. At this price everyone will buy as much as will suit him. Let us suppose that a purchaser X buys 6 lb. at this price. But it has already been made clear that although each unit that is consumed costs the same price, the satisfaction derived from them is not the same. The earlier units yield higher satisfaction than the later. For the earlier units X would have paid more than the price of Re. 1·8 per lb. Since he stops his purchase of tea after the sixth unit, this unit was just worth Re. 1·8 to him and no more. Therefore this unit did not yield him any surplus satisfaction. There *was* such a surplus however on the earlier units, and this is his consumer's surplus, i.e. the excess of what he would willingly have paid if necessary, and what he actually does pay or, as Taussig expresses it, 'the difference between the potential price and the actual price'.²

¹ *Elements of Economics of Industry*, p. 420.

² F. W. Taussig, *Principles of Economics*, 3rd ed., vol. I, p. 125.

In Fig. 3 the position is that to obtain 1 lb. of tea our purchaser would really be willing to pay Rs. 4 rather than

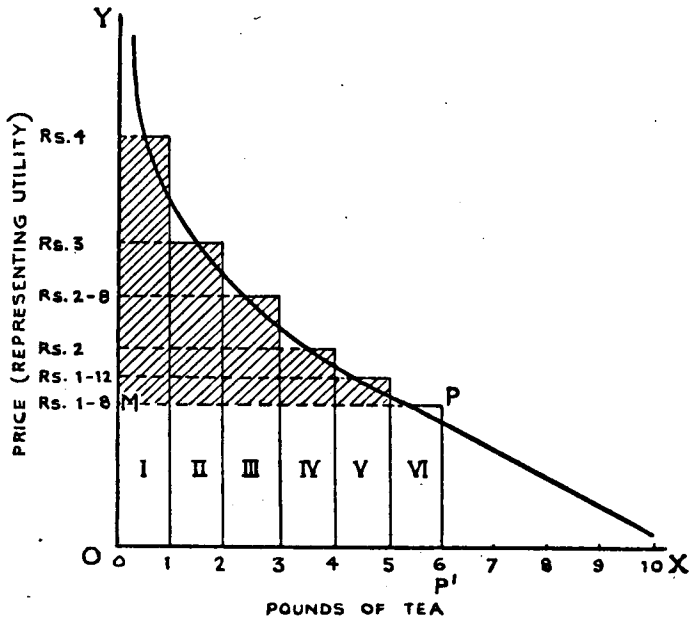


FIG. 3.—DIAGRAMMATIC REPRESENTATION OF CONSUMER'S SURPLUS

go without it altogether. Rs. 4 measures the total utility of the first pound and it is represented in the diagram by rectangle I. For the second pound he would be willing to pay Rs. 3, or, what amounts to the same thing, if the price were Rs. 3 he would be just induced to buy 2 lb., and so on. Now suppose the price has fallen to Re. 1-8 per lb. then he would be induced to buy 6 lb., all at the same price of Re. 1-8. In that case he obtains a consumer's surplus on all the pounds of tea except the sixth, which is on the margin. Thus on the first pound he obtains a surplus measured by Rs. 4 (potential price) *minus* Re. 1-8 (actual price)=Rs. 2-8; and on the second, Re. 1-8; on the third, Re. 1; on the fourth, As. 8; on the fifth, As. 4; on the sixth he gets no surplus, as previously explained. The aggregate consumer's surplus for 6 lb. is therefore Rs. 5-12-0. This is equal to the aggregate potential price (Rs. 14-12-0) measuring the total utility

of 6 lb., *minus* Rs. 9, i.e. the price actually paid for 6 lb. ($6 \times \text{Re. } 1\text{-}8$ price per lb.). The total surplus is represented in the diagram by the shaded portion, the unshaded area OMPP' standing for the total exchange value or price paid for the aggregate supply of six pounds. The surplus satisfaction in the case of each of the first five pounds is represented by the shaded portion of rectangles I, II, III, IV and V respectively. Rectangle VI, which represents the utility of the sixth (marginal) pound, has no shaded portion since there is no surplus satisfaction derived from it by our consumer.

It is easy to think of illustrations from practical life. For example, before the war of 1914-18 we had to pay four annas for a copy of the *Times of India*, but now we can buy it for an anna. So that those of us who bought the paper before the war and continue to buy it now, enjoy a surplus satisfaction of at least three annas. Again, we can write a letter to a friend, say at Delhi, at the cost of an anna, although we would perhaps be willing to pay as much as six annas for doing so if necessary. We thus reap a surplus of As. 5. Obviously in the case of many common comforts of life such as railway facilities, bus journeys, books and sugar, most purchasers enjoy a considerable consumer's surplus.

We must, however, bear in mind certain limitations of the doctrine of consumer's surplus. It is valid enough as a general concept and corresponds to our daily experience. But the difficulty arises in measuring it accurately in terms of money.¹ In the first place, an equal amount of money does not measure an equal amount of satisfaction to rich and poor alike. The payment of a high price in the beginning by the rich for something that may later be purchased at an appreciably lower price by the poor (say, mangoes at the beginning of the mango season when they are expensive, and in the full swing of the season when they are cheap) does not indicate a higher consumer's surplus to the rich, but rather a lower marginal utility of money to them. Secondly, in the case of articles like diamonds possessing scarcity or prestige value and therefore satisfying the love of *distinction*, consumer's surplus seems to be unreal or unsubstantial, since it would disappear if diamonds were to become abundant and

¹ For detailed criticisms of the doctrine, see Nicholson, *op. cit.*, vol. I, pp. 58-65 and Taussig, *op. cit.*, pp. 125-9. See also Marshall, *Principles of Economics*, pp. 128-34.

cheap; for in that case the rich people would cease to prize them and would not buy them. Thirdly, in the case of a minimum quantity of indispensable necessities of life like bread, consumer's surplus is incalculable, since its utility is indefinite or infinite. A person would be prepared to part with his whole fortune if necessary in order to secure the minimum necessities of life. We cannot therefore really measure it. Lastly it is never possible precisely to measure consumer's surplus, since we can have no accurate knowledge regarding the potential prices that would be paid for the several instalments of a commodity. We can of course restrict ourselves to the demand schedule of prices which are more or less customary. But this cannot give us a full measure of the consumer's surplus.

The doctrine of consumer's surplus has considerable utility in practical life for making comparisons of life in two places, and in the case of problems concerning the higher uses of wealth, fixation of monopoly price and taxation of commodities. For example, as Marshall points out, a man with £1,000 a year in Central Africa is not so well off (does not enjoy the same consumer's surplus) as a person with £400 a year in England, for although things which money will buy in Central Africa will be as cheap there as in England there are so many things which cannot be bought in Central Africa at all. Thus people living in more civilized regions enjoy greater amenities of life and command a greater consumer's surplus, i.e. more material well-being, than those living in backward tracts. The doctrine of consumer's surplus also indicates the margin available to the monopolist for raising prices and to the state financier for levying taxes on goods without unduly trenching on the consumer's surplus derived from the goods concerned.

§14. **Demand.**—By demand we understand in economics not merely desire but *desire backed by the necessary purchasing power*. A pauper's desire for a Rolls-Royce motor car will not act as a stimulus to the production of these cars. In order that demand should not be confused with mere desire the more explicit phrase 'effective demand', or 'efficient demand' is often used.

§15. **The Law of Demand.**—The so-called Law of Demand is merely a corollary from the Law of Diminishing Utility, and it may be expressed as follows: *when the price falls demand expands, and when the price rises demand contracts*. The fall in price must correspond to diminished utility, which results from increase in quantity. The rise in

price must correspond to increased utility, which results from decrease in quantity.

Another way of expressing the same idea is to say that a larger quantity can only be disposed of if the price is lower, the decline in price measuring the diminution in utility; or a smaller quantity can be disposed of at a higher price, the rise in price measuring the increase in utility.

§16. **Demand Schedule and Demand Curve.**—If we put prices on one side and place against them the respective quantities that can be sold at those prices, we get what is called a Demand Schedule.

*Market Demand Schedule
with a class of 'very rich' men (say, 5 in every 100
of population)*

Price per lb. of sugar	Quantity demanded in the market	Quantity demanded by 'very rich' men
As.	lb.	lb.
16	50	50
14	60	50
12	80	52
10	130	55
8	200	57
6	300	60
4	500	62
3	700	63

In the above table, the influence of changes in price on market demand has been studied. Such a table is known as the Demand Schedule.¹ It may be drawn for an individual or for a particular class or for the whole market. The market or group demand schedule represents the net combined result

¹ The transition from Individual Demand Schedule to the Market Demand Schedule is clearly explained in J. H. Todd, op. cit., pp. 117-8.

of a number of individual demand schedules and is more steady and dependable than the latter, the individual peculiarities of different consumers being largely cancelled one against the other in the aggregate demand schedule. We find in our schedule that as the price falls, demand increases; while as the price rises, demand falls. In the third column the influence of changes in price on the richest class in society is studied. It shows that at the highest price only this class would make any demand, and that as price falls there is no appreciable increase in the amount demanded. Thus the demand on the part of the rich is inelastic as compared with the more elastic group demand, which reacts more readily to price changes.

We may now proceed to draw what is called a demand curve based on the above demand schedule (see Fig. 4).

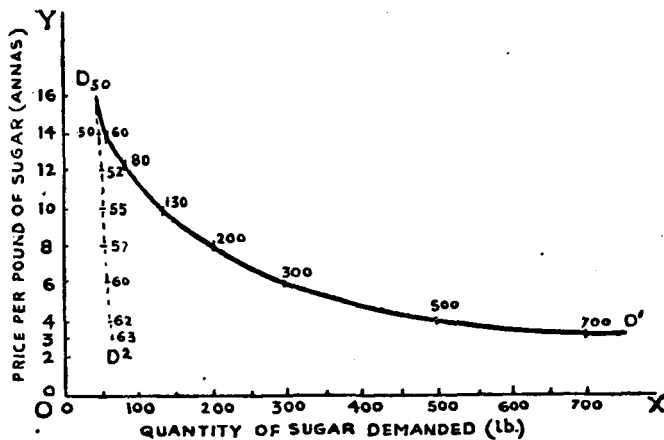


FIG. 4.—DEMAND CURVE

Along the horizontal axis OX are marked quantities demanded, while on the perpendicular line OY are marked the various prices for pounds of sugar. If we have a number of such price quotations and the corresponding quantities demanded at those prices we shall be able to mark a number of points, by joining which we get our 'Demand Curve' (DD' in the diagram), showing a gradual and steady decline in prices accompanied by an increase in the quantity demanded. Thus as a result of the fall in price from 16 annas to 3 annas the quantity demanded increases from 50 to 700 lb. The dotted

curve represents the inelastic demand on the part of the 'very rich'. The same drop in price (namely from 16 to 8 annas) does not induce them to increase their purchases appreciably, the quantity demanded increasing only from 50 lb. to 63 lb. This inelastic demand is illustrated by DD^2 showing a sharp decline.

As remarked above, demand means effective or efficient demand. It means the quantity that is taken by purchasers at a given price. Or perhaps it is even better to say that the *demand for a particular commodity means the whole range of prices with the quantities going with each of those prices*. The question, 'What is the demand for such and such a thing?' is best answered by setting out its demand schedule or plotting it as a curve.

§17. Elasticity of demand.—Every commodity obeys the Law of Demand as stated above, that is, its demand expands with a fall in price and contracts with a rise in price. But this variation of demand following on variation in price occurs more readily in the case of some commodities than in that of others. In the former case we say that demand is comparatively more *elastic*; and in the latter, comparatively less elastic, or *inelastic*. *Elasticity of demand may be defined as the degree of response (in the form of variations in the quantity demanded) to changes in price. When a small decrease in price causes a considerable increase in the quantity demanded, (or a small increase in price causes a considerable decrease in the quantity demanded), the demand for that commodity is said to be elastic. When a considerable change in price is required to produce an appreciable change in quantity demanded, the demand for that commodity is said to be inelastic.* Strictly speaking, we ought to speak of demand being 'relatively more elastic' and 'relatively less elastic', rather than elastic and inelastic. For since every commodity is subject to the Law of Demand, the demand for no commodity can be said to be absolutely inelastic, in the sense that no change of price, however great, causes any change whatever in the quantity of it that is demanded. For the sake of brevity and convenience we often do actually use the handier expressions 'elastic' and 'inelastic', and there is no great harm in doing so provided we understand clearly that it is all a question of degree.

§18. Rules regarding elasticity of demand.—*In the case of necessaries, elasticity is generally small, since whatever the price, people must have enough; and when they have had enough, they do not want very much more even if there is*

a considerable drop in the price. *Demand is elastic in the case of luxuries*, because they are not urgently required; people can increase or decrease their consumption of them according as prices fall or rise (see Fig. 5).

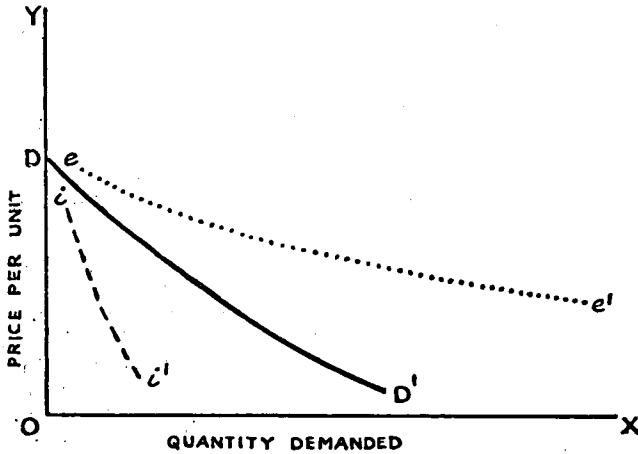


FIG. 5.—DIAGRAM SHOWING ELASTIC AND INELASTIC DEMAND¹

DD¹.—DEMAND CURVE SHOWING DIMINISHING UTILITY

ee¹.—ELASTIC DEMAND FOR LUXURIES

ii¹.—INELASTIC DEMAND FOR NECESSARIES

We have already seen how what is a luxury to one set of people may be regarded as a necessary by another set. It follows, therefore, that the *same commodities may show different elasticity from one group of people to another according to differences in financial position*. The clearest notion of elasticity is, therefore, obtained by considering each class by itself.

When prices are very high, demand is usually inelastic. Because then only the very rich can afford to buy the commodity and in their case even considerable changes in price do not cause appreciable changes in the quantity demanded.

When prices are very low, demand is similarly inelastic. Because the low prices enable people to consume the commodity practically up to the point of satiety, and so long as

¹ See Taussig, op. cit., vol. I, p. 136. *

prices remain low on the whole, little variations in them do not much matter (see Fig. 6).

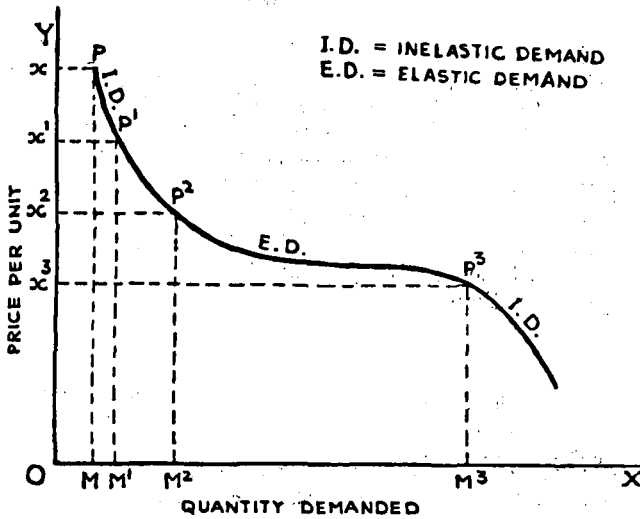


FIG. 6.—DEMAND CURVE SHOWING INELASTICITY OF DEMAND AT VERY HIGH AND AT LOW PRICES, AND GREATER ELASTICITY AT INTERMEDIATE LEVELS AS INDICATED BY THE GENTLER SLOPE. THE GREATER THE INELASTICITY THE STEEPER THE SLOPE

$$xx' = x'x'' = x''x'''$$

AT PRICE PM , QUANTITY OM IS DEMANDED

AT PRICE $P'M^1$, WHICH IS LESS THAN PM BY xx' , DEMAND INCREASES ONLY BY MM^1

AT PRICE $P''M^2$, WHICH IS LESS THAN $P'M^1$ BY $x'x''$, THE INCREASE IS GREATER, NAMELY $M'M^2$

AT PRICE $P'''M^3$, WHICH IS LESS THAN $P''M^2$ BY $x''x'''$, THE INCREASE OF DEMAND IS VERY MUCH GREATER NAMELY M^2M^3

It thus follows that the more equal the distribution of wealth, the greater the elasticity of demand.

Demand is more elastic when there are substitutes than otherwise. Thus increase in railway fares will decrease the demand for railway service. But this will happen more rapidly if there are substitutes like motor buses.

Demand is more elastic when a commodity is put to several uses of differing urgency than if confined to a single use (e.g. coal or rubber). As prices change, the commodity is readily extended to or withdrawn from the less urgent uses.

§19. Measurement of elasticity.—In order to give a precise significance to the idea of elasticity, we say that *elasticity=1 (unity), if a given change in price is followed by an exactly inverse proportionate change in quantity; if the change in quantity is less than proportionate, elasticity is less than 1; if more than proportionate, it is more than 1.* Suppose prices are halved and quantity sold is exactly doubled, then elasticity=1. If the quantity is less than double, elasticity=less than 1. If the quantity is more than double, elasticity=more than 1.

SUMMARY

Consumption is the end of all economic activity. Production being the means and consumption the end, production may be said to be subordinate to consumption. If we allow production to fall out of step with consumption, there is loss to producers or inconvenience to consumers.

Human wants in general are insatiable. But each single human want is satiable.

Some wants are complementary, i.e. they can be satisfied only by two or more things being provided together.

Many human wants are alternative, i.e. they can be satisfied equally well by this or that other thing.

The satiability of every single want is at the basis of the Law of Diminishing Utility—which states that, after a point, every addition to the stock of any useful thing yields less and less satisfaction. (We assume that the intervals between the additions are quick and that the consumer's tastes or preferences do not undergo a fundamental change.)

Total utility means the aggregate utility derived from the consumption of the whole of a stock of similar goods. Marginal utility means the utility lost if one unit of the stock is lost—or, which comes to the same thing—it is the utility of the unit consumed last. The marginal unit, however, is not fixed unalterably: it depends on the quantity consumed, which varies according to price and also according to intensity of demand. The utility of every unit considered as part of a given aggregate is the marginal utility. Value is the expression of marginal utility.

Most of us have limited incomes to be spent on a large variety of goods. A wise man under these circumstances orders his expenditure in such a manner that he does not feel he has spent too much on one thing and too little on another. In technical language this is expressed by saying that he tries to observe the Law of Equimarginal Utility or Returns.

In its more general application than in the regulation of ordinary personal expenditure, this law is known as the Law of Substitution.

By following the Law of Equimarginal Utility or Returns, or the Law of Substitution, the object achieved is the highest total satisfaction from a given outlay according to each person's individual scale of values.

Wants are classified into *Necessaries, Comforts and Luxuries*. Each of these terms is elastic as to what kind of consumption it is to include. The term 'necessaries' for example is capable of a very rigorous or a very liberal interpretation. A liberal interpretation would include a number of things over and above what is required for bare existence.

Conventional necessities are those which while not necessary for efficiency are imposed by social convention.

'Comfort' and 'luxury' are terms whose meaning will obviously vary in accordance with the class in society to which a person may belong. To aim at a high standard of life is not only not wrong, but it is actually a necessary condition of economic progress. The low standard of life with which the masses in India are content is one of the causes of their poverty. While it is necessary for economic progress that wants should increase, these wants should be such as ennoble and do not degrade human life.

The aggregate of necessities, luxuries and comforts to which any class of people has become accustomed is its *standard of living*. It varies from individual to individual, class to class, and nation to nation. It also varies from period to period for the same people. Desire to maintain one's standard of life has far-reaching influences on efficiency and on the worker's reactions to any given wage policy. The standard of living among the people of India is showing some signs of rising, which should make for greater economic efficiency and economic welfare.

Both *spending* and *saving* are necessary for economic health and stability. All spending and no saving will lead to deterioration and ruin of the capital equipment of society and must ultimately react disastrously on production. All saving and no spending means that there is no demand for the products of industry. It also means that production would ultimately cease. There was a tendency in the old days to exalt saving as a supreme virtue and to regard spending as a thing to be deprecated. Modern economists have restored the balance by emphasizing the necessity of spending as well as of saving. The two processes are not opposed, but complementary to each other.

A study of the family budgets of different classes of society has given rise to the generalization known as *Engels' Law*, which states that the smaller the family income, the larger the proportion of it spent on food and other elementary necessities of life, and the higher the family income, the greater the proportion of it spent on comforts and luxuries. Figures from family budgets illustrate this generalization.

Consumer's surplus can be defined simply as the difference between what a consumer actually pays for a thing and what he would have been prepared to pay rather than go without it. It measures the difference between marginal and total utility. Consumer's surplus is a real phenomenon, though it is impossible to calculate the exact size of it in any given case. The conception is inapplicable in the case of things whose value depends on their remaining scarce, and when we are considering the utility of a certain *minimum* quantity of an absolute necessary of life. Another

complication is that equal amounts of money mean unequal amounts of satisfaction to the rich and the poor. In spite of these difficulties, however, the doctrine is of practical usefulness in comparing life in two different places, in questions of taxation, and questions relating to the most advantageous price for a monopolist.

Demand in economics means desire supported by the purchasing power necessary to satisfy it—in other words, efficient or effective demand.

Law of Demand.—When price falls, demand expands; when price rises, demand contracts.

This law is a corollary from the Law of Diminishing Utility.

The reaction of demand to changes in price can be shown either by means of a *Demand Schedule*, or a *Demand Curve*.

Elasticity of demand means the degree of change in quantity demanded in response to change in price.

If even a slight change in price causes a big change in demand, demand is said to be *elastic*.

If even a very considerable change in price causes only a comparatively small change in demand, demand is said to be *inelastic*.

Since all commodities obey the Law of Demand, the demand in each case shows some elasticity. The difference between one commodity and another is only as regards the degree of elasticity.

Elasticity is small in the case of necessities, the demand for which is, therefore, said to be inelastic.

Elasticity is considerable in the case of luxuries, the demand for which is, therefore, said to be elastic.

Elasticity varies not only from commodity to commodity but also from one class of purchasers to another.

As a general rule, demand is inelastic when prices are very high or when they are very low. Equality of wealth-distribution favours elasticity.

Among other things favourable to elasticity of demand are presence of substitutes and also employment of a commodity for several purposes of varying urgency.

Measurement of elasticity of demand.

- (i) Elasticity is equal to 1 (unity),
- (ii) Elasticity is less than 1, or
- (iii) Elasticity is more than 1,

according as the response to changes in price is respectively

- (i) exactly proportionate,
- (ii) less than proportionate, or
- (iii) more than proportionate.

CHAPTER V

PRODUCTION : LAND

§1. **Meaning of production.**—Every activity which results in the creation of *wealth* as defined above¹ is to be regarded as productive. *Production may be defined as the creation or addition of utilities or values.* By the exercise of productive activity something that has exchange-value comes into existence.

In the production of material wealth, there is of course no question of creating new matter. This is something which man cannot do. At the most he can rearrange and combine particles of matter and give them a form which has a greater value for human purposes than they possessed before. Thus he puts together brick and mortar, so that he gets a house; or joins together pieces of wood, so that he gets a piece of furniture. This type of production is described as the *creation of form utilities*.

Another type is the *creation of place utilities*. The trader's function consists essentially in taking commodities from places where they are comparatively plentiful and have therefore relatively small utility or value to places where they are less abundant and have therefore greater value. The trader by his activity *adds to the value* of things and has as great a title to be considered a productive worker as, let us say, a labourer in a coal-mine, who takes coal out of the bowels of the earth, where it was useless to human beings, and brings it up to the surface where it becomes available for human uses.

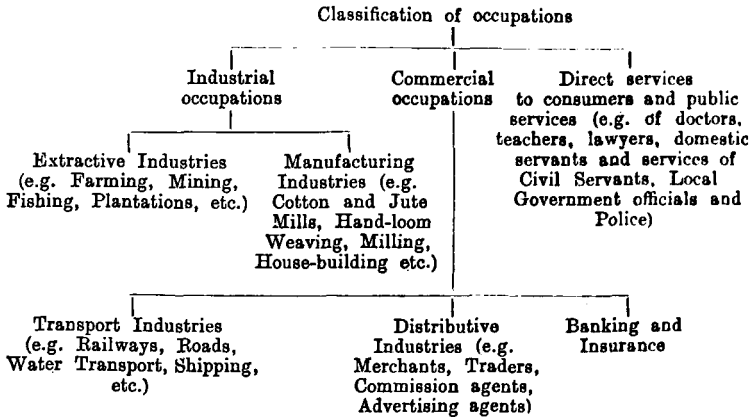
Production may also consist in the *creation of time utilities*. The actual supply of commodities like grain and fruit is limited to a certain period in the year, whereas the consumption of them is not so limited. Storing or preserving these things and carrying them over from periods of plenty to periods of scarcity is undoubtedly an important form of wealth production.

The processes in *immaterial production* are, first of all, endowing persons with the necessary skill and powers (so far as these are capable of being acquired), and secondly, the

¹ See ch. iii, §2.

release by persons thus endowed of the different forms of non-material wealth, i.e. services, like professional services, recreative services and domestic services.

§2. **Classification of occupations.**—The various occupations arising out of the different kinds of wealth-production may be grouped as follows :¹



§3. **Productive and unproductive labour.**—We may here briefly refer to the controversy, at one time acute, regarding what is productive and what is unproductive labour.

The Physiocrats, as the French economists of the eighteenth century were called, held that labour devoted to extractive industries like agriculture, mining, etc. was alone productive. Their idea was that nature cooperated with man in a very special manner in these extractive industries and created a *net product*. Adam Smith admitted the production of manufactures to the category of productive labour. But labour devoted to transport and trade was for a long time held to be unproductive, and even today, perhaps, in the minds of some people, there is a prejudice against the mercantile classes. The contention was that transport and trade did not create any *new* wealth, but dealt only with wealth already created. But we have already seen how modern economists have widened the connotation of the term 'wealth' by recognizing certain place and time utilities to be wealth. The transport services are essentially productive since they endow things with place utility. So also

¹ S. E. Thomas, *Elements of Economics*, 5th ed., p. 64.

the labour of the commercial classes is fundamentally productive, since merchants direct the movements of commodities, store and hold them over until they are required by consumers (i.e. endow them with time utilities); and sometimes they may be said even to *create* form utilities, e.g. by sorting out and selling goods in convenient lots as required by the consumers. Even when commerce is reduced to the mere act of exchange it is productive, since production is not complete until the commodity is placed in the hands of the consumer.

For a long time it was similarly held that the labour of servants, soldiers, judges, sailors, actors and the professional classes (in fact all labour in the form of personal or non-material services) was unproductive, and whole classes of the community were stigmatized as economically sterile. This view led to many absurdities. For instance, the labour of the fiddle-maker was considered productive, but that of the musician who played on it was held to be unproductive. Or again, the labour of the furniture-maker was productive, but that of the domestic servant who kept the furniture in good condition was unproductive. The fundamental test obviously is whether human wants are satisfied by the utilities in question irrespective of the source whence they flow. Services which have to be paid for, if they satisfy our wants, are wealth as much as material objects. Nor is it necessary that the utilities should yield direct satisfaction. For example, the labour of the soldier, the policeman, or the judge, by promoting security of life and property, enables wealth or direct utilities to be created, and therefore is itself productive.

But the question now arises, is any labour unproductive at all? In a certain number of cases a definite affirmative reply can be given. For example, labour is unproductive if it fails of its purpose and represents effort that is wasted (e.g. in building a capital city in a desert area uninhabitable by human beings). Secondly, the labour of burglars, swindlers and pirates is purely predatory, although it may be most strenuous. It does not add to our stock of utilities, but is aimed at the misappropriation of the existing stock. Such labour is, therefore, clearly unproductive. There are, however, certain kinds of labour which call for some discriminating judgement. For example, is the labour of the quack doctor productive or unproductive? If there is deliberate fraud practised on the consumer and he is deceived into taking something not wanted by him, then the labour is unproductive, since his *felt* want is not satisfied. If,

however, the seller is not deliberately practising fraud and if the people believe in the efficacy of the quack medicines, and are prepared to pay for them, the labour devoted to manufacturing them must be declared to be productive, though their consumption may really be injurious or undesirable.

Similarly, the labour of business men and company promoters is not necessarily unproductive. When honestly and capably performed it is of the highest value to the community, as we shall see while discussing the services performed by the entrepreneur class.¹ But sometimes their operations are of a predatory nature and are intended to deceive innocent investors, and then they must certainly be regarded as unproductive. So also speculators as a class cannot be pronounced to be unproductive and parasitical. We shall see in Chapter IX that speculation based on expert study of demand and supply renders useful services to the community by way of moderating fluctuations in prices and generally enhancing the time utility of things. But when speculation degenerates into mere reckless gambling ignorantly or dishonestly practised, it is obviously unproductive.²

§4. Factors or agents of production.—In developing our picture of the modern economic system we principally take into account the production of material wealth, which involves the cooperation of four factors or agents of production: Land, Labour, Capital and Organization. The four factors may in the last analysis be reduced to only two, namely, Land (materials and powers of nature) and Labour. Capital is compounded of land and labour, and Organization is after all a kind of human labour. However, leaving aside the question of ultimate origin, there is sufficient difference in character between the four factors to justify our treating them separately. We proceed now to elucidate the nature and the functions of each of these factors.

LAND (NATURE)

§5. Meaning of Land.—In economics we borrow many terms in common use but often attach special meanings to them. *By 'land' we mean all the materials and powers of nature which man adapts for his own use and consumption.* Besides 'land' in the ordinary sense of the term, we include such things as sunshine, rain, winds, waterfalls, water above as well as below the surface of the earth, the various minerals, electricity, magnetism and also the animals which

¹ Ch. viii, §1.

² See Taussig, *op. cit.*, vol. I, pp. 20-7.

man puts to economic uses—everything in fact which is given free by nature, and which man works on with his labour for producing wealth. Whenever the student comes across the word 'land' in economics, he should get into the habit of reminding himself of the comprehensive meaning attached to this term. This is all the more necessary because, in expounding economic theory, writers often find it convenient to draw their illustrative material from land in the ordinary popular sense of the word, and the reader is apt to lose sight of the wider scientific connotation of the term. *'Land' means all gifts of nature in the form in which they exist before man begins to work upon them.*

The character of the natural resources and the lavishness or niggardliness with which a country has been endowed in respect of them have clearly an important influence in determining the economic strength and prosperity of its people. A good soil, a favourable geographical position for carrying on international trade, the possession of good harbours, valuable coal and iron deposits, a temperate and invigorating climate, are obviously advantages which have a great economic value provided the people who possess them know how to use them.¹

While land (i.e. the materials and powers of nature) is free in the sense that it is not the result of labour, not all of the natural agents are unlimited in quantity in relation to the demand for them. Those that are unlimited of course possess no 'value' and therefore as economists we are not interested in them.² *We are interested only in those natural resources whose supply, while it is free, is limited and cannot be increased by human action.*

§6. Natural resources and their importance.³—With the growth of scientific knowledge the mastery of man over nature is rapidly increasing. However, in the last resort, man must depend upon the materials and powers of nature, and the part of nature in determining the economic destiny of man cannot be ignored. Nature is the very foundation of economic life.

As already observed, the term 'nature' (Land) stands for the entire natural environment, and under environment, we may include such things as (i) Contour, (ii) Geographical

¹ See §6.

² However, we do take them into consideration when a comparison is made between the economic position of one country and another.

³ We have given a brief account of India's natural resources in Part II.

location, (iii) Climate, (iv) Soil and subsoil, and (v) Vegetable and animal resources.¹

(i) *Contour*.—This refers to the general physical features of a country such as the arrangement of land and water areas, the size and position of mountains and rivers, and the extent and altitude of the land divisions. The configuration or relief of the earth's surface influences economic activity in various ways. Thus according to contour we get either extensive plains giving us level sheets of land suitable for cultivation and facilitating communications (e.g. the Gangetic Plain in Northern India) or mountainous tracts (e.g. the Konkan) with small holdings and difficult communications, or again a gradually undulating slope (e.g. the Deccan Plateau). The altitude, the rivers, and water areas largely influence the climate, vegetable resources, forests, animal resources and navigation.

(ii) *Geographical location*.—The geographical situation of a country has also an important bearing on its material prosperity, and its importance grows with the growth of international commerce. The situational factor may first be considered from the point of view of (a) *maritime situation*, as referring to proximity to sea, possession of suitable harbours and convenient location on the banks of rivers. This factor largely explains the rise of the Mediterranean, the Atlantic and the Pacific civilizations. London, New York, Bombay, Calcutta, Karachi owe their present importance largely to their favourable maritime location. It is easy to understand therefore why modern States are so anxious to secure direct access to the sea. (b) Secondly, the *inland situation* of a place in a country covering extensive territory like India is equally significant, having regard to the great volume of internal trade. The old caravan routes and the favourable location of cities like Cawnpore, which have risen from their position of cross-road villages, are instances in point. (c) The *industrial location and situation* assume special importance with growing commercial and industrial expansion. Proximity to raw materials, and cheap power, largely determine the localization of an industry;² witness the rise of the cotton mill industry in the Bombay Presidency, or of the iron and steel industries in the vicinity of the coal and iron fields in Bihar and Orissa.

Attempts to overcome the disadvantages of physical location.—Referring to the possibility of overcoming the dis-

¹ cf. Seligman, op. cit., pp. 37-48.

² See ch. viii, §16.

advantages of physical location, Seligman speaks of a three-fold improvement, namely as regards (a) transportation of men and commodities, (b) transmission of power, and (c) communication of ideas.

(a) *The changes in the methods of transport* from the pack-animal and the sailing boat of the olden times to steam and electric transport on land and water (not to speak of air transport) have revolutionized internal and foreign commerce by annihilating distance. The railway in particular has greatly reduced the importance of natural advantages of situation, so that many originally obscure places have come into prominence because the railway line happens to pass near them.

(b) *Transmission of power.*—All production involves the manipulation of matter whose resistance must be overcome by the use of some motive power aiding man's muscular energy. Animal power has been utilized for a long time and is still the principal motive force for the millions of cultivators in India. But it has obvious limitations of food and space. The power supplied by the wind is feeble and intermittent, and the water-mill is necessarily localized. Greater promise has been held out by steam power, or gas (depending on coal, oil, or wood). But electric power is often the cheapest and the most easily portable motive force. It virtually overcomes the handicap of distance and has revolutionized modern industry and greatly altered geographical values in recent times.

(c) *Modern facilities for the communication of ideas* have also, to some extent, reduced the importance of natural location. The post, telegraph, telephone and wireless have contributed to making the world into one market, so that changes in supply and demand in one part of the world make themselves felt almost immediately in all other parts. Thus conditions in the American cotton market quickly react on the Bombay cotton market.

(iii) *Climate.*—Temperature, moisture, the direction and the force of winds, the healthiness or reverse of the atmosphere—all these affect the arts of civilization, the character of the vegetable and animal products and the efficiency of human labour. Extreme heat (as in the Equatorial region), and extreme cold (as in the Arctic regions) are both unfavourable to sustained and progressive economic activity. In tropical countries, the lavish bounties of nature, and the enervating heat, insure easy conditions of life for man on the one hand, and on the other encourage dullness and lethargy.

A temperate climate as in western Europe is conducive to continuous progress, since on the one hand, nature is not too bountiful, and sustained effort is necessary in order to make a living; while on the other hand, nature is not too niggardly, and human effort does get its reward in the long run. A more favourable climate is at least one of the causes of the superior efficiency of European as compared with Indian labour.

The rainfall (moisture) factor influences the growth of forests, the size and utility of rivers, the nature of vegetable and animal resources, etc. Thus the moist climate of Lancashire is favourable for spinning the higher counts of yarn; Bombay enjoys a similar advantage, though in a smaller degree. Climate also affects the birth rate and age of maturity, as also the occupations of the people and their attitude towards the State. A favourable climate and adequate moisture develop self-reliance and individualism as in the United Kingdom, but inadequate moisture and semi-arid conditions, as in Australia or in the precarious tracts in India which are liable to frequent drought, make the people look to the State for most things, and invite State initiative and action. The great influence of the monsoon currents on our national economy has been discussed in Part II.

(iv) *Soil and subsoil*.—The influence of soil conditions on agricultural productivity and vegetable resources is obvious. A rich soil will support a dense population, as in the case of the alluvial fertile soils of the Indo-Gangetic Plain. On the other hand, population will be sparse in rocky or inhospitable tracts of land poor in chemical ingredients, which are either uncultivable wastes or at best only useful for sheep-farming or cattle-grazing.

Under subsoil conditions, we may take note of such factors as the presence or absence of mineral wealth. Mineral resources have played a significant part in the early stages of civilization. We thus speak of the Stone Age, the Bronze Age, the Iron Age, etc. We ourselves may be said to be living in an Iron and Coal Age. The iron, steel, mineral oil, and coal-mining industries are most important for economic development, and that is why we call them 'key industries'. England's economic prosperity has been favoured by her fortunate possession of coal and iron ore deposits occurring near each other. Our survey of the mineral resources of India will show how India possesses a large range of mineral deposits and appears fitted to be an important industrial country.

(v) *Vegetable and animal resources.*—As already observed, these are largely conditioned by natural factors like altitude, climate, and soil conditions. In a primarily vegetarian and agricultural country like India, the part played by its flora and fauna can hardly be exaggerated. The supply of food, of raw materials, of animal power, of means of locomotion, etc., depends upon the effective exploitation of our vegetable resources, which include our main crops of rice, wheat, cotton, oil-seeds, jute, etc., and of our animal resources, which consist of the cow, ox, buffalo, sheep, horse, camel, etc. The course of civilization has been determined in the past by the adequacy or otherwise of these resources.

§7. **Agricultural tenures.**—Agricultural land is, of course, a most important part of nature, affecting man's economic destiny, and a brief description of the principal methods adopted in different countries of holding and cultivating land and distributing its produce may not be out of place here.

The following are the principal types. (i) *Landlord owner and tenant farmer.*—Under this system, the landlord leases the land and buildings (farmhouses, etc.) to a tenant or tenants, and charges an annual cash rent fixed in advance, either for a long period (long lease), or for a short period (short lease). When no particular period is specified and the tenant is legally liable to be asked to quit at any time, he is called a tenant-at-will. Short leases are undesirable since they lead to a wasteful use and neglect of land and result in its impoverishment. Another evil of the tenant system is absentee landlordism, and oppression of the tenant class, who are liable to be rack-rented or summarily evicted merely because the landlord lives away from his estates and administers them through hired agents. Some protection to the tenants against oppressive landlords is necessary, and this is attempted in India by the enactment of Tenancy Laws. This system of land tenure is found in the United Kingdom, and in India in the United Provinces and Bengal (where it is called the zamindari system).¹

(ii) *Peasant proprietorship.*—Under this system, the cultivator is himself the owner of the land. He cultivates his land largely by means of his own labour and that of the members of his family, with occasional (free or hired) outside labour. The farmer takes all the risks himself; he is his own 'captain of industry'. This is commonly regarded as the most natural and the healthiest system, since it ensures

¹ See Part II, ch. iii, §32.

personal care and attention and efficient cultivation of land. Here we have the 'magic of property that turns sand into gold'! But the evils generally found in conjunction with this system are excessively small and uneconomic farms, an unduly conservative attitude on the part of the peasant, and excessive thrift which defeats its own object. On political and social grounds, however, it is often upheld as an ideal system, since it creates and supports a sturdy and well-contented peasantry which is the backbone of a nation. The peasant proprietary tenure prevails in a number of continental countries such as France, Germany and Belgium. It also prevails largely in India and is called the Ryot Tenure or ryotwari.

(iii) *The Métayer system.*—This is a crop-sharing system and is prevalent in southern Europe (Italy, Portugal, etc.) and in parts of India like the Punjab and Bombay. The landlord lets his land and provides some of the capital, the tenant cultivates, and the produce is generally shared half and half. The system ought to ensure joint interest in the care and development of land. In practice, however, it is often found to break down, because the landlord may prefer to receive a fixed rent and may not be prepared to take any risks at all. Nor is the arrangement altogether satisfactory from the point of view of the tenant farmer, who may not relish his partnership with the landlord and the consequent loss of his independence. He may come to feel that too much of the profit goes to the landlord and too little remains for himself. Under these circumstances, he may not take as much interest in the land as the peasant proprietor.

(iv) *State or collectivized farms.*—The most outstanding modern instance of this system is found in Soviet Russia, where the peasants' farms have been 'socialized' or 'collectivized', and are cultivated under the care and supervision of the State. This new experiment in agricultural organization raises vast issues which are beyond the scope of this book.

The best type of land tenure, all things considered, is perhaps the peasant proprietary system, provided care is taken to ensure farms of moderate size and to enlist co-operation between a number of peasant proprietors, especially for joint farming, so as to secure the various economies or advantages of large farms.¹

¹ The question of large-scale *versus* small-scale farming (agriculture) is discussed in ch. viii, §23.

§8. **Laws of Increasing, Constant and Diminishing Returns.**—In order to produce wealth we have to make use of the different agents of production. If more wealth is desired, we can only secure it by using these agents more and more. But the relation between the effort put forward and the wealth created in response to that effort is not of an unvarying character. Sometimes an increase of effort may give us a more than proportionate increase of response. Thus suppose we employ Rs. 10,000 as capital and twenty labourers, the value of the goods produced with the help of this equipment is, let us say, Rs. x . Now we double the equipment, that is to say invest another Rs. 10,000, and employ another set of twenty labourers. It may happen that with this enlarged equipment certain new economies become possible and that the working of the establishment becomes more efficient. As a result of this we get an *additional* supply of goods worth say Rs. $1\frac{1}{2}x$. The return in this case is more than proportionate to the increase of effort in the shape of the extra Rs. 10,000 and the labour of twenty more men. By doubling the effort we have more than doubled the value of the produce, the value of the goods now being Rs. $(x+1\frac{1}{2}x)$, or Rs. $2\frac{1}{2}x$ instead of only Rs. $2x$. When this kind of thing happens, we say that the Law of Increasing Returns is in operation. When the response to increased effort does not change, that is, if the additional capital and labour gives us the same additional return as before—namely another Rs. x —we say that the Law of Constant Returns is in operation. If the result is *less than proportionate*, i.e. if we were to get an addition of, say, Rs. $\frac{2}{3}x$, we should say that the Law of Diminishing Returns was in operation. The response from each one of the agents of production, namely land, labour, capital and organization, may exhibit at different times every one of the three varieties of (i) Increasing, (ii) Constant, or (iii) Diminishing Returns. But a persistent demand on any one of these agents of production will eventually be met by diminishing returns. The Law of Diminishing Returns is therefore of fundamental importance. Constant or increasing returns may not show themselves at all. Or if they do show themselves they do so in a fitful and uncertain manner. But we can depend upon the Law of Diminishing Returns asserting itself in the long run. The operation of this law is best explained with reference to land, which shows its working in a more pronounced manner than any of the other factors of production. The following statement of the law as given by Marshall is for that reason made with special

reference to land, though the law itself is really of universal application, i.e. it applies to all the four factors of production.

§9. **Marshall's statement of the Law of Diminishing Returns.**—'An increase in the capital and labour applied in the cultivation of land causes in general a less than proportionate increase in the amount of the produce raised, unless it happens to coincide with an improvement in the arts of agriculture.'¹

Beyond a certain point or after a certain stage in the cultivation of land has been reached, every further increase in the amount of labour and capital applied to it produces a less than proportionate return. What is meant is not that the *total return* from the land diminishes, but that the *additional return* received as the result of further expenditure is less than proportionate to the additional outlay. The law may also be stated as a Law of Increasing Cost. Up to a certain point every increase in the return from land may mean decreasing cost per unit. But this cannot go on indefinitely. A stage will be reached when the return will diminish and will ultimately even fall below the outlay as the cost per unit increases. Obviously a wise farmer will stop applying any further doses of labour and capital at the point where he finds that the additional yield from a particular dose just equals his expenditure. Land, as everybody knows, is not all of the same quality. Some lands are more fertile and others less. At first, of course, only the superior lands will be cultivated. But as the yield diminishes it may be more profitable to take up the inferior land for cultivation rather than lay out more and more capital and labour on the superior land. Thus, let us suppose there are three kinds of land available for cultivation, *A*, *B* and *C*. *A* is the best land, *B* comes after it in point of fertility, and *C* stands last being the least fertile of the three. The farmer would naturally cultivate land *A* first. Let us imagine that he applies successive 'doses' of capital and labour which cost him, say, Rs. 50 each and that the crop he wishes to raise is wheat which is selling in the market at the rate of 4 seers to the rupee. The application of the first dose of capital and labour gives him 500 seers. He spends another Rs. 50 and gets 450 seers, the third dose of Rs. 50 gives him 400 seers. Here he finds it worth while passing on to the cultivation of *B*, where his first outlay of Rs. 50 yields 350 seers; then he prefers to go back to *A* where an investment of another

¹ Marshall, op. cit., p. 150.

Rs. 50 gives 300 seers. After this he finds it profitable to turn to *C* which yields him 275 seers. The subsequent doses are in the following order :

<i>C</i>	...	...	...	250 seers
<i>A</i>	...	...	...	225 "
<i>B</i>	...	...	...	225 "
<i>A</i>	...	...	...	200 "
<i>B</i>	...	...	...	200 "
<i>C</i>	...	...	...	200 "

The net result of his operations may be set out as follows :

LAND A

Expenditure	Produce in seers	Cost per seer	Increasing Costs or Diminishing Returns
1st Rs. 50	500	$\frac{1}{5}$ th of a rupee	
2nd Rs. 50	450	$\frac{1}{4}$ th of a rupee	
3rd Rs. 50	400	$\frac{1}{3}$ th of a rupee	
5th Rs. 50	300	$\frac{1}{2}$ th of a rupee	
8th Rs. 50	225	$\frac{2}{3}$ ths of a rupee	
10th Rs. 50	200	$\frac{1}{2}$ th of a rupee	
Total } Rs. 300	Total } 2075	...	

LAND B

Expenditure	Produce in seers	Cost per seer	Increasing Costs or Diminishing Returns
4th Rs. 50	350	$\frac{1}{4}$ th of a rupee	
9th Rs. 50	225	$\frac{2}{3}$ ths of a rupee	
11th Rs. 50	200	$\frac{1}{2}$ th of a rupee	
Total } Rs. 150	Total } 775	...	

LAND C

Expenditure	Produce in seers	Cost per seer	Increasing Costs or Diminishing Returns
6th Rs. 50	275	$\frac{2}{11}$ ths of a rupee	
7th Rs. 50	250	$\frac{1}{2}$ th of a rupee	
12th Rs. 50	200	$\frac{1}{4}$ th of a rupee	
Total } outlay } Rs. 150	Total } produce } 725	...	

The cultivation of each kind of land is in this manner pushed to a point beyond which it ceases to be profitable. In the above example, it pays to spend Rs. 300 on *A* and Rs. 150 each on *B* and *C*. An additional dose of Rs. 50 will yield less than 200 seers on all these lands. A produce of 200 seers enables the farmer just to recover his cost of Rs. 50 at the current market price of 4 seers per rupee. Less than that will mean a loss to him.

The point that is brought out in the above example is that returns diminish or, what comes to the same thing, costs increase with every successive application of capital and labour, whether we use our additional outlay on the same land or on some other (inferior) land. Thus when the fourth Rs. 50 was spent on *B* following the third Rs. 50 spent on *A*, the yield diminished from 400 seers to 350 seers, i.e. the cost went up from $\frac{1}{4}$ th of a rupee to $\frac{1}{2}$ th of a rupee per seer. We get similar results by taking each kind of land separately, e.g. *A*'s responses to successive doses are represented by the figures 500 seers \rightarrow 450 seers \rightarrow 400 seers \rightarrow 300 seers \rightarrow 225 seers \rightarrow 200 seers, and the corresponding costs are $\frac{1}{10}$, $\frac{1}{9}$, $\frac{1}{8}$, $\frac{1}{6}$, $\frac{2}{9}$ and $\frac{1}{4}$ of a rupee per seer.

If the returns diminish in passing from one kind of land to another, this is the *extensive* aspect (corresponding to extensive cultivation) of the Law of Diminishing Returns. When the returns diminish as we apply more and more capital and labour to the same land, we talk of this as the *intensive* aspect (corresponding to the intensive cultivation) of the Law of Diminishing Returns. When more produce is needed, we obtain it partly by working old lands more intensively and partly by resorting to new lands, which at first we had ignored because of their relative inferiority. Thus, generally speaking, the Law of Diminishing Returns is found to be in operation in both of its aspects, extensive

as well as intensive. The fact that lands known to be inferior are cultivated at all is itself a proof of the truth of the Law of Diminishing Returns in its intensive form. For if the superior productivity was experienced indefinitely in the case of the better lands we should prefer continuing to take advantage of this, and need never use the inferior lands at all. Similarly the fact that we think of new lands *only after the east on the old ones has risen* to a certain level is itself a proof of the operation of the law in its extensive aspect.

§10. **Qualifications and conditions.**—The Law of Diminishing Returns holds good only under certain conditions and is subject to certain qualifications. (i) In the first place, we must remember that in the earlier stages of cultivation we may find returns increasing instead of diminishing.¹ But after a while the increasing returns give place to diminishing returns.

(ii) An increase in capital and labour causes a less than proportionate increase in the produce, 'unless it happens to coincide with an improvement in the arts of agriculture'. The adoption of improvements (in implements, manures, organization, etc.) may result in increasing returns. In our example, the first dose applied to *A* gives 500 seers. But before the second dose of Rs. 50 is applied, the methods of cultivation may have improved and consequently the return may be 700 seers instead of 450. Yet, once the new methods are established, the same phenomenon of a progressive fall in output will show itself. Only the fall will now be from 700 seers instead of from the original 500 seers. The law assumes that any given methods of working the land (whether backward or advanced) remain stable. Therefore the fact that with the change of methods the output will be greater for the same expenditure cannot be regarded as an exception to the Law of Diminishing Returns.

(iii) The law suggests that the order of cultivation is from the better to the worse lands. It does not, however, require that any current classification of soils as good or bad must never change. Land at first regarded as inferior may later appear as superior (owing to the discovery of new methods, the construction of new roads and railways, etc.). This, however, does not in any way invalidate the Law of Diminishing Returns, for which all that is necessary is that under any given set of conditions some lands should be better

¹ Marshall's statement of the law given above is for this reason careful to include the words 'in general'.

and more profitable to work than others. All we need is that lands should always fall into different grades, and not that the grading should never change.

§11. **Other applications of the Law of Diminishing Returns.**—The argument showing how the Law of Diminishing Returns applies to land used for building sites,¹ to mining, fisheries and other extractive industries, runs on lines exactly similar to those just indicated with reference to agricultural land.

It is also not very difficult to see the working of the law in relation to the other factors of production. Take a machine, for example, as typical of capital. Employing more labourers to operate it, or using more and more coal as a source of power for keeping it in motion, may for a time increase the efficiency of the machine. But sooner or later additional doses of 'land' and labour will cease to evoke proportionate responses. Too much coal for example will choke a steam-engine instead of making it work better. Similarly the efficiency of the labour force will show a satisfactory increase for a while, as more and more land and capital and more and more organizing ability are associated with it. But the point will eventually be reached when it will be necessary to call a halt to this process, because it is found not to pay any further.

While, however, the Law of Diminishing Returns is unmistakable in its operation when we consider the limits of the productivity of every single unit of land, labour, capital and organization, the differences between land and the other factors are (i) that the supply of land is limited, and (ii) that recourse to *other* lands means recourse to progressively inferior lands. The supply of labour and machines and organizing ability may on the contrary be regarded as unlimited from the point of view of any one given business or firm. Additional supply of labour does not mean that the labourers employed later are less efficient. Similarly we can have more machines and more factories, if necessary, without any limit, humanly speaking, and the later machines and factories may be just as good as the earlier ones.

So far as the factors other than land are concerned, we may say, therefore, that the law is not seen to operate in its *extensive* aspect. This is what is implied when it is said sometimes that the law applies only to land and not to the other agents of production. When in any act of wealth-

¹ See also ch. xiii, §17.

production, the part which land or nature plays is predominant, as in agriculture, we witness quickly and unmistakably the operation of the Law of Diminishing Returns. Where, however, the part of land or nature is subordinate and the part of man is predominant, the Law of Diminishing Returns may be masked for a long time during which we may succeed in securing constant if not increasing returns, as in manufactures.

§12. **Diagrammatic Illustrations of the Laws of Diminishing, Constant and Increasing Returns.**—The Laws of Diminishing, Constant and Increasing Returns may be represented graphically by the following figures :

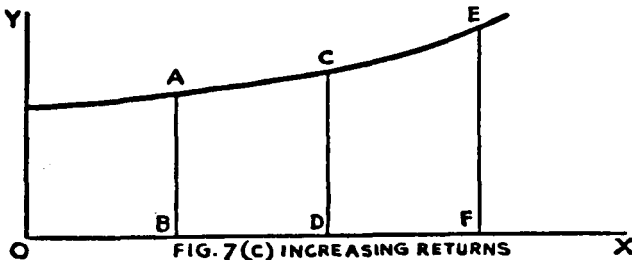
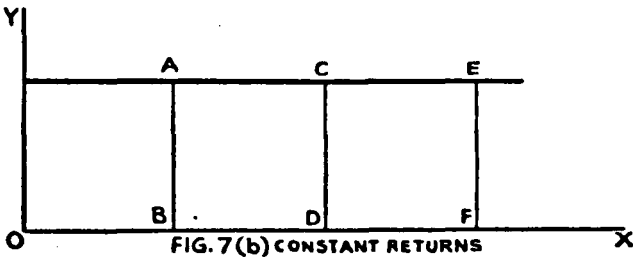
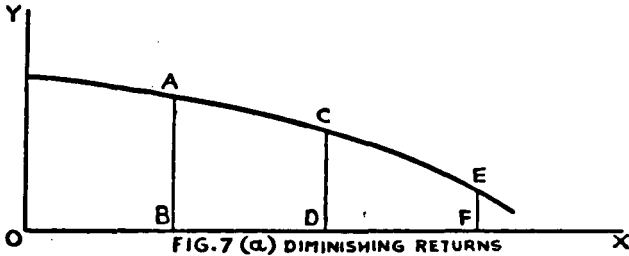


FIG. 7.—DIAGRAMMATIC REPRESENTATIONS OF THE LAWS OF DIMINISHING, CONSTANT AND INCREASING RETURNS

In Figs. 7 (a), (b) and (c), OB, BD, DF = say Rs. 50 and the lines AB, CD, EF represent the returns to successive applications of doses of productive power.

SUMMARY

By 'production' we mean adding or creating values or utilities—form-utilities, place-utilities or time-utilities. The utilities created may be material or immaterial. *Productive occupations* fall into three main classes: (i) Industrial occupations, (ii) Commercial occupations, and (iii) Direct services to consumers and public services. Any labour which issues in the production of 'wealth' is productive. Labour which fails of its purpose or which is purely predatory is unproductive. The test to apply is whether it satisfies some want that is actually felt.

In the production of material wealth the cooperation of (i) Land, (ii) Labour, (iii) Capital, and (iv) Organization is involved. These four are called the *Factors of Production* or *Agents of Production*.

Land (Nature).—'Land' in economics has a much wider meaning than in ordinary language. It includes all the materials and powers which are freely given by nature and which man utilizes for wealth production. Their supply is limited and cannot be increased by human effort. A country's economic destiny depends, among other things, on whether nature has been bountiful or niggardly, considerate or neglectful, in respect of contour, location, climate, soil and subsoil, vegetable and animal resources.

Agricultural land is one of the most important items coming under natural resources. Apart from the character of the land possessed by a country, the manner in which it is employed by man has far-reaching economic consequences. In this connexion the question of *land tenures* arises. The principal known types of land tenure are the following: (i) Landlord Owner and Tenant Farmer, (ii) Peasant Proprietorship, (iii) The *Métayer* System, (iv) State or collectivized farms. On the whole, the system of peasant proprietorship is the best from the economic and social point of view.

The employment of additional doses of capital and labour may be attended with different results at different times. Sometimes the returns may be more than proportionate to the additional effort (Increasing Returns) and sometimes they may be just proportionate (Constant Returns). But eventually the returns will be less than proportionate (Diminishing Returns). This tendency is known as the *Law of Diminishing Returns* and is of fundamental importance in production, particularly when in production we are concerned with 'land' more than with the other factors of production. It is therefore commonly stated thus with reference to land: 'An increase in the capital and labour applied in the cultivation of land causes in general a less than proportionate increase in the amount of the produce raised, unless it happens to coincide with an improvement in the arts of agriculture.' This result follows whether the increases of capital and labour are applied to the same land or to another plot which, being relatively inferior, was not at first taken up for cultivation. In the first case, we get the intensive aspect, and in the second case, the extensive aspect of the

Law of Diminishing Returns. The law is subject to the following qualifications: (i) it may not show itself for some time in the beginning; (ii) it may be held in abeyance if there are sufficiently important improvements in the arts of agriculture; (iii) in its extensive aspect, it assumes land as graded into superior and inferior. But this gradation is relative to a given time or set of circumstances and may change in course of time and under a different set of circumstances.

Other instances of 'land' are the mines, fisheries, etc. and the law applies to them in the same manner as to agricultural land.

It is also applicable to the other factors of production with the differences that (i) whereas land is limited, the other factors may for all practical purposes be regarded as unlimited, and (ii) the operation of the law in its extensive aspect is not so clear or so inevitable as in the case of land.

CHAPTER VI

PRODUCTION : LABOUR

§1. **Characteristics of labour.**—Labour is any human effort which has an aim and purpose outside of itself, and which contributes to wealth-production. The exertion may be wholly or mainly physical or muscular, or it may be wholly or mainly mental or nervous. It may be of a mechanical and routine character, or it may involve the exercise of the highest human faculties. Again some labour may involve much responsibility and other labour may not do so to any great extent.

Amidst all these variations, however, considered as an agent of production, labour must always possess two characteristics : (i) It must be undergone not for its own sake but primarily with a view to some reward outside of itself. The bodily exertion of an amateur gymnast, however strenuous it may be, is not labour in the economic sense. But if people have to pay for witnessing the gymnast's feats, then it becomes labour.

Some labour is essential and healthful to all normally constituted human beings, and under certain conditions it may be altogether pleasant to the labourer. But these are incidental advantages, and economic labour is put forth not in order to reap these advantages but for the remuneration attached to it.

In any case, while some labour may be pleasant, a good deal is also unpleasant and involves heavy toil, and it would not be forthcoming without inducement in the shape of wages. Again, a man may sometimes gladly do work of certain kinds for the mere pleasure of it, provided he is free to take it up or stop it as the spirit moves him. But modern industry requires steady continuous labour. When a man *must* put in a certain number of hours' work, whether he feels inclined to do so or not, the element of compulsion turns labour that may otherwise be pleasant into something irksome. Every student knows how an otherwise charming book becomes hateful directly it is prescribed as a textbook, which he is compelled to study for an examination!

Labour thus involves strain and sacrifice. This is however how the labourer himself regards it, and it is therefore

called the *subjective* aspect of labour. According to this point of view, the amount of sacrifice entailed and, therefore, the reward expected depend upon such considerations as the following : the time per day or week during which work has to be done, the intensity of the work, the nature of the work—whether it is regarded as respectable or not—the physical, moral and social surroundings under which it has to be done, whether it is exceptionally unpleasant or exceptionally unhealthy, involving early retirement or death, and the expensiveness or otherwise of the previous training it requires.

(ii) The second characteristic of labour is that it must result in the creation of wealth, that is, something which has an exchange-value. Mere intention to create wealth is not enough. The intention must be successfully fulfilled. All the labour of a cultivator is lost, if the crops he has painfully raised are eaten by wild animals or destroyed by disease. Labour which is misdirected or which miscarries will naturally not command any reward and is, economically speaking, not labour at all.

The consideration that labour must result in the creation of wealth serves to call attention to the *objective* aspect of labour. The reward offered (by the employer) for work done will obviously be according to the results of labour (and not according to the painful feelings associated with it), in other words, will depend on the *efficiency* of labour.

§2. **Conditions of efficiency.**—The output of the worker will first depend upon the *standard of his health*. This in its turn will depend on his income and the manner in which he spends it. Civilized States nowadays perform functions of the highest importance in protecting the community from disease. These functions cannot be left to individuals or to the spasmodic efforts of private charity. The money spent on public health and sanitation by the public authorities is the soundest of national investments. Apart from measures of public health, for creating an efficient labour force a satisfactory system of *education*—general as well as technical—is necessary. In order that the available labour force of the nation should be most effectively employed, it is necessary that it should be distributed over the different occupations as well as over the different parts of the country, according to the opportunities available in each of them. If through ignorance, inertia or prejudice, or through the operation of social restrictions, certain occupations and places get overcrowded and certain others are under-manned, labour power is wasted. Labour must be mobile in all the senses

of the term (as explained below in §8) to attain its maximum efficiency. The *choice of occupation* should be guided by temperament and natural aptitude, and misfits should be avoided as far as possible. Methods of testing different kinds of ability are gradually being perfected, and the State should endeavour to guide the choice of vocations by giving its citizens reliable advice based on the widespread employment of scientific tests of inborn capacity. It must also provide ample facilities for training its young men in different vocations.

The *surroundings* in which labourers are required to work should be healthy and as pleasant as possible. (The wages should be high enough to enable the worker to obtain not only a sufficiency of the bare necessities but also a few of the modest comforts and luxuries of life.) The *hours of labour* should be limited so as to allow a margin of leisure for purposes of rest, recreation and self-improvement. The *atmosphere* in which the labourer lives and works must be one of hope, freedom and change.

Labour must be contented if it is to be efficient. It must feel that it is getting a fair return for its sacrifice. Throughout the western world, and to a growing extent even in India, the attitude of labour (especially industrial labour) is one of profound discontent with the existing economic system, and the demand for a radical overhauling of this system is becoming more and more insistent. Factory legislation adopted by all civilized countries in the interests of labour has been of immense benefit to workers. But while they are thus protected from the cruder and more obvious kinds of exploitation on the part of the employers, the feeling is growing that the present capitalistic system itself must undergo a fundamental change in order that the worker should get a just reward for his labour.¹

It is difficult to say how far economic efficiency is a matter of race and heredity. Certain races like the negroes are said to be incapable of the sustained effort necessary under present conditions of wealth production. In most cases, however, there are good grounds for holding that the existing deficiencies are not inherent and irremediable, but are capable of being removed by education and improvement of environment.

Climate is another factor which has a bearing on efficiency. Extremes of heat and cold are unfavourable to

¹ See also ch. xvi, §§17-18.

efficiency. The highest efficiency is developed in regions with a temperate climate, and the lowest where the climate is hot as well as damp. A temperate climate enables man to maintain physical activity and vigour, as it hardens without exhausting.

§3. **Size of population and efficiency.**—Up to a certain point, increase in size of population helps to increase the efficiency of labour by facilitating large-scale production, co-operation and division of labour. But a time comes when a further increase in population is no longer advantageous. Suppose that there are two countries exactly similar in respect of available natural resources, that labour in each is equally efficient and that further, the proportion of workers to non-workers is also the same in each. Under these conditions, if one country has twice the number of people that the other has, the labour-power of the former will also obviously be twice as great. The student should, however, not jump to the conclusion that the first country (that is, its inhabitants) will necessarily be twice as well off. The relation between the size of population and economic prosperity is not so simple as that, as will be seen later on.

§4. **Malthusian doctrine of population.**—Here it is convenient to introduce a discussion of Malthus' Doctrine of Population. Malthus wrote his famous *Essay on Population* in 1798. In the later editions of this celebrated work he summarized his conclusions as follows :

(i) Population is necessarily limited by the means of subsistence.

(ii) Population invariably increases where the means of subsistence increase, unless prevented by some powerful and obvious check.

(iii) These checks, and the checks which repress the superior power of population, and keep its effects on a level with the means of subsistence, are all resolvable into moral restraint, vice and misery.

The first proposition requires no proof. A certain minimum amount of food is required to keep alive a human being. If human beings grow in numbers but food cannot be increased in proportion, death by starvation will follow until the size of the population is such as can be maintained by the available food-supply.

By his second proposition Malthus tries to convey his notion that increase in food-supply is swiftly followed by increase in population. In fact, in his opinion the rate of population growth is much greater than the rate of growth

of means of subsistence. Every twenty-five years population tends to double itself, i.e. it increases in geometrical progression thus : 1 : 2 : 4 : 8 : 16 : 32 and so on.

Food-supply on the other hand increases in arithmetical progression thus : 1 : 2 : 3 : 4 : 5 : 6 and so on. There is, however, no proof establishing these ratios. What we should now say is this : that except in very rare cases and except for very short periods, every increase in population is followed by a less than proportionate increase of food-supply (or to put it more generally—of *wealth*).

If a highly civilized people, already well advanced in knowledge and the arts of production, transplant themselves to some new and hitherto unexploited part of the globe, they may find that for some time with every increase of population there is a more than proportionate increase in production. Therefore for some time growth of population may go hand in hand with increase in wealth and prosperity. But unless there is constant improvement in knowledge and the arts of production, a time comes when increasing returns give place to diminishing returns. Nature fails to respond to greater human effort made possible by increase in numbers, and forces restraining population within the limits of subsistence come into operation. Malthus classifies these forces under the headings of (a) moral restraint, and (b) vice and misery. Another classification suggested by him is (a) preventive checks, and (b) positive checks.

By moral restraint, Malthus means 'restraint from marriage from prudential motives, with a conduct strictly moral during the period of this restraint'.

Preventive checks are all those influences (good or bad) which lead to a diminution of birth-rate. If population is not regulated by the exercise of preventive checks, positive checks come into operation. Positive checks, according to Malthus, mean all those influences by which the death-rate increases, that is to say, 'the whole train of epidemics, wars, plagues and famines'. If we wish to avoid the positive checks and all the human misery and suffering they necessarily involve, we must use the right type of preventive checks. The only preventive check which Malthus blesses and sanctions is moral restraint as defined above.

§5. **Qualifications of the Malthusian doctrine.**—Subject to certain amendments the Malthusian doctrine is generally accepted nowadays. But our propositions in this connexion are less dogmatic than they appear in Malthus' treatment of the subject. Malthus' mathematical formula expressing the

ratios of increase of food and increase of numbers is now discredited. Also we no longer say that population, if unchecked, is always ahead of production. We say that this may very often be the case. It is conceivable that human ingenuity may provide means by which any given growth of population is more than offset by increase of wealth production. This may be said to have happened in England during the period of the Industrial Revolution. But, of course, there is no guarantee that there will be a constant and adequate improvement in human invention to cope with every increase of population.

If we are not able to increase wealth in proportion to increase in population, the only way to prevent misery is deliberately to check numbers. As stated above, Malthus approves of only one method of checking excessive growth of population, and that is moral restraint, i.e. the postponement of marriage. Modern opinion views this remedy as impracticable, unnecessary or even undesirable, and advocates recourse to neo-Malthusian methods of controlling births. There are good reasons for supposing that these methods are being largely followed in most of the civilized countries of the west, and their use (birth control) is being advocated with increasing insistence and emphasis.

§6. **Optimum population.**—Before taking leave of this subject, we may mention a modern refinement of the theory of population for which Dr Cannan is responsible. He has introduced the term 'optimum population' which he explains as follows :

'At any given time, or, which comes to the same thing, knowledge and circumstances remaining the same, there is what may be called a point of maximum return, when the amount of labour is such that both an increase and a decrease in it would diminish proportionate returns. . . . Just as there is a point of maximum return in each industry, so there must be in all industries taken together. If population is not large enough to bring all industry up to that point, returns will be less than they might be, and the remedy is increase of population; if, on the other hand, population is so great that the point has been passed, returns are again less than they might be, and the remedy is decrease of population.'¹

The idea brought out clearly in this statement is that a nation may suffer economically because the population is

¹ E. Cannan, *Wealth*, pp. 68-9.

too small in size, just as it may suffer because it is too big. So far as we can, we must avoid both the evils—the evil of under-population as well as the evil of over-population.

We have spoken above of the modern emphasis on bringing about the retardation of an excessively high rate of increase by voluntary limitation of the birth-rate. Apart from and independently of this method, western experience teaches that a decrease of the death-rate, in some unexplained manner causes a corresponding decrease of the birth-rate. If for instance, owing to improved public health measures, people live longer, they breed less fast, even without any deliberate attempt on their part to reduce the birth-rate. Again, it is now taken as established that fertility decreases with increase of wealth and comfort and with the growth of cultural and intellectual interests. Lastly, if people get accustomed to a higher standard of life, and, owing to the advance of education, become more and more capable of forethought and prudence, they tend deliberately to check the birth-rate and thus succeed in keeping up the higher standard of living. An important aspect of progress is the education not only of men but also of women. Female education makes women less and less inclined to regard marriage as the only profession open to them. They seek other spheres of usefulness and activity and may often choose to remain unmarried.

Again the general progress of the community in health and education will make it economically more efficient. Thus while wealth will increase, forces will come into operation limiting the population to the optimum size.¹

§7. Factors determining size and density of population.

(i) *Size*.—The increase of population in a country is found by taking into consideration the birth-rate and adding to the number of persons born those that have immigrated into the country from abroad. On the other hand, we have to deduct from this total, the number of persons who die during a certain period (usually a year) and also the persons who emigrate from that country. Thus a given population is constantly gaining at one end by birth and immigration, and losing at the other end by death and emigration. The birth-rate depends largely upon the frequency of marriage and its fecundity. We must count the illegitimate as well as

¹ See Part II, ch. i, §22, for a discussion of the population problem in India.

legitimate births. The question of the Indian birth- and death-rates is dealt with in Part II.

(ii) *Density of population.*—The density of population (expressed usually in terms of the number per square mile of territory) depends on the environment and its utilization by man, on climatic conditions, security of life and property, standard of comfort, economic resources and the stage of economic development. While natural conditions such as fertility, temperature, rainfall, and altitude have an important bearing on the density of the population, the human factor has come to exercise a decisive influence on the density. The area necessary for the support of a given number has steadily decreased with the progress of civilization from the hunting and pastoral to the agricultural stage, and thence to the manufacturing stage. Thus a highly industrialized and commercialized country with intensive agriculture will show the highest density of population, as for example the United Kingdom and Belgium, where the density is well above 600 per square mile. Moderate development of both gives a medium density (about 200) as in India. Further, in an agricultural country the density of population will also depend upon the character of the cultivation.¹

One point that deserves emphasis is that mere numbers supported per square mile have small significance unless we also take into account the standard of comfort of the population in question. Thus, it would be misleading to infer from the almost equal density of Bengal (646) and of Belgium and England, that Bengal is economically as well off as these other countries. It is well known that the standard of living in Bengal is much lower. The high density in Bengal is, therefore, to be regarded rather as an index of its poverty and economic backwardness.

§8. *Mobility of labour.*—The term 'mobility of labour' indicates the ease with which labour can flow from one place or occupation to another, while the term 'immobility of labour' indicates the difficulty of such a movement. Since the labourer has to deliver his labour *personally*, it is clear that the mobility of labour and the mobility of the labourer are convertible terms.

(i) *Geographical mobility of labour from one place to another.*—As Adam Smith has said, 'of all sorts of luggage man is the most difficult to be transported'. He is by

¹ See Jathar and Beri, *Indian Economics*, vol. I, 5th ed., pp. 41, 44; and Seligman, *op. cit.*, pp. 49-52. Also Part II, ch. i, §16.

nature inclined to remain where he usually resides or where he is born. Fondness for home, reluctance to leave old associations, patriotism, natural inertia, difficulties of language and ignorance prevent free movement of labour from one place to another even when a man is thereby likely to improve his prospects.

(ii) *Horizontal mobility of labour*.—Horizontal mobility means mobility as between one occupation or trade and another of the same kind. No change or very little change in the nature of the task is entailed, the grade of work remaining the same (e.g. a typist moving from a textile to a mining office). This kind of mobility is relatively freer than the vertical mobility of labour since the degree of skill and the general nature of work are the same.

(iii) *Vertical mobility of labour*.—This occurs as between trades or occupations of *different* kinds, involving either an upward movement of labour from an inferior to a superior grade (e.g. a clerk in an office becoming the office manager or a railway porter becoming a guard), or from an upper grade to a lower grade in the same or a different industry. This kind of mobility is more difficult to attain owing to the influence of hereditary occupations, personal pride in the craft, lack of ambition and of the necessary facilities to secure promotion. The vertical immobility of labour results in the stratification of society into more or less non-competing groups, and affects their rewards.¹

(iv) *Social mobility*.—Lastly, closely allied to the vertical mobility is *social mobility* from one social grade to another. This is impeded by social and wealth barriers and to some extent by caste or trade union restrictions on the choice of occupation.

The caste system in India exercises a considerable influence on mobility of labour of all kinds, especially the vertical and social mobility of labour.²

SUMMARY

Labour is any human effort undergone for the sake of wealth-production and resulting in wealth-production. It may be physical or mental or a mixture of both. It may be of a highly responsible kind or it may be practically free from responsibility. Modern industry requires steady continuous labour which is felt to be irksome and which, therefore, would not be forthcoming without the inducement of wages. Labour can be viewed

¹ See ch. xiv, §5.

² See Part II, ch. i, §23.

subjectively or objectively. The subjective view is that of the labourer himself, who thinks of the sacrifice and discomfort of working. The objective view is that of the employer, who is interested not in the amount of discomfort undergone by the labourer but in the quality and quantity of the work done.

The *efficiency of the labourer* depends upon several factors. First of all, it depends upon his standard of health. In order that this should be satisfactory, the labourer must enjoy an adequate income and must know how to spend it wisely. Another important factor in this connexion is efficient organization of public health and sanitation. No amount of individual effort alone will ward off disease, if for example the water-supply is impure or if there is no system of compulsory vaccination. These are matters for public regulation.

Education, general as well as technical, is another great factor governing efficiency.

It is necessary that the available labour force should be distributed among the different occupations according to the opportunities available in each.

The educational system should be so devised as to test the ability and special aptitudes of the scholars, who should be advised to choose occupations for which they may be fitted.

Ample provision for efficient training in different occupations is necessary.

Efficiency is not possible without contentment. Labour must feel that it is getting its due. The universal discontent which characterizes labour under the present capitalistic system indicates the necessity of reforming that system.

It is sometimes asserted that labour efficiency is a question of race and heredity. It is difficult to dogmatize about this. Generally, however, differences as regards efficiency can be explained sufficiently satisfactorily as being due to differences in environment and education.

So far as the effect of climate on efficiency goes, the highest efficiency is developed in regions with a temperate climate and the lowest in regions of damp heat.

Under every given set of conditions there is a certain *size of population* which is economically the most advantageous, so that a decrease below as well as an increase beyond this size will lead to a diminution of wealth per head of the community in question.

This ideal size of population is called the optimum size. The relation between size of population and prosperity was first stated by Malthus, but in unduly pessimistic terms. According to Malthus, population always tends to outgrow the means of subsistence, but the balance is established by the superfluous population being cut off by wars, epidemics, etc. (positive checks). It is open to mankind, said Malthus, to practise moral restraint (preventive checks) and thus to escape much useless misery. He was, however, not very hopeful about mankind in general being sufficiently enlightened to adopt moral restraint. Hence the pessimistic tone of his writings.

The *Malthusian theory* has now been supplemented and improved in several directions, e.g. (i) by the conception of optimum population, (ii) by

a recognition of the possibility of human inventiveness coping with increasing numbers without the positive checks coming into action, and (iii) by recognizing the importance of public health measures and of economic welfare as checks on the growth of population, and lastly (iv) by insistence on birth-control (neo-Malthusian) methods.

The following formula indicates the factors involved in increase (size) of population:

[Birth-rate + Immigration] minus [Death-rate + Emigration] = Net increase of population.

Density of population (i.e. number per sq. mile) depends on natural conditions and the manner in which men have learnt to use them. High density combined with high standard of living are characteristics of western countries generally. Industry on the whole supports a higher density of population at a given standard of comfort than agriculture. Mere density affords no sure indication of the position as regards economic well-being.

By *mobility of labour* we understand the freedom of its movement from (i) one locality to another (geographical mobility); (ii) one occupation to another (a) of a similar kind (horizontal mobility) or (b) of different kinds (vertical mobility); and (iii) one social grade to another (social mobility).

CHAPTER VII

PRODUCTION : CAPITAL

§1. **Definition.**—Capital has been defined as *all wealth, other than land, intended for further production of wealth*. Even in the earliest stages of human evolution capital makes its appearance. The crudest hunting implement made out of flint or stone is a form of capital. Time and energy have been spent by the savage in fashioning it instead of being spent in obtaining food. With an eye to the future, direct and immediate satisfaction has been sacrificed, with the result, however, that the savage is now equipped with an instrument which will enable him to kill his game and obtain his food with much greater ease and in greater abundance than before. In modern society the forms of capital are very much more varied and complicated, but the principle involved is the same. Unless a community devotes a considerable proportion of its energy and resources to producing capital or 'production goods' instead of devoting itself to the production of immediately consumable goods ('consumption goods'), it cannot reach more than a very primitive stage of material prosperity.

§2. **The part played by capital.**—Production of wealth with the aid of capital has been called 'the roundabout process' of production. Böhm-Bawerk illustrates the advantages of the roundabout process by the following example. A peasant requires drinking water. The spring is some distance from his house. He may go to the spring each time he is thirsty and drink out of his hollowed hand. But this is very inconvenient. Besides, he cannot collect and store any great quantity of water, such as he requires for various other purposes. But if he constructs an axe, fells a tree, hollows out pieces of wood and lays them end to end and thus constructs a channel which will bring water straight to his cottage, all his labour will have been more than repaid.

A very much greater result is thus obtained by the roundabout method, and many highly useful commodities cannot be produced except by the employment of elaborate roundabout methods. Even such a simple article as a pair of spectacles requires ground and polished glass and a rigid

framework, and the processes of manufacture are highly complicated.

§3. **Capital and money.**—Capital is often confounded with money because it is generally advanced in the shape of money. If, however, the money is used for buying articles for immediate consumption by the borrower, it is not capital. It can be regarded as capital only if employed for purchasing machinery and other instruments of production.

§4. **The functions of capital.**—In the modern economic organization, capital performs the following principal functions :

(i) *Provision of subsistence.*—The wages that have to be paid (e.g. to labour engaged in a factory) ultimately come from the value of its product. But a period of waiting must expire before the finished commodities can be disposed of. In the meanwhile, capital in the form of wages is required to supply food, shelter and clothes in order to enable the workers to maintain themselves. This advance payment to labour is one important function of capital.

(ii) *Provision of appliances or auxiliaries of production.*—Capital is further required to purchase plant and tools, factory buildings, workshops, etc.

(iii) *Provision of materials.*—Lastly, capital is also required for buying the raw materials of industry and stores of all kinds from which to manufacture finished commodities.

§5. **Capital depends upon use and intention.**—If money or gold or silver is simply hoarded or buried underground, value is no doubt stored, but we cannot call it capital unless it actively participates in producing wealth. Wealth becomes capital only when used for further production of wealth. For example, grain used as seed is capital. But if it is consumed as food, it is not capital. Again, a thing used in an identical manner may or may not be capital according to intention. Thus grain if it is consumed by the landowner, is not capital. If, however, he uses it to feed his labourers as part of their wages, it is capital.

§6. **Capital and land.**—Materials and powers of nature limited in quantity but possessing utility for man—this is our definition of land, and in theory we can distinguish land from capital by further pointing out that man has no control over the supply of land, but that he has a control over the supply of capital. This is clear enough. Very often, however, it is difficult to say whether a particular utility is 'land' or not. Whenever human labour is mixed up with it, to however small an extent, we should no longer call it

land. It is sometimes suggested that the raw materials used in industry (e.g. cotton in cloth weaving) should be regarded as land. But since human labour of various kinds has been used before the cotton reaches the factory in a suitable form it is more logical and scientific to call it capital. In any given productive process, it will be found that a comparatively small number of the things used, can strictly be called land. On a proper view of the matter most of them have to be called capital.

§7. **Three aspects of capital.**—Capital has three characteristics : (i) revenue-yielding capacity, (ii) productiveness, and (iii) prospectiveness.

A shareholder in an industrial undertaking looks upon his investment as something that will bring him income. If he reflects upon the matter he will realize that the income he is expecting is due to the productivity of capital. But productiveness is an attribute which capital shares with other factors of production. On the other hand, prospectiveness may be regarded as a quality peculiarly belonging to capital. By 'prospectiveness' we mean postponement of immediate consumption for consumption in the future, the sacrifice of present to future utility which is involved in the creation of capital.

§8. **Principal classifications or divisions of capital.**—Various attempts have been made to classify the manifold forms of capital. The following are some of the classifications :

(i) *According to the use made* (a) agricultural, (b) commercial, (c) industrial, and (d) financial.¹

(a) *Agricultural capital* consists of things applied to land for its cultivation (e.g. agricultural implements and machinery, live-stock, manures, seed).

(b) *Commercial capital* is employed to carry on commerce or exchange (e.g. the transport system, ships, docks, warehouses).

(c) *Industrial capital* is applied to the processes of industry in the narrower sense of the term (e.g. plant or machinery, factory buildings, materials, stores, accessories).

(d) *Financial capital* is a fund of money or its paper and credit representatives, which may be used to promote economic enterprises and be turned into concrete auxiliaries of production.

(ii) *According to the nature of ownership.*—(a) *Private or individual capital* is all the stock-in-trade in the exclusive

¹ Seligman, op. cit., pp. 319-20.

or partial ownership of the individual. (b) *National capital* is the aggregate of the capital owned by the individual citizens and of the collective capital owned by the community or by a Government (e.g. national railways and telegraphs).

(iii) *According to the degree of durability: Fixed and circulating capital.*—(a) Capital which can be used only once and exhausts itself in one single use in the act of production is *circulating capital* (e.g. raw materials like coal, cotton, seed, manure). (b) *Fixed capital* is that which serves for *several* similar productive acts (e.g. a factory, machinery, the railway system).

Fixed capital being more durable than circulating capital, it follows that the return on circulating capital is immediate, while that on fixed capital is distant. The former must be replaced immediately, the latter at the end of a certain period. Fixed capital is of great advantage in production, and its growth in modern times is the most important cause of the remarkable advance in material welfare which civilized countries have achieved.

(iv) *According to the scope for alternative uses: Sunk capital and floating capital.*—(a) *Sunk capital* is specialized and cannot be easily adapted to an alternative use (e.g. a tunnel or a pit shaft). (b) *Floating or fluid capital* displays a greater degree of elasticity of use and can serve different purposes (e.g. money, coal, fuel).

(v) *Material capital* comprises tangible and exchangeable objects. *Personal capital* consists of the skilled ability of a person (e.g. a singer's voice) enabling him to earn a living: it is non-transferable and is indeed a part of the personality of the man.

(vi) *Remuneratory and Auxiliary capital.*—(a) *Remuneratory capital* may be regarded as wage capital being devoted to the advance of wages or salaries. (b) *Auxiliary capital* includes various kinds of aids to labour in production such as plant and materials. The distribution of a given amount of capital in an enterprise between these two forms of capital is governed partly by the principle of Equimarginal Returns or the Law of Substitution, and partly by the nature of the enterprise (e.g. a solicitor's office and a cotton mill).

(vii) *Production (or Trade) and Consumption Capital.*—*Production capital* consists of aids to production, such as machinery and materials, while *consumption capital* consists of things like food and clothing, which are consumed by the workers for the direct satisfaction of their wants while they are engaged in production.

§9. **Creation of capital.**—Capital is not an *original* factor of production. It is the joint product of labour and nature. The primitive flint axe of the savage man as well as the tractor of the modern farmer are both the result of labour applied to materials supplied by nature. The existence and the use of capital implies an earlier surplus of production over consumption made possible by postponement of present enjoyment and the desire to provide for the future. The flint axe was made during his leisure hours by the prehistoric man, who almost by instinct chose to spend time and energy in providing for the future by fashioning crude implements, instead of wasting his time in idleness. The first step was the hardest, but with the growth of intelligence, foresight and with the increasing command of efficient tools, further accumulation of capital was rendered easier, and as civilization progressed the stock of capital goods increased enormously, making consumption also much richer and more varied in the long run.

In modern society few persons provide for their future needs directly in the form of the actual goods they are likely to want. What they usually do is to save a part of their income and keep it with banks or, less often, lend directly to those who can make use of it for productive purposes. True *saving* is to be distinguished from *hoarding* which merely involves refraining from expenditure without helping further production.¹ Now most saving is the result of foresight, forbearance and avoidance of waste, but it does not necessarily involve abstinence or sacrifice on the part of the saver. The term 'waiting' is preferable to the term 'saving'. The rich can hardly be said to abstain in the sense of suffering privation. Indeed some of them cannot help saving, unless they deliberately waste their substance. Effort and sacrifice are involved in the case of the savings accumulated by the middle classes, and much more so in the case of the working and poor classes. However, whether capital is accumulated by the rich or the poor, in both cases there is a *postponement* of enjoyment. Capital is thus the result of 'waiting'. It is sometimes also described as being the result of abstinence. As explained above, however, the word abstinence suggests privation or suffering, and since this suggestion is not justifiable in all cases, it is better to use the more neutral term 'waiting'.

In our modern society based on a money economy, savings

¹ See ch. iv, §10.

are conveniently held in the form of money and, in countries like England and the U.S.A. where the banking system is well developed, they ultimately find their way into the banks and are by them lent to the business community for making advances to labourers at various stages of production and for purchasing plant, tools and all kinds of materials, or for the repairs and renewals of capital. It is obvious, however, that not all savings and investments result in the formation of capital. Loans to spendthrifts or to Governments for *un-productive* purposes like war, result merely in increased and wasteful spending. They cannot be said to help in the making of 'capital'. But fortunately the bulk of the savings in modern society are productively utilized.

§10. **Factors influencing the growth of capital.**—The following factors influence the growth of capital :

(i) *The extent of the margin between income and expenditure*, which determines the capacity to save. The margin is high in the case of economically advanced countries like England and the U.S.A., but low in the case of economically backward and undeveloped countries like India, where the *per capita* income is very small. The extent of the margin for saving depends upon the natural resources of a country and the use made of them by its people.

(ii) Of equal importance is the *willingness to save*, which is essentially a psychological phenomenon. This depends largely upon the *influence of custom*, and *habits of self-control* and of *avidly realizing the future*. As Marshall points out, these qualities are of slow growth, depending much upon the progress of knowledge and intelligence among the people. The strength of family affection is often the chief motive for saving, though sometimes business ambition also stimulates the saving habit.

(iii) In order that the desire to save should obtain free play certain obvious conditions must be fulfilled :

(a) In the first place, it is necessary that there should be *security of life and property* guaranteed by a strong, stable and just Government. With chronic disorder, or unjust or heavy taxation on capital, people would either spend extravagantly or would simply hoard their wealth. This is what happened in India during many centuries of misrule and disorder and it encouraged the hoarding habit among the people. Conditions today are vastly better in respect of security to life and property and to that extent the obstacle to save has been removed.

(b) It is also necessary that there should be adequate facilities for saving and for investment in the shape of Savings Banks and Investment Trusts, Joint-Stock Banks, Insurance Companies, Cooperative Societies and Provident Funds. One of the impediments in the way of saving in India is the lack of adequate investment facilities.

(iv) Last but not least is the *influence of the rate of interest*. In the absence of this inducement to save, the volume of savings is bound to shrink. There are always a few persons who are keen on securing a fixed income in future for themselves or their families and who, contrary to the normal rule, would save less with a higher rate of interest and more with a lower rate of interest. But ordinarily, as Marshall points out, a rise in the rate of interest tends to increase the supply of capital, and a fall to decrease its amount.

✓ §11. **Mobility of capital.**—By mobility of capital is meant the freedom or readiness with which capital moves from one industry to another, or from one place to another, or from one country to another. Much of the fixed capital that is specialized or sunk in a particular industry cannot be shifted easily from that industry to some other. While the prospect of higher remuneration in one particular trade than in other trades draws capital into it, it is not easy to withdraw the capital invested in any trade even if the returns are not adequate. A manufacturer, rather than throw his machinery and plant on the scrapheap at once, would go on producing even at a low rate of profit. But new capital will not flow into such trades, nor will the old capital be replaced as it is rendered useless by wear and tear. Sometimes capital sunk in a particular enterprise (e.g. a tunnel, a pit shaft or a canal) is not useful for any other purpose and cannot be withdrawn for some other employment. Some kinds of machinery and factory buildings can however be put to alternative uses, and here capital has greater mobility (e.g. during the war many factories were converted into munition-producing establishments). Money is floating capital *par excellence*, and is free to flow into agriculture or industry, a cotton mill or steel manufacture.

Geographical mobility of capital.—In general, capital can move more readily from place to place and country to country than labour can, since it is impersonal, and has no special attachment to any particular place. If it can earn a better return in one place than in another it will be moved from the second to the first. But even so, the movement is

not altogether free, especially as between one country and another. Although it is a fact that capital has become more cosmopolitan in our times, it still has to reckon with several impediments, such as lack of international or political security, liability to heavier taxation abroad, the general preference for home investment, and State control over investment. Again, so far as short-term investments of a floating character are concerned, capital moves more readily from one monetary centre like London to another like New York in response to changes in the rates of interest or discount. We shall see later on that the theory of international trade (comparative costs theory) is based upon the assumption of the relatively greater immobility of labour and capital as between one country and another than within one single country.¹ In India, capital does not move sufficiently readily from one place to another within the country itself. It is also not mobile as between different employments of it. Investments in land, houses and money-lending are favoured, and the inclination to invest in industrial enterprise is relatively weak. Indian investments abroad are practically negligible. Indigenous capital is not even able to meet all the country's requirements, so that a considerable amount of foreign capital has come to be invested in Indian industries. A gradual improvement is, however, going on. In fact certain optimistic observers like Sir Basil Blackett have expressed their conviction that the time when Indian capital will overflow the national boundaries and seek investment abroad is not very distant.

SUMMARY

Capital includes all wealth—other than land—intended for further production of wealth. Production with the aid of capital has been called the 'roundabout process' of production. Wealth-production would be negligible and primitive without the help of capital. Capital should not be confounded with money. Money is capital only when turned into (i) instruments of production, (ii) wages, or (iii) raw materials—the supply of which constitutes the threefold function of capital.

The same thing may be capital or not according to use or intention.

Sometimes it is difficult to say whether a thing is to be called land or capital. It is, therefore, useful to remember that when human labour has to any extent been mixed with natural resources (land), the result should be called capital. Capital has *three characteristics*: (i) Revenue-yielding capacity, (ii) Productiveness, and (iii) Prospectiveness (reference to the future).

¹ See ch. xii, §§1-2.

Capital can be classified in different ways, e.g. (i) according to the use made; (ii) according to the nature of ownership; (iii) according to the degree of durability; (iv) according to the scope for alternative uses, etc.

Capital is the result of saving (i.e. waiting, or postponement of consumption).

The following factors influence its growth: (i) margin between income and expenditure; (ii) habit of saving and family affection; (iii) security of life and property; (iv) banking and investment facilities; and (v) rate of interest.

Mobility of capital (like mobility of labour) is its freedom of movement from (i) one trade or industry to another and (ii) one locality to another. In both these respects capital is comparatively immobile in India.

CHAPTER VIII

PRODUCTION : ORGANIZATION OF INDUSTRY

§1. **The entrepreneur and his functions.**—We have already mentioned organization or business management as the fourth factor of production. Although organization, or the task of directing an enterprise, is only a kind of labour, it is such an important and peculiar kind of labour that it must be treated separately. Even under simpler forms of economic activity (such as small-scale farming of his own land by the peasant proprietor, or weaving by an autonomous artisan) some management, judgement and ability are necessary for success. The need for such business ability and direction is particularly urgent when the various factors of production are owned by different persons and come from different places.

Even today we find a few cases of self-sufficient families and small autonomous artisans and farmers supplying all the factors of production themselves, managing their own business and undertaking all risks in connexion with it. But generally in the modern business world, the task of organization, or directing production so as to secure the greatest possible return, is so complicated that the services of a specialized class of people—called by various names such as entrepreneurs, undertakers, or organizers—have come to be essential. The entrepreneurs adventure or undertake the risks of the business. They bring together capital and labour, arrange or engineer the general plan of the business, and superintend its minor details. Looking at business from one point of view we may regard them as a highly skilled industrial grade; from another, as middlemen intervening between the manual worker and the consumer.¹

The functions performed by the entrepreneur fall into two classes :

(1) *Internally* (a) he undertakes the projecting, engineering and planning of an industrial enterprise. This includes the choice of a suitable site having regard to the advantages of localization of industry,² the raising of capital on reasonable terms, the decision as to the nature of the

¹ Marshall, *Elements of Economics of Industry*, pp. 162-3.

² See §16.

commodity to be produced and the erection of factory buildings or workshops, etc. (b) He employs on the most profitable terms the various factors of production, choosing such quantities of them as are likely to be most effective (on the principle of substitution). (c) He introduces a suitable plan of division of labour and adopts scientific management in order to ensure full utilization of men and machines and to eliminate waste.

(ii) *Externally* the entrepreneur has to purchase all kinds of materials and supplies. He has to run the risk of market fluctuations. He must closely study them and regulate his policy in the light of his study. He must watch any changes in the tastes and fashions of consumers and arrange for the sale of his product on the most advantageous terms possible.

§2. **Essential qualities.**—In order to discharge all these functions properly, the entrepreneur must possess foresight, judgement, business shrewdness, ability to select the proper men and to inspire confidence among his deputies. He has been aptly called the 'captain of industry', and like a general in command of an army he must keep one eye on internal discipline and efficiency, and another on external strategy. In these days, the fortunes of different businesses are so closely bound up with one another that the ruin of one often reacts disastrously on a large number of others, causing widespread unemployment, distress and dislocation. In these circumstances, the unfailing supply of the right type of business ability is a matter of the highest importance to society. Considerable risk is inseparable from modern business enterprises because production takes place long in anticipation of demand. And one's most careful calculations may be upset because of a sudden change in demand; or a new invention may render obsolete the old plant which may have been laid down at great expense; or again the machinery may break down, or the essential supplies of raw materials be cut off by war, or the credit machinery may be disorganized. Under such conditions men of pluck and insight are required as entrepreneurs.

§3. **Forms of business organization.**—The following are the possible different forms of business enterprises or business management :

(i) Sole Trader or Producer, (ii) Partnership, (iii) Corporation or Joint-Stock Company, (iv) Trust, (v) Government undertaking, (vi) Cooperative production, and (vii) Profit-sharing.

We shall describe these briefly.

§4. **Sole trader or producer.**—Business enterprise originally began as the enterprise of individuals, and although this is now steadily giving way to associated enterprises as in joint-stock companies, even today some businesses are conducted as personal businesses by sole producers. The producers may contribute their own land, labour or capital, or borrow some of the capital and employ a certain amount of hired labour, but they take the whole risk themselves and of course take all the profits. Instances of this are the peasant proprietor or ryot (in agriculture), and independent artisans like weavers, tailors and shop-keepers (in industry). Greater personal interest in the business, and better attention to the needs of the consumers are the principal advantages of this type of business over others. Its scope, however, is necessarily limited. It is most successful where the market is local, the demand regular and competition not excessive.¹

§5. **Partnership or Firm.**—This is an association of a limited number of persons who carry on business jointly for profit. It is the oldest and the simplest plan for renovating the energies of a business by taking into partnership some of its ablest employees and thus joining interest with responsibility. Two or more persons may combine their resources for carrying out a large and difficult enterprise, so as to increase the efficiency of the unit. Sometimes there is a division of labour between the 'active partners', who actually direct the business, and 'sleeping partners' who only supply capital. Or some of the partners may attend to the internal and others to the external affairs of the firm. Such partnerships are found among traders, solicitors and small manufacturers. The partnership is a virile and elastic form of business, and has played a very important part in business organization in the past. In India, many businesses are still carried on as partnerships, the partners often being members of the same family. The partnership as a form of organization, however, suffers from the following drawbacks:

(i) The personal trust is limited to a few. (ii) The supply of capital and ability available under a partnership is often inadequate. (iii) The unlimited liability of every partner for all debts of the firm hampers enterprise. (iv) There is absence of continuity, caused by the death, bankruptcy or retirement of partners. (v) Disharmony among partners is a frequent cause of trouble.

¹ S. E. Thomas, *Commerce, its Theory and Practice*, p. 50.

§6. **Joint-stock company.**—This is the typical form of business enterprise today and is tending to push out the other forms, thanks to the rapid expansion of large-scale undertakings of all sorts, in manufacture, mining, transport, banking, trading and even in farming of the type ushered in by the Industrial Revolution. Its progress was facilitated in England by the recognition of the principle of limited liability about the middle of the nineteenth century. The joint-stock company is an association of shareholders who subscribe to its capital, which is divided up into fractions, usually of small value, called shares. The shares which are transferable carry with them limited liability—usually limited to the face value of the share—the right to a dividend or a share in the profits when sanctioned by the directors, and a voice in the management in proportion to the shares held. Besides such *ordinary shares*, the corporation may issue (i) *preference shares*, carrying a certain fixed dividend from profits, if any, to be paid before any dividend is paid on the ordinary shares, and (ii) *founders' or deferred shares*, entitled to receive a certain proportion, usually a large one, of the profits, only however when these reach a certain minimum and also only after payment of a fixed rate of interest on *debentures or bonds* and the dividend on ordinary and preference shares. The bonds are pledged against the properties of the company and bear a fixed rate of interest. The bondholders are thus the creditors of the company and their claims constitute the first charge on the profits and assets of the company. In this connexion, the terms 'Nominal or Authorized Capital', 'Subscribed Capital' and 'Paid-up Capital' may be explained. The *authorized capital* of a joint-stock company is the total nominal value of the shares authorized by the Memorandum of Association (which is a statement of the company's powers and objects). The *subscribed or issued capital* is the nominal value of shares actually issued to or subscribed by shareholders. The *paid-up capital* is the total amount called up from the shareholders and paid into the coffers of the company. The shareholders in a joint-stock company are mostly sleeping partners, the active management being entrusted to a Board of Directors elected at annual meetings of shareholders, and to salaried managers. The joint-stock company or corporation is a fictitious person in the eye of the law, but unlike an individual person it enjoys the advantage of unbroken existence and may live for an indefinite length of time. It is entitled to certain privileges, for instance, it can own property and enter into contracts. It can also sue and be sued.

The advantages of joint-stock enterprises.—(i) The principal advantage is that large-scale operations or enterprises, which formerly could be undertaken only by the State, are now possible to individuals who can combine their resources to build, say, a railway, or start a cotton mill or iron works. The joint-stock company is thus enabled to command all the advantages of large-scale production, such as the employment of highly-paid experts, the introduction of up-to-date machinery, and specialization. (ii) The division of a large total capital into a number of small shares carrying limited liability, facilitates the utilization for investment of small savings. (iii) The facility of transferring one's shares by sale spreads the risks widely and allows control to pass into the hands of the most competent and those who have faith in the enterprise. (iv) The corporation enjoys stability owing to its continuous existence, and can plan far ahead and for distant returns. (v) A well-conducted and resourceful corporation can offer stable employment and unusually satisfactory conditions of work to the employees. (vi) The management is efficient, being centralized in the hands of a small Board of Directors, who are generally persons well versed in the intricacies of modern business.

The disadvantages of joint-stock enterprises.—Nevertheless the corporate form of industry is liable to be greatly abused and is exposed to serious dangers. (i) In the first place, the corporation is an inferior kind of association as compared to the partnership, since it is an impersonal association of a large and scattered body of shareholders unknown to each other. Adverse critics have said that it is merely an association of 'money bags' and that it leads to the evils of absentee capitalism, exploitation of workers and other abuses. The masters of the business (i.e. the shareholders) are too numerous and cannot possibly take an active hand in the business because most of them have some other occupation of their own on which they depend for their livelihood. (ii) The transferability of shares opens out dangerous possibilities of ill-advised speculation or gambling in shares on the Stock Exchange either by ignorant laymen or unscrupulous speculators. (iii) The promoters, directors and managers cannot be effectively controlled by shareholders, and being in possession of inside knowledge often play the game with 'loaded dice', defrauding innocent investors. (iv) Other dangers are over-capitalization, rise of monopolistic combinations, and political corruption—especially in a democracy.

On the whole, however, the advantages of the joint-stock

form of organization outweigh the disadvantages. We cannot, therefore, dispense with it under present conditions. Greater publicity, proper auditing of accounts, suitable measures for increasing the responsibility of promoters and directors would minimize its disadvantages.

§7. **Trusts.**—A further stage in the corporate form of industry is reached when a number of joint-stock companies unite together to form combinations known as 'Trusts' in America and 'Kartells' in Germany. We shall deal with the whole Trust problem later in the chapter.¹

§8. **Government undertakings.**—Under the influence of socialistic ideas regarding the functions of the State, the active participation of the State in the management of industry has been steadily increasing. Thus we have State railways, State forests, State roads and State canals in India. In western countries, what is known as Municipal Trading or Municipal Socialism, is steadily on the increase. Municipal corporations own and manage theatres, water-works, street tramways, electric supply, etc. How to ensure adequate control on the part of the taxpayer, how to secure a proper choice of officers, how to avoid serious inroads on the free initiative of the individual, which is the mainspring of progress—these are some of the problems to be tackled in this connexion.² In Russia, all enterprises, including farming, are now collective enterprises managed by the State.

§9. **Cooperative organizations.**—In order to overcome the drawbacks of the capitalistic types of business organization (such as waste, exploitation of workers, absence of any voice in the management to workers, and denial of any share in the profits to them) on the one hand and of State enterprises on the other, some social reformers have proposed the adoption of the cooperative type of organization. It is claimed that cooperation avoids the drawbacks of both capitalism (e.g. excessive individualism and self-interest) and of socialism (e.g. too great a suppression of the individual, and excessive interference on the part of the State). It keeps alive the stimulus of self-interest, but reconciles it to the common interest. We shall discuss the various types of cooperative activities in India in Part II. Under cooperation, competition between worker and worker is eliminated, the workers being the shareholders, undertaking the risks of the business and sharing the profits. They possess the power of voting at the General Meetings and take their part in

¹ §§31-3.

² See ch. xvii, §§27-9.

laying down broad lines of policy and choosing officers to carry it out. They are thus the employers and masters of their own managers and foremen, and render unnecessary some of the minor work of superintendence that is required in joint-stock capitalistic establishments. 'Each for all, and all for each', is their motto. Each member is expected to give to the society the best that lies in him. While the principle of cooperation has been successfully applied to consumers' stores and credit societies, it has not so far made much progress in the production of wealth on a large scale, which is today mostly organized on capitalistic lines. The cooperative association for production labours under several handicaps. There is a dearth of business ability among the workers themselves. The employers are not always the best possible masters of their own foremen and managers; the majority of members being manual workers are unwilling to pay large salaries to those who work with their brains; nor are they always able to find all the capital that is essential for large-scale industry.

§10. **Profit-sharing.**—This is a modification of the capitalistic type of enterprise and is intended to enlist greater willingness, zeal and efficiency on the part of workers, to avoid friction, and to attract workers of more than average ability and industry. Under a profit-sharing scheme, a private capitalistic firm or company, while retaining in its own hands full control of the business, agrees to pay its workmen, in addition to their wages, a share in the net profits as well, when these reach a certain minimum. But unfortunately in their actual operation, profit-sharing schemes have failed of their purpose and do not seem to evoke much enthusiasm either on the part of the capitalist employers or of the workers. The employers on the whole dislike the idea of sharing profits with their workers, while the workers are inclined to look upon the share allotted to them as a sop thrown to them, while they are still denied any real voice in the management.

This review of the principal forms of business organization reveals the great variety of types that have been evolved to suit conditions of different times and different trades. It is, of course, wrong to infer that any one type has been wholly replaced by any other. As a matter of fact, today all these types are simultaneously in operation. Though the joint-stock type is the leading form of organization, the sole producer or trader still thrives not only in the less advanced countries like India and China, but even in the more advanced

countries of the west. He continues to hold his own in such businesses as tailoring, retail shop-keeping, farming, printing, plumbing, etc. State undertakings and cooperative enterprises are also widening their sphere of activity.

§11. Forms of division of labour.—(i) *Division of employments.*—In a rudimentary stage of economic development the wants of men are few and simple, and each man is sufficient unto himself and satisfies practically all his needs by his own personal labour. But very soon specialized occupations begin to appear. Each man, instead of being his own blacksmith, carpenter, barber, tailor, doctor and so on, devotes himself entirely to one or other of the different occupations. He offers his own services in exchange for the services of others pursuing the other occupations, and this is a far more satisfactory arrangement than everybody doing everything for himself.

(ii) *Division of processes within an employment.*—A further stage is for each employment to be split up into a number of processes. In his famous description of the industry of pin-making, Adam Smith describes how 'one man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head'. He notes how 'the important business of making a pin is in this manner divided into about eighteen distinct operations, which in some manufactures are all performed by distinct hands'. The result of such specialization (which has advanced very much further than in Adam Smith's days) is that the same number of workmen can, in a given time, turn out a vastly increased quantity of the product.

§12. Advantages of division of labour.—We may thus note that the greatest advantage from division of labour is greater plenty and cheapness of the goods produced :

(i) Labour becomes more effective, because (a) the time of the workman is not lost in passing from one process to another; also because (b) work can be assigned according to ability, the more skilful workmen doing the more difficult parts of the work, and the less skilful doing the less difficult. Superior ability is not wasted by being partly employed on work of an inferior character (incidentally the inferior men need not be refused employment, for they can be asked to attend to the easier processes); (c) the loss due to mis-handling of expensive machinery is minimized by choosing the more careful and competent workmen for operating such machinery; (d) such skill as each workman possesses is further enhanced because of his concentration on *one* type of

work instead of diffused attention given to a number of perhaps widely different processes.

(ii) Apart from the improvement in the efficiency of the workmen, industry gains in efficiency in other ways. (a) Costs are reduced because a smaller equipment of tools and implements is required. It is not necessary to provide each workman with a complete set of tools but only those appropriate to his particular specialized task. Similarly there is economy as regards space, light, etc. (b) But far more important is the consideration that division of labour promotes invention. There may be persons whose special business it is to watch the various operations in an industry and suggest improvements. Their ranks are increased by the addition of the workmen themselves engaged on these operations. Continuously going through the same set of movements required for some simplified task, they have much greater opportunities for detailed observation and thinking of some better way of doing the work. Employers often offer special bonuses for useful suggestions made by their workmen. (c) Invention is also promoted in another sense. When a complicated operation is divided and subdivided, each of these subdivisions tends to become automatic and mechanical, and this is exactly the sort of thing a machine can do just as well and indeed better than any human being. (d) From the standpoint of the workmen themselves it may be noted that since division of work increases their efficiency, their wages are likely to rise. They are further likely to benefit as consumers owing to the general cheapening of goods. Again, because the subdivided processes are simpler, no prolonged period of training or apprenticeship is necessary for the ordinary workman.

§13. **Disadvantages of division of labour.**—Those who talk of the disadvantages of division of labour have in mind not the differentiation of occupations (for this they would agree is a mark or necessary condition of progress), but the splitting up of each industry or occupation and the specialization of workers in these little uninteresting segments. They are also thinking of the evils of machinery and large-scale production, because these are generally associated with division of labour in modern industry, and it may be worth while pointing out that some of the faults, commonly laid at the door of division of labour, belong to these other logically separate characteristics of modern business.

Objections to division of labour all aim at showing that it worsens the position of the labourers.

It is commonly urged that (i) it reduces the worker to an automaton.* As a writer asks : 'What can be expected of the mind of a man whose activities are constantly devoted to making the eighteenth part of a pin?' A man who makes a whole shoe himself may find some interest in his work, and in his humble way experience the joy of artistic creation. But how can he be made to feel any interest or pleasure, if for hours together every day he has to do nothing except, say, punch holes in leather by means of a machine? He is not required to use his brain, which therefore gets numbed. Very often he does not understand the meaning of his work and how it fits into a well-thought-out scheme for combining the result of his labour with that of a number of other 'specialists' like him and thus giving the world a good serviceable article. Even if he is sufficiently educated to be able to see the relation to the whole of the particular part of the work he is entrusted with, this does not get over the fact that his own task is dull and monotonous. To say that a highly specialized expert may be more finely developed as a man than a jack-of-all-trades is beside the mark. The point is that under present conditions a large number of workmen are condemned to do work which is monotonous in character, and some of it is so mechanical that the doing of it does not in any way help the development of the specifically human qualities of the worker.

The monotony is no doubt generally exaggerated, and probably there is also a tendency to exaggerate the interesting character of the work of the average craftsman of the old type.

We must also not forget that a good deal of the work under modern conditions involves the exercise of intelligence and judgement. For example, it is generally accepted that the scarcity of *skilled* labour is one of the reasons of the present backwardness of India in industrial development.

*Lastly, we must remember that when a piece of work becomes purely mechanical, generally the result is that a machine is invented to do it, and human labour is released for more intelligent work.

However, after all these allowances are made, it remains broadly true that, *owing to division of labour, work becomes on the whole more monotonous and uninteresting.* The worker has also a greater feeling of being driven. For example, the man who is doing the upper part of a shoe must do it at a rate which bears some reasonable relation to the rate of the man doing the lower part. Also, when

the workman has to deal with a machine, he has to keep up the pace set by the machine, which does not get tired like a human being.

(ii) Another evil commonly stated as following from division of labour is that the workman, being overspecialized, is not able to take up any other work if there happens to be depression or unemployment in his own trade. Immobility of labour is increased, and so the problem of dealing with unemployment becomes more difficult.

This, however, runs counter to what we have said above about a prolonged period of apprenticeship and training being no longer necessary under the present system of division of labour. If a man finds there is no work for him in one industry, he should find it comparatively easier nowadays to fit himself for employment in some other industry, because division of labour which prevails in all the industries means simplification of the work to be performed by each workman. Even if it is dissimilar from industry to industry it can be easily learnt; and often it is similar, especially when the use of machinery is common in all industries. The industries may be distinct, but the machines which the workers have to operate are often very similar. Operatives in a watch factory, for example, would find themselves at home among machinery used in the lighter metal trades. It would be much more difficult for the watch-maker of the old type to convert himself into the weaver handicraftsman.

On the whole, therefore, we must conclude that immobility of labour is not greater under the modern system. Very probably it is less than under the old system.

(iii) It is further argued that under division of labour, the worker loses his sense of responsibility. So far as this is true, however, it is not the effect of division of labour but of the fact that the worker has no proprietary interest in the business. If on the other hand, it is suggested that the labourer can shirk work without being noticed, this again is not true, the complaint on the contrary being that the worker feels he is driven too fast under the present system.

(iv) The social, moral and physical evils of the factory system and the overcrowding in industrial centres are often mentioned as being among the disadvantages of division of labour. Strictly speaking, however, the two things are separate. For instance, a task may be subdivided and each subdivision entrusted to a worker working in his own cottage.

(v) Similarly, the evils of machinery such as they are, should not be attributed to division of labour as such. The two have no doubt gone together, but, as Marshall points out, 'the connexion is not so close as generally supposed. It is the largeness of markets, the increased demand for great numbers of things of the same kind, and in some cases of things made with great accuracy, that leads to subdivision of labour; the chief effect of the improvement of machinery is to cheapen and make more accurate the work which would anyhow have been subdivided'.

(vi) Lastly, the disappearance of the personal bond between the employer and the workers is commonly regarded as another unfortunate result of division of labour. The chain of causation may be stated as follows :

Division of labour \rightarrow many tasks \rightarrow many workers \rightarrow impossibility of maintaining a personal relation with each of them.

Or again :

Division of labour \rightarrow large-scale production \rightarrow large capital \rightarrow joint-stock organization, i.e. a corporate employer instead of an individual employer, \therefore impossibility of a personal bond.

§14. **Limitations of division of labour.**—Division of labour results in a great expansion of production. It is useless if there is no correspondingly wide and continuous demand to take off the increased supply of goods. Division of labour, therefore, is limited by the extent of the market.

Again, specialization or division of labour cannot proceed very far in a community whose wants are few and relatively simple.

Division of labour is also limited by the nature of the employment, as pointed out by Mill. 'Agriculture, for example, is not susceptible of so great a division of occupations as many branches of manufactures, because its different occupations cannot possibly be simultaneous. One man cannot be always ploughing, another sowing, and another reaping. A person who practised only one agricultural operation would be idle eleven months in the year.'

§15. **Machinery: its advantages and disadvantages.**—We may now treat the issues raised by machinery at greater length. Since the Industrial Revolution in England in the latter half of the eighteenth century, more and more we have been living in an age of material invention and

progress. Industry, transport and even agriculture are fast getting mechanized, transforming the social and economic order of society.

Advantages of machinery.—(i) The greatest and the most obvious advantage of machinery is that it enormously increases the productivity of human labour. If instead of merely scratching the soil we use a plough, the yield will be very much greater. The plough is a simple device, whereas much of the machinery employed in modern industry is far more complicated. But the underlying idea of both is the same, namely, increase in productivity. With the expenditure of the same amount of human labour, much more wealth is produced, and therefore machinery may be said to add to human welfare.

(ii) Machinery increases the demand for general intelligence, although it displaces purely manual skill or dexterity of the old type.

(iii) It largely removes the barriers between different trades and promotes the mobility of labour. For example, a worker in a watch-making factory can without much difficulty secure a job in the lighter metal trades since the general nature of the machinery is similar in the two trades.

(iv) It relieves the strain on human muscles by performing very heavy tasks.

(v) It lessens human drudgery by taking over monotonous tasks, such as copying, or folding of papers.

(vi) It makes possible the employment of workers of average strength and ability on work which formerly required exceptional skill or strength.

(vii) It performs work much more regularly, quickly and accurately than would be otherwise possible.

(viii) It excels both in the performance of exceedingly heavy tasks and exceptionally delicate ones.

(ix) It promotes standardization of goods and the production of identically interchangeable parts and thus facilitates the use of machine-made machines (e.g. tractors, pumps, or a motor-car engine).

Disadvantages of machinery.—On the other hand, critics like Ruskin look upon machinery as the greatest curse of the modern age. There are still people of this mode of thinking, who would like the world to revert to the domestic system of industry.

(i) It is argued that machinery is detrimental to the working classes, since it displaces human labour and throws large numbers of them out of their jobs. There is no doubt

that this is the first or initial result of machinery, as witness the supplanting of the hand-loom by the power-loom, the bullock-cart by the bus, and the plough by the tractor. In the end, however, machinery creates more employment and absorbs the displaced labour. It reduces costs and makes things cheaper, and thus stimulates demand. The cheapness also increases the savings which people can make, and thus the supply of capital is enlarged. All these things mean more business activity and more demand for labour. The hardships of the period of transition, when labourers suddenly find themselves without employment are, however, very real, and every effort must be made to minimize them. A similar objection is raised today against rationalization of industry, and explains the hostile attitude of the average worker towards it. The more enlightened labour leaders, however, are not opposed to machinery as such but to its private ownership and to the freedom enjoyed by the capitalist to use it in a way detrimental to the working classes.

(ii) Machinery, it is argued, makes labour monotonous. As against this contention it may be pointed out that monotony and drudgery were not altogether absent from the old ways of working without complicated machinery. On the other hand, machinery makes possible shorter hours of work, and workers have opportunities of utilizing their leisure pleasantly and profitably. This must be regarded as a substantial compensation for the monotony and drudgery of the working hours.

(iii) Machinery has adversely affected the skilled craftsmen, who under its regime have degenerated into semi-skilled machine operators.

(iv) It is also said that hand-products are superior to machine-made goods. This objection is, however, valid only in those cases where individual tastes have to be satisfied or artistic production is concerned. Besides, much handwork is ugly, e.g. Indian toys; while machine-made products may be beautiful if the design is artistic.

(v) Finally, it is argued that machinery is responsible for the evils of modern industrialism and the capitalistic system, such as the exploitation of female and child labour, loss of the economic and social independence of the worker and narrow specialization.

As said above, however, many of these abuses are capable of being either prevented or remedied by appropriate social legislation. We cannot do without machinery if we want to

maintain our standard of living and the general advance of civilization.¹

* §16. **Localization of industries, or territorial division of labour.**—Like individuals, particular localities are found to specialize in certain industries. This development may be influenced by (i) *permanent and natural factors*, such as availability of raw materials and cheap labour, transport facilities, nearness to markets, a suitable climate (e.g. a moist climate is advantageous for cotton spinning), availability of capital and credit facilities; and (ii) *accidental factors*. A pioneer who starts a new industry happens to choose a particular locality, when he might just as well have chosen some other. And when he succeeds, other people establish similar industries in the same place.

When, for whatever reasons, an industry becomes localized in a particular place it tends to stick there, partly because it develops certain special advantages denied to other localities, and partly by sheer force of inertia.

The advantages of localization are known by the name of 'external economies'² and they may be summarized as follows :

(i) Where a large number of establishments of the same type are concentrated, a number of subsidiary industries spring up for supplying tools and accessories to the main industry, doing the necessary repairs, or preparing the raw materials for it.

(ii) Specialized means of transport and communication may develop so that the industry can market its products and secure its raw materials easily and cheaply.

(iii) Similarly, institutions like Banks and Stock Exchanges may come to be established, as in Bombay and Calcutta, and be of great use in the provision of capital to the industry and the marketing of securities based upon it.

(iv) Skilled workers such as may be required for the industry naturally congregate where there is likely to be constant demand for their skill. The industry benefits because it can choose the best men.

(v) Just as it is a good thing for the progress of learning that there should be a number of colleges at the same place, so it is a good thing for the progress of an industry that there should be a number of similar establishments in the

¹ See Part II, ch. iii, §15, for the controversy in India centring round the *charka*.

² See §18.

same locality, so that it is easy for them to compare notes and learn from each other. Under these conditions improvements are rapid, and much of the knowledge concerning the industry is imbibed unconsciously and automatically. Such conditions are also favourable to the establishment of technical journals and of technical institutions and the promotion of research.

Disadvantages of localization of industry.—The main disadvantage of localization is that the economic prosperity of the locality comes to be bound up too closely with the fortunes of the one main industry. If anything should go wrong with the principal industry, the whole district may be faced with starvation as there is no other work to fall back on. Thus, the prosperity of the city of Bombay depends largely on the prosperity of its cotton mill industry, and since this, in recent years, has not been doing well, the position of the city seems to be steadily deteriorating. A possible remedy lies in the establishment of supplementary industries.

§17. **Decentralization of industry.**—Side by side with localization of industry we find that there are certain forces in the modern economic organization which are making for the dispersion rather than concentration of industry, witness the shifting of the cotton mill industry in India. It was formerly confined to the town and island of Bombay, but has now been established at several up-country centres like Ahmedabad, Sholapur, Hubli, and also at Nagpur, Madras and Cawnpore.

The causes are obvious. (i) The heavy rents in crowded cities like Bombay, higher wages of labour, higher municipal and central taxation and high costs in general counteract the advantages of localization and force the industry to disperse. (ii) The vicinity of raw-material-growing areas and of the markets also favours decentralization of industry. The tendency has become all the more pronounced owing to modern improvements in transport, especially of motor transport. (iii) The practicability of conveying cheap electrical power over long distances has made it unnecessary for industry to be always localized near coal-mining areas. It is now often feasible to establish it in the open country in healthy surroundings.

It is also clear, however, that decentralized or scattered industrial concerns cannot readily command the facilities that are available to localized industrial establishments, in the matter of skilled labour, credit facilities, etc. So it is all a question of balancing the various gains and losses.

Sometimes it may pay to start an enterprise where the industry is already well established. At other times, it may on the whole pay to choose some other locality.

§18. **External and internal economies.**—The consideration of the advantages of localization of industry leads us to that of the distinction between the external and internal economies of a business and of large-scale production. Marshall divides the economies arising from an increase in the scale of production of any kind of goods into two classes: (i) the external economies, and (ii) the internal economies.

(i) *External economies* are dependent upon the general development of an industry either in a particular locality or a country or the whole world. These are best secured by the concentration of many small businesses of a similar character in particular localities. The economies arising from the localization of industry come under the heading of external economies. They are so called because they are dependent on external conditions and independent of any individual business or establishment and of its resources.

(ii) *Internal economies* are those that are dependent on the resources, the technical organization and the efficiency of management of individual firms. They arise within the establishment concerned and are therefore called 'internal'.

§19. **The tendency towards large-scale production.**—Internal economies depend largely upon the adoption of a sufficiently large scale of production. Before the Industrial Revolution, under the domestic system of industry, the small concern was the type; the large business unit was the exception. But things have changed since then. More and more capital and labour tend nowadays to be massed in individual business units, leading to an increase in their size or scale of operations. While the average number of persons employed, the output and the capital have been steadily expanding, the total number of individual establishments either remains stationary or at times even decreases. The size of an establishment is influenced by several factors, such as the nature of the industry, the nature of the markets, the available business ability and capital. Some businesses, such as those connected with the manufacturing and transport industries, have to be organized on a large scale to secure the best possible results. Thus, a cotton mill or a railway can be run with advantage only on a large scale. The cost of machinery and plant and equipment here are so heavy that the industry must be organized on a scale such that the heavy fixed charges are spread over a large output. On

the other hand, extractive industries in general, like farming and fishing, being more subject to the Law of Diminishing Returns, do not readily admit of expansion of scale.

The extent of the market or demand is another factor. Where the demand is regular and comes from the masses, production can be standardized and organized on a large scale, as in the case of cloth or hardware goods. But where the market is limited, or where the tastes of individual consumers must be catered for (as in the case of special types of saris required by Indian women or special types of utensils, etc.), the scale of business is necessarily restricted. On the whole, the tendency towards large-scale production is striking.

§20. **Advantages of large-scale production.**—Let us now formally enumerate the principal advantages of production on a large scale, i.e. the internal economies of a business establishment.

(i) A system of minute and efficient division of labour can be adopted, and specialized experts of the highest capacity can be employed with advantage.

(ii) Considerable savings can be made in the general expenses, e.g. in the overhead or standing charges, called the 'on-costs' or 'supplementary costs' of production. These costs do not increase in proportion to the increase in the size of the business. One engineer and one watchman will do just as well for a comparatively large factory as for a small one. Rent, insurance and taxes are other charges which do not increase proportionately.

(iii) Expensive and up-to-date machinery and plant can be introduced with advantage since it can be continuously used if production is on a large scale. Cheaper power is also another advantage.

(iv) Economies of buying and selling can be made owing to the greater bargaining power of a larger business unit, and its greater reputation. There is also a saving of freight. Both selling and buying in large quantities are thus economical.

(v) Effective advertising and publicity.—Extensive and scientific advertising of goods is essential in these days. But it is also expensive. Only a large firm can afford it because, the expense being distributed over a large output, the increase in cost per unit is small.

(vi) Utilization of by-products.—This is not possible when the scale of operations is small; and the by-products, because they are not sufficient in quantity, are simply wasted. If, however, the scale is sufficiently large it will be worth while

erecting a special plant to treat the waste products. For example, the scrap material in engineering shops or the saw-dust in saw mills or the coal gas in the coking process can be manufactured into something useful and marketable.

(vii) *Other advantages* of production on a large scale are : (a) greater possibilities of conducting research and experiments. A small firm cannot afford to make costly experiments, some of which may fail; (b) comparative freedom from trade and market fluctuations; (c) better credit and a larger turn-over of capital.

(viii) The *consumer also stands to benefit*, because goods are sold cheaper as the costs of production are lower.

§21. **Limitations of large-scale production.**—We have already noticed cases where production has to be on a small scale. But even where the scale must be large, there is a limit beyond which the enlargement should not be allowed to proceed. The limitations of large-scale production arise from the infirmities of human nature and the increasing difficulties of management and supervision (which are specially great in agriculture, where the operations are spread over a large area). A point of maximum returns is reached sooner or later, beyond which the enterprise becomes too cumbersome and unwieldy; and leakage, inefficiency and waste result. Personal interest and supervision become impossible. The task of supervision has to be delegated to paid men who must themselves be watched as they have no personal interest in the business. An elaborate system of checks and counterchecks becomes necessary, involving waste and red-tapism. As soon as these disadvantages begin to manifest themselves it is desirable to start, say, another cotton mill, rather than expand the existing units indefinitely and face diminishing returns.

After a certain scale of production has been exceeded direct contact between the employer and the employed becomes impossible. This is a fruitful cause of friction and misunderstanding, strikes and lock-outs.

The difficulty in the matter of commanding an adequate supply of high business ability, which is essential for the conduct and management of big concerns, is another check to large-scale production.

A concern may grow so large as not to allow any changes in its structure, or in the direction of its effort, to take place. Such lack of adaptability may lead to serious consequences to itself and to others.

Lastly, it may be added that the tendency towards large-

scale production often results in the formation of vast monopolistic combinations.¹

§22. Small-scale production (Petty industry).—We may now explain the advantages of small-scale production or 'petty industry', which still persists even in industrially advanced countries like the United Kingdom, the U.S.A., or Germany, and is certainly very important in a country like India.

In pointing out the limitations of large-scale production we have incidentally indicated the advantages of small-scale production.

Small-scale production ensures personal interest and supervision on the part of the producer, attention to detail, perfect knowledge of customers' individual needs and direct personal contact between the employer and the workers.

Small-scale production of the old domestic industry type secures the economic independence of the workers and thus avoids the evils of industrial disharmony. If a number of small concerns cooperate, they also can secure those mercantile economies in buying and selling goods and the credit facilities which are normally available only to the large concerns.

§23. Large-scale and small-scale farming.—In farming, the size of the farms or holdings depends on a number of circumstances.

(i) In new countries like Australia, where land is abundant, holdings will tend to be large, while in old countries like England and India they will tend to be small. Again, hilly tracts as in the Konkan do not favour large-scale farming. Its possibilities are greater in level plains as in the Indo-Gangetic valley.

(ii) The nature of the crops also determines the size of the farm. Some crops (e.g. garden-crops) require individual attention on small farms, while others like cotton and sugar-cane require extensive areas.

(iii) Progress in intensive methods of cultivation tends to reduce the size of the average farm.

(iv) Climate and irrigation are also other factors to be considered. Where artificial tank- or well-irrigation is necessary, holdings will tend to be small.

(v) Lastly, the law relating to inheritance and succession also influences the size of land-holdings. For example, the English Law of Primogeniture favours concentration of land

¹ See §31.

in a few hands and therefore extensive holdings. While the Law of Equal Inheritance as in France or India, promotes small holdings.¹

§24. **Economies of large farms.**—We shall now discuss the economies of large farms or large-scale agriculture. These are similar to those of large-scale production in manufacture

(i) A large farm is better equipped with capital, which can also be borrowed on moderate terms. It encourages expensive permanent improvements, such as enclosures drainage, embankments, roads and farm-buildings.

(ii) Division of labour can be carried further in the case of large farms than in the case of small farms.

(iii) Large farms can employ expensive machinery and implements, which involve heavy outlay but help in keeping down farming costs.

(iv) The crops being large, the costs of marketing them are relatively small.

(v) Other advantages are that a scientific system of rotation of crops can be adopted, a due proportion can be maintained between arable and pasture lands, and agricultural experiments can be undertaken.²

§25. **Limitations of large farms.**—Increasing difficulties of supervision over a wide area set a limit to the increase in the size of farms. This limitation is found to be more rigid and is earlier felt in agriculture than in the case of large-scale manufactures. There is again, not the same scope for division of labour as in manufactures owing to the seasonal and intermittent nature of agriculture. Under a system of large agricultural estates, certain social evils generally appear, such as absentee landlordism, unequal distribution of property and wealth, and agrarian discontent.

§26. **Advantages and drawbacks of small-scale farming.**—(i) Careful personal attention to land and its cultivation is paid by the small cultivating farmer, who is intensely devoted to his land.

(ii) The great social advantage of small-scale farming is that it implies a wide diffusion of landed property.

(iii) The political advantages of a large class of peasant proprietors have been widely recognized.

On the other hand, of course, the proverbial conservatism of small farmers, while it makes for political stability, may also sometimes act as a serious hindrance to progress. In the

¹ See Part II, ch. iii, §5.

² J. S. Nicholson, *op. cit.*, vol. I, pp. 142-7.

economic sphere, by the cooperative organization of agriculture it is possible for small farmers to command many of the advantages of large farms. A due balancing of the economic, social and political factors seems on the whole to point towards farms of moderate size cooperatively organized.¹

§27. **The Law of Increasing Returns.**—The Laws of Returns have already been explained above.² But there special stress was laid on the Law of Diminishing Returns as being appropriate in a discussion about Land. The subject now, however, is Organization of Industry. And in this connexion the emphasis is on the other two Laws, especially the Law of Increasing Returns. It is no doubt incorrect to divide industries into two rigidly separated classes: (i) manufacturing industries subject to the Law of Increasing Returns, and (ii) extractive industries subject to the Law of Diminishing Returns, since the latter law, as we have already seen, applies to all industries sooner or later and the former applies even to extractive industries under certain circumstances. The broad distinction suggested above is nevertheless sufficiently sound.

§28. **Statement of the Law of Increasing Returns.**—The Law of Increasing Returns is the exact counterpart of the Law of Diminishing Returns. Marshall states it thus: 'An increase of capital and labour leads generally to an improved organization, which increases the efficiency of the work of capital and labour.'³

The Law of Increasing Returns may also be described as the Law of Diminishing Cost. Under certain conditions the cost of production of successive increments of supply tends to fall with every increase of labour and capital applied to a business. Thus the cost diminishes up to a point as the size of the manufacturing establishment expands, and as more and more economies of large-scale production are realized. Thus if a motor-manufacturing concern is turning out, say, 100 cars a day at a cost of Rs. 3,000 per car, by doubling its output to 200 cars a day it would perhaps be able to reduce the cost to, say, Rs. 2,500; for the various costs,

¹ See ch. v, §7.

² See ch. v, §8.

³ The student should carefully note that the working of the Law of Increasing Returns is independent of any inventions or changes in the methods of production. In explaining it, we assume that the arts of production remain the same. The changes we contemplate are only as regards organization, scale of operation, etc.

especially the on-costs or supplementary costs, would not increase proportionately, and greater specialization and a better division of labour could be introduced. The economies will go on increasing until at last a point of maximum return or minimum cost is reached, say, when the output has been raised to 300 cars and the cost reduced to Rs. 2,000 per car. Then the disadvantages of large-scale production would begin to tell, and would make it worth while starting another motor factory rather than expanding the existing one. The same holds good of transport and commercial activities, banking and insurance and so on. If, however, the price of the raw material, like wheat used in the wheat-milling industry, or wool used in manufacturing woollen cloth, is the principal factor in determining the price of the finished commodity, there is not much scope for increasing return. An increase in demand for it is likely to be followed by an increase in the cost and therefore an increase in price. Sometimes, however, the opposing tendencies of increasing and diminishing returns may just balance each other and give rise to constant returns.

§29. **Consolidation and Integration of industry.**—We now pass on to consider yet another feature of the modern industrial organization, namely the consolidation and integration of industry. Combinations of all kinds are the order of the day, and may be looked upon as a new development of the principle of large-scale production. We may refer to this tendency as the tendency towards large-scale management. These combinations are formed with a view to securing by joint action more favourable results and further economies than before the combination. They are also often actuated by the motive of eliminating competition and controlling supply and price. The modern improvements in transport and communication—through the telegraph, the telephone, the wireless and the postal service—have facilitated their growth. The great cost at which fixed capital has been provided and the ruinous consequences of cut-throat competition have made business rivals more and more anxious to come to terms with each other. This is rendered all the more easy because competition is often so severe that only the few most powerful firms survive it. And the very smallness of the number of survivors makes it easy for them to combine.

§30. **Horizontal and vertical combinations.**—There are two main kinds of industrial combinations: (i) horizontal combinations, and (ii) vertical combinations.

(i) *A horizontal combination* is a combination of business units engaged in producing or selling similar things—a merger or consolidation of similar establishments into a larger one under a single centralized management. Thus the Standard Oil Company of New York is a combination which owns or controls the great majority of petroleum refineries in the U.S.A. Similarly the Imperial Tobacco Company owns practically all the tobacco-manufacturing establishments in the U.S.A. Recently a proposal has been made that a merger of all the cotton mills in Bombay should be effected as one means of saving the industry.

(ii) *A vertical combination* occurs when a number of dissimilar business units engaged at *different* stages in the production of an article, come under a single management. The idea is to integrate the successive stages in production from the raw material to the finished product. Thus the United Steel Corporation has its own deposits of iron ores, coal-pits, blast furnaces, steel works, its own engineering workshops, railways, etc. The steel and iron industry particularly lends itself to this kind of integration. The Tata Steel and Iron Company at Jamshedpur is an example of a vertical combination of industry.

Sometimes horizontal and vertical combinations of industry go together. Thus the Steel Corporation (U.S.A.) is also a horizontal combination for certain purposes or in some branches. It owns many iron furnaces, steel mills, tube works, steel and tin-plate works and so on. Similarly, the American Tobacco Company has attempted not only to combine all the establishments for manufacturing tobacco, but has also extended its operations to the retail disposal of its products.¹

§31. **Trusts and cartels.**—Of the different varieties of industrial combinations the best known are the Trusts in the U.S.A. and the Cartels in Germany.

Firms organizing themselves as trusts and cartels (especially the former) sacrifice, to a considerable extent, their individual liberty of action in the common interests of all the members. Often, however, the combinations are short-lived and of a looser type, the individual firms trying to secure the advantages of certain definite understandings for preventing the evils of excessive competition, while at the same time retaining intact their individuality and their

¹ Taussig, op. cit., vol. I, p. 62.

freedom from outside interference in internal management. Such agreements may take the following forms :

(i) *Agreements to fix prices.*—These often prove short-lived and unstable because of defection on the part of some of the members, who violate the agreement as soon as they find it convenient for themselves to do so.

(ii) *Division of the selling field.*—For example, in the case of competing American railways. This type also has difficulties of its own, such as borderland disputes.

(iii) *Pools.*—In this case a certain maximum output is fixed for each member, and profits are pooled together and divided in certain agreed proportions. Such arrangements are becoming common in India among competing buses plying for hire on the roads.

We shall now discuss the stronger and more developed forms of industrial combinations, namely, cartels and trusts.

(i) *The cartel (kartell)* is a characteristically German form of a combination of the horizontal type. It combines the features both of agreements to fix prices and of pools. It fixes prices as well as output, and functions as a selling agency. Thus the coal-mining industry in Germany is controlled by a cartel with a central sales organization. The profits are distributed among the members on an agreed basis. Sometimes the marketing area is apportioned among the members, who are thus prevented from competing with each other. The central sales agency receives orders, fixes prices and effects sales. In this form of organization members enjoy a far greater degree of autonomy than in a trust. The cartel is comparable to a loose confederation of independent States, while the trust is like a compact federation forming one single State.

(ii) In a *trust*¹ the individual establishments amalgamate, and transfer their respective shares to a Central Board of Trustees in exchange for trust certificates. Effective control over the amalgamated concern is thus vested in the hands of the trustees, who direct the policy of the whole organization.

§32. **The advantages and drawbacks of industrial combination.**—The main advantage of an industrial combination is that when a number of business units are consolidated or integrated together, it is easier to realize the usual

¹ The term 'trust' is now applied to all types of combinations in the U.S.A.

economies of large-scale production.¹ Combinations are, however, generally dreaded because : (i) They often resort to unfair or cut-throat devices of competition against small, independent producers. (ii) They also often result in the establishment of monopolies which may be detrimental to the consumers.² (iii) They lead to speculation in stocks and over-capitalization (to induce independent units to amalgamate), adversely affecting the position of the corporate investor. This is facilitated by the wheels within wheels that have arisen within the corporate form of industry. (iv) They result in unemployment and displacement of labour caused by the closing down of some of the concerns and the policy of restricting output. (v) They open the way to political corruption in a democratic State in consequence of the powerful financial resources of the trusts and their interest in controlling legislation and the general economic policy of the State.

§33. Regulation of Trusts.—In order to deal with the trust problem, what is needed and feasible is their regulation by suitable legislation, re-enforced by public opinion. Total suppression, even were it possible, would be undesirable since it deprives the community of the real benefit derived from industrial combinations. The present attitude of the U.S. Government towards them is more favourable than it used to be. The anti-trust laws have been suspended as part of the National Industrial Recovery programme of President Roosevelt's administration. Indeed, what is called 'rationalization of industry' is characterized by a strong movement in favour of industrial amalgamations with a view to weeding out the inefficient units and reducing the costs of production.

§34. Rationalization of industry.—The term 'rationalization' is German in its origin and has passed into business terminology during the post-war period. It means the rational organization of industry in the light of figures and careful calculations. The parlous condition of German industry during the post-war period and the confusion caused by the inflation of currency created a powerful movement in that country for reducing the costs of production and increasing efficiency by overhauling whole industries with a view to eliminating all waste, modernizing industrial technique, and promoting industrial research. A similar movement appeared in the U.S.A. as well. Even before the war there was a movement in industrial countries of the west in favour of

¹ See §20.

² See ch. ix, §§28-9.

scientific management and the elimination of waste. But the war gave a powerful fillip to rationalization in one form or another by promoting standardized production, by fostering the habit of cooperation among industrial leaders, by stimulating collection of industrial statistics, and by restricting, through Government fiat, certain unnecessary types of production. Rationalization has made great strides in Germany and the U.S.A., and the movement has now spread to other countries, including India, especially during the post-Armistice depression.

Rationalization includes : (i) scientific organization of labour, (ii) standardization of both materials and products, (iii) simplification of processes, (iv) improvements in transport and marketing, (v) amalgamations, horizontal and vertical, and (vi) modernization of industry.

The rationalized industry is thus expected to govern itself consciously, reaching back to the source of raw materials and forward to the consumer.

Rationalization has already been carried on with considerable success in such enterprises as the Bata shoe factory, the Imperial Chemical Industries in Great Britain, or the Ford factories in the U.S.A. It has resulted in lower costs, increased efficiency, higher wages, better goods at lower prices, and sustained rewards to the management : that is, in considerable advantages to all concerned. It bids fair to be a permanent feature of modern industrial organization.¹

Rationalization has, however, its own difficulties and disadvantages. (i) It calls for a high degree of trained intellectual and business ability to control industry, which may not be forthcoming readily. (ii) Again, a large amount of capital is necessary for scrapping old plant and modernizing production. (iii) Moreover, the elimination of the less efficient units and the introduction of improved plant and processes result in considerable displacement of labour and unemployment (although ultimately labour may gain). (iv) Lastly, the consolidation and integration of industry may give rise to monopolistic combinations detrimental to consumers.

Considerable opposition from the labourers was encountered by the Bombay cotton mill owners when they recently tried to introduce rationalization (allotting more looms to weavers, etc.). But as the recent (1934) Report of the Bombay Labour Office inquiry about wages and unemployment

¹ cf. *Twentieth Century Business Methods*, vol. I, ch. xviii.

in the cotton mill industry shows, considerable progress has nevertheless been made.

§35. **Competition.**—The modern economic organization is said to be competitive, in contrast to the medieval economic organization which was supposed to be under the sway of custom. It is also argued that competition is the main regulator of the whole economic mechanism of modern society in production, distribution, exchange and consumption of wealth.

Competition means complete freedom of action in economic life, industry and enterprise, so as to call forth the highest exertion of energy and resourcefulness. Under competition, everybody is quite free to choose what occupation he likes and to sell his goods and services wherever he likes. Competition implies private property and unhampered liberty for the possessor in the matter of its employment and disposal. Commonly, the word competition brings before our mind's eye the picture of rival producers of a commodity, each trying to attract towards himself the largest number of customers. This, however, implies that each seller is free to regulate his sales policy as he thinks fit. For example, it is open to every seller to quote as low a price as he chooses without his freedom being restricted in any way by other sellers or by any outside agency like the Government. Similarly, every purchaser enjoys unrestricted freedom in his choice of goods to be purchased as well as of the sellers from whom to purchase them.

§36. **Forms of competition.**—Competition may assume many forms, some of which are given below :¹

(i) *Commodity competition.*—We have already seen how wants are sometimes competitive and alternative, i.e. two or more commodities (such as tea and coffee, railway and bus) compete for satisfying the same want.

(ii) *Individual competition.*—This is competition between two or more rival producers or consumers of the same commodity (e.g. competition between two or more cotton mills, or two or more workers of the same grade).

(iii) *Market competition.*—This means competition between two or more places (for example, between the ports of Bombay and Bhavnagar) to draw trade to themselves by such means as offering better and cheaper marketing facilities.

¹ cf. Seligman, op. cit., pp. 141-2.

(iv) Finally, there is *competition between nations*. This international competition is evidenced by the present-day phenomenon of tariff wars, dumping, exchange depreciation, etc.

§37. **Is the present system of competition satisfactory?**—The old classical economists tended to exaggerate the blessings of competition. They argued that only under a regime of competition can our needs be effectively satisfied, because under competition effort is directed automatically to the production of those goods which are really needed by society. Competition automatically brings about an equilibrium between production and consumption, they said. If there is deficiency of production, prices rise and with them profits. More producers come on the scene, and the increase in production again sends down the prices. If there is a surplus, lower prices will result in restricted production and thus bring about a rise in price. An adjustment between supply and demand is thus easily effected by the force of competition. All this, however, is only partially true. The phenomenon of periodical crises, well known to the modern world, shows that maladjustment between production and consumption constantly occurs under the present system of competition. The general feeling, at present, is that this haphazard action of competition must be replaced by deliberate planning of production and its continuous adjustment to consumption. Further, it is generally argued that competition stimulates economic progress by the rivalry among the competing parties and by the elimination of the inefficient and the unfit. This is, of course, mainly true. We must nevertheless not forget that the methods of competition may, sometimes, be very harmful and may lead to such evils as adulteration and production of cheap, shoddy articles, unduly low wages to the workers, etc. Nor is it always true that competition means the lowest possible prices. For often there is a considerable waste involved in competition, for example, in very expensive though quite unnecessary advertisement. This means unduly high costs and therefore high prices.

Competition, in the sense of unrestricted freedom for everyone to regulate their economic relations, frequently leads to gross injustice. The most striking example of this is the one-sided character of nominally free bargains between unequally matched parties, in which the stronger party exploits the weaker. The individual worker, almost inevitably, suffers in striking bargains for wages with the relatively more

powerful employer. Hence the development of Trade Unions and the substitution of collective for individual bargaining.

Thus we nowadays admit the necessity of limiting the operation of competition in various directions by cooperation, monopoly, etc. But the question whether it is possible or desirable to eliminate competition altogether, and radically to alter the present economic structure of society (e.g. on the lines followed in Soviet Russia) is highly controversial.

SUMMARY

Except in the case of the autonomous worker, the task of organization is undertaken by a specialized class of people in modern industry, who are generally known as *entrepreneurs*. The function of the entrepreneur is to plan the enterprise, bring together land, labour and capital in the most suitable proportions, and above all to take the risks of the business. It is a most important and delicate function.

Business enterprises may take several forms, e.g. (i) Individual as opposed to corporate enterprises; (ii) Partnerships; (iii) Corporations or joint-stock enterprises; (iv) Trusts; (v) Government undertakings; (vi) Co-operative production; and (vii) Profit-sharing.

Of these the typical and dominant form of business enterprise is the joint-stock company, which has the great advantage that it makes possible modern large-scale enterprises requiring huge capital outlay. It is not without serious drawbacks. Profit-sharing and cooperation represent attempts to avoid these drawbacks. But under present conditions they cannot be regarded as substitutes for the joint-stock company.

One of the most important features of modern industrial organization is the great development of *division of labour*, by which each kind of production tends to be split up into more and more separate processes. Instead of all the processes being looked after by the same set of people, each is assigned to a separate set of people. The final product of course is complete only after the results of these separate processes have been put together (i.e. the division of labour implies or requires combination or cooperation of labour).

The advantages of division of labour are many and obvious: (i) It increases the effectiveness of labour and tends to enhance wages. (ii) It reduces the cost of production and thus benefits the consumer through lower prices. (iii) It promotes invention.

Its main disadvantages are: (i) It makes labour monotonous. (ii) It destroys the personal friendly relations between workman and employer.

Division of labour, machinery, factory production are all so intimately related to one another that it is difficult to separate the effects attributable to each. Consequently causes and consequences are apt to get mixed up. In this manner, some of the evils of machinery and of factory production in general come to be illogically described as evils of division of labour.

Division of labour is limited by the extent of the market, the development of wants, and the nature of the employment.

Machinery represents the mastery of man over nature and is a mark of progress and civilization. It enormously increases the productivity of human labour; takes over work that is purely mechanical and monotonous, leaving intelligent work to human beings; lessens human drudgery; relieves the strain on human muscles; increases mobility of human labour by increasing the demand for general intelligence rather than for specialized skill; widens the scope for employment; ensures accuracy, regularity, promptness and delicacy of work; and promotes standardization of goods. Its sudden introduction may displace labour. In the end, however, by increasing wealth and capital it increases the demand for labour.

Division of labour refers to specialization on the part of individuals. *Localization of industries* refers to specialization on the part of localities. It may be described as territorial division of labour. It may be determined by natural or permanent causes, or may be purely accidental. When an industry is concentrated in a locality, it comes to enjoy certain advantages known as external economies due to the springing up of subsidiary industries, the congregation of skilled workers, and the possibility of rivals observing each other and learning from each other.

The main disadvantage of localization is that the locality may suffer if its only industry declines for any reason. The remedy lies in the establishment of supplementary industries.

Forces making for *decentralization*, as opposed to localization of industry, are the high costs due to heavy taxation, etc. in big industrial cities, development of transport, and the use of cheap electrical instead of steam power.

External economies are those which are dependent on external conditions—on the general development of an industry (e.g. those which flow from the concentration of a number of similar firms in the same locality).

Internal economies are so called because they are internal to every firm and depend on its resources, the efficiency of its management, etc. A number of these internal economies are due to the adoption of a sufficiently large scale of production—the ideal or optimum scale of course varying from industry to industry. Large-scale production is generally indicated where the fixed charges are heavy and demand for the products is extensive and regular.

When the *scale of production is large*, several advantages attend upon it, e.g. a more elaborate division of labour; the possibility of employing highly-paid experts; up-to-date machinery and effective advertising methods; expensive research and experiments; utilization of by-products; saving in overhead expenses, and in buying and selling; better credit; larger turn-over of capital; comparative freedom from market fluctuations.

All these advantages increase the competitive power of a firm. They also benefit the consumer because efficient production from his point of view means lower prices (and, if possible, also better quality).

The scale of production, however, cannot be enlarged indefinitely. After a point the enterprise becomes too cumbersome, difficult to manage and to supervise and therefore inefficient and wasteful. The supply of business men of extraordinary ability who can manage huge concerns efficiently is limited. The possibility of labour troubles is greater on account of the

increase in the number of labourers to be dealt with. Through excessive growth in size, a firm may lose its adaptability to changing conditions. Lastly large-scale organization is apt to facilitate the formation of monopolistic combinations.

Cooperation may enable small concerns to realize all the advantages of large-scale production, while avoiding its disadvantages. In *agriculture*, the *scale of production* is conditioned by a number of factors, such as abundance or scarcity of land, as well as its contour; the nature of crops; progress in intensive cultivation; climate; irrigation; and the laws of inheritance and succession.

The advantages and disadvantages of large-scale and small-scale production apply *mutatis mutandis* to agriculture also. The limit of extension of scale is, however, reached earlier in agriculture than in industry, not to speak of certain special social and political advantages attaching to a widely diffused ownership of land which in practice favours small-scale production.

As the Law of Diminishing Returns requires special emphasis in connexion with agriculture, so the *Law of Increasing Returns* requires special emphasis in connexion with manufacturing industries. The Law of Increasing Returns may also be called the Law of Diminishing Cost, because with every increase of capital and labour the cost of production per unit decreases up to a point. This tendency is more noticeable and lasts longer in industry than in agriculture and other extractive industries. But here also a limit is reached sooner or later, when instead of returns increasing they begin to diminish. In other words the costs begin to increase faster than the economies of large-scale production.

The modern tendency towards consolidation and integration of industry is mainly due to the desire of eliminating cut-throat competition, but it also makes possible certain economies reaped from an enlargement of the scale of production.

Industrial combinations may be (i) horizontal, i.e. combination of similar establishments; or (ii) vertical, i.e. combination of dissimilar business units. In combinations known as trusts the individual firms entering into the combination surrender their private liberty of action or management. In combinations known as cartels the units continue to enjoy a considerable degree of autonomy. There may be other kinds of combination with any number of variations as regards power surrendered and matters forming the subject of agreement.

Combinations, as suggested above, may result in the reduction of costs, but they are feared by the public because of their tendency to develop into oppressive monopolies. They may also use their great power and resources to get control of the political machinery for their own selfish purposes. A total suppression of trusts and combinations is neither possible nor desirable. But legislative regulation of some kind may be necessary.

The recent movement towards *rationalization* owes its strength to an impulse similar to that which leads to the formation of combinations. It means the rational organization of an industry in the light of statistics and careful calculation. It implies scientific management and the elimination of waste (or overproduction) through the scientific organization of

labour, standardization of materials and products, simplification of processes, improvements in transport and marketing, amalgamations, etc. Rationalization, however, requires high business ability and the supply of abundant capital in order to be successful. It may also be accompanied by considerable displacement and unemployment of labour and may degenerate into selfish monopoly.

Competition.—The force of competition is a principal regulator of economic relations in modern society. It implies among other things complete freedom in the choice of occupations and in buying and selling. Competition may be between commodities, individuals, markets or nations.

The old classical economists tended to regard competition as a wholly beneficent influence calculated to bring about swift and certain adjustment between production and consumption, the survival of the fittest and distribution of rewards according to deserts. It was, however, realized that complete *laissez-faire*, which seemed to be the logical corollary of freedom of competition, led to various evils. Deliberate planning, regulation and regimentation of various kinds is now almost universally regarded as necessary to cope with these evils and to guide the force of competition so that it may operate to the best social advantage.

CHAPTER IX

EXCHANGE : VALUE AND EXCHANGE

§1. **Scope of the chapter.**—In the introductory chapter, we have already examined the meaning and scope of exchange as one of the main divisions of economics and also its relation to production. We shall now first study the importance, benefits and conditions of exchange. We shall then show how at every stage there is the determination of value, and how the concept of exchange leads to that of value.

§2. **Importance of exchange and its benefits.**—In the early epochs of civilization, members of a self-sufficing tribal group or of a family met their wants by their own direct efforts. Every member was engaged in the same occupation, although there was a certain elementary division of labour between the sexes. But as these groups expanded and the contacts between them multiplied, the need for exchange became obvious. As communities gradually developed into villages, villages into towns and towns into nations, division of labour became more and more complex, and exchanges became wider and more frequent. Under modern conditions, we have an elaborate system of division of labour and we mostly live by the exchange of our services and products for those of others. Production being mostly for exchange (sale), and rarely for the producer's own use, we must look upon wealth from the point of view of exchange. Economic progress implies specialization, and specialization in its turn implies exchange or marketing. The advantages of exchange are mainly those of division of labour. The possibility of exchange enables nations and individuals to specialize in those tasks for which they have the greatest aptitude or natural advantages. This makes for economy of effort and provides conditions favourable to the material prosperity of all. The conception of exchange gives rise to that of value and price, that is, the ratio at which exchanges take place.

§3. **How and why exchange takes place.**—As Jevons puts it, 'exchange is the barter of the comparatively superfluous for the comparatively necessary'. People sometimes argue as if one of the parties to every exchange must necessarily lose. This view is, however, incorrect. A sounder

idea is conveyed by the common statement that 'exchange is no robbery', which suggests that both parties gain. The act of buying and selling being purely voluntary, we are as a rule entitled to say that both buyer and seller derive benefit from it. Each party is satisfied that what he receives in exchange is more valuable to him than what he has to part with. Suppose a farmer exchanges his surplus grain for the surplus cloth of a weaver. It is clear that the farmer values the cloth at least as much as, if not more than, his grain; and that the weaver values the grain at least as much as and possibly more than his cloth. The intervention of money does not make any difference. The farmer sells his surplus grain for money, and with this he purchases cloth and other requirements. Here we say that the utility of cloth to our farmer is not less than that of the money given. The above illustration serves also to emphasize certain *conditions of exchange, which are as follows* :

(i) First, each of the parties must desire the thing owned by the other.

(ii) Secondly, both must be able to compare the satisfaction to be gained by possessing the thing desired with that derived from what must be given up in exchange.

(iii) Finally, both the parties must be able to command a surplus of the commodity over and above what they require for their own needs, and they must have a reasonable assurance of being able to exchange this surplus for something else that they may desire.

§4. **Exchange by sale and purchase.**—In the course of economic progress, exchange by barter is found to be attended by many inconveniences and is replaced by 'money economy', or exchange by sale for money, and purchase by means of money. For example, if our farmer possesses a cow, and wishes to have a blanket, a ploughshare and a box, it is very unlikely that he could get all these three things from one man, and that this man should at the same time be in need of the farmer's cow. He may have one of the three things the farmer wants, but the cow is more valuable than this one thing and is obviously not divisible; the farmer cannot offer only a part of it in exchange. Therefore, no exchange would be possible. This difficulty is expressed by saying that exchange by barter requires *double coincidence of wants* (i.e. *A* must want what *B* possesses, and *B* must want what *A* possesses). When exchanges become frequent and complex such double coincidences will be very rare. On the other hand, if our farmer were first to sell his cow or grain for

money, he could use this money to purchase cloth or a ploughshare or any of his other requirements, whenever he chose to do so. The intervention of money, therefore, splits the barter into sale and purchase, but in the long run it has the same results as barter itself, namely, exchange of one set of commodities and services for another.¹

The modern system of exchange thus requires money as the universal medium of exchange and the common measure of value. It is also obvious that it requires merchants to serve as middlemen linking up producers and consumers. It further requires means of transport, such as railways, roads and ships for moving goods from the place where they are produced to those places where they are wanted; and lastly it requires well-developed markets to enable the buyers and sellers to come into contact with one another.

The basic problem of exchange is the problem of value, that is, of the formulation of the principles which determine the ratio at which exchange takes place. We shall see how practically every problem in economics can in a sense be regarded as a problem of value.

§5. **What is a market?**—Before embarking upon the analysis of value, we must be clear as to what exactly we mean by the term 'market' in economics. Here we must at first rid ourselves of the notion that the term market necessarily refers to a particular and definite locality. The essential idea of a market is not so much some particular place (because as we shall see presently some markets are world-wide), as the presence of effective competition. What is implied is that buyers and sellers are in such intimate contact that the price of the commodity in question tends to be uniform throughout the extent of the market. The contact is intimate in the sense that direct competition is possible. Buyers are bidding against one another and so are sellers. If prices are higher in one part of the market than in others this fact becomes instantly known to the whole body of sellers and purchasers. Sellers will then set about sending supplies so as to benefit by the higher prices. Buyers, on the other hand, will abstain from placing their orders in that part of the market where higher prices prevail and will buy where prices are lower. In other words, supply will increase and demand will decrease in this part of the market, so that the prices which have risen will come down, and eventually one price will come to rule in the market as a whole.

¹ The difficulties of barter are again referred to in ch. x, §1.

The real distinguishing mark of a market therefore is this tendency towards the establishment of a uniform price for the same commodity at the same time, the force securing this result being, as already explained, the existence of effective competition. It is not suggested that prices never vary as between one part and another of the same market. But if the market is properly organized or, in other words, if it is a market in the true sense of the term, then these variations will tend to be quickly corrected.

§6. **Conditions determining size of a market.**—It is not very difficult to infer from what has been said above that a particular market will be wide or narrow in response to the following main conditions :

(i) *Means of communication which exist between buyers and sellers.*—In these modern days the telegraph, the telephone and the wireless enable vast bodies of sellers and buyers to be in instant communication with each other, though they may be separated in space by enormous distances. Sellers and buyers come to know at once the state of prices in different parts of the market and proceed to buy or sell wherever it suits them. Under these conditions, it is easy to see how in respect of cotton, for example, such widely separated places as Bombay, Liverpool and New York, constitute one market, and prices at all these centres tend to be the same at any given time.

(ii) *The portability of goods dealt with.*—Even if I know that I can sell my cotton better at Liverpool than at Bombay, this knowledge will be useless to me unless I am in a position to transfer my cotton rapidly and without too much expense to Liverpool. Easy portability is thus an essential condition for the establishment of a wide market.

(iii) *Cognizability* (or the ease with which a thing can be recognized).—So far as this matter is concerned, first-class securities and the precious metals enjoy an exceptional advantage. Although the buyer may not be on the spot he knows exactly what he is buying. There can be no mistake about the nature or the quality of the goods he is buying. It is obvious that in cases where it is necessary for the would-be buyer actually to see or handle the article because of the impossibility of getting an accurate impression by mere description, the market will be very restricted. The expedient of grading and sampling has latterly improved the conditions for such articles as wheat, cotton, pig-iron, etc. A sample may be sent (that is, if the commodity is homogeneous), or the commodity may have been classified into a

number of grades so that everyone knows, for example, that Grade A stands for such and such a quality, Grade B stands for such and such another, and so on, and a bargain may be struck without the buyer actually being on the spot to inspect the commodity.

(iv) There must be *a large and steady demand for the commodity*. Otherwise it will not have a wide and well-organized market.

(v) *The commodity must be reasonably durable*, that is, it must not go bad like butter or fruit (unless properly tinned or preserved) in the process of transfer. Owing to the recent progress in cold storage many commodities are passing from the perishable into the durable class, and their market is consequently widening. We are, for example, already trying to find a market in England for our mangoes because it is now possible to protect them from damage in transit. In proportion as these conditions are fulfilled, commodities will have wide and highly organized markets instead of small and restricted markets.

§7. **Nature of speculation.**—Speculation, or dealings in futures, constitutes an essential and useful feature of modern markets. Such dealings take place on the (i) Produce Exchanges (i.e. markets for commodities like wheat, sugar, coffee, copper, oils); (ii) Stock Exchanges (i.e. markets for invested capital, namely stocks and shares); and (iii) Bullion Exchanges (markets for the precious metals; that is, gold and silver).

'By speculation is meant the purchase or sale of anything in the hope of profit from an anticipated change in its price.'¹ Its essence lies in the forecasting of price movements, and then buying or selling, as the case may be, for profit. The speculator concentrates and intensifies the forces which affect demand and supply during a given period.

A highly gradable commodity like wheat or cotton, regularly in demand and produced on a large scale, is very suitable for speculative transactions, particularly if its supplies are intermittent or seasonal in character.

§8. **Principal forms of speculation (or dealings in 'futures').**—(i) A speculator, anticipating a fall in price, may sell 'short', i.e. he may enter into a contract for the delivery at a certain specified time, in the future, of goods not yet in his possession. Suppose that, in the speculator's opinion, the price of cotton is likely to fall in three months' time

¹ Seligman, op. cit., p. 360.

owing to the expectation of a bumper crop (in India, the U.S.A., etc.). The price of cotton (say in January) is Rs. 250 per candy, but is expected to fall to Rs. 200 in March. Our speculator will sell cotton for delivery three months hence (March) at the price, say Rs. 240, fixed now. If his forecast is correct and the price *does* fall, he can enter the market and buy cotton 'spot' at Rs. 200 (or even Rs. 220 or Rs. 230) in order to fulfil the contract by which he agreed to sell at Rs. 240, and thus make a handsome profit. Actual deliveries are rarely taken or given. Usually only the difference between the present and future price is settled. If several speculators thus sold 'short', their action would at once begin to depress prices, and a *sudden slump* in future prices would be avoided. This gradual fall would also stimulate consumption, and thus at any rate partially absorb the increased production of cotton. Speculators who speculate for a fall in price are technically called the 'bears'. The 'bears' are interested in pulling down prices.

(ii) A speculator on the other hand may buy 'long', i.e. will buy more for future delivery to himself than what he cares to take or requires immediately. He will do this if he has reasons to anticipate a rise in price. Suppose a failure of the cotton crop is apprehended (or that there is expectation of increased demand for it), and prices are expected to rise to, say, Rs. 300 a candy. Our speculator will, therefore, enter into a future contract requiring the other party to deliver cotton to him at a price fixed now, say Rs. 250 or even Rs. 260. If the price does rise to Rs. 300 or is, at any rate, above Rs. 250 or 260 (i.e. the price contracted for) he will at once sell the goods at the higher price and realize a handsome profit. If several speculators bought 'long' in this way their action would begin at once to send up prices and would thus prevent a *sudden spurt* in prices in future. It would also check consumption and thus promote a better adjustment of demand to supply. Such speculators are called 'bulls'. The 'bulls' speculate for a rise and try to toss up prices.

§9. **Advantages of speculation.**—Professional and regular speculation, by intelligent people possessing expert knowledge, has a very useful role to play in the modern economic organization. From the above examples, it will be clear that the principal advantage of speculation lies in the moderation of fluctuations in market prices. It exercises a steadying influence on their course and prevents undue congestion of either demand or supply at any one point. It may be said

to link up the market price with the normal price. It prevents wild oscillations in prices by facilitating adjustment between demand and supply and thus benefiting producer and consumer alike. 'Speculation is a struggle of intelligence against chance' (S. E. Thomas) and by its help forces which, left to themselves, would make themselves felt in too violent and jerky a manner, begin to operate at once and affect market prices gradually.

Another advantage of speculation is in the assumption by speculators of risks inseparable from production initiated long in advance of demand. Violent fluctuations in the prices of raw materials might upset all the calculations of manufacturers and convert profit into loss through no fault of theirs. Here the professional speculator plays a very useful role by freely assuming risks and by entering into future contracts with the manufacturer for future delivery of raw materials (like cotton, or wheat) at a fixed price. This relieves the manufacturer of anxiety regarding a possible rise in the price of his raw materials which may involve him in loss. For, as often happens, he may have entered into a contract with some wholesale merchant to sell him the finished goods at a certain price and he must do so irrespective of any increase in his cost of production. The manufacturer being protected from this danger by the intervention of the speculator is enabled to concentrate his attention on his legitimate functions as an organizer of industry. The same results can be obtained by the manufacturer or business man himself resorting to speculation and entering into what are called 'hedging' contracts. For example, when a miller is buying wheat for his business, he may also sell it for future delivery at the time when he expects to be ready with the finished commodity, so that in case the price of wheat falls, the loss caused by a consequential fall in the price of wheat-flour is made good by his gain in selling wheat at a price higher than the new low price ruling in the market.

Speculation on the stock exchanges in securities of various kinds is useful in so far as it promotes investment of capital in the most promising lines of business. Investment as a whole is also promoted by the facilities for a ready sale of stock of all kinds. If a man has purchased some shares, it is not as if his money were locked up for ever. In case he happens to be in need of cash, he can sell his shares on the stock exchange.

§10. **Evils of speculation.**—Speculation in the hands of ignorant, reckless and unintelligent persons, or in the hands

of clever but unscrupulous speculators is, however, highly dangerous and most harmful to society. The craving for getting rich quickly often leads people to gamble in securities and commodities as they gamble in cards or lotteries, and their action results in violent fluctuations in prices. Suppose, for example, that speculators who enter into transactions merely in a spirit of gambling and without giving any real study to the conditions of supply and demand, assume that prices are going to rise. Under this mistaken belief, they rush into the market and make extensive purchases with a view to profiting if the prices rise in future. But the real economic forces of which they have not been careful to take account may be forcing the prices down. The purchases of the speculators, however, will first send up the prices, so that the inevitable fall, when it comes, will be unnecessarily steep and violent. Unscrupulous speculators sometimes try artificially to manipulate prices in their own selfish interest, utterly unmindful of social good. This kind of speculation is obviously antisocial.¹

§11. **Remedies.**—While the evils of speculation are thus very serious, it is by no means an easy task to suggest remedies short of total prohibition of *all* dealings in futures. And this is certainly not desirable, even were it possible. The so-called anti-option laws prohibiting future transactions in grain in Germany have been either ineffectual or have done harm in interfering with *legitimate* speculation. Apart from close scrutiny by responsible stock exchange committees, what is wanted is a strong public opinion, which will not tolerate ignorant reckless gambling, because such gambling is often not only ruinous to those who actively participate in it, but also causes the most serious inconvenience and hardship to the public in general. We must also endeavour to foster a higher standard of business ethics and a more developed sense of social responsibility.*

§12. **Approach to the problem of value.**—Value always depends upon the interaction of supply and demand. In this connexion, we often meet with false or inaccurate statements; for instance, the statement that value depends on cost of production only. This is at once disproved by pointing out that much money may be spent in making an article and yet people will not pay anything for it if they have no use for it.

¹ All these abuses of speculation were amply illustrated by the Wall Street crash in New York in October 1929, ushering in the present world economic depression.

Again, let us suppose that the cost of production of an article *A* is twice as great as that of another article *B*. It may also happen that the price of *A* is for some time twice that of *B*. Nevertheless, there is no guarantee that this proportionate relation of prices will always be maintained. It is a matter of common experience that relative prices of commodities are constantly changing without any corresponding change in their cost of production. This happens because conditions¹ of demand keep changing. For instance, if an illiterate community becomes literate, its demand for books will rise, and the prices of books may therefore be higher.¹

Similarly, the phenomenon of value cannot arise unless there is the supply side as well as the demand side. The plain commonsense meaning of this statement is that unless it costs something to make a commodity it will not bear a price, however much it may be desired by people. (The exceptional class of useful goods which do not involve any cost of production but which nevertheless bear a price because of their scarcity is so small that it may be ignored.)

§13. **Marshall's statement of the theory of value.**—We have already made a first approximation to a correct theory of value by explaining how value (or 'price' which simply means value in terms of money) depends both upon supply and demand. Marshall compares the phenomenon of value with the phenomenon of cutting by means of a pair of scissors. The process of cutting requires the lower blade as well as the upper; both of them may not always be equally active but both must operate. Similarly, the phenomenon of value cannot manifest itself unless the supply side as well as the demand side is present; although supply may exercise a larger determining influence under one set of circumstances, while demand may be the more important factor under another set of circumstances.²

¹ In practice the tendency for prices to rise is more than counterbalanced in the case of books, as a greater demand enables the costs of production to be distributed over a larger edition, and the price is often reduced. See §§18 and 28.

² 'We might as reasonably dispute whether it is the upper or under blade of a pair of scissors that cuts a piece of paper, as whether value is governed by utility or cost of production. It is true that when one blade is held still and the cutting is effected by moving the other, we may say with careless brevity that the cutting is done by the second, but the statement is not strictly accurate, and is to be excused only so long as it claims to be merely a popular and not strictly scientific account of what happens.—Marshall, *Principles of Economics*, p. 348.

§14. **The marginal theory of value.**—Modern economic analysis has drawn pointed attention to the behaviour of both supply and demand *at the margin*. Instead of simply saying that value depends on supply and demand, it is more accurate to say that it depends on *marginal supply and marginal demand*. As we know, the supply of any commodity in a market is contributed not by one producer¹ but by several, and the cost of production varies from producer to producer. But the price demanded in the market does not vary from producer to producer. We have seen that in the same market there cannot be more than one price for the same commodity. This uniform price must be such as to satisfy all producers. If, however, it satisfies the man whose cost of production is the highest or the man who is least anxious to sell, that is, the *marginal producer*, it must necessarily satisfy the other producers. From the side of supply then the price is fixed by the *marginal supply* (that is, the supply of the marginal producer).

Similarly, among the consumers of a commodity, there are some who are more anxious to purchase it and are willing to pay or can afford to pay more than others. But, unless the more anxious as well as the less anxious consumers purchase the commodity, the whole of a given aggregate quantity will not be sold. In order that it should be sold, the uniform price must be such as to suit the least anxious among the purchasers, i.e. the *marginal consumers*. From the side of demand, therefore, the price is fixed by marginal demand. Thus the actual price must be such that it represents both the marginal supply and the marginal demand.

Let us suppose that 300 units of a certain commodity x are required, and that the amount can be made up only if, say, three suppliers A , B , C , can be induced to bring in their supplies. Suppose for simplicity's sake that each of them supplies 100 units. The cost of production per unit of the commodity is as follows :

For A	...	...	Rs. 5
For B	...	...	Rs. 6
For C	...	...	Rs. 7

C is here the marginal supplier who is 'least willing to sell', in the sense that he will ask for a higher price (namely, Rs. 7) than A or B . Under these circumstances the one uniform price which will satisfy all suppliers will be not less than Rs. 7. Therefore, we say that from the side of supply the price is fixed with reference to marginal supply.

As regards the consumers, let us suppose the aggregate of 300 units can be disposed of only if *D*, *E*, *F*, all offer to buy it. Since their circumstances are not the same, the price at which each will consider it worth his while purchasing the commodity will be different.

D is prepared to pay Rs. 11 per unit and buy 100 units at that price.

E is prepared to pay Rs. 10 per unit and buy 100 units at that price.

F (marginal consumer) is prepared to pay Rs. 7 per unit and buy 100 units at that price.

The one uniform price which will suit all the three purchasers, will be the one that is low enough to induce the least anxious of the consumers to purchase, that is, Rs. 7. Since *D* and *E* are prepared to pay Rs. 11 and Rs. 10 they will of course buy all the more readily if the actual price happens to be lower.¹ Thus for the given amount of a commodity, namely 300 units, which changes hands, the price must be such as to satisfy the least anxious producer whose contribution is necessary to make up the total, and it must at the same time be such as to attract the least anxious among the purchasers who must come in if the whole of the commodity is to be bought. In our example, Rs. 7 is this price. This price is calculated to give satisfaction to the greatest number of buyers and sellers. It will satisfy six people, namely *A*, *B*, *C*, *D*, *E* and *F*. The price of Rs. 5 will satisfy only four, namely, *A* among the sellers, and *D*, *E* and *F* among the buyers. The price of Rs. 6 will satisfy five people, namely, *A*, *B*, *D*, *E* and *F*. The price of Rs. 11 suits only four, namely, *A*, *B*, *C* and *D* and Rs. 10 suits only five, *A*, *B*, *C*, *D* and *E*.

§15. **Divisions of the problem of value.**—In the above section we have given a general outline of the theory of value. Now we proceed to consider some important details of it. The proposition that value depends upon (marginal) supply and (marginal) demand, we shall find, varies as to its interpretation according to the period we are considering. This

¹ We must not imagine that the more eager purchasers will go about shouting that they would really be prepared to pay more than the market price. Similarly, the more anxious among the sellers would not proclaim from the house-tops their willingness to accept lower prices if necessary. The higgling of the market consists in each party concealing its eagerness as far as possible so as to get the best of the bargain. But all the same, after a series of tentative approaches, the equilibrium price, appropriate to a given position of supply and demand, establishes itself.

leads us to the famous distinction between Market Value and Normal Value.

§16. **Market value and normal value.**—Market value is the current price of a commodity, i.e. its price at any moment, and may be regarded as the temporary equilibrium price (balancing temporary demand and supply). On the other hand, the normal value of a commodity is the price which economic forces will bring about in the long run and may be regarded as the normal (long-period) or permanent equilibrium price (balancing normal demand and supply). We shall discuss the two cases separately.

§17. **The equilibrium of demand and supply in the case of market value.**—A diagram such as Fig. 8 is commonly used to illustrate how market price is determined :

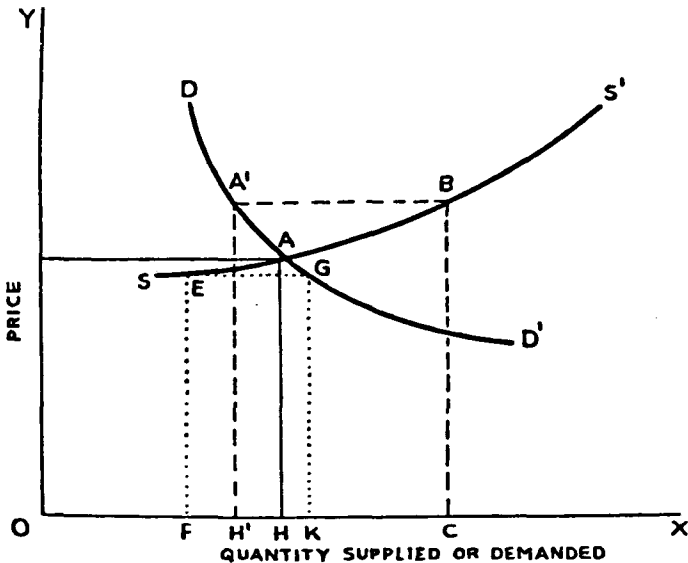


FIG. 8.—DIAGRAMMATIC REPRESENTATION OF HOW MARKET VALUE IS DETERMINED BY THE BALANCING OF DEMAND AND SUPPLY

In the above figure quantities are measured along the line OX and prices along OY. SS' is the supply curve. It slopes upwards, showing that larger supplies are attracted as prices rise, thus inducing the less anxious among the sellers to bring in their supplies. DD' is the demand curve. It

slopes downwards, showing that larger quantities will be demanded as prices fall, thus inducing the less anxious among the purchasers to buy. AH is the only price which will reconcile the opposite points of view of the suppliers and the purchasers. At that price the quantity offered for sale coincides with the quantity which purchasers are willing to take. AH is the equilibrium price, so called because once established, it is not likely to be disturbed. Any other price is unstable or likely to be disturbed. For example, take a higher price, namely, A'H'. At this price OC is supplied but only OH' is demanded. That is, sellers are more anxious to sell while buyers are less anxious to buy. So prices will come down until again the stable price AH is reached. Similarly any price lower than AH is unstable. For instance, at price EF only OF is supplied, while OK is demanded. That is, buyers are more anxious to buy and sellers more anxious to sell. Therefore the prices will rise until AH is reached again. The principal thing to be remembered in the case of market value is that here supply means supply in hand or in sight, i.e. stocks already on offer in the market including any changes in them that could possibly be effected almost at once. The fact that the quantity actually available at any given time has to be taken as unchangeable for the time being has important consequences. For instance, supposing that for some reason demand for the commodity in question rises (that is, people are prepared to pay a higher price for the same quantity or to purchase larger quantities at the same price), what will be the immediate effect of this? We can confidently answer this question by saying that the immediate effect will be a rise in price. This is how market value is affected.

§18. **The equilibrium of demand and supply in the case of normal value.**—But the question as to what will be the effect of this in the long run, or in other words, how normal value will be affected, cannot be answered so briefly or so confidently. The higher demand and higher price, if they persist for any length of time, will influence the supply.¹ Because of the higher price more capital will flow into the industry, existing establishments will be enlarged and new

¹ This, of course, does not apply to goods the supply of which cannot possibly be increased, e.g. paintings of old masters or old coins. The majority of goods, however, are of the reproducible type, i.e. they are being constantly produced and constantly consumed, and most of our reasoning in economics is in connexion with this type of goods.

establishments will appear. Supply, though it cannot be increased immediately, will thus eventually be increased. We cannot say off-hand what will be the effect on price of this increased supply, because that will depend on the conditions governing the production of the commodity. If the Law of Diminishing Returns is in operation, the rise in price (which, as we saw, must occur immediately if demand is keener) will be permanent. If the Law of Constant Returns is in operation, there will be no change in price. Only more will be sold at the same price. But if the Law of Increasing Returns is in operation, this means that with the increase of scale of production the cost of production per unit will go down, and therefore the price also will be lower. So the long-period effect of the increase of demand may be (i) a higher, (ii) the same, or (iii) a lower price, according to these different circumstances.

The matter can be argued on the same lines on the assumption that there is a fall in demand. The immediate result of this would be that the market price will be lower than the cost of production. Because, while demand has fallen, supply cannot immediately be curtailed appreciably. The stocks that are there must somehow be got rid of. It also takes time to transfer capital and labour from one kind of production to another. So that in spite of lower prices and lower profits, practically the same quantity will for the time be offered for sale. But ultimately, the process of the transfer of capital and labour and curtailment of scale of production will make itself felt, and supply in the market will fall off. Whether the final effect of this fall-off will be a higher or lower or the same price will again depend on which of the three Laws of Production is in operation. Assuming diminishing returns, a smaller supply will mean a lower price. With increasing returns, a smaller supply will raise the cost of production and therefore the price. With constant returns, the price will remain the same; but the quantity sold will be less.

§19. **Determination of normal value under the three Laws of Returns.**—The diagrams of Fig. 9 illustrate how normal value is determined and bring out the influence of the Laws of Returns on normal value. Suppose demand has risen from DD^1 to D^2D^3 , then (i) with Diminishing Returns (or Increasing Cost) the new normal equilibrium price will rise from P^1P to KN (as in diagram *a*); (ii) with Increasing Returns (or Diminishing Cost) it will fall from P^1P to KN (as in diagram *b*); and (iii) with Constant Returns (or Con-

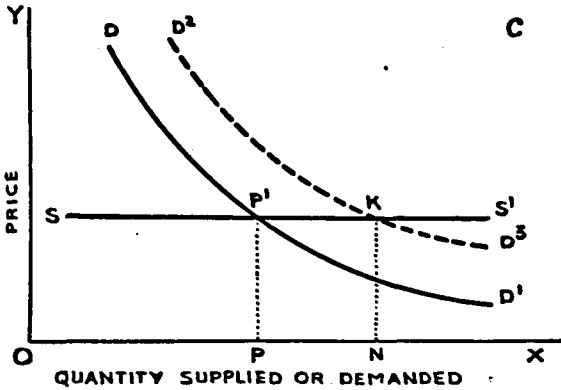
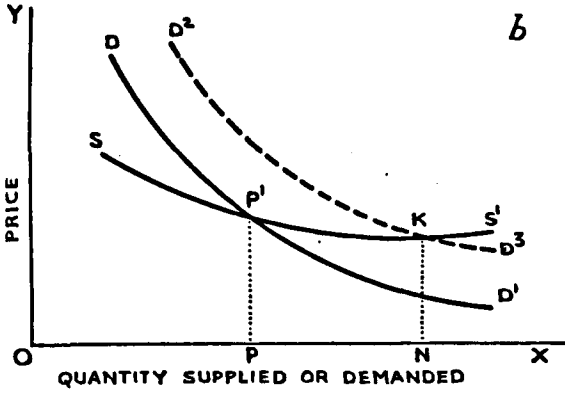
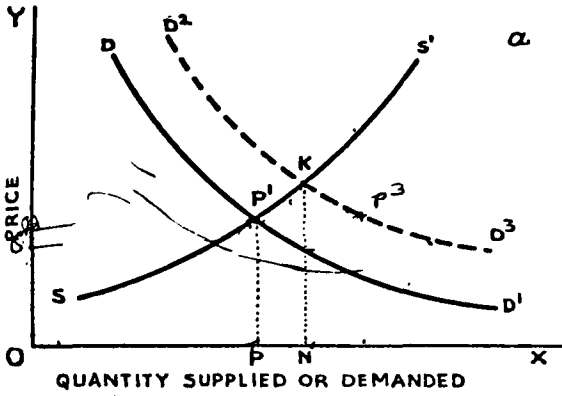


FIG. 9.—DIAGRAMS ILLUSTRATING THE DETERMINATION OF NORMAL VALUE UNDER

- (a) INCREASING COST (OR DIMINISHING RETURNS)
- (b) DIMINISHING COST (OR INCREASING RETURNS)

stant Cost) the new equilibrium price will be the same as before (as in diagram *c*).

If we want to consider the effects of a fall in demand we can reverse the above argument and suppose the original demand is represented by D^2D^3 . It now falls to DD^1 . Then (i) with Diminishing Returns the new normal equilibrium price will fall from KN to P^1P (as in *a*), (ii) with Increasing Returns, it will rise from KN to P^1P (as in *b*), and (iii) with Constant Returns it will remain unchanged (as in *c*).

§20. **Conclusions regarding market and normal value.**—

Because generally speaking supply cannot be adjusted at once in response to changes in demand, we say that for market value demand is more influential than supply, i.e. the marginal utility to consumers of the available supplies mainly governs value. That is, price may for a time be out of relation with cost of production. With normal value a sufficiently long time is assumed for economic forces to work themselves out and fully adjust the supply to a given change in demand, and therefore we say that here supply is more influential than demand. That is, price must in the long run correspond to the (marginal) cost of production. We must, however, again emphasize the truth that in market value as well as in normal value the supply and the demand side are both there, as they must be in every phenomenon of value.¹

Market value is determined by the conditions of supply and demand actually effective at any given time. But with every day that passes there may be some little adjustment on the side of supply, so that gradually market value will be drawn towards normal value.² The greater the degree of adjustment the more will market value approach normal value. The more readily the supply can be increased or decreased as required, the quicker and closer will market price conform to cost of production.

Again, there may be certain temporary influences which may act upon market value, pushing it up or down. For example, suppose there is a boom in cotton; speculators start buying it feverishly and this will send up the prices. But when more normal conditions of demand are restored

¹ See §13.

² With every change in conditions of supply and demand there will be new normal value towards which market value will move. But the main point to remember is that every given position of supply and demand has its normal value, and the market value tends to approximate to the normal value which is normal with reference to this particular position.

the prices will again come down to their usual level. It is in this manner that market value is spoken of as hovering round normal value. In short, market value reflects the conditions of demand as they exist at any given time. Normal value reflects the more permanent conditions of demand and supply, enough time being allowed for their effects to be fully worked out. It will thus be realized that the *time element* plays a very important part in the theory of value and that on it is based the distinction between market value and normal value.

If we firmly grasp the idea that both supply and demand are fundamental causes of value, we shall be able to see the fallacies of some of the earlier theories, most of which erred in emphasizing either the supply side or the demand side to the exclusion of the other. Thus the Utility Theory of Value was mistaken because it ignored the supply side and made it appear as if value depended solely on utility or demand. The Labour Theory (or the Cost of Production Theory) was mistaken in that it neglected the demand side and placed exclusive emphasis on the supply side as the determinant of value. The correct theory of value is the Marginal Theory as explained above, which brings out the significance of both supply and demand.

§21. *Cost of production.*—We may now proceed to analyse further some of the terms and ideas used in the preceding sections. We will first consider the conception of cost of production. In the first place, a distinction may be drawn between (i) *real cost of production*, which means the actual efforts and sacrifices of various kinds required for the production of a commodity, and (ii) *money cost or expenses of production*, which means the money payments for these different efforts and sacrifices in the form of wages, interest and profit. In economic discussions the term 'cost of production' is very often used in the sense of expenses of production. But if we are particular, the latter term should be used only when we mean the money costs. A further distinction is drawn between (i) *prime, special, or direct cost*, and (ii) *supplementary or on-costs*. The *prime, special or direct cost* refers to such items of the cost of production as vary in direct proportion to the output (e.g. the amount of raw materials consumed, the labour power required, and the wear and tear of machinery involved). The *supplementary costs (on-costs)* include those standing charges on account of durable plant, salaries of the superior employees, and other establishment (overhead) charges which must be incurred

whatever the volume of the output. These two elements together make up the total cost of a commodity, and price in the long run must cover this total cost, although during short periods of depression, or excessive competition, things may be sold at less than the total cost at a price just sufficient to cover the prime costs. But unless in the long run the price covers the total cost, production will cease.

§22. **The Representative Firm.**—We have said above that marginal supply (which is the same thing as marginal cost) determines the supply price of a commodity. It is the cost of that unit of the supply which is just worth the producer's while to offer or contribute to the market. In every industry the costs of different producers are different. Some have exceptional abilities and other advantages and their costs are low. Some may be just struggling into business with the greatest handicaps in these respects and are thus leading a precarious existence. We cannot, therefore, regard the conditions of supply by such individual producers or firms as typical of the industry. As Marshall suggests, we must leave aside both these types of producers or firms, and select what may be called an average or 'Representative Firm. which must be one which has had a fairly long life and fair success, which is managed with normal ability, and which has normal access to the economies, external and internal, which belong to that aggregate volume of production'.¹ It is the cost of production of this average or mature representative firm that determines the normal supply price of a commodity. The superior firms, conducted by men of extraordinary ability or enjoying other exceptional advantages, will therefore make extraordinary profits. The most inefficient firms will sooner or later be eliminated, and their costs do not determine price. They are undersold by the better-managed firms with lower costs, and are eventually pushed out. The true marginal cost therefore, which governs price, is the cost of production per unit of the output in the representative firm. In this book it is not possible to enter into further refinements of the cost doctrine.

§23. **Values of complementary goods.**—We have so far considered simple values of goods considered separately. We shall now proceed to consider the question of values of complementary or connected goods. Goods which are combined so as to form an economic whole are called complementary goods. Let us first consider the values of

¹ Marshall, *op. cit.*, p. 317.

complementary goods on the demand side and then on the supply side.

(i) *Joint demand*.—Things are said to be in joint demand when what is wanted to satisfy certain kinds of demand is not a single article but a combination of articles (e.g. ink and pen, golf clubs and golf balls, pipe and tobacco). Then again a demand for a finished commodity involves an indirect or derived demand for its factors of production. Thus the demand for bread involves a joint demand for land, seed, labour, agricultural implements, transport, etc. (see Fig. 10a).

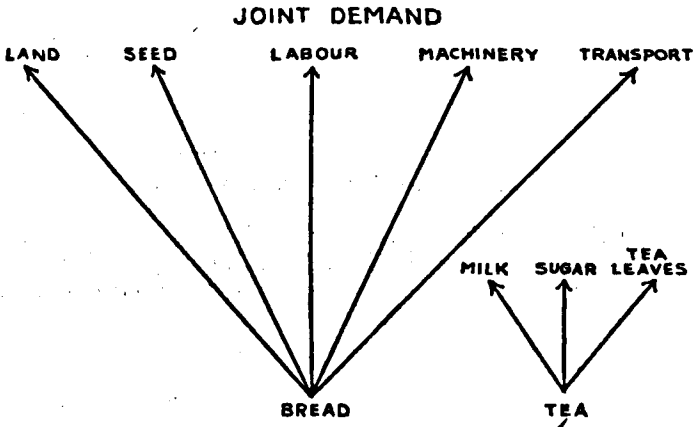


FIG. 10a.—JOINT DEMAND

An increase of demand for the ultimate product will generally bring about an increase in the prices of the constituent factors, but the increase is not necessarily uniform. That constituent will increase most in price whose supply is comparatively difficult to increase and which is also indispensable. It is clear that this constituent will absorb the greater proportion of the increased price of the ultimate product. Any constituent whose supply is plentiful and can be easily increased will show a comparatively small rise of price.

(ii) *Composite demand*.—Demand is said to be composite when a commodity is in demand for two or more different purposes or uses. Thus the demand for coal is compounded of the demands for it in households, in factories, in railways and in gasworks (see Fig. 10b). Similarly, many raw materials like rubber, leather and steel can be put to different uses

and the demand for them is therefore composite. The price of such an article is fixed by the competition of its buyers for the several uses.

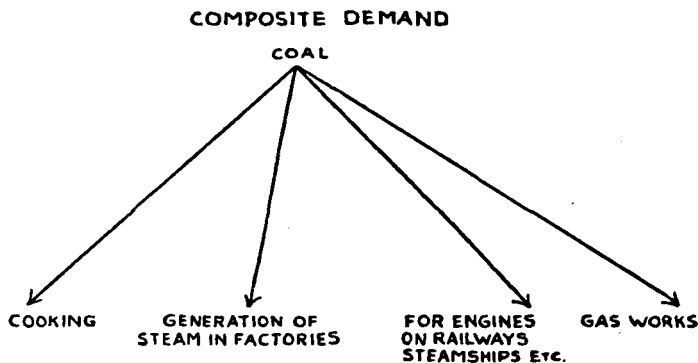


FIG. 10b.—COMPOSITE DEMAND

(iii) *Alternate demand*.—Demand is said to be alternate when it can be satisfied in alternative ways. Thus the demand for light is an alternate demand for electric and gas or kerosene-oil lights. The demand for hot drinks is an alternate demand for tea and coffee. The price of one influences the price of the other. If tea rises in price consumers will, to some extent, substitute coffee for tea. But this in its turn will raise somewhat the price of coffee.

(iv) *Joint supply (cost)*.—We shall now pass on to consider complementary goods on the supply side and the peculiarities of their value. Corresponding to joint demand

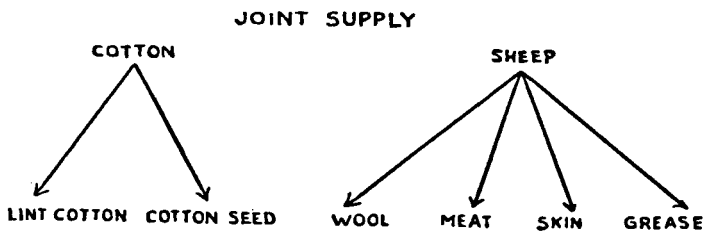


FIG. 11a.—JOINT SUPPLY

we have joint supply when the supply of one article necessarily involves the supply of another. Wheat and straw, cotton and cotton seed, gas and coke are examples of joint

supply (see Fig. 11a). The costs of production are here chargeable jointly to the articles produced in combination. The railway service offers a case of joint costs, since most of the standing costs are jointly incurred for goods and passenger traffic, and for mail and passenger trains. A passenger train may have first, second and third class carriages, but the greater part of the cost of running the train is constant and does not vary very much according to whether the train consists of different classes or not. For instance, the cost of maintaining the permanent way and the cost in connexion with the establishment, including station-masters, signalmen, etc. have all to be incurred without reference to whether the train has only one class or more. The railways require a large fixed capital which is put to varied purposes, such as carrying goods or carrying passengers. Certain simple rules regarding the prices of joint products may be stated :

(a) The prices of the joint products must together be enough to cover the joint costs of production.

(b) But the apportionment of price depends upon the relative demand for the commodities jointly produced, i.e. on the marginal utility of each. Thus usually the demand (marginal utility) for a pound of cotton is greater than that for a pound of cotton-seed and, therefore, the former sells at a higher price and the latter at a lower price. If, further, the demand for cotton increases there will also be an increased supply of cotton-seed along with that of cotton, and the price of cotton-seed will go down, but the price of cotton will rise and thus the joint prices of the two commodities will be such as to cover the joint costs.

(c) Usually each article entails some special cost to make it marketable and it is clear that it must sell for at least its special cost.

The principle of joint cost is found to have a wide application today owing to the growing influence of chemical science, which is making possible the wide-scale utilization of by-products.

(v) *Composite supply*.—Supply is said to be composite when a thing is produced from several rival sources. Thus sugar is manufactured from cane and beetroot; conveyance in a modern city is supplied by various means like trains, taxis, horse carriages, trams (see Fig. 11b). As Marshall says : 'A demand can often be satisfied by any one of the several competitive routes, according to the principle of substitution. These various routes are rivals or competitors with one another. . . But in relation to the demand they cooperate with

one another; being "compounded" into the total supply that meets the demand.¹ The principle of substitution, as seen

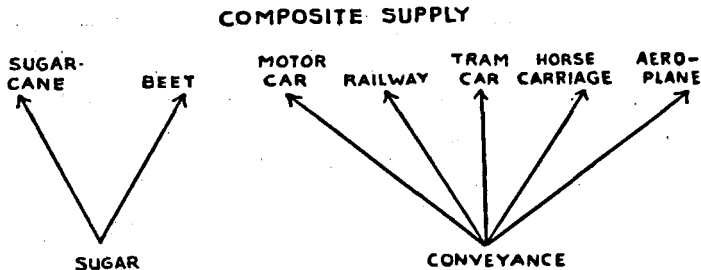


FIG. 11b.—COMPOSITE SUPPLY

above, exercises a moderating influence upon the prices of the several complementary supplies.

(vi) *Alternate supply*.—Supply is said to be alternate when a given set of factors of production can be used to turn out more than one class of goods, though only one at a time. Thus land can be cultivated alternately so as to yield a crop of wheat or barley, or may be put under grass, whichever use is more profitable for the time being.

The foregoing survey of complementary goods shows how their range is extensive and is constantly expanding in the modern economic organization, making the values of many individual goods dependent on the values of other goods. The theory of value, however, is not fundamentally affected by this complication.

§24. **What is a monopoly?**—Monopoly is the negation of competition. When the whole, or practically the whole, supply comes from one producer, he can fix any price that may suit him best. Under competition each producer has to take care that his own prices are not higher than those quoted by his rivals. Monopoly thus implies effective price control—usually on the part of the producers.²

§25. **Classes of monopolies.**—Chapman³ suggests the following classification of monopolies: (i) Natural, (ii) Social, (iii) Legal, and (iv) Voluntary.

¹ Op. cit., p. 390.

² Monopolies may sometimes arise on the demand side, i.e. we may have buyers' monopolies when there is only one buyer or a number of buyers combine and are in a position to dictate prices. Such cases, however, are comparatively rare.

³ S. J. Chapman, *Outlines of Economics*, pp. 143-4.

(i) *Natural monopolies* arise as the result of limitation of nature's supply of raw materials. The supply may be small and confined to certain parts of the globe (e.g. diamonds in South Africa, oil wells in Iran, Burma, the U.S.A., and water-power sites as in the Western Ghats).

(ii) *Social monopolies*.—Competition is regarded as undesirable in the case of certain public utility or quasi-public enterprises. In such cases it is either not allowed at all or is strictly limited on grounds of economy and public convenience, e.g. a number of competing railways covering the same tract would be uneconomical and inconvenient to the community at large.

(iii) *Legal monopolies* are those created by law for promoting general progress and encouraging invention (e.g. patents and copyrights conferred upon inventors and authors, and trade marks). Some social monopolies also enjoy legal support (e.g. railway companies require legal permission to lay down the railway track).

(iv) Finally there are the *voluntary monopolies* which arise (a) from the absorption by one business unit of other business units, or from elimination of rivals by cut-throat competition, or (b) from the purchase of competing businesses or from more or less voluntary agreements between different firms. These monopolies broadly fall under two classes, namely trusts and cartels, which we have already dealt with.¹

§26. **Monopoly value compared and contrasted with competition value.**—A monopoly may be defined as a condition of production in which a single person, or a number of persons acting in combination, have power to fix the price and to leave the demand to determine the quantity that can be sold at that price (or to put it the other way round, the power to fix the quantity offered for sale and sell it at such a price as is necessary to induce the purchasers to buy the whole of that quantity). The monopolist producer and the producer under competition are both moved by the same desire, namely the desire for the maximum profit obtainable in the given circumstances. Under competition, however, each producer has to reckon with rivals and, as we have already seen, the price under these conditions will approximate to the expenses of production. The monopolist on the other hand, can, in theory, fix the price at any level he chooses above the bare expenses of production. He has no need to fear that somebody else will undersell him and attract all the

¹ See ch. viii, §31.

consumers to himself. Under competition the (marginal) expenses of production give the minimum below which the prices will not fall as well as the maximum beyond which they will not rise. Under monopoly the prices will of course not be less than the expenses of production, but theoretically they are subject to no maximum limit.

It would, however, be a mistake to suppose that the monopolist's interest always lies in pushing up his prices higher and higher; for he must consider the effect of such a procedure on demand, which will shrink as prices rise. In fact, on the demand side, the problem of value under monopoly remains the same as under competition. The Law of Demand, which tells us that in the case of every commodity to a greater or less extent, every rise in price will cause demand to contract and that every fall will similarly cause it to expand, remains in operation under monopoly as under competition. If the monopolist therefore desires a very high price, he must restrict his supplies. At any given time, every conceivable price is linked together with a certain definite quantity which alone can be sold at that price. *The monopolist can fix either the price or the output but not both.*

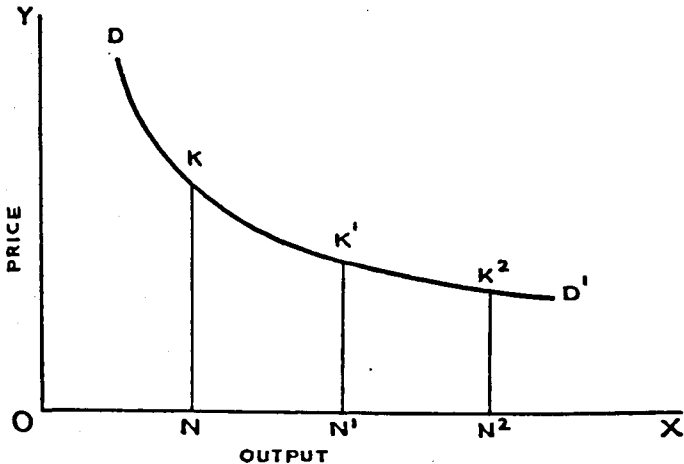


FIG. 12.—DIAGRAM ILLUSTRATING THE MONOPOLIST'S LIMITATIONS IN PRICE OR OUTPUT

In Fig. 12 DD^1 is our usual demand curve. According to this figure the monopolist cannot, for example, fix his output

at ON^2 and expect to be able to sell it at price KN per unit. If he decides to fix the price at KN , the output is automatically fixed for him, because at price KN he can only sell quantity ON . Or, which comes to the same thing, he can decide on output ON , in which case he finds that the price must be KN , because he will not be able to sell quantity ON at any price higher than KN , however much he may wish to do so. *Out of any number of possible prices the monopolist endeavours to choose that price which yields him the highest net income or the highest net monopoly revenue.* 'Net monopoly revenue' means the total amount realized at a certain price *minus* the expenses of producing the quantity that can be sold at that price. The expenses of production, it must be remembered, include among other things normal profits secured under conditions of competition.

§27. **Considerations governing monopoly value.**—In the examples given below (A, B and C) the considerations determining the price and output yielding the highest net monopoly revenue have been indicated in each case.

We cannot say off-hand whether the monopolist stands to gain most by a comparatively high price or a comparatively low price, without studying the demand and supply schedules of the commodity in question. Other things remaining the same, the monopolist's interest lies in (i) securing as high a price as possible for each unit sold, while at the same time (ii) selling as large a quantity as possible, and (iii) reducing as much as possible the cost of production per unit.

(A) In the case of a commodity the demand for which is inelastic, prices may be raised without the demand being appreciably curtailed in consequence. If the commodity is also subject to the Law of Diminishing Returns, so much the better for the monopolist. Because even if the demand shrinks to some extent as the result of a rise in prices, this may be more than counterbalanced by the decrease in the cost per unit of the smaller output.

(B) Similarly, the interests of the monopolist are likely to be best served by fixing prices at a low level in the case of elastic demand and increasing returns. For the lowering of the price in this case is likely to be more than offset by expansion of demand, while the increased output will mean decreased costs of production.

(C) Finally, in the case of articles subject to the Law of Constant Returns, the monopolist can almost exclusively concentrate his attention on demand since there are no changes in cost, which indicates only the lower limit to the

price which will be fixed according to the elasticity or inelasticity of demand. If demand is elastic, price will be low, if inelastic, price will be high.

Thus in all cases of monopoly value, the monopolist must carefully weigh two main factors: (i) the nature of the demand, and (ii) the expenses of production per unit.

§28. **Illustration of monopoly value.**—Finally we may give an example to show how price would be fixed in practice by the monopolist. Let us take the case of copyright books with elastic demand and subject to diminishing cost (Case B above):

(1) Output, or size of the edition	(2) Cost per copy	(3) Aggregate cost	(4) Demand or sale price	(5) Aggregate receipts	Net monopoly revenue (5 minus 3)
	Rs.	Rs.	Rs.	Rs.	Rs.
4,000	6½	26,000	7½	30,000	4,000
6,000	5	30,000	6	36,000	6,000
8,500	4	34,000	4½	38,250	4,250

From this example it is clear that neither the highest price (Rs. 7½) nor the lowest one (Rs. 4½) per copy will yield to the monopolist the maximum monopoly gain. The medium price of Rs. 6 per copy will be the most suitable price since it will yield the highest monopoly profit (Rs. 6,000), the number of copies sold being 6,000.

In Fig. 13 the data given above are graphically illustrated. The three alternative prices are P^1K , P^1K^1 and P^2K^2 . The shaded rectangles represent the net monopoly gain in each case. Rectangle II represents the largest monopoly revenue, thus showing that P^1K^1 is the best price for the monopolist. Under competition the price would be determined at the point of intersection of SS^1 and DD^1 , namely at P^3 , and would be P^3K^3 . Similar diagrams could be drawn to illustrate the determination of monopoly prices under increasing cost and constant cost. How far the monopolist succeeds in hitting upon just the price which will maximize the net revenue depends upon the correctness with which he can make his calculations regarding the reactions of demand to varying prices and the cost of producing different quantities. To some

extent he may be able to base his estimates on actual experiments with different prices and quantities, but largely he will

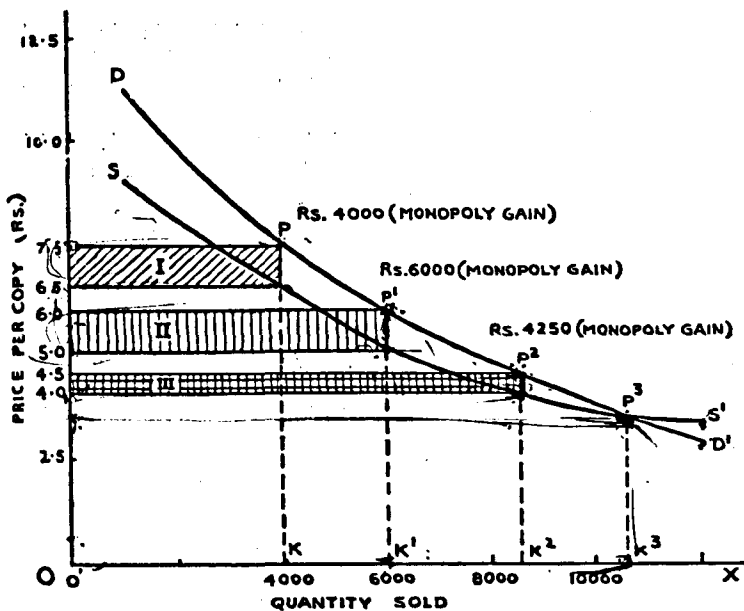


FIG. 13.—DIAGRAM ILLUSTRATING THE DETERMINATION OF MONOPOLY PRICE UNDER INCREASING RETURNS (OR DIMINISHING COST)

have to depend upon his insight and business acumen in deciding which price will be most profitable.

§29. Is monopoly necessarily detrimental to the consumer?—The popular notion is that a monopoly must necessarily be injurious to the interests of the consumer because it is supposed that the monopolist's prices will usually be higher than competitive prices. But this need not always be so. In the first place, the cost of production under monopoly may be distinctly lower than if the same aggregate output were to be produced by a number of comparatively small competing producers. Even under competitive conditions, large-scale production is of course possible; but it is easier to realize its well-known economies under monopoly than under competition, by 'concentration of best-equipped plants which are worked regularly at high pressure', by

'standardizing the product or the service, and thus increasing the general productivity of the organization'. An individual producer may again be deterred from introducing improvements because these are very soon copied by his rivals. A monopolist, on the other hand, is sure of himself reaping the whole benefit of any of his economical devices and therefore he is readier to adopt them. While all these economies will send down the cost of production below the competitive level, the monopolist may find his greatest gains in selling a large output at as low a price as possible, and the resulting price may actually be lower than under competition. Here the interests of the monopolist and the consumer happen to coincide. But even when the immediate advantage of the monopolist may seem to lie in fixing a pretty heavy price there are several considerations which may lead him to keep the price within moderate limits. We may mention some of these *restraining influences* :

(i) The possibility of substitution.—Goaded by too high a price the consumers will try hard to find some substitute and often succeed in doing so.

(ii) The monopolist by his tactlessness may drive the consumers to combine against him.

(iii) The public resentment due to his action may lead to Government interference and regulation. The Government may even decide to take over the industry itself.

(iv) Competitors, who may not be there in the beginning, may at last appear. From the high prices charged by the monopolist they will infer high profits and will try to share them.

(v) Occasionally the monopolist may happen to be a man who has a social conscience. He may desire to combine reasonable profits for himself with the promotion of public welfare through moderate prices. It is natural that this solicitude for public welfare should be expected more as a matter of course when the monopoly is in the hands of the State or a public body like a municipality.¹

§30. **Evils of monopoly.**—Although, as shown above, monopolies need not necessarily be detrimental to the interests of the consumers, there is a good deal of popular prejudice against them and some explanation of this fact is necessary. Part of the explanation is that the monopolist often shows a thoughtless preference for unreasonably high prices, where low prices would in reality be more advantage-

¹ See ch. xvii; also read Marshall, *op. cit.*, pp. 488-9.

ous even from his own purely selfish point of view. He generally acts by rule of thumb without careful and intelligent calculation and on the mistaken assumption that the higher the price, the greater must be the benefit to himself. Another evil associated with monopoly is price discrimination, that is, charging different prices to different people in the same market (a thing which cannot occur under competition), or different prices in different areas in the same country.¹ Discrimination between one customer and another may be prompted by the desire on the part of the monopolist as far as possible to absorb the whole of the consumer's surplus. If, for example, in the judgement of the monopolist customer *A* will be prepared to pay Rs. 10 for the article, he will charge him Rs. 10; if customer *B* is only prepared to pay up to Rs. 7, he will charge him Rs. 7 and so on. (The first edition of a novel is often highly priced and is followed by a cheaper edition.) Or it may simply be due to favouritism—favouring powerful customers and tyrannizing over weaker ones. Lastly, monopoly may spell stagnation in industry. Without the stimulus of competition producers are likely to be unenterprising and conservative and the industry will therefore remain in a backward condition.²

Another danger from monopoly is that the powerful monopolistic combinations may be a source of grave menace to the State and may use political corruption to secure their ends.³

SUMMARY

Economic progress requires specialization or division of labour and this in turn necessitates *exchange*. The phenomenon of exchange gives rise to the central problem in economics, namely the problem of value.

Voluntary exchange among normally intelligent men must result in gain to both parties to the exchange.

In the course of progress the inconvenient and clumsy method of exchange by barter gives place to exchange effected through the medium of money. Besides money, a developed system of exchange rests upon a proper system of merchant middlemen and of transport.

¹ The variant of this practice under which lower prices are charged for the same goods in foreign markets as compared with those in the domestic market, known as 'dumping', is discussed in ch. xii, §11.

² As the reader will notice in ch. xii, §10, this is one of the principal arguments against protectionism.

³ See ch. viii, §32.

The consideration of exchange naturally leads to a consideration of *markets*. The essential idea of a market is not some definite locality where things are offered for sale, but the presence of effective competition leading to uniformity of price throughout the extent of the market.

The following *conditions* are favourable to the development of wide markets, and their absence will tend to make markets narrow:

(i) Effective means of communication, (ii) Portability, (iii) Easy cognizability (through grading, sampling, etc.), (iv) Durability of the goods dealt with, and (v) Existence of a large and steady demand.

One of the characteristics of modern markets is the development of *speculation* or dealings in futures. A speculator may either 'sell short' or 'buy long'. He will do the former if he expects prices to fall and the latter if he expects them to rise.

Speculation is a socially beneficial activity provided the forecasts of speculators are based on intelligent and painstaking study, because it makes inevitable fluctuations of prices gradual instead of sudden, so that people get time to adjust their consumption to the change. Producers also benefit because professional speculators can guarantee to them the supply of their raw materials at fixed prices, which saves them much worry and inconvenience. Sane speculation on the stock exchanges directs the course of investment into the most fruitful channels.

When speculation degenerates into mere gambling it acts injuriously upon society, by springing upon it sudden and unexpected changes in prices of goods and securities, causing serious economic dislocation, and bringing unmerited suffering on thousands of innocent people.

It is, however, very difficult to devise suitable checks. Legislation is found to be either ineffectual or to hit legitimate speculation along with the undesirable variety. Reliance must be placed mainly on fostering a higher standard of business morality and of social responsibility.

For a correct understanding of the phenomenon of *value*, it is necessary to appreciate the fact that value depends both on supply and demand. Modern analysis has shown that what is significant in this connexion is *marginal supply* and *marginal demand*.

The famous distinction between *market value* and *normal value* turns on the period considered. In market value the reference is to the price at any given time, and the forces of supply and demand that we have to consider are those actually operative at that time. These forces are constantly changing because we are living not in a static but in a dynamic world. But the immediate or short-period effects of these changes on value (or price), with which we have to do in market value, may be different from the ultimate or long-period effects, with which we are concerned in normal value. In normal value we assume that enough time is given for tendencies set up by any changes in conditions of supply or demand to work themselves out completely. Thus suppose there is a rise in demand. Supply will then tend to increase. But the increase takes time. In the meanwhile the market price will rise because here supply means what happens to be actually available. But in the long run when supply does increase, we shall have a level of prices appropriate to this increase and the cost of its production.

Gradually the day-to-day or market price will show the influence of adjustment on the side of supply, and market price will approach normal price more and more.

In market price again, any purely temporary influence will make itself felt. But being temporary it will disappear and leave the market price to be influenced steadily by the permanent forces, so that it will gravitate towards normal price.

Such is the relation between market value and normal value.

In market value, demand is more influential than supply, which is to be taken as, for the time, unalterable. In normal value, supply may be regarded as the more influential factor, a certain changed condition of demand being assumed to persist while the supply is being adjusted to it. The term 'cost of production' is sometimes used to mean (i) *the real cost of production*, i.e. the actual effort and sacrifice undergone by the suppliers of the different factors of production, or (ii) *the expenses of production*, i.e. the money payments in the form of wages, interest and profit necessary to call forth the different kinds of effort or sacrifices.

Another useful distinction is between (i) Prime, Special or Direct Cost, i.e. such costs as vary with output, and (ii) Supplementary or On-Costs, i.e. such costs as do not vary whatever the output.

The two together make up the total cost of production which price must ultimately cover.

Seeing that the cost of production varies from firm to firm we want to know whose cost of production it is that determines price (or that price must cover). For this purpose we have the notion of the *representative firm*, i.e. a firm managed with normal ability and enjoying normal access to internal and external economies. Firms less than normal in these respects will sooner or later go under in competition and their unduly heavy costs of production will not influence price.

Demand is said to be *joint* when its satisfaction requires the use of more than one article in combination. Changes in such demand will bring about changes in the prices of the several constituent articles according to the relative difficulty of supply and the extent to which each is indispensable.

Demand is said to be *composite* when a commodity has more uses than one. The total demand for the commodity is the aggregate of the demands for each several use. The competition of its buyers for its several uses is one of the forces governing the price of such a commodity.

Demand is *alternate* when substitutes are available. Thus if we want light, we may use electricity or gas or kerosene oil. The prices of such substitutes are to some extent mutually interdependent.

We speak of *joint supply* when the production of one commodity involves the production of one or more other commodities inseparably connected with it. The price yielded by such commodities together must cover the joint cost of their production, the portion of the total price which each bears being dependent upon its marginal utility.

Supply is said to be *composite* when it is produced from several rival sources giving scope for the operation of the principle of substitution.

When the same factor of production can be used to produce more than one class of goods, though not simultaneously, *supply* is said to be *alternate*.

Monopoly is the opposite of competition. The whole supply is controlled by one producer who can fix what price he likes, instead of having to accept the price as determined by competition among a number of rival producers. But while the monopolist can fix the price he cannot at the same time dictate the amount to be sold at that price, because this latter depends on demand. The essence of the matter may be expressed by saying that the monopolist can dictate *either* the price *or* the output but *not both*. He will consider various prices and the various quantities which his knowledge of demand tells him he is likely to sell at these several prices, and he will choose that arrangement which will yield him the highest net income or the highest *net monopoly revenue*, as it is called.

If the demand is inelastic and the commodity is subject to the Law of Diminishing Returns, the monopolist is likely to favour a high price and restricted sales. If demand is elastic and the Law of Increasing Returns is in operation, large sales at a low price will probably be most advantageous to him.

Thus it is not true that even if the monopolist were to pursue nothing but his own interest, prices are bound to be high. On the contrary, it may happen that monopoly prices are actually lower than competition prices, because under monopoly there may be a considerable saving in the cost of production, and the monopolist may after careful calculation come to the conclusion that his profits are likely to be highest if he fixes the price as near the cost of production as possible, enabling the market to take a very large quantity. Apart from this purely selfish consideration, the natural impulse of the monopolist to pitch the price very high is subject to the following restraining influences: (i) Possibility of substitution, (ii) Fear of combined action on the part of consumers, (iii) Fear of Government interference, (iv) Fear of competitive producers appearing on the scene, and (v) Solicitude for public welfare.

The prejudice against monopoly, however, is not altogether baseless. The monopolist will often exact an oppressively high price because it may actually be most profitable to him or because he thinks (it may be quite mistakenly) that it is most profitable. He may also make himself unpopular by charging different prices to different people or in different areas. Other possible evils of monopoly are that in the absence of the spur of competition there will be no inducement to introduce improvements, and monopolies may constitute a grave menace to the State and may lead to political corruption.

Monopolies may be classified as (i) Natural monopolies, (ii) Social monopolies, (iii) Legal monopolies, and (iv) Voluntary monopolies.

CHAPTER X

EXCHANGE : MONEY

§1. **Difficulties of barter.**—A money economy is found to exist in every civilized society. The peculiar disadvantages of barter (that is, direct exchange of goods against goods) which is a possible alternative to money economy, may be briefly summarized as follows :¹ Exchange by barter cannot occur without the double coincidence of wants and possessions. What I want the other man must possess, and he must want what I possess. Even when there is this double coincidence there would be difficulty in deciding how much of one thing ought to exchange for how much of the other, and endless higgling would be the result. This difficulty is obviated if we have a common measure of value. In barter there will be the further difficulty of 'accommodating units of sale to units of purchase'. Suppose I have a field and I wish to offer it in exchange for numerous articles which I am in need of. How can I cut up the field into convenient lots to offer them in return for every one of these articles?²

§2. **Definition of money.**—The term 'money' is used in different senses in different connexions. But a careful inquiry as to the meaning of the term will serve to clear our ideas on the subject. Walker's famous statement, 'Money is what money does', on the analogy of the well-known

¹ See also ch. ix, §4.

² 'In modern communities the obstacles to barter of any kind are almost insuperable. One can hardly imagine a producer, in the manner of a town-crier, proclaiming his wares and requirements in the following terms:

"Oyez! Oyez! I am a printer, and have for sale forty-eight hours a week of my labour for fifty weeks of the year; and I want someone to give to me in return for my labour the use of a house and garden, the necessary furniture, adequate food and clothing for myself and family, tobacco, matches and a daily newspaper, writing paper and postage stamps, life insurance and medical attendance, a weekly entertainment at a theatre, and an annual holiday. . .!" The requirements could almost be extended without limit, but it would be ludicrous to pursue the example. We may conclude that the complex system in which we now live renders simple barter virtually impossible; indeed, that our economic system could never have evolved to its present position had not a more efficient system of exchange been discovered.'—H. A. Silverman, *The Groundwork of Economics*, pp. 81-2.

proverb, 'Handsome is that handsome does', merely leads us further to inquire 'What is it that money does? What are its functions?' Its principal functions are that it acts (i) as a medium of exchange, and (ii) as a standard of value. If as Walker says whatever performs the functions of money is to be included under the term money, it would appear as if coins, government notes, bank notes, cheques, bills of exchange and even first-class securities must be regarded as money. But a little thought will show that these different instruments do not all perform the functions of money equally well. *In order to be a good medium of exchange it is necessary that the money used should be accepted freely in final discharge of liability or debt throughout a community.* From this point of view there is considerable difference between the instruments broadly grouped as money. For instance, rupees in this country pass from hand to hand with complete freedom. So do Government Currency Notes. But the notes will circulate freely only so long as people continue to believe that they are convertible without question on demand into rupees. Cheques on the other hand, circulate only amongst those who are assured of the credit of the drawer (assured that they will be cashed by the bank on which they are drawn). Bills of Exchange, *hundis*, etc., have a still more limited circulation. But there does not seem to be any logical reason why all these media of exchange should not be called money in so far as they do perform the functions of money. As we shall see later on, the volume of money has an important bearing on the level of prices. In establishing this proposition we shall find that under the term money we have to include not only standard coins and other legal tender,¹ but also to some extent cheques and other forms of 'fiduciary' or 'representative money'.² What exactly is to be understood by 'money' in a particular connexion will generally be clear from the context. But the more important thing is to understand thoroughly the nature of the work which money is expected to do. Let us therefore give a fuller statement of the functions of money.³

¹ This term is explained in §12.

² Fiduciary (from Latin *fiducia*, trust, reliance) means drawing its value from the confidence of the public. Representative means representing or acting as a substitute for the standard of value.

³ The terms 'money' and 'currency' may in this connexion be distinguished. The term 'money' is very wide in its scope, since it includes anything that serves as a medium of exchange. The term 'currency', on the other hand, is narrower in its scope, and it usually signifies those

§3. **Functions of money.**—The functions of money fall into two classes : (i) the fundamental or primary functions, and (ii) the secondary or derived functions (derived from the fundamental ones).

(i) The fundamental functions of money are that it acts as (a) a medium of exchange; (b) a measure of value.

(ii) The derived functions of money are that it serves us (c) a store of value; (d) a standard of deferred payments; (e) a reserve for bank credit.

We shall now explain each of these briefly :

(a) *Money acts as a medium of exchange.*—It is a means of transferring, from one party to another, command over commodities in general (purchasing power), thus facilitating exchanges among the members of a society and enabling division of labour to work out its results smoothly.

(b) *Money functions as a common measure of value.*—Just as we measure the length of a piece of cloth by means of the yard-stick, so we measure the value of utilities by the measuring rod of money. By stating the prices of different utilities (i.e., by stating their values in terms of a common standard, money), it is clear that we facilitate the exchange of one utility against another.

(c) *Money serves as a store of value.*—Money should be capable of performing this function satisfactorily. It should not deteriorate in value by being stored. We may want to store our money because we wish to enjoy it at leisure, or because we simply wish to save it. This function is becoming less and less important owing to the substitution of deposit banking for hoarding, and owing to the growth of the investment habit.

(d) *Money acts as a standard of deferred payments.*—Contracts about future deliveries or payments would work out inequitably, if the money in terms of which they are made fluctuates in value. It is therefore important that our money should be reasonably steady in value.

(e) *Lastly, money serves as a reserve or basis for credit operations.*—A proper cash reserve ensures solvency and enables us to use cheaper media of exchange, such as bank notes and cheques.

media of exchange which are commonly current by reason of the authority of the State behind them, i.e. those that are legal tender. Thus while the rupee or rupee notes are currency, a cheque or a bill of exchange cannot be regarded as currency, although it may, to some extent, function as money.

§4. **Precious metals as money.**—A gradual process of evolution has led to the general acceptance of the precious metals as the chief form of money, because they possess the following qualities usually regarded as necessary: (i) Portability; (ii) Durability; (iii) Intrinsic value (gold and silver are valued for their own sake); (iv) Homogeneity (so that value is in exact proportion to weight); (v) Divisibility (gold and silver can be divided and joined together again with ease. Contrast with them such a thing as a diamond. It cannot be divided without losing its value); (vi) Malleability (the metal should be capable of being easily hammered into any form and receiving any kind of stamp guaranteeing its quality and value); (vii) Cognizability (no inferior metal can be passed off as gold or silver, because they are so easily recognized); (viii) Stability of value (gold and silver—particularly gold—are relatively stable in value, because, owing to their great durability, the stocks of the world supply of gold and silver have gone on steadily increasing ever since man began to dig them out of the earth. The total stocks at present in existence are therefore so huge that any year-to-year fluctuations in the quantity mined have very little immediate influence on the value of the whole. The value of other commodities like wheat depends largely on the quantity produced in any given year. Nevertheless it must be admitted that in respect of stability of value even gold has been found to be more unstable than is to be desired. How to devise a monetary system that will give the world relief from violent changes of prices is one of the most urgent as well as one of the most difficult of economic problems.)

§5. **Standard coins.**—The standard or the principal coin is the chosen coin adopted as the unit in the monetary system, being a certain weight of gold or silver of a certain standard of fineness. Thus when the Gold Standard was functioning in Great Britain, before 20 September 1931, the gold sovereign having a weight of 123·27 grains $\frac{1}{2}$ fine (or 113·01 grains troy of pure gold) was the standard unit of value, all other values or prices being reckoned in terms of it. A standard coin has the following characteristics: (i) Its value as metal is the same as its value as coin. For example, the gold sovereign in pre-war England was officially equal to twenty shillings. If it was melted, one could always have twenty shillings in currency in exchange for it. (ii) The standard coin is also unlimited legal tender, i.e. it can be used in final discharge of any liability. (iii) Usually again the mints are open to free coinage of the standard coin.

(iv) Lastly, to the value of the standard coin (money), are referred the values of money of other kinds for determination.

§6. **Token coins.**—Token coins are so called because they are *tokens* of value, having an official purchasing power which they do not intrinsically possess. They are made of a different metal (e.g. nickel or bronze) from the standard coin and are dependent on the latter for their nominal purchasing power. They are intended to serve as subsidiary money for making small payments, or making up odd amounts involved in large transactions. Token coins offer a contrast to standard coins in all respects and possess the following characteristics : (i) Their intrinsic value is less than their value as metal. If, for instance, twenty silver shillings are melted, the metal so obtained cannot be sold for £1 or twenty shilling pieces or anything equal in value to that. (ii) Token coins are limited legal tender. In England the silver shilling, which is a token coin, is legal tender only up to forty shillings or £2. If in England you owe somebody £5 and take a hundred shilling pieces to your creditor, he is entitled to refuse to accept payment in this form. (iii) There is no free coinage of token money. The public cannot take ingots of metal to the mints and have it turned into token coins. How many token coins are manufactured and put into circulation depends entirely on the discretion of the currency authority.

If the token coin (as metal) is really not worth as much as fixed by the currency authority, how is it accepted by the public at the official valuation? The answer is that by *limiting its supply* the currency authority can maintain the official value. Token coins have utility because without their use the smaller transactions could not easily be carried on. They possess utility and the Government sees to it that they are supplied in limited quantities. We have already seen that in order that anything should possess value, it should be useful and scarce. If through an error of judgement or for the purpose of making profit out of the coinage, the Government issues an excess of token coins, they will lose the artificial value with which they have been endowed. This is known as the principle of limitation.¹

The rupee in India is a curious mixture of token and standard coin. It is like a standard coin in that it is

¹ It is often stated that their limited legal tender character also helps token coins in maintaining their value. However, the fact that they are not unlimited legal tender is a disadvantage and by itself ought to diminish their value rather than increase it.

unlimited legal tender. It is like a token coin in that (i) its official value of 1s. 6d. sterling is very much more than the market value of the 165 grains of pure silver which it contains and further in that (ii) it is not freely minted.

Paper money may also be regarded as token money, its intrinsic value being almost nil. The difference between silver or bronze token coins and paper money is often one of degree only. The shilling or the rupee is after all a note printed on silver (a more expensive material than paper).

COINAGE PROBLEMS

§7. **The use of coins.**—The precious metals are used as money in the form of coins today, and the inferior metals like copper, bronze and nickel for subsidiary or token coins. When precious metals were first used in the shape of rough ingots or cut ingots it was not possible to use them as currency 'by tale' (i.e. by counting the number of money pieces), because they were not guaranteed to be uniform in weight and value. They had to be weighed and assessed every time they were offered as money. This naturally caused considerable inconvenience. Eventually they were given a definite form as coins, usually disc-shaped. Coins may be defined as stamped and certified pieces of metal of which the weight and fineness are guaranteed by the Government, and certified by the integrity of designs impressed on the surface of the metal. The above description applies to what are called 'standard coins'. Token coins are also stamped, but their weight and fineness are not guaranteed. In fact, it is understood that their intrinsic value is smaller than is artificially given to them by the Government.

Owing to the increasing use of convertible and inconvertible paper money¹ the use of standard coins at present in the principal currency systems of the world is very small or almost nil. The coins in circulation today are mainly token coins.

§8. **Free coinage, gratuitous coinage, seigneurage and brassage.**—The conversion of metal into coins is now everywhere a function of the State, which undertakes it mainly for ensuring public convenience by maintaining uniformity of coins. Incidentally the profit from coinage goes into the public treasury. For this purpose every Government maintains one or more mints (e.g. India has mints at Bombay and Calcutta).

¹ See §22.

Free coinage in its technical sense refers to the right of any holder of bullion to have it converted into standard coins at a fixed rate and without any limit of amount. For example, mints in India were open to the free coinage of silver into rupees from 1835-93. In 1893 the mints were closed to the coinage of silver except on Government account.¹

Gratuitous coinage (which should be carefully distinguished from *free coinage*) means that the State levies no charge for conversion of bullion into coins at the mint. For example, until the passage of the Gold Standard Act of 1925, in Great Britain gold bullion was converted into sovereigns for the public without any charge, the expenses being borne by the Government.

As already observed, the right of free coinage is recognized only in relation to the standard coins of a country; as to token coins, they are issued solely at the discretion of the State. It may be added here that the free coinage of standard coins without limit of amount, and the freedom to melt them, serve to maintain the identity of the legal (or the face) value and the intrinsic (or bullion) value of such coins.

Seigneurage and brassage or mintage.—The term 'seigneurage' is ambiguous. It ordinarily means the charge levied by a Government on coinage by withholding a small amount of the bullion presented for coinage. When the charge is just equal to the actual cost of coinage, it is referred to as brassage or mintage. The seigneurage may sometimes be in excess of such cost, giving rise to a profit which is appropriated by the authority issuing the coins. This practice was common in the Middle Ages, but it no longer obtains today. The term 'seigneurage' sometimes means the special profit made on token coins which are issued by the Government at a legal value higher than their bullion value (e.g. the British shilling or the Indian rupee). In the pre-war period the rupee cost the Government about eleven pence but was issued at sixteen pence. This resulted in a profit of about five pence per rupee, which was credited to a special reserve for maintaining the exchange value of the rupee.² Sometimes the profit made on the issue of paper money is also referred to as seigneurage, which in this case is almost 100%, the cost of paper and printing being negligible.

§9. *Remedy allowance, or tolerance of the mint*.—In spite of the perfection of the art of coinage, accidents in

¹ See Part II, ch. vi, §1.

² *Ibid.*

minting do cause a slight deviation from the standard of weight or of fineness prescribed by law. The 'remedy allowance' or 'tolerance of the mint' is the amount of the variation permitted by law from the exact standard of weight or fineness of the new coin.

§10. **Mint price of gold.**—The rate at which standard coin is given for bullion at the mint is called the mint price of the standard metal. For instance, the mint price of gold in Great Britain was £3-17-10½ per standard ounce of gold (i.e. ½ fine). This weight (480 grains) of gold could be converted into £3-17-10½. This corresponds to a price of £44-11½ per ounce of fine or pure gold. The sovereign accordingly contains 123·27447 grains of standard gold, or 113·0016 of pure or fine gold. Under the Gold Standard Act of 1925, which established the Gold Bullion Standard in Britain, only the Bank of England was entitled to get sovereigns issued in lieu of gold bullion. A private person could, however, obtain currency at the rate of £3-17-9 per standard ounce of gold from the Bank of England.¹ The difference of ½*d.* between the mint price of gold and the bank's buying price represented the expenses of assaying and the loss of interest during the period of waiting, pending conversion of bullion into coinage.

§11. **Debasement.**—Debasement is an alteration in the standard unit of value, or standard coin, effected either by clipping or 'sweating' (i.e. by reducing the quantity of the metal by a chemical process) resulting in a diminution of weight of the metal; or by lowering the standard of fineness by mixing more alloy with it. Debasement of coins was freely practised by Governments in olden days, e.g. by Henry VIII in England. But today most Governments consider it to be a point of honour not to tamper with their standard money. The case of token money is, however, different, and as a matter of fact the standard of fineness of the English shilling was reduced from $\frac{3}{4}$ to $\frac{1}{2}$ in 1920, so that people should not be tempted to melt their shillings, as had happened during the war owing to a temporary rise in the price of silver. If people melt on a large scale in this fashion a shortage of token coins would occur, causing inconvenience to trade.

§12. **Legal tender.**—Money certified by law to be valid for final discharge of debts of *any* amount is called (unlimited) legal tender money. Standard money is usually full or un-

¹ See §15 (ii).

limited legal tender. Token money, on the other hand, is limited legal tender. For example, the sovereign is full legal tender, but the shilling is legal tender only for forty shillings at a time. The rupee and the half-rupee—though tokens—are unlimited legal tender, but the nickel coins are legal tender up to one rupee only. If a man owes me Rs. 500 and offers payment in the form of rupee coins or currency notes, I must accept the payment. If, however, he wishes me to accept payment in the form of $500 \times 8 = 4,000$ two-anna nickel coins, I have a right to refuse payment in this form, because the rupee and rupee notes alone are legal tender for any amount. Money that is not legal tender at all is called 'optional' money (e.g. the gold mohurs in India between 1835 and 1893 were optional money). So also bank money (cheques, etc.) is optional money.

§13. **Gresham's Law.**—Gresham's Law, so called after Sir Thomas Gresham, the monetary adviser of Queen Elizabeth, states that if good and bad (or weak) money are circulating together, the bad money will eventually drive out the good from circulation. If one has the choice of paying by means of sound full-weighted coins or the coins that are defaced or light, one will naturally prefer to part with the latter. This assumes that no difficulty is being experienced in getting people to accept payment in the bad money (which though bad is legal tender just as much as the good money). Under these circumstances, the good coins will be withdrawn from circulation, because people will prefer to use them in arts, for ornaments, for hoarding and for export. In these uses the value of the coins is simply the value of their metallic contents. The value of good coins as metal is greater than that of bad coins. But as *money* both have precisely the same value.

Gresham's Law also applies to other cases :

(i) *Bimetallism* (the system under which coins of gold and silver circulate together).—Alterations in the market ratio of the values of the two metals in relation to a fixed legal or mint ratio result in the displacement of gold money by silver money or vice versa, according as silver or gold money respectively is for the time being the weaker of the two moneys.¹

(ii) *A depreciating paper money circulating side by side with metallic money.*—If there is an overissue of paper money, so that it is totally or partially inconvertible, it

¹ See also §19.

becomes bad money relatively to metallic money and therefore drives out the latter from circulation.¹

Exceptions.—Gresham's Law, however, acts subject to certain limitations :

(i) Under the influence of habit, bad money and good money may continue to circulate side by side for a long time, before a sufficiently large number of people become aware of the difference in the value and alive to the advantages of withdrawing the better money from circulation for other more profitable uses.

(ii) If the total currency is sufficiently limited, people may find that bad and good coins or money are *both* necessary for purposes of trade.

(iii) The bad coins or inconvertible paper money, as the case may be, may have reached such a stage of badness or depreciation, that people will lose faith in them and will simply not accept them whatever the Government may have to say about the matter. Here the reverse of Gresham's Law will hold good because good money (which alone will be accepted) will drive out bad money (which nobody will accept).

MONETARY SYSTEMS

§14. **Monetary standards.**—We describe below the principal types of monetary standards :

(i) *Monometallism or the Single Standard.*—Under this system, one metal alone—generally either gold or silver—is freely coined and is full legal tender; while for the sake of making small payments baser metals are coined into token coins at the discretion of the Government and made legal tender to a limited extent. This monetary system is also called the Composite Legal Tender System. According as the freely coined (or the standard) metal which is selected as the standard unit of value is gold or silver, we have (a) Gold Monometallism or the Gold Standard or (b) Silver Monometallism or the Silver Standard. India (as China until recently) was under silver monometallism between 1835 and 1893.

(ii) *Bimetallism or the Double Standard.*—This is also called the Multiple Legal Tender System. The essence of bimetallism is first, that both gold and silver are used as standard money or standard units of value; secondly, that both are unlimited legal tender; thirdly, that both are given

¹ See §24.

the privilege of free coinage; and fourthly, that there is generally a fixed legal (or mint) ratio between the value of the two metals at which it is intended that they should circulate. Thus both gold and silver are accorded equal monetary status under bimetallism.

(iii) *Paper Standard, or Managed Currency Standard.*—The third principal monetary system is the Paper or the Managed Currency Standard. Under this system the currency consists of paper and the currency authority does not bind itself to convert it into gold.¹

§15. *The Gold Standard.*—The Gold Standard was in operation (until recently) in most of the advanced countries of the world, so that the resulting system could be described as an International Gold Standard. It was first adopted by Great Britain in 1816, and her example was widely followed during the last thirty years of the nineteenth century when bimetallism came to be discarded by Germany, France, the U.S.A., the Scandinavian countries and others. The Gold Standard thus became the world's most approved monetary system and held this pre-eminent position until the outbreak of war in 1914.

The Gold Standard is so called because under it gold is the measure of values of goods and services, and all debts in the last resort are payable in gold. A country is said to be on the Gold Standard when it maintains its monetary unit (the pound sterling in the United Kingdom, the franc in France or the dollar in the U.S.A.) at a value equal to that of a definite weight of gold of a certain fineness.

(i) *Gold Currency Standard.*—Before the war this equivalence was generally secured by the adoption of that form of the Gold Standard which is known as the Gold Currency Standard. Under this form gold coins of a certain prescribed weight and fineness (e.g. the British gold sovereign weighing 123·27 grains $\frac{1}{12}$ fine) were actually used as currency. Paper money (e.g. the Bank of England notes in England) was made convertible into gold coins on demand. At the same time free coinage of gold, free melting of gold coins and free export and import of gold were allowed. The currency unit was thus maintained at a fixed gold parity, and gold tended to have the same value all over the Gold Standard area.

Until recently, the form of the Gold Standard, or gold monometallism, generally prevalent, was that of a Gold

¹ See §§21-5.

Currency Standard described above. The force of necessity during the war as well as advance in economic thought have now made people realize that actual gold coins passing from hand to hand are an unnecessary luxury and that we can have all the essentials of a Gold Standard without gold coins.

Two other arrangements, namely, the Gold Bullion Standard and the Gold Exchange Standard have thus come to be admitted as genuine forms of the Gold Standard, which are more economical than the Gold Standard of the orthodox type. Of these two, a good deal of suspicion still clings to the Gold Exchange Standard. To most people, the Gold Bullion Standard is much more acceptable as an alternative to the orthodox type than the Gold Exchange Standard.

(ii) *Gold Bullion Standard*.—During the war gold coins ceased to circulate in most countries, and now the use of actual gold currency in daily life may be looked upon as a phase of the Gold Standard that has passed. When Great Britain returned to the Gold Standard after the war by the Gold Standard Act of 1925, she introduced important modifications and adopted what is now known as the Gold Bullion Standard. The main features of the new standard were as follows: (a) The free coinage of gold on private account was abandoned, only the Bank of England being allowed to get sovereigns issued against gold. Sovereigns, though not legally, were practically demonetized and ceased to circulate. (b) The Bank of England's Notes, now the principal legal tender, ceased to be convertible into gold coins on demand. (c) But the Bank of England as the currency authority was required to maintain the gold parity of the pound sterling (i.e. to maintain the value of the actual currency medium in terms of gold) by: (1) selling gold in the form of bars of pure gold of 400 oz. at the rate of £3-17-10½ per standard ounce (or what comes to the same thing, at the rate of £4-4-11½ per *fine* ounce). This meant that legal tender currency (Bank Notes) of the value of about £1,700 had to be presented to the Bank in order to obtain 400 oz. of fine gold bullion. Gold bullion cannot be used as money. Under the old system, gold coins were given in exchange for the notes presented by the public and these naturally passed into circulation. (2) Secondly, the Bank of England was required to buy gold in lieu of legal tender currency (Bank of England Notes) at the Bank's buying price of gold (namely, £3-17-9 per standard ounce or £4-4-9 ³/₁₆d. per *fine* ounce). (d) Free import and export of gold were allowed as before.

So long as the currency authority is prepared and able to

sell gold or buy gold at a *fixed* rate at the option of the public and in any quantity required, and so long as the free export and import of gold are allowed, that is all that is necessary for an effective gold standard. What is wanted is that the currency should always have the same value in gold, not that gold coins should circulate.

Under the Gold Bullion Standard, while gold is the measure of value, it no longer functions as a medium of exchange. This secures great economy in its internal use. Practically all the gold reserves in the country are held by the Central Bank which keeps currency at a fixed value in relation to gold.

Great Britain's example was followed by other countries like France when they restored the Gold Standard. The Hilton-Young Commission (1925-6) also recommended the Gold Bullion Standard for India.¹

(iii) *Gold Exchange Standard*.—The Gold Exchange Standard was in use before the war in certain countries like India, the Straits Settlements and the Philippines. After the war there was for some time a tendency towards its adoption by European countries like Germany, Italy and Belgium which could not afford the luxury of a large stock of gold in their reserves.

Under the Gold Exchange Standard, the internal currency consists of cheap tokens of silver or paper. Here also, as under the Gold Standard, the internal currency is maintained at a certain fixed value in terms of gold. This is, however, done not by converting local currency into gold coin or gold bullion but into gold exchange, i.e. bills and drafts on some foreign centre where the gold standard is in effective operation. Thus before the war, the value of the Indian rupee was fixed at 1s. 4d., and, because England was on a gold basis, 1s. 4d. stood for a definite quantity of gold. We could get drafts and bills on London when the Government chose to sell them for maintaining the value of the rupee at the fixed rate, but we could not get actual gold or gold coins. We could always convert gold or gold coins into rupees or notes at the fixed rate, but not rupees and notes back into gold or gold coins as a matter of right. Gold is made available at some foreign centre, where the gold reserves are therefore located. The reserve maintained in the country itself is in the shape of local currency, because the currency authority does undertake to convert gold into local currency though it

¹ See Part II, ch. vi, §3.

does not undertake to do the reverse, namely, to convert local currency into gold.

The Gold Exchange Standard, if properly worked, secures an even greater economy of gold for monetary purposes than is possible under the other forms of Gold Standard. It is therefore especially suited to countries that cannot afford to adopt the full-fledged Gold Standard either because of their comparative poverty or backward development. It requires, however, a great deal of control over currency and exchange. The system as generally worked is liable to cause inflation of currency. Under the Gold Currency or Bullion Standard, if there is too much currency, it is presented for conversion into gold and thus there is an automatic check to inflation. Under the Gold Exchange Standard, the currency authority gives gold exchange at its discretion and not on demand. Therefore the check is not automatic. The location of the gold reserves abroad is also attended with certain dangers, such as the lack of confidence in the currency system and the risk of depreciation of the reserves in case the country in which they are held goes off the Gold Standard, as Great Britain did in 1931. On the whole, practical economists are inclined to prefer some form of the Gold Standard.¹

§16. **The advantages of the Gold Standard.**—We shall now consider the advantages of the Gold Standard, especially in the case of the Gold Currency and Bullion Standards.

(i) The Gold Standard is a simpler monetary system than either Bimetallism or the Managed Paper Currency Standard.

(ii) Gold is in universal demand all over the world and is everywhere acceptable. It thus becomes an international monetary standard and ensures the benefit of stability of foreign exchanges, which is beneficial to international trade.

(iii) The Gold Standard makes reckless expansion or depreciation of currency impossible by making an increase in its quantity strictly dependent on larger gold reserves. It also secures automatic contraction with every decrease of the gold reserves.

(iv) The Gold Standard is comparatively a more stable standard than any so far tried. The accumulated stock of gold being very large, variations in its annual output do not

¹ The student is advised to refer to Part II, ch. vi, and to §39 below for a discussion of the Gold Exchange Standard in India. The history of the Indian experiment will serve to throw further light on the uses as well as the difficulties of the Gold Exchange Standard.

produce corresponding changes in its value, their influence during short periods being small. It is also claimed that during normal times the supply of gold has kept pace with the demand for it and that fears about its shortage are groundless.

(v) Finally, until recently at any rate, the Gold Standard enjoyed the confidence of the world and every civilized country tried to adopt it.

§17. **Drawbacks of the Gold Standard.**—(i) It has been argued, on the other hand, that over long periods gold does not possess stability of value in terms of goods and services. Changes in its output do ultimately affect prices, causing them sometimes to rise (e.g. during the period 1895-1914) and sometimes to fall (as since 1929). The Gold Standard is thus found to be an unstable monetary standard. Some present-day economists apprehend a shortage of gold having regard to the needs of our progressive civilization. According to Gustav Cassel, the rate of our economic progress is 3 per cent per annum while the rate of increase of gold is only 2 per cent.¹ It is mainly on these grounds that certain economists like Keynes advocate a Controlled or Managed Currency Standard to ensure the internal stability of prices, which in their view is even more important than the external value of a country's currency unit.

(ii) The Gold Standard makes expansion of currency much too difficult by making it dependent on the blind forces of nature governing the output of gold.

(iii) The breakdown of the Gold Standard during the war and once again recently (since 1931) as also the maldistribution of gold in recent years are quoted as evidence of the weakness of the Gold Standard. The advocates of the Gold Standard in defence point out that the 'rules of the Gold Standard game' have not been observed (e.g. free movement of gold is not permitted and the gold that is imported is sterilized, i.e. is neither allowed to influence the price level and the course of foreign trade nor is lent abroad). It is also argued that the war upset the sensitive organization of the Gold Standard; and that the war debts, reparation payments and lack of confidence in paper currencies have brought about maldistribution of gold (nearly two-thirds of the world's supply of monetary gold being cornered by the U.S.A. and France, leaving only one-third for all other countries together).

¹ G. Cassel, *The Crisis in the World's Monetary System*, p. 17.

§18. **Future of the Gold Standard.**—The future of the Gold Standard remains today very uncertain.¹ An attempt was made to ensure an international agreement on the question of the restoration of the Gold Standard at the World Economic and Monetary Conference held in London in June-July 1933, but it proved a failure. Even today influential opinion (as evidenced by the declaration of the Gold Delegation of the League of Nations, the British Empire Declaration at Ottawa and again at the World Monetary Conference of 1933, and that of the Monetary Sub-Commission of the World Economic Conference) is strongly in favour of the ultimate restoration of the Gold Standard when conditions are more propitious than at present. It is hoped that the Gold Standard of the future will be of a better and more economical type than the orthodox standard. Gold in internal circulation might be dispensed with. The gold reserves need not exceed, say, 25% of the note issue instead of the much larger reserves varying from 33 to 50% or even 60% actually held today. The Central Banks of the world might cooperate more actively in regulating the international movements of gold and the volume of credit so as to ensure a stable price level. Weighing all the elements of the situation it would seem that ultimately some form of Gold Standard will have to be adopted, since the world as a whole is not yet ready to work a system of an inconvertible paper standard on a permanent basis. Gold still has a powerful hold even on the most highly civilized nations of the world, some of which have in fact taken to gold hoarding. It is likely, however, that lower gold parities for the various currency units than the old ones will have to be adopted² with a view to lessening the amount of gold in the reserve required as cover for notes, and also to maintaining a more remunerative price level for goods and services than prevails today.

§19. **Bimetallism: a brief review of its working and difficulties.**—Till the last quarter of the nineteenth century, for about 200 years, Bimetallism had been the leading monetary system of the western world (except in the United Kingdom which adopted the single standard of gold in 1816), and had worked reasonably well. During this long period the market ratio of silver and gold was fairly stable at about

¹ See T. E. Gregory, *Future of the Gold Standard*.

² e.g. Great Britain may find it necessary to revise the gold value of the pound sterling and fix it, say, at 80 grains instead of 113 grains of pure gold.

15½ : 1. But on account of the discovery of gold mines in Australia and California in 1850, gold fell in terms of silver and the ratio was 15 : 1. Under the legal ratio of 15½ : 1 in France gold came to be overvalued or weak money (i.e. the legal value was higher than the market value of gold coins), and silver became undervalued or strong money (i.e. its legal value was below the market value of silver coins). Gresham's Law thus came into operation and the weak gold money displaced the strong silver money. In 1865 therefore France and other countries of the so-called Latin Union¹ stopped the flight of their silver coins by reducing their standard of fineness except in the case of the 5-franc silver piece.

The tables were turned against silver when, commencing from 1871, there set in a great adverse change in its monetary status. The price of the white metal declined steadily from about 60*d.* per ounce in 1871 to 26*d.* per ounce towards the end of the century. While there was a great increase in the supply of silver—which was mined in large quantities in America—the demand declined because important nations like Germany, the Scandinavian group and the U.S.A. demonetized silver, i.e. discarded it for monetary purposes, and adopted the Gold Standard, so that they now required silver only as token money. The market ratio underwent violent changes, being 20 : 1 in 1871 and 38 : 1 at the end of the century. The countries of the Latin Union were flooded with cheap silver, which was presented for coinage at the mints. This cheap silver drove out gold coins. The Latin Union countries, becoming alarmed at the prospect of losing all their gold, decided to save the situation by closing their mints (1874) to the free coinage of silver which had made the displacement of gold coins possible. The standard thus adopted came to be known as the *Limping Standard* and remained in force throughout the pre-war period. Under this standard, though free coinage of silver was suspended, both gold and silver remained legal tender with a fixed legal ratio between them. The silver coins could be redeemed in gold and were maintained in circulation along with the gold coins. * Silver thus limped or 'hobbled along' with its stronger companion gold. Hence the name of *Limping Standard*.

The foregoing survey brings out the principal defect of Bimetallism, namely, the periodic disturbance caused by

¹ This Union was formed in the year 1865 by France, Belgium, Switzerland, Italy and Greece for taking concerted action in defence of Bimetallism.

changes in the market ratio. In practice it worked out as an alternating standard of gold or silver, because now silver, now gold went out of circulation.

§20. **International Bimetallism.**—The advocates of Bimetallism in France and the U.S.A.¹ did not admit the defects mentioned in the preceding section, so readily, and argued that if all the important nations of the world adopted bimetallism at an agreed ratio, not only would the market ratio remain stable but there would be other advantages also. The joint standard of gold and silver would be more stable than the Gold Standard alone, since any deficiency of gold could be remedied by using silver. This would keep prices stable. It would also secure a reasonable stability of foreign exchanges which is so important to international trade. There was a considerable agitation in favour of international Bimetallism in the last quarter of the nineteenth century, and at one time even the Government of India favoured it as it was expected to assist in arresting the fall in the gold exchange value of the rupee.² The question was considered at several International Monetary Conferences, but nothing came out of it. The fresh discoveries of gold after 1895 set at rest the apprehension regarding the shortage of gold. England and Germany were from the outset not keen on Bimetallism because it would have meant sacrificing their Gold Standard, which they regarded as a great blessing. The cooperation of bankers is indispensable for the successful working of any currency system, and somehow the banking world had no faith in silver.

In the post-war period, especially in recent years, there has been partial revival of the agitation in favour of Bimetallism and the remonetization of silver as a corrective to the alleged shortage of gold and as helpful in increasing the supply of currency, so as to bring about the rise in prices desired in the present economic depression. But except in the U.S.A. (where President Roosevelt under pressure from the Silver Party in the Congress recently adopted a silver-buying policy), monetary opinion does not favour the proposal to revive Bimetallism. The opinion rather is that, failing the Gold Standard, the best plan would be to devise a sort

¹ The U.S. Government's policy was greatly influenced by powerful business men who were interested in silver mining. They naturally desired to see silver restored to its old status as one of the standard metals, so that the fall in its price might be checked.

² See Part II, ch. vi, §1.

of International Managed Paper Currency Standard instead of the cumbersome Bimetallic Standard.

PAPER MONEY

§21. **Paper money: its advantages and limitations.**—It now remains to consider the third principal monetary system, namely, the inconvertible or Managed Paper Currency Standard.

In many advanced countries of the world paper money constitutes an important part of the circulating medium. In India, for example, besides the metallic coins (of silver, nickel and bronze) we have currency notes issued by the Government. In most countries today paper money is issued by the great Central Banks of Issue such as the Bank of England. In India also an Act has recently (April 1934) been passed by which the Reserve Bank of India (established in April 1935) instead of the Government has been empowered to issue notes.¹

The advantages of paper money are obvious. It is convenient to handle, readily portable, and it is, of course, very economical. It can be issued in any convenient denominations, small or large. It may also be said to be homogeneous. *Prima facie* its value can be kept more stable by conscious regulation of its quantity than that of metallic money, whose supply is dependent on the blind forces of nature. The greatest danger of paper money, however, is the temptation to overissue it until it becomes inconvertible and at times absolutely worthless—as in the case of the mark notes, before the German currency was stabilized in 1924. Paper money, even when it is otherwise satisfactory, is, of course, recognized only in the particular country which issues it. Unlike gold money, it is not accepted all over the world. This and other difficulties can theoretically be removed by the issue of an International Paper Money. But the present lack of cooperation among nations even in much less difficult matters than this makes concerted international action in this sphere most improbable. At present what is more feasible and essential is a careful regulation of the issue of paper money in each country.

§22. **Forms of paper money.**—In the first place, we may point out that commercial paper (cheques, bank drafts and bills of exchange)² is usually distinguished from the three forms of paper money described below, which readily pass from hand to hand. Commercial paper on the other hand,

¹ See also Part II, ch. vi, §19.

² See ch. xi, §3.

has restricted circulation, depending as it does on the credit, standing and mutual knowledge of the parties concerned. In the United States and United Kingdom commercial paper or bank money, as it is sometimes called, is used to a very large extent as a means of payment or medium of exchange. The term 'paper money' as ordinarily understood, however, does not include commercial paper.

The following are the three principal kinds of paper money :

(i) *Representative paper money*.—The United States' Silver and Gold Dollar Certificates are examples of representative paper money. They are merely bullion certificates, and, like warehouse receipts for goods, stand for metal, coined or uncoined, deposited with the United States Treasury. The certificates are, of course, more easy to carry about than the metal itself. Strictly speaking they are not paper money at all. The real problems of paper money arise only when it is not fully backed by metal.

(ii) *Fiduciary or credit paper money*.—Here the issuing authority (bank or other) promises to pay a specified sum of metallic money or gold bullion on demand or presentation of the notes. They readily pass from hand to hand and are accepted by the public owing to their faith in the issuing bank or authority. Usually they are unlimited legal tender. The notes issued by the Bank of England are unlimited legal tender, even though since September 1931 they have ceased to be convertible.

(iii) *Fiat or inconvertible paper money*.—Although in outward form fiat or inconvertible paper money may be a promise to pay a certain sum of metallic money, it is generally understood or known that the issuing authority has not the intention or the ability to keep the promise. This often happens in time of war or some other grave political unsettlement. The French *assignats* issued during the French Revolution, the American 'greenbacks' issued during the Civil War, the German mark, the French franc and the British Treasury Notes issued during the war of 1914-18, are all instances in point. They show how under the stress of some kind of crisis, fiduciary or convertible bank notes may degenerate into inconvertible paper money by State fiat or law, authorizing the bank of issue to suspend gold payments for its notes. This may be done in order to enable the bank to extend loans to a needy Government, either for war expenses or to meet any difficulty it may have in finding the necessary gold for converting the notes.

§23. Evils of a depreciated or inconvertible paper money.—A paper currency generally depreciates if it ceases to be convertible, unless its quantity is strictly regulated. Currency which has depreciated is a bad standard of value and a bad medium of exchange. If, for example, £10 notes cannot be changed into as many ten sovereigns and are issued in excess, they become less valuable than coins. Besides this depreciation of notes in relation to gold there is also a general depreciation of paper money in terms of commodities and services. That is, prices rise. Those with fixed incomes suffer because their incomes lose in purchasing power. Creditors are defrauded for the same reason. The money they receive in settlement of the debt has not the same command over things which it had when the debt was contracted. Business becomes uncertain and speculative with fluctuations in the value of money. The mercantile classes and employers of labour gain at the cost of wage-earners, because wages generally lag behind prices. Exports are temporarily encouraged because a higher price in the depreciated domestic paper money is received for goods sold abroad. Imports are restricted since a higher price in such paper must be paid to buy goods abroad. The sudden increase in paper incomes leads to public and private extravagance and ultimate collapse of credit, national and international. All these evils of inconvertible paper have been experienced recently in an acute form by Germany, Austria and Russia during and after the war.

§24. Signs of overissue of paper money.—There are several signs of the excessive issue of paper money, which should cause the issuing authority to reflect on the situation and cry halt and, if possible, to retrace its steps in order to restore the normal monetary circulation. These signs are :

(i) *Premium on gold.*—As a result of the depreciation of paper money in terms of gold, gold sells at a premium. This premium on gold is measured by the difference between the fixed mint price of gold (which is expressed in terms of gold coins) and the higher market price of gold in the market. Thus while the mint price of an ounce of fine gold in Great Britain is about 85s., the current (March 1936) market price is about 141s. Gold is displaced in circulation by paper money and becomes merely a commodity, subject to variation in price in terms of the paper money, like any other commodity.

(ii) *A rise in the rate of exchange.*—There is a rise in the paper price of export bills payable abroad in gold.¹

¹ See ch. xii, §17.

(iii) *Flight of metallic money.*—Paper money, when issued in excessive quantities, tends to displace metallic money according to Gresham's Law and the circulation comes to consist mainly of paper currency.

(iv) *Rise in prices.*—This is the inevitable result of inflation of paper money. According to the Quantity Theory of Money,¹ when the quantity of money increases faster than the demand for money (i.e. the volume of trade), prices in general rise (the value of money, or its purchasing power, falls). This is the main explanation of the sharp rise in prices during and after the war in many of the belligerent countries, which were compelled to issue large quantities of paper money to meet their war expenditure.

(v) *Double set of prices.*—There are two sets of prices for the same things, lower prices in gold and higher prices in paper.

Thus the probability of overissue with all its disturbing consequences is the main objection to inconvertible paper money. Moreover, experience shows that an attempt to correct the evils of depreciation and inflation by a return to specie payments is difficult and painful because it involves a sudden curtailment of currency, a fall in prices, a setback to exports, etc. The value of precious metals, while, of course, not immune from changes, is founded on the bed-rock of their scarcity, natural qualities and the non-monetary demand for them. Therein lies the superiority of a standard based on them.

§25. *Future of paper money.*—Owing to the suspension of the Gold Standard in Great Britain and several other countries since September 1931, an inconvertible Paper Standard has been in operation in these countries. So far as Great Britain is concerned, the confidence of the British people in the Bank of England and the monetary policy of the Government, which aims at avoiding overissue of paper currency, has made the present system workable. This success of the British monetary policy has made the prospects of a Managed Currency Standard brighter, at any rate in advanced countries. Less advanced countries like India will probably not be able to dispense with a metallic standard so readily. It is doubtful whether even the progressive countries of the west will be prepared to dispense permanently with gold.

§26. *Value of money.*—We said above that one of the things we expect from good money is that it should be a

¹ See §30.

stable standard of value, just as the yard-stick—our measure of length—should not be elastic. The value of whatever is chosen to function as money should not fluctuate in a disturbing manner. By 'value of money' we mean the quantity of goods and services it will buy. If with the same amount of money we are able to buy more of things in general, in other words, if prices fall, this means that the value of money has risen. Similarly, if with a given amount of money we can buy less, that is, if prices rise, this means that the value of money has fallen (Rise of prices=Fall in value of money; Fall of prices=Rise in value of money).

§27. **The mechanism of Index Numbers.**—In order to get an indication of the direction and the extent of price movements the device of index numbers is used. We first fix a certain date or period with reference to which as a base we wish to compare prices at other dates or periods. We select a number of articles in general use, put down the prices for each of the articles at the basic date, and express each of these prices by the number 100. At the other dates we take the prices (of the same articles) then prevailing and express them as percentages so as to show the proportionate change as compared with the basic year. The following example will make the idea clear :

TABLE OF PRICE CHANGES OF CERTAIN COMMODITIES'
(1913-20)

(The figures in brackets show the percentage change)

Year	Rice	Wheat	Jowar	Salt	Cotton cloth	Average Index Number of prices
	Price per maund	Price per maund	Price per maund	Price per maund	Price per piece	
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	
1913	5 3 0 (100)	3 11 6 (100)	3 0 0 (100)	0 8 7½ (100)	5 4 0 (100)	100
1915	6 0 0 (116)	5 6 0 (144)	3 4 0 (108)	1 4 0 (233)	4 2 0 (79)	132
1917	5 1 0 (97)	4 12 6 (129)	3 11 3 (103)	2 4 0 (420)	7 2 0 (136)	175
1920	8 6 0 (161)	7 0 0 (188)	5 8 0 (183)	1 8 2 (280)	14 2 0 (269)	216

Adding up the percentage figures of the five commodities for 1920, we get a total of 1081. Dividing this by 5 (the

' Stanley Jevons, *Money, Banking and Exchange in India*, p. 261.

number of commodities) we get 216 as the average percentage increase. This figure is called the index number and is compared to the basic index number of 100 for 1913.

In constructing an index number care must be taken to select as many articles as possible. These should be representative and must be in general demand. The commodities should not all belong to one group, because if they do, they are all likely to move in the same direction. Among the commodities left out there may be many which are largely consumed, and which are in constant demand, and the change in their case may be in the opposite direction to that of the commodities which have been included and which are all of the same type. The result will not be reliable unless most of the important types are represented. Wholesale prices are to be preferred to retail prices. The former are very much more sensitive to competition and do not vary widely from place to place as the latter do. For certain purposes, however, the retail prices may be more informative, e.g. in measuring the variations from time to time in the cost of maintaining a certain standard of life among factory labourers.

§28. **Weighted index numbers.**—Since the importance of all the commodities that enter into consumption is not the same (e.g. bread is far more important than silk), a simple arithmetical average of their prices would be misleading. If for instance the price of bread were to rise by 50% and that of silk were to fall by 50% the index number of prices would not be affected, the rise being cancelled by the fall. But it is clear that the community would be worse off owing to the rise in the price of such a prime necessity of life as bread, though the index number failed to indicate this. Therefore the device of 'weighting' is adopted. Each price is multiplied by a number calculated to represent the relative importance of the commodity in question. Thus if bread and silk are consumed in the proportions of 7 to 1, the following table may be constructed to give us the weighted index :

WEIGHTED INDEX NUMBERS¹

Basic period—1914		Subsequent period—1920	
Bread (7 units)	= 700	Bread (7 units)	= 1,050
Silk (1 unit)	= 100	Silk (1 unit)	= 50
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 800		1,100
Average of 8 units	= 100	Average of 8 units	= 137½

¹ H. A. Silverman, *The Substance of Economics*, pp. 190-1.

Thus the weighted index number for bread and silk is 137½. An index number calculated by this method of attaching appropriate weights to the commodities concerned gives a more reliable idea of the real change in the value (purchasing power) of money than the index number based on the simple arithmetical average.

§29. **The uses of index numbers.**—Index numbers of prices are useful in dealing with many practical problems. For example, to find out whether the real wages of labour as compared to its nominal or money wages have fallen or increased or remained unchanged, the index numbers of prices or the cost-of-living index numbers are compared with the index numbers of nominal wages. The following formula (illustrated with reference to the wages in Bombay cotton mills) is used for this purpose :¹

$$\begin{aligned} & \text{Real Wages Index Number for December 1933, with} \\ & \quad \text{July 1926 as 100} \\ = & \frac{\text{Money Wages Index Number (83} \times 100)}{\text{Cost of Living Index Number (72)}} \\ = & 115. \end{aligned}$$

In the second place, index numbers give us some idea of the changes in the value of deferred payments and the extent of hardship caused thereby to creditors or debtors. They furnish some measure of the inflation or deflation of currency as the case may be, and serve to indicate the degree of contraction or expansion of currency required as a corrective. Finally, index numbers impart a certain amount of definiteness to comparisons of the value of money in different places or countries.

§30. **The Quantity Theory of Money.**—The Quantity Theory of Money in its orthodox form states that the level of prices varies in direct proportion to the changes in the quantity of money, or alternatively that the value of money varies in inverse proportion to its quantity. In other words, it is the quantity of money that determines the level of prices. If there are a hundred objects to be exchanged and a thousand pieces of currency, all the goods being offered against all the currency, it follows that each commodity will

¹ *Wages and Unemployment in the Bombay Cotton Textile Industry*, p. 42, Bombay Labour Office (1934).

exchange for ten units of currency. The proposition in this form depends upon three assumptions :

(i) Every exchange of goods is accompanied by an exchange of money.

(ii) Money is used for no other purpose than as a means of exchange.

(iii) All the money in existence is in circulation and all the goods are offered for sale.

§31. **Modification of the Quantity Theory of Money.**— Obviously in the actual world these assumptions hold good only partially and the Quantity Theory has to be modified so as to fit the facts :

(i) The first modification is to widen the meaning of the term 'money' so as to include not only the metallic currency but all credit instruments such as notes, cheques and bills of exchange, which actually circulate and do the money work and the volume of which also influences the general level of prices.

(ii) Further, by the volume or quantity of money, we must understand not merely the physical quantity, but also the rapidity with which money changes hands. Increased rapidity or velocity of circulation will raise prices just as surely as increase in the quantity of money as ordinarily understood.¹

(iii) Again, it is clear that only that portion of money which is used as a means of exchange must be taken into account. If it is used for other purposes (e.g. metallic money may be used for ornaments or bank cash reserves) it cannot be regarded as part of the available money and therefore can have no influence on prices.

(iv) Similarly we must exclude from consideration any money which may not happen to be in circulation but may be merely hoarded.

¹ 'Suppose there are ten things, and one hundred pieces of money, and let the things be of equal value in the eye of the only possessor of the money. He will then give ten pieces for each thing, and each piece of money is used once only in effecting these ten exchanges. If, however, the man of money only desired one thing, and gave all the money for that thing, and the receiver passed it on in the same way in one lump to his neighbour in the market, and so on through the whole set of things and merchants, each thing would be sold for one hundred pieces instead of ten; and the essential point of difference is that each piece of money is used ten times instead of once.'—J. S. Nicholson, *Elements of Political Economy*, p. 263.

(v) The quantity of exchanging to be done (quantity of goods to be exchanged multiplied by the rapidity with which they are exchanged) constitutes the demand for money. The larger the demand, i.e. the volume of trade, the greater the value of money (i.e. the lower the price level), other things remaining the same; and vice versa.

(vi) The demand for money also depends on the habits and convenience of people. Thus a man who receives his wages weekly will tend to hold a smaller amount of currency than if he is paid at the same rate but monthly. In the former case demand for money is less, therefore its value also will be less, i.e. prices will tend to rise. In the latter case the effect will be the reverse of this.

(vii) Growth of population generally increases the demand for money, and unless this is offset by an increase in the volume of money it should cause a fall of prices (i.e. rise in the value of money). If prices are rising rapidly (i.e. the value of money is falling) people will tend to hold less of it, thus helping prices to rise further. The contrary of this holds good if prices are falling rapidly.

It will thus be seen that prices are a resultant of a large number of factors. And though we can single out each factor and say how it will by itself influence prices, the final result in any given case will depend on how the other factors are working.

§32. Peculiarities of the value of money.—Money like other things depends for its value on conditions of supply and demand. We can thus be certain that if we somehow increase the supply of money we are helping prices to rise, and that by restricting its supply we shall be helping them to fall.

A distinction may, however, be drawn between the value of money and the value of ordinary commodities. If the supply of wheat were doubled its value would probably be less than half as much as before since the demand for it is inelastic. But if the supply of money were to be doubled, other things being the same, its value would be exactly halved. The explanation is the assumption that money is in demand only as a medium of exchange and is not wanted for any other use: therefore changes in its supply produce proportionate changes in its value in the absence of disturbing factors.¹

§33. **The Equation of Exchange.**—The following equation, suggested by Professor Irving Fisher, is commonly used to express the truth embodied in the Quantity Theory :

$$PT = MV + M'V'$$

where P=Price level, T=Volume of trade,
M=Metallic money in circulation,
V=Rapidity or velocity of circulation of M,
M'=Money in the form of credit instruments,
V'=Velocity of circulation of M'.

The above equation could also be rewritten as follows :

$$P = \frac{MV + M'V'}{T}$$

This means that the price level varies directly with the supply of money (quantity of money multiplied by the rapidity of circulation), and inversely with demand for money (the volume of trade).

The Quantity Theory of Money is confirmed by the history of prices. Before the war the large discoveries of gold since 1895 and the expansion of credit raised the general price level by greatly adding to the supply of money in the countries on the Gold Standard. Prices would have shown an even greater rise but for the fact that the increase in the quantity of money was counteracted to some extent by the growth of business or increase in the demand for money. So also we all know how during the war the inflation of paper money in the belligerent countries of the world resulted in a sharp rise in the price levels in these countries. Today one of the causes of the slump in prices, which is the most outstanding feature of the world economic depression, is held to be a decrease in the quantity of money, partly owing to the shortage or maldistribution of gold and partly to the contraction of credit.

§34. **Relation between the cost of specie and value of money.**—The value of money, like the value of other commodities, is in the long run influenced by changes in its cost, i.e. changes in the cost of production of the precious metals, especially gold. (We are assuming the general prevalence of the Gold Standard.) Thus a lower cost of mining gold will increase its supply—and therefore the supply of money—and raise the price level (i.e. lower the value of money). On the other hand, a higher cost will lower the general prices by diminishing the supply, and raise the value of money. As in the case of ordinary commodities, the

relation between cost and value is mutual. Thus if the value of money is high (i.e. all money costs of labour, raw materials, etc. are low), the supply of specie or money is likely to be greater since even the comparatively poorer mines can be worked with profit. If the value of money is low (i.e. money costs are high), the supply will tend to be less, since the comparatively poorer mine will cease to be worked. Owing to the durability of precious metals and the existence of large old stocks, changes in their annual output influence their value very slowly, unlike in the case of ordinary commodities with negligible old stocks. Therefore during comparatively short periods it is the value of money which influences mining activity and determines which mine will be the marginal mine, i.e. just worth working at the current value of money (or the current price level). In the long run, however, changes in the cost of production of specie do affect the value of money.

§35. Price changes and their effects on the different sections of the community.—It has been shown above that fluctuations in prices take place either owing to changes on the money side of the equation (supply of money as influenced by its quantity and velocity of circulation) or owing to changes on the goods side (demand for money as influenced by the volume of goods to be exchanged for money and their rapidity of circulation). These changes in the price level or the value of money (its purchasing power over goods and services) create widespread economic disturbances, since the modern economic system is based upon a price structure and long-term contracts resting on the assumption that the value of money will remain stable. Some of these are noticed below :

(i) *Creditors (Investors) and debtors.*—A rise in the price level affects the creditors adversely and the debtors beneficially. Between 1914 and 1920 prices in India were roughly doubled, and therefore a loan of Rs. 100, contracted in 1914 and repaid in 1920, meant a loss to the creditor, since with the Rs. 100 which he received in 1920, he could purchase only one-half of what he could have purchased in 1914, when he advanced the loan. The burden of the debt for the same reason is lightened for the borrower if prices rise. Conversely, a fall in prices (as for example since 1929) is of advantage to the creditors but burdensome to the debtors. Thus changes in prices disturb the equities of debt payments, especially in the case of long-term contracts (this also applies to public contracts, e.g. long-term public loans).

(ii) *The business community.*—The producers and merchants welcome a rise in prices, since their costs of production such as wages and interest charges do not increase as fast as the prices. They take time to be adjusted to the change in prices. In the meanwhile the profit-margins are widened and business activity is stimulated. On the other hand, falling prices are considered bad for trade and production, since profit-margins are reduced owing to the failure of costs (wages, etc.) to adjust themselves quickly to a lower price level. The producers and employers of labour thus act as a buffer between prices and wages, absorbing the shock caused by price changes and experiencing first their good or bad effects. Part of the explanation of the optimism of the business community in the case of rising prices and pessimism in the opposite case is, however, purely psychological. When prices rise, money incomes also rise, and that becomes a matter of jubilation by itself, even although the value of money may have diminished. Similarly a decline in prices is dreaded because it leads to a diminution of money incomes, although real economic welfare might remain unaffected owing to increased purchasing power of money.

(iii) *Wage-earners.*—Wages are generally the last to rise and the last to fall. Therefore a rise in prices is disadvantageous to the wage-earners since the purchasing power of their incomes is reduced. A fall in prices is on the other hand welcomed by them since their real wages are greater for the time being. At the same time high prices and high profits mean more business activity and therefore better employment for labourers. Low prices bring about stagnation of business activity and therefore reduce the volume of employment.

(iv) *Persons living on fixed incomes.*—Persons living on fixed incomes in the shape of pensions, interest or rent, suffer in a period of rising prices and gain in a period of falling prices, since the purchasing power of their *fixed* incomes shrinks in the former case and expands in the latter case.

Thus rapidly rising as well as rapidly falling prices create an unstable economic equilibrium in society by causing serious disturbances in the relative distribution of wealth. This means disturbance in industry and unequal and undeserved gains and losses to different classes. Production is undertaken long in anticipation of demand and is based upon certain anticipated prices, and long-term contracts are entered into on the assumption that the value of money will

not change. A reasonably stable price level or stability in the value of money in terms of goods and services is therefore highly desirable for the smooth functioning of the economic machinery of the world.

§36. **The problem of price stability.**—The serious and violent disturbances in prices during and after the war have attracted a good deal of attention towards this fundamental issue. Modern writers on money, like Keynes, have laid great emphasis on internal stability of prices. It is argued that while stability of the external value (the exchange value of a currency unit in terms of other currencies) of a country's money is an important facility to foreign trade, it is not so important as the stability of the internal value of money or the internal price level. This objective of monetary policy is capable of being attained in a large measure by the careful regulation of the volume of money (currency and credit) in each country. If this were done by all countries, external stability would also be largely realized. British and American monetary policies are today largely governed by this guiding consideration. As prices have fallen very low since 1929 attempts are being made in these and other countries to raise them to a certain desired level and thereafter to keep them stable at that level. As pointed out above, the critics of the Gold Standard maintain the view that since it has been found to be an unstable standard of value it should be replaced by a Managed Currency Standard aiming at internal price stability.

§37. **The Multiple or Tabular Standard.**—With this object in view some writers, such as Jevons, have recommended the use of an official index number as a standard of deferred payments. This is called the Tabular or Multiple Standard since it is based on the average movement of prices of a number of important commodities, which thus form a basis for a unit of general purchasing power in terms of which long-term obligations might be expressed and adjusted. This scheme is attractive, but it is not so simple as it looks. It is by no means easy to construct a reliable index number of prices. The official agency entrusted with this task might also be biased, arbitrary or corrupt. Moreover, the uncertainty of the changing official index number would make commercial transactions speculative.

§38. **Plan of a compensated dollar.**—Another interesting plan is suggested by Professor Irving Fisher in his book *Stabilizing the Dollar* (1920). He proposes 'to adjust the weight of the dollar (i.e. the gold bullion dollar) at stated

intervals, each adjustment to be proportioned to the recorded deviation of the index number from par'. Thus a rise in prices would be counteracted by adding to the weight of the dollar, and a fall in prices by deducting from it. The recent (1934) 40% reduction in the gold contents of the U.S.A. dollar by President Roosevelt is intended to check falling prices and raise them to a desired higher level. It is not possible here to enter into the merits of this scheme.

The problem of price stability has not, so far, been satisfactorily solved. An International Gold Standard, worked under close cooperation among the Central Banks of the world, should yield satisfactory results. The present unsatisfactory international situation, however, does not justify us to expect an early realization of such hopes.

§39. **Other essentials of a sound monetary system.**—Stability of the value of money, internal and external, is the first essential of a sound monetary system. Other essentials are : (i) certainty, (ii) simplicity, (iii) elasticity, and (iv) economy.

(i) *Certainty.*—The principal features and the mechanism of the monetary system of a country should be definite and certain. This is accomplished by a comprehensive monetary law precisely defining the various obligations of the currency authority. For example, the Gold Exchange Standard, as it was operated in this country until recently, did not fulfil this condition, since too much was left to the discretion of the Government and the standard was nowhere precisely defined.

(ii) *Simplicity.*—The monetary system should be simple and readily intelligible to the ordinary citizen. The Gold Currency Standard, judged by this test, is less complicated than the other forms of the Gold Standard or the Managed Currency Standard. Some writers attach special importance to this consideration in India where the general level of enlightenment is low.

(iii) *Elasticity.*—It is also necessary that the monetary system of a country should be elastic. It should be capable of automatic expansion and contraction according to the monetary needs of the country. In a mainly agricultural country like India, with its cycle of busy and slack seasons, it is particularly necessary that the monetary system should be sufficiently elastic to meet the varying seasonal demands for currency.

(iv) *Economy.*—Lastly, economy should be one of the guiding considerations of a sound monetary system. For

example, the Gold Bullion Standard is more economical than the Gold Currency Standard, and a well-managed Paper Currency Standard is the most economical of all—although in practice such a standard usually breaks down.

No rigidly uniform system can be applied indiscriminately to every country. Each country must decide which is on the whole the best workable system suited to its special conditions.

SUMMARY

If there were no money we should have to fall back on barter, which is a most clumsy and inconvenient method of exchange. (i) Barter is possible only where there is the double coincidence of wants and possessions. (ii) Even then, endless higgling would result in settling the terms of bargains. (iii) Money can be divided into any units, small or large, but usually things cannot be so divided.

Money functions as (i) a medium of exchange; (ii) a measure of value; (iii) a store of value; (iv) reserve for bank credit; and (v) a standard of deferred payments.

In order to be able to perform these functions satisfactorily, the money-material should preferably possess all of the following qualities: (i) Portability, (ii) Durability, (iii) Intrinsic value, (iv) Homogeneity, (v) Divisibility, (vi) Malleability, (vii) Cognizability, and (viii) Stability of value.

Of all things tried so far, the precious metals (gold and silver) have been found best to fulfil these requirements.

A *standard coin* is (i) a coin of which the contents are defined by law; (ii) its face value is the same as its intrinsic value; (iii) it is unlimited legal tender; (iv) it is freely coined; and (v) all values are expressed in terms of it.

Token coins are (i) limited legal tender; (ii) not freely coined; and (iii) their intrinsic value is smaller than their face value. They succeed in maintaining the artificial value given to them because they are required for small payments and *are issued in limited quantities*.

Standard coins and token coins are both stamped by the Government. In the case of standard coins the Government also guarantees the weight and the fineness of the metal used.

Free coinage means the right of any holder of bullion to have it converted into (or exchanged for) standard coins *at a fixed rate and without any limit of amount*.

Coinage is *gratuitous* when there is no charge levied for conversion of bullion into coin at the mint.

Seignorage generally means the charge, if any, levied on coinage. Sometimes the term 'seignorage' is used only if the charge is higher than the actual cost of coinage, the term 'brassage' or 'mintage' being used when the charge just covers the actual cost. The *remedy allowance* or *tolerance of the mint* is the variation permitted by law from the weight and fineness of a standard coin when freshly issued.

The *mint price* means the rate at which standard coin is given for bullion at the mint.

Debasement means the deliberate and illicit reduction of quantity or proportion of fine metal in the standard coin—an activity at one time indulged in even by Governments (generally by needy and unscrupulous sovereigns) but now confined to crooks and swindlers.

When any kind of money is said to be *legal tender* (or *full or unlimited legal tender*), it means that it can be legally used for the final discharge of obligations without limit of amount. When it is said to be *limited legal tender*, it means that nobody can legally be compelled to accept it for payments beyond a certain amount stated by law.

Gresham's Law states that when good and bad money are circulating together, the bad money eventually drives the good money out of circulation. The law applies not only in the case of good and bad coins of the same metal but also to conditions arising under bimetalism and when a depreciated paper money is circulating side by side with metallic money.

Gresham's Law holds good subject to the following qualifications:

(i) It acts only when a large number of people discover that some money is bad and some good, and desire to abstract the good money from circulation for more profitable uses.

(ii) Both good and bad money may continue together if the total supply of money is sufficiently limited.

(iii) The law assumes that there is no difficulty about the bad money being accepted as a medium of exchange.

Under *monometallism* standard coins only of some one selected metal are in circulation. We have *bimetalism* when there are *standard coins* of two metals (gold and silver) in circulation, with a fixed legal ratio of value between them. Under the *Paper or Managed Currency Standard* only paper is in circulation without any guarantee of convertibility at a fixed rate into the standard metal or standard coins.

A country is said to be on the *Gold Standard* when all values are measured in gold and the standard monetary unit is always maintained at a certain defined value in gold.

A Gold Standard with actual gold coins in circulation is called the *Gold Currency Standard*. Under the *Gold Bullion Standard* no gold coins are in circulation, but all legal tender currency (e.g. Bank of England notes in England) is convertible into gold (not in the form of coins but of bars) at a fixed rate. Gold is similarly convertible into legal tender currency, and export and import of gold are unrestricted as under the Gold Currency Standard.

Under the *Gold Exchange Standard*, the internal currency consists of cheap tokens of silver or paper. The internal currency is maintained at a certain fixed value in terms of gold by providing for its convertibility into gold exchange, i.e. bills and drafts on a foreign centre where the gold standard is in effective operation. Arrangements are also made for converting gold into local currency.

Quite a number of countries are at present off the Gold Standard. It has, however, broken down not because of its inherent defects but owing to certain exceptional circumstances and owing to the failure on the part of certain important countries to fulfil the conditions for its successful functioning. The Gold Standard, in spite of its difficulties and inconve-

niences, is still the most satisfactory and the least risky system of all and it is possible to make it more elastic and less costly, e.g. by dispensing with gold in circulation, by decreasing the proportion of the metallic reserve and by active cooperation among the Central Banks of the world. The principal merit of the Gold Standard is its simplicity and the protection it affords against the evil of inflation.

Bimetallism had a long innings in Europe for about 200 years, till sudden changes affecting the production of the precious metals since the middle of the nineteenth century began to subject the system to violent disturbance. Gresham's Law came into operation and now silver and then gold began to disappear from circulation. The efforts of the countries of the Latin Union to maintain both the metals in circulation proved unavailing. Bimetallism was finally abandoned by practically every country—a process which was powerfully helped by the example of England. France and other members of the Latin Union adopted what is known as the *Lumping Standard*. Bimetallism in practice works out as an alternating standard of silver or gold. International bimetallism is theoretically a workable proposition and would ensure even a greater stability of prices than under the Gold Standard. But owing to the opposition of some important countries like England and Germany and of the banking world it has not so far been found feasible to give a trial to bimetallism on an international scale. If the necessary international cooperation is forthcoming, an even more promising experiment than bimetallism would be some sort of an International Managed Paper Currency Standard.

At present most of the important modern nations have a *Managed Paper Currency Standard*. It is cheap and its quantity and therefore its value are more susceptible to conscious regulation than is the case with the precious metals. But it is liable to be a curse if the temptation to over-issue is not firmly resisted. This applies particularly when we have fiat or inconvertible paper money. In the case of fiduciary or convertible paper money, the principal precaution against its depreciation is to maintain a sufficiently strong reserve for ensuring convertibility. Danger signals of inflation and depreciation of paper money are (i) a premium on gold, (ii) a rise in the rate of exchange (unfavourable exchange), (iii) external drain of gold, (iv) rise of prices, and (v) two sets of prices—one in gold, which is lower, and the other in paper, which is higher.

The *evils of depreciation* are (i) undeserved and unexpected losses and gains to different classes of people, (ii) uncertainty in business and in international trade and in all kinds of contracts based on money, and (iii) private and public extravagance. It is possible to have an inexpensive and sanely regulated system of paper money. But the pitfalls are so numerous and the memories of monetary chaos due to over-issue and inflation of the war and post-war period are still so vivid that even the most advanced among the western nations are likely for some time to come to prefer the safety of the Gold Standard to the possibly superior advantages of a cautious and wisely regulated system of paper money.

It is often necessary to find out the extent of change in the *value of money* during a given period. The device of *index numbers* is used for this purpose. It can be depended upon to give an approximately correct

measure of the change, provided we are careful to select commodities (i) sufficiently numerous to represent general consumption, and (ii) not belonging to the same group.

Generally speaking also it is better to use wholesale rather than retail prices. When the commodities selected are given weights expressing their relative importance, we get *weighted index numbers*.

The Quantity Theory of Money states that the level of prices varies in direct proportion to changes in the quantity of money. This is true subject to the following qualifications and assumptions, that:

- (i) Money is used at every exchange of goods;
- (ii) Money is used only for exchange and only such money is taken into account;
- (iii) All the money in existence is offered against all the goods produced for sale;
- (iv) Money includes not only metallic money but all the credit instruments which do money-work;
- (v) Quantity of money means the physical quantity combined with rapidity of circulation; and
- (vi) The level of prices (or the value of money) is determined not only by its quantity (supply) but also by the various factors governing the demand for it (e.g. volume of transactions, etc.). (The elasticity of demand for money is always equal to unity.)

The truth of the Quantity Theory is illustrated by the price changes in recent times.

As in the case of other commodities, the cost of the production of the precious metals is one of the factors governing their value and the value of the money which may happen to be based on them. But owing to the huge volume of precious metals already in existence, the position as regards their supply in any given year does not appreciably affect the value of the total stock, though in the long run the cumulative effect of the yearly supplies will make itself felt.

A rise of prices is favourable to debtors, producers and merchants; and unfavourable to creditors, wage-earners, and those with fixed money incomes. A fall of prices exactly reverses this position.

Wage-earners, however, may stand to lose on the whole by falling prices if this seriously diminishes profits and enterprise, and therefore the volume of employment available.

The question whether complete stability of prices is desirable need not be asked, because such a thing is unattainable in a changing world. Violent fluctuations are, however, unquestionably harmful. Several plans have been proposed for achieving at least relative stability. Probably the best results will be obtained by an International Gold Standard and close and systematic cooperation among the Central Banks of the world. Present conditions are, however, not very favourable for such cooperation. (Violent price changes are always bad. If the alternative is between gradually rising prices and gradually falling prices, we should be inclined to favour the former because they act as an incentive to economic activity.)

Apart from comparative price stability, other minor essentials of a sound monetary system are certainty, simplicity, elasticity and economy.

CHAPTER XI

EXCHANGE: CREDIT AND BANKING

CREDIT

§1. **Nature and characteristics of credit.**—Among civilized men economic transactions are largely based on mutual credit or faith. Many people, for example, entrust their money to banks in the faith that when they want it back, the banks will be willing and able to return it. Again, a very large volume of buying and selling takes place not on a basis of cash but of credit (that is, a promise to pay in future). The shopkeeper allows us to run up bills because he has confidence that we shall discharge the bills at a future date. Banks very often advance money to business people and others in different ways, usually against some security, but always in the expectation that the borrower himself or someone else will be willing and able to fulfil the promise of future payment. In a well-constituted State, the aid of law also can be invoked, if necessary, to enforce the fulfilment of these promises—implied or explicit. This preparedness to trust each other and the fact that it is in most cases justified has most important economic consequences, as we shall see presently.

Credit involves a temporary transfer of wealth. In this way some person or body of persons acquires the right to enjoy wealth the ultimate economic title to which belongs to someone else. Credit may, of course, take the form of a loan of concrete goods or the temporary transfer of a mere right or privilege. But in most modern instances of credit the thing lent is money, so that credit becomes a contract for the future delivery of money by the borrower to the lender. It is evident that the lender or creditor necessarily exposes himself to a certain amount of risk, because his confidence in the probity or solvency of the borrower may prove to be misplaced and the borrower may fail to meet his obligations at the stipulated date.

We may now give a more formal definition of credit. Credit is an exchange or transaction which consists in the temporary transfer of the usance of wealth in the form of concrete goods or a fund of capital or a mere right or privilege. The essence of credit is the right of enjoying

something, in most cases, money, the ultimate economic title to which belongs to another.'¹ Credit, as pointed out above, nowadays is virtually a contract for the future delivery of money. Time and confidence are the two essential features of credit.

§2. **Productive and unproductive credit.**—According to the use made of credit we distinguish between productive credit and unproductive (or consumption) credit. For example, when the Indian peasant borrows for marriage expenditure, credit is used unproductively. But if he borrows for land improvement or for meeting cultivation expenses, credit is productively used. In the modern economic organization credit is mostly used for productive purposes. The principal unproductive use of credit today is when huge war loans are contracted by the State.

§3. **Credit instruments.**—The promise to pay in future takes various forms, which include *verbal* and *book credits*.² The principal credit instruments are promissory notes, cheques and bills of exchange.

A *promissory note* is a written promise by the debtor to pay a certain sum of money to the creditor, either on demand or at the expiration of a specified period. The creditor or the 'payee' can endorse (sign) the note and thus make it negotiable or transferable. If there is one endorsement on the note it is called double-name paper, because both the maker (the original debtor) and endorser are responsible. Many of the loans granted to ryots in India by money-lenders are supported by such promissory notes. Another important class of promissory notes comprises the currency notes issued either by the Government (as in India until recently) or by some authorized institution like the Bank of England in Great Britain. These notes are payable on demand and form part of the regular legal-tender currency of most countries. Promissory notes are also extensively used in connexion with the inland or internal trade of a country, and are included in 'commercial paper'. (See Fig. 14.)

Next we have *cheques*. A cheque is a written order signed by a depositor—an individual or a firm—on his bank,

¹ Seligman, op. cit., p. 496.

² 'Verbal credit' is a loan granted on the mere verbal promise of the borrower to make payment at a certain time. 'Book credit' (or 'book debts') is the credit granted and entered in the books (ledgers) of the creditor. It is credit on account. The entry in the ledger is an evidence of the credit granted. There is no such evidence for verbal credit unless there is a third party as a witness.

Rs. 500/-

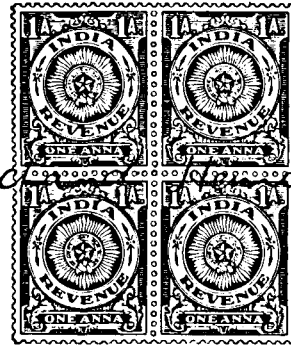
Bombay, 27th December, 1935

On presentation I promise to pay to the order of

Ramlal Kapurchand
Rupees five hundred only
at Benares

with interest at 6 % per annum.

Value received



Rupchandra Kapurchand

NO. 672.

FIG. 14.—SPECIMEN OF A PROMISSORY NOTE

N^o C144,251

8th September 1935

Ramlal Hiraldal

Rs. 1000/-

N^o C144,251

43

8th September 1935



Lloyds Bank Limited

INCORPORATED IN ENGLAND

Bombay.

Pay Ramlal Hiraldal

Order
or Bearer

Rupees one thousand only

Rs. 1000/-

Rupchand Hemchand

London Office (Eastern Department) 39 Threadneedle Street, E.C.2

FIG. 15.—SPECIMEN OF A CROSSED CHEQUE WITH COUNTERFOIL ATTACHED
(Reproduced by kind permission of Lloyds Bank Ltd., Bombay)



Rs. 500/-

September 10, 1935

accepted
Krishnaji Vinayak Bros.

9 As.

Poona, September 8, 1935

Pay to the order of *Gadhadal (for myself)*
Rupees *five hundred*

Value received and charge the same to the account of

To *Krishnaji Vinayak Bros.*
85, Fort, Bombay

Vasant Rao Narayanrao & Co.

FIG. 16.—SPECIMEN OF A DOMESTIC (INTERNAL) BILL OF EXCHANGE

ordering the bank, on demand, to pay a certain sum of money to a third person or to the drawer himself, or his order, or to the bearer. Sometimes a cheque is crossed, i.e. two lines are drawn obliquely across the cheque (see Fig. 15). Like the ordinary cheque, the crossed cheque is also drawn upon a bank, but it can be paid only to the bank to whom it is crossed. The name of the bank, in whose favour it is crossed, is sometimes written between the two lines drawn obliquely across the cheque. Such a cheque is generally carried to account and is safer than the ordinary cheque; even if it is stolen, it is of no use to a thief since only the bank in whose favour it is crossed can obtain payment on it. A cheque drawn by one bank upon another is known as *banker's draft*.

A *bill of exchange*¹ is an order by one person or firm (called 'drawer') drawn on another person (a firm or a bank, called 'drawee') instructing the latter to pay a certain sum of money for value received to a third party or to the drawer (called 'payee'). But, unlike a cheque, a bill of exchange is not necessarily payable on demand or at sight, but at some future date, it may be after thirty days, or sixty days, or ninety days, but generally not longer than six months. It is called a 'sight bill' if the payment is to be made as soon as the drawee has seen it (i.e. on demand). If the payment is to be made at the expiration of a fixed period it is called a 'time (usance) bill'. The person on whom the bill is drawn may either accept the bill by signing it as 'Accepted' or decline to make payment (signing 'Protested'). The acceptor becomes legally liable to make the payment due on the bill. If the drawer and the drawee are in the same country the bill is called a domestic bill; if in different countries, it is called a foreign bill (an export or import bill).² Fig. 16 is a specimen of a bill of exchange, the acceptance being written across the bill by the 'drawee'.

§4. How credit economizes the use of metallic currency.—The element of trust involved in a cheque or bill of exchange is greater than in a Government or Bank note. The note is as good as cash because it can generally be converted into cash: the State or a State-authorized bank undertakes the responsibility for conversion. The note is also legal

¹ A *hundi* is a variety of the domestic bill of exchange: see Part II. ch. vi, §17.

² See ch. xii, §14.

tender, which the cheque or bill of exchange is not. A vast volume of transactions is conducted by means of cheques and bills of exchange, and a great economy in the use of the precious metals as currency results. This is facilitated by two devices. In the first place, both cheques and bills of exchange (as also promissory notes) are negotiable, i.e. they can be transferred by the payee or the person in whose favour they are drawn by endorsement to another person. In the case of cheques made payable to the bearer ('bearer cheques' as they are called), the transfer is effected merely by delivery from hand to hand as in the case of a bank note. Thus before a cheque or a bill of exchange is finally cashed or 'retired', it may have passed a number of times from hand to hand, being used like money for discharge of obligations. Cash or use of actual money is thus dispensed with so far as the intermediate transactions are concerned. Secondly, there is the device of the 'clearing house', which is described below.

§5. **Clearing house system.**—In most of the big banking centres like London, New York, Calcutta and Bombay, there is an institution called the clearing house, on which are represented the principal banks in the centre. This organization performs the function of offsetting cross (*contra* or mutual) obligations in the form of cheques on each other received by the various banks in the course of their day's transactions. The leading bank of the place (generally the Central Bank) presides over the clearing house and acts as a banker's bank, and as the other banks keep an account with it, it can adjust in its books the deficit against or balance in favour of the various member banks after offsetting the different claims of the banks amongst themselves. The member banks usually keep certain balances with the Central Bank and pay the difference by a draft on the latter. Thus the necessary adjustments are effected by book entries without any cash changing hands. In the London clearing house, for example, barely 1% of the cheques is actually cashed.

§6. **Economic functions of credit.**—(i) The principal use of credit is that it enables men of enterprise and initiative to embark upon large-scale ventures on borrowed capital. It mobilizes the existing capital, i.e. makes its more effective use possible. It enables production to be initiated long in advance of demand, that is, in advance of the sale of the product to the consumer. (ii) It transfers capital from those who cannot or do not wish to use it themselves to those who have the desire and the capacity to use it profitably.

Naturally, those business men who are known to be competent obtain credit more easily than those of unproven ability. Credit thus exercises a selective influence and encourages the survival of the fittest amongst the industrialists and business people. It is clearly advantageous to the community that capital should flow into the hands most capable of using it well. Further, some businesses are liable to come to a standstill unless through credit a continuous supply of capital is ensured. Credit may also be said to promote the progress of invention because the introduction of inventions and new processes requires capital, the supply of which is facilitated by credit. Credit is to be distinguished from capital in the same manner that money is distinguished from capital. Both money and credit stand for purchasing power, and whether they represent or stand for capital or not depends on whether they are spent on the capital necessary for further production or on objects of immediate consumption.

(iii) Thirdly, as already seen, credit enables considerable economies in the use of gold (metallic money) to be effected, and provides convenient media of exchange, such as bank notes, cheques and bills of exchange.

§7. **Abuses of credit.**—Like every human device credit is liable to be abused. If the borrower uses credit recklessly and wastefully he inflicts ruin both upon himself and on the lender. Moreover, there is the danger that credit may be issued to excess by the banks (who are the principal dealers in credit today) so that the economic stability of society is endangered and speculation encouraged. Overproduction may ensue as one of the evil results. The unwise use of credit may also enable the weakness of business concerns to be concealed for quite a long time, making the inevitable crash all the more disastrous when it comes. Hence the need for careful regulation.

BANKING

§8. **Utility of banking.**—Banking occupies a most important position in the modern economic world. Banks are dispensers of credit, and we have already examined the numerous ways in which credit serves the community and keeps the wheels of commerce and industry revolving. By offering opportunities for investment and safe custody of deposits, banks stimulate the habit of thrift or saving, and discourage hoarding or an unproductive use of surplus wealth, thus promoting investment and the growth of capital. A

wise banking policy may go a long way towards mitigating the shocks of an economic crisis. While all these advantages can be reaped from a sound banking organization wisely conducted, a banking system, if badly constructed and badly handled, is capable of inflicting great harm on trade and industry and of seriously impeding economic progress.

§9. **Banking: definition and functions.**—Banking means the business of dealing in credits and a bank means an institution whose main business is receiving deposits from the public and on the basis of them making advances and loans in such a manner as to make a profit for itself.¹

The functions of banks.—Modern banks perform a variety of functions, some of which are given below :

(i) Various kinds of *money dealings*, such as money-changing, shipment of money or bullion, purchase and sale of bullion.

(ii) *Receiving of deposits.*—This is considered in greater detail below.²

(iii) *Discounting* (i.e. purchasing at present worth) commercial paper (e.g. bills of exchange and promissory notes).³

(iv) *Granting loans in other ways* either by advance against securities or by way of overdraft,⁴ mortgage loans, or by purchase of shares in industrial companies.

(v) *Issue of bank notes.*—This function, as we shall see later,⁵ is nowadays virtually restricted to the Central Bank of Issue. In the eighteenth century it was regarded as an essential function of all banks.

(vi) *Dealings in foreign exchange.*⁶

(vii) *Issue of securities* (e.g. bonds or shares for joint-stock companies).

(viii) *Performing agency functions* on behalf of clients, such as (a) safe custody, sale or purchase of securities; (b) safe custody of other valuables; (c) collection of dividends and interest for clients; (d) acting as correspondents and clearing agents for other banks; (e) issuing letters of credit to travellers; (f) acting as trustees, executors, attorneys; (g) serving as bankers to joint-stock companies; (h) the Central Bank of a country acts as the agent to the

¹ 'The term bank is ordinarily applied to an institution which receives deposits of money or of credit and which seeks profits through the extension or sale of its own credit.'—E. E. Agger, *Organized Banking*, p. 19.

² See §§11-13.

³ See §13.

⁴ See §13.

⁵ §15.

⁶ See ch. xii, §§13-18.

Government and performs banking functions for the Government.¹

§10. **Some features of modern banking.**—(i) *Banking specializatiòn.*—It must not be imagined, however, that all these functions are performed by every bank. There is a division of labour and specialization here as elsewhere. Thus what are known as commercial banks accept deposits for short periods and lend credit also for short periods (for the current finance of trade and industry) in England, the U.S.A. and India. As distinguished from these, there are the industrial banks, like those in Japan, which extend long-term finance, i.e. lend money for long periods to industrial concerns and raise their working capital by debentures. Some banks, as in Germany, are of the mixed type and combine ordinary commercial banking with industrial finance. Certain banks specialize in land mortgage banking, some in savings banking, some in cooperative banking, some in the financing of the foreign trade or foreign exchanges. The Central Banks are in a class by themselves. They are generally empowered to issue paper currency and their outlook is national and different from that of the ordinary banks, which are ordinary profit-making concerns.

(ii) *Bank amalgamations.*—Another striking feature of modern banking organization is the process of bank amalgamations under the stimulus of much the same forces, (namely, desire to avoid competition and ensure economies) as promote large-scale production, large-scale management and combinations. Thus England has its 'Big Five' (Barclays, Lloyds, Midland, National Provincial and Westminster banks). The advantages of amalgamation are efficient organization and the control of banking through highly-paid expert managers, the centralization of reserves, cheaper and wider banking facilities, and services throughout the country and the world. As usual certain disadvantages show themselves if the process of amalgamation is carried too far, so that the whole organization becomes unwieldy, cumbersome and excessively centralized and leads to the neglect of local interests. Financial resources may also come to be centralized in the hands of a single organization with all the attendant evils of unchallenged monopoly. It is, therefore, felt that something must be done to check amalgamation beyond a certain stage. In Great Britain, as recommended by a Committee of Inquiry in 1918, the sanction of the

¹ See §19.

Treasury is now necessary for further amalgamations. The following may be mentioned as striking instances of amalgamations which have recently occurred in India (a) amalgamation of the three Presidency Banks into the Imperial Bank of India (1921), and (b) of the Central Bank of India with the Tata Industrial Bank (1923).

(iii) *Branch Banking versus Independent Unit Banking.*

—In this connexion, a word or two may be said about two rival systems of banking: branch banking and unit banking. Under the branch banking system there is a small number of very large banks, each having numerous branches. Where the rival system obtains, as in the U.S.A., there are a great many small independent banks. Branch banking has made great strides in England, Australia, Canada and France. On the other hand, the U.S.A. is the home of the independent unit banking system, branch banking being restricted or prohibited there by law. In India, we are following the branch banking system, the Imperial Bank of India having much the largest number of branches, while other joint-stock banks, such as the Central Bank of India, follow the same system. In favour of branch banking, it can be said that it enables funds to be transferred from one branch to another according to the needs of the different localities served by them. A more even distribution of risks as between various types of enterprise, and cheap and widespread banking facilities are other advantages. Its principal defects are the possibility of monopolistic control, excessive centralization of authority at headquarters, and neglect of local interests. Money collected from one branch may be sent to headquarters or another branch. The local manager may be shifted about from branch to branch so that he does not get an opportunity of studying thoroughly the conditions and needs of any particular locality.

§11. **The principal operations of a commercial bank: Deposit banking.**—We shall now discuss in greater detail the principal functions or operations of modern commercial banks.

Deposit banking.—The first business of a bank is to receive deposits from the public in order to increase its working capital beyond its own share capital, for the purpose of making loans and investments. It pays a lower rate of interest on the deposits which it receives than what it charges in its turn to its customers who borrow from it. This difference constitutes its profit.

At one time the chief function of a banker was money-changing. This was necessary because there were numerous

kinds of coins, domestic and foreign, in circulation. In the seventeenth century; goldsmiths in England undertook this business, as did the Bank of Amsterdam at an earlier period. The *shroffs*, or indigenous bankers in India, performed a similar function in the pre-British period. The next stage was deposit banking. People placed their coins for safe custody with the goldsmiths, who gave written acknowledgements for them. At first they allowed oral transfers of such deposits and later accepted written orders which, as time went on, came to have more and more of the characteristics of modern cheques. The goldsmiths used a part of this money to make advances. Sometimes, as in England, the reigning monarchs took advantage of this facility and borrowed money on interest-bearing securities. Similarly in India, the indigenous bankers used to receive deposits from the public for safe custody. They also served as State financiers. In England, owing to the repudiation of his debts to the goldsmiths by Charles II, the old system received a rude shock. It was partly the exigencies of the State (the war expenditure of William III) and partly the rise of England as a commercial nation that led to the establishment of the Bank of England in 1694 by Act of Parliament. For all practical purposes this may be regarded as the starting-point of modern banking. Deposit banking gradually developed, and along with it the cheque system which has already been explained. Bank deposits, originally confined to coins, gradually took the form of bank notes in the eighteenth century, and later of cheques sent to a bank by its customers to be carried to their account. In the nineteenth century, the note-issue function gradually receded into the background, and deposit banking made a great advance. Note issue came to be restricted to a few banks, and in several countries is confined to Central Banks of Issue.¹

We may point out here that there are two kinds of deposit: (i) *deposits of money* (cash or claims to cash), left with a bank by depositors, and (ii) *deposits of credits*, issued by the bank to its clients against suitable security. The latter kind of deposits have come into great prominence today. Business men greatly prefer to have means of payment made available to them by deposit credits. That is, when loans are granted to business men, they generally take the form of current account deposits in the name of the borrowers, which they can draw upon by means of cheques

¹ See §15.

as need arises.* Whether deposits consist of money in cash or of credits, the bank is always bound to pay in money, whenever called upon to do so, and it must therefore maintain a sufficient cash reserve to meet all demands. As we shall see later on,¹ part of this reserve is generally kept as a deposit with the Central Bank, which thus comes to hold the banking reserves of the country as a whole. In a few countries like the U.S.A. the law prescribes a statutory minimum cash reserve against the deposit liabilities of banks. Banks, like insurance companies, work on the principle that at any given time claims for payment are made only in respect of a certain fairly calculable proportion of the deposits, so that a surplus is available which they can invest or lend at interest to their clients and thus make a profit.

§12. **Classes of deposits.**—There are three main classes of deposit accounts: (i) *Deposits on current account* which can be withdrawn by the depositor on demand without any previous notice. Therefore on such accounts the banks usually allow little or no interest. Indeed, if the deposits fall below a certain minimum they generally charge a certain commission. These accounts can be operated by means of cheques.

(ii) *Deposits on fixed account.*—These are kept with the banks for fixed periods ranging from one month to twelve months and in some cases for some years. In the case of these deposits the banks get notice of withdrawal and are ready to pay interest, because they can be invested more freely than deposits on current account, the rate of interest varying directly with the length of the period of deposit. The longer the period, the higher the rate of interest allowed.

(iii) *Deposits on savings account.*—Special facilities are given by commercial banks to attract such deposits. There are also special savings banks (e.g. Postal Savings Banks in India) which accept very small sums, allow interest, and permit withdrawal on a limited scale (say twice in a week). This variety of deposit banking suits the middle and the lower middle classes and promotes the habit of thrift. It is particularly useful in rural areas.

The cheque system and clearing houses.—These are intimately connected with deposit banking and have already been described while discussing the instruments of credit and the uses of credit.²

¹ See §19.

² See §§3-5.

§13. **Loans and advances.**—We shall now proceed to explain the principal types of loans advanced by banks to their clients, varying in their forms and conditions of interest.¹

(i) *Loans against specific promises to pay.*—The simplest form of loan is the 'clean' advance on the personal note of the borrower, called the single-name paper. When such a note is endorsed by a friend or business associate of the borrower, it is called a two-name paper. Such endorsements may be multiplied, thus adding to the value of the security.

(ii) *Collateral loans.*—These are advanced against promissory notes supported by the pledging of stock or bonds, called in this connexion, 'stock exchange collateral'. These are usually easily marketable bonds, certificates of stock, etc. The stock exchange offers an open market for certain listed (approved) securities. It is obvious that such loans are more acceptable to banks than where the security is only personal.

(iii) *Discounting of commercial paper.*—Discounting of commercial paper, promissory notes, and bills of exchange is the most acceptable form of investment for banks. The risk is comparatively small, since such loans are advanced against paper which originates in the buying and selling of actual goods. *A* sells goods to *B* and usually draws a bill on *B*, for which a bank pays cash to him and ultimately recovers the amount from *B*, who in the meanwhile has sold the goods and is in a position to meet his liability. The security therefore is tangible and substantial. Such paper is discounted or purchased by the bank at its face value less interest on the principal at the current rate till the time when the bill falls due. Such commercial paper is usually short-term paper, ordinarily running for periods not exceeding three months, and as such is very welcome to commercial banks who cannot afford to invest their funds (mainly drawn from short-term deposits) for long periods.

(iv) *Overdraft.*—This form of loan arises when a depositor is allowed to draw by cheque beyond the deposit amount to his credit at the bank up to a certain stated limit, security being generally required in the case of large amounts.

(v) *Cash credit.*—This consists of an open credit or drawing account granted by the bank to someone vouched for by at least two "cautioners" or sureties' (Seligman). The customer draws on the bank in small instalments and

¹ Agger, op. cit., pp. 44, 48; and Seligman, op. cit., pp. 506-10.

pays interest on the amount actually drawn. This type of loan suits small merchants, farmers and artisans. The system of cash credit is best developed in Scotland, and is also extensively used in India.

Bank loans according to conditions of payment.—(i) 'Call' or Demand loans, issued generally on security, are repayable at the option of the bank as well as at the option of the borrower at any time.

(ii) *Short-term loans* mature within thirty, sixty or ninety days, and enable the bank to have its resources as completely under its control as possible.

(iii) *Long-term loans* for six months and more are made more frequently by private bankers, trust companies, and investment or industrial banks whose obligations to depositors do not usually call for repayment on demand.

The prudent banker brings about such a combination of these various kinds of loans as will secure for him the largest average rate of interest, without so tying up his funds that they cannot be quickly converted into cash for meeting emergencies.¹

§14. **The importance of adequate cash reserves and the need for regulation of banks.**—The maintenance of sufficient cash reserves is the very ABC of sound banking. The chief danger to a bank is insolvency arising from failure promptly to honour its obligations, which in the case of a commercial bank are for the most part demand liabilities, i.e. liabilities which must be met as soon as demand is made. It is, however, the experience of most countries that banks learn this salutary lesson only after a reckless disregard of it has actually caused a series of disasters. Often they cannot resist the temptation of earning high dividends for their shareholders by making large and risky investments at the cost of safety. The progress of banking largely depends upon public confidence, which is a plant of slow growth. Unfortunately, in a time of crisis the public do not discriminate between a sound bank and an unsound one. One bank failure may be sufficient to create a widespread panic and bring a large number of banks into trouble by causing a general run on them. The sins of one badly managed bank are thus visited on the heads of the good banks. Particular care is, therefore, necessary to secure prudent and cautious

¹ Banks also invest a part of their working capital in Government, Municipal, Trust and other semi-public securities which can easily be realized in case of emergency.

management. It may also further be argued that banking is really a kind of public trust in the management of which anything like profiteering should be discouraged. On these grounds is based the case for the regulation of banks. One important method of regulation that is suggested is to impose an obligation upon banks to hold a certain minimum proportionate cash reserve as in the case of the American National and Federal Reserve banks. Other regulations lay down that loans should be granted only for certain specific purposes and only on certain conditions regarding the nature of security, specify the maximum period for which loans may be advanced, and insist on publicity of accounts and periodical inspection as further safeguards. The principal argument in favour of 'free' banking is the importance of elasticity in the supply of money and credit, the need for which is liable to considerable variations particularly in agricultural communities. Moreover, a statutory minimum reserve would in practice tend to be the maximum reserve and would lessen the sense of responsibility of directors and managers. This would also be the result of other restrictions. The general feeling, however, is that regulation of this type is on the whole useful and desirable. Latterly there is in evidence a tendency to bring banking under greater State control, as in the U.S.A., and there is even a movement for nationalization or socialization of banking, for instance in the United Kingdom. The need for regulation of banks and of prescribing a statutory minimum reserve is all the greater in a country like India where modern banking is still in its infancy. It is not easy to determine the minimum reserve, although an orthodox banking maxim prescribes thirty-three per cent as the minimum 'apprehension reserve'—any lessening of which would create doubt in the public mind regarding the solvency of the bank. Each country must make up its mind regarding the percentage appropriate to its own conditions, and the conditions may differ not only as between one country and another but also as between different localities of the same country. The experience of bankers is obviously a valuable guide in this connexion.

§15. **Issue of bank notes.**—We have already explained the character of bank notes¹ and pointed out that though in the earlier stages of modern banking development the issue of bank notes was considered indispensable for the growth of banking, the rapid development of deposit banking and the

preference of the business community for deposit credits made the issue of bank notes less necessary. So also a better appreciation of the necessity of regulating the issue of bank notes resulted in the curtailment of the right of issue, which was at first entirely free. Free competition among banks in the matter of note issue came to be looked upon as undesirable both as leading to the evils of diversity and multiplicity of notes and of the abuses of overissue. A virtual monopoly of issue in favour of either a State bank (as in Russia and Finland), or of a private bank (as in England, France, Germany and India) is now the system adopted in most countries. Even in the U.S.A., where a number of banks were at one time allowed to issue notes, the right is now being centralized in the hands of a dozen banks, called Federal Reserve Banks, by the Federal Reserve Act of 1913.

§16. Regulation of note issue: Currency School and Banking School.—The unsatisfactory position of English currency about the middle of the nineteenth century, and the numerous failures among banks and business houses, made everyone alive to the necessity of regulating the issue of bank notes in the interests of the public. But widely different opinions were held as to the best method of doing so. The Currency School and the Banking School represented two extreme views on this matter, and before the passing of the Bank Charter Act of 1844, a great controversy raged between these two schools.

The Currency School held that a bank note should be regarded as a bullion certificate and should be issued only against a backing of gold to the full value of the note or, at any rate, of a very large holding of gold, the fiduciary or uncovered issue being strictly limited. If this were not done, there would be overissue of bank notes with all its resultant evils. In the view of the Currency School, a bank note was to be regarded as a substitute for metallic currency rather than as a pure credit instrument. It is obvious that this ultra-cautious policy would ensure safety, but only at the cost of elasticity and economy, making it most difficult to expand the note issue to meet an emergency. To insist on a hundred per cent reserve is expensive and unnecessary.

The Banking School, on the other hand, held that the question of gold reserves should be left to the discretion of the banks themselves. In their own interest they would avoid overissue of notes. Even if there was by any chance an excess beyond trade requirements, this would soon be returned to the banks. Large gold reserves

were therefore not necessary to secure the convertibility of the notes.

The principal merit of the banking theory is that it provides for elasticity and economy in the note issue. On the other hand, human nature being what it is we cannot entirely depend upon the banks and their sense of responsibility. Complete freedom in this matter would result in speculative transactions being financed by an uncontrolled issue of notes. Moreover, a considerable overissue of notes may occur without anyone being aware of it for a long time. It was precisely because all these evils had manifested themselves on an alarming scale under the old system—which left matters entirely to the discretion of the bankers—that there was a general outcry against the continuance of a *laissez-faire* policy. It is thus not surprising that the Currency School triumphed ultimately and its recommendations were incorporated in the Bank Charter Act of 1844. This is, however, not to say that the currency school did not err on the side of excessive caution. The best policy really lies midway between the positions adopted by the advocates of these two rival principles, and its aim should be to combine safety and stability with elasticity and economy.

§17. **Principal methods of regulating note issue.**—Four principal methods of regulating note issue may be distinguished :

(i) *The fixed fiduciary issue system* which has been adopted by England under the Bank Charter Act of 1844 and retained under the Currency and Bank Notes Act of 1928. The Bank of England is authorized to issue its own notes against securities to an amount fixed by statute. This authorized fiduciary issue was originally fixed at £14,000,000. When the right of note issue enjoyed by the country banks lapsed, a proportion of their right to issue notes devolved upon the Bank of England. In this manner the fiduciary issue rose to £19,750,000 in 1923. This was the maximum allowed by the Charter Act of 1844.¹ This limit has now been fixed at £260,000,000, under the Currency and Bank Notes Act of 1928, which also amalgamated the Treasury Notes issued by the British Government during the war with

¹ The process of complete centralization of note issue in the hands of the Bank, contemplated by the Charter Act of 1844, was completed when the last of the other banks lost its privilege on amalgamation with Lloyds Bank in 1921.

the Bank of England notes, the Bank being made responsible for the payment of this amalgamated issue.

Any additional notes over and above this fixed fiduciary limit have to be secured by a gold backing of 100%. The Act of 1844 required the separation of the business of note issue and of banking into two separate departments—the Issue Department and the Banking Department. The Issue Department dealt exclusively with the issue and redemption of notes and held the gold reserves as well as the fiduciary reserve. The Banking Department was concerned with the discount, credit and banking business generally. Thus not a single note could be issued by the bank except against gold after the fiduciary limit was reached. If for example more currency was needed to meet a severe monetary crisis, the only course open was to suspend the Bank Act (as was done in the crises of 1847, 1857 and 1866), thus enabling the bank to increase its fiduciary issue of notes. The violation of the Act had to be condoned by obtaining a subsequent indemnity from Parliament. This gave occasion to the gibe that the Bank Charter Act of 1844 became useful only when it was suspended! There can be no doubt that under the Act of 1844 safety was purchased at the expense of elasticity. If the British banking system as a whole has worked well in spite of this Act it is because of the rapid development of joint-stock banking and the use of the cheque as the chief medium of exchange.

While the Act of 1928 retains the principle of maximum fiduciary note issue, it makes the clumsy procedure of suspension unnecessary by authorizing the Treasury to allow the bank to exceed the limit of £260,000,000. The sanction so given, however, is to be communicated to Parliament, and the permission is restricted to a period of six months, which may however be extended to a further period of six months. The British note issue has thus been made somewhat more elastic in times of emergency. But as far as the normal expansion of trade and business is concerned, the cheque system will continue to be as indispensable as before the war. Before 1920, the principle of a fixed fiduciary reserve underlying the Bank Charter Act of 1844 was adopted in India, when Government paper currency was introduced in 1861.¹

(ii) *Proportional reserve system.*—This is the system now prevalent in the continent of Europe, the U.S.A. (under

¹ See Part II, ch. vi, §7.

the Federal Reserve System of 1913), South Africa and India. Under this system, the notes are secured by a *minimum percentage* of gold and gold securities laid down by statute. This percentage is 40% under the Federal Reserve System, in Germany, in South Africa and India, and 35% in France. These minima may however be disregarded for short periods with the consent of the Government on condition that the issuing bank pays a tax reckoned on the amount of the deficiency, the rate of the tax being made to rise steeply as the deficiency rises. All these precautions are intended to discourage excessive issue of notes. The principal merit of the proportional reserve system is that it is elastic. The expansion and contraction do not take place at the same rate as increase or decrease of the gold reserve, as in the case of the fixed fiduciary issue, but at a greater rate. Thus suppose the proportion of the gold reserve is 40%, then for every increase of 40 in the gold reserve, the permissible expansion of note issue will be 100. Similarly a contraction of gold reserve by 40 will cause contraction of note issue by 100: expansion as well as contraction are much more substantial than under the fixed fiduciary system. Usually the Central Banks working under this system maintain a reserve ratio far above the legal minimum. The Hilton-Young Currency Commission of 1925-6 recommended this system for India, and it has accordingly been embodied in the Reserve Bank of India Act of 1934.

(iii) *Maximum issue*.—Under this system, the maximum amount of notes that may be issued by the Central Bank is prescribed by law. This was the French system before 1928, the maximum originally fixed being 350,000,000 francs. This maximum was raised several times, particularly during the war. Except for this restriction the Bank of France was allowed complete discretion and no reserve was made compulsory by law. The French system was the nearest approach in theory to the banking principle, although in practice the Bank of France held superlatively large cash reserves. The French system reversed what is commonly regarded as the sound principle of regulation, namely, allowing freedom as regards the *total* amount of notes, but restricting *fiduciary* issue by requiring a minimum reserve of gold to be held. It has been supplanted in France since 1928 (with the restoration of the Gold Standard) by the proportional reserve system, a 35% gold reserve being now prescribed by law.

(iv) *The bond (security) deposit system*.—This was the

system of regulation of note issue which operated in the United States before the passing of the Federal Reserve Act of 1913. The National Banks were given the privilege of note issue (there being several thousands of them) subject to the following conditions : they could issue notes only against the deposit of U.S.A. bonds with the Treasury ; they were required to keep a 5% cash reserve in the same Treasury as a Redemption Fund and to pay a tax of $\frac{1}{2}$ % on the value of the notes issued ; they were not to issue notes in excess of their capital. This system made the note issue rigid by making it dependent upon the price of bonds and their supply. At the same time the note issue remained decentralized, i.e. in the hands of a large number of banks scattered up and down the country.

The Federal Reserve Act of 1913 contemplated the eventual replacement of National Bank notes by the Federal Reserve Bank notes. This Act established twelve regional Federal Reserve Banks in the principal towns federated under the control of a Federal Reserve Board. The Board could authorize the Reserve Banks to issue notes called Federal Reserve Notes which were made by law the obligation of the United States and were redeemable at the United States Treasury at the holder's option. These banks had to deposit with the Board commercial paper as security against the notes, and themselves to keep a reserve of 40% in gold, which could be reduced on payment of a graduated tax on the deficiency. This new note issue was expected to provide for the seasonal demand for currency and to be useful in meeting a crisis. Thus the American banking system has largely come into line with the centralized banking systems in European countries. Of course, there is not a single central bank, but a dozen. This is partly due to the jealousy of the Federal Government and partly to the large size of the country.¹

§18. Central banking problems.—This leads us to one of the most discussed questions of the day, the question of central banking. The International Financial Conference, which met at Brussels in 1920, passed a resolution that in countries where there is no Central Bank of Issue, one should be established. Underlying this resolution is the idea that there is a close connexion between the maintenance of financial stability and a central banking organization. Already before the war several European countries had

¹ For the Indian paper currency system, see Part II, ch. vi, §§7-8.

developed a strong central system, as in England, France, Germany and Switzerland. The United States, the home of decentralized banking, adopted the new system under the Federal Reserve Act of 1913. After the war several new Central Banks have been established in countries that previously formed part of the Austrian and Russian empires, in certain of the Balkan countries, in Central and South American States and in South Africa, New Zealand and Canada,¹ and India has recently (April 1935) established a Reserve Bank. There is no uniformity regarding their constitution. Some are private banks as in Britain, America, France and India, while some are State banks as in Russia and Finland. It is, however, generally thought desirable to keep Central Banks free from political influence.

§19. **Functions of Central Banks.**—(i) The Central Bank is mainly a bankers' bank. It offers rediscounting facilities to its member-banks and thus makes credit available to them. In some countries it also serves as the custodian of the country's banking reserves, the smaller member-banks—either as a matter of convention as in England or as a matter of law as in the U.S.A. or India—keeping a certain percentage of their deposits with the Central Bank. Thus the latter is distinct from the ordinary commercial banks and its policy is directed not so much to making profits and maintaining its own solvency, as to regulating the credit machinery and maintaining the solvency of the banking system as a whole. For these reasons Central Banks do not usually allow interest on deposits and avoid direct dealings with the public, in order to avoid competition with commercial banks.

(ii) *Bankers to the Government.*—The Central Banks usually act as bankers to the Government. The receipt of revenue, Government disbursements and borrowing operations all being conducted on a large scale, influence the money market. Until recently the Indian Government conducted important foreign exchange operations in connexion with the remittance of Home charges. It is most desirable that one and the same authority should control the banking transactions on behalf of the Government as well as the money market in general. The Reserve Bank has now to do this and control both currency and credit.

(iii) *Note issue and regulation of credit.*—Since the Central Bank has to supply the market with cash or take

¹ See C. H. Kisch and W. A. Elkin, *Central Banks*, p. 2.

bills or securities off its hands, it is very desirable that it should have the monopoly of note issue. We have already examined the principal methods of regulation of note issue and seen that notes are issued against gold (or silver), Government securities or commercial bills. The withdrawal of notes, resulting in the contraction of currency, is effected by the sale of these assets in the reserve. The principal legal tender currency today in countries like England is the bank note.

(iv) *Stability of foreign exchanges.*—The Central Bank is also responsible for maintaining the stability of the external value of the currency unit. It has to arrange to buy or sell foreign exchange or gold so as to control directly the exchange rates or change its bank rate (see §20 below) so as to produce an indirect effect on the rates of foreign exchange.

(v) *Internal stability.*—One of the recognized functions of a Central Bank today is to keep the internal price level stable by a proper regulation of the volume of currency and credit, and we have already stressed the importance of this function.¹

(vi) *Other miscellaneous functions* relate to the provision of credit facilities to agriculture, trade and industry. These tasks are usually not performed directly by the Central Bank but through the member-banks.

§20. **Credit policy of Central Banks.**—The principal weapons in the hands of the Central Bank for carrying out its great responsibilities are (i) appropriate changes in its official rate of discount (bank rate), and (ii) open-market operations.

(i) *Bank rate policy.*—A Central Bank is liable to meet both external and internal drains on its reserve, and seeks to protect its reserve by raising its official rate for the discounting of bills. A rise in the bank rate is followed by other banks raising their rate of discount also, so that there is a decrease in the volume of bills presented for discount and of fresh loans. A rise in the discount rate is also followed by a rise in the rates of interest on deposits, and consequent increase in saving and decrease in spending. A high rate in the money market induces temporary investment of floating funds from abroad and thus may cause an inflow of gold. The prices of stocks and shares fall, as they are offered for sale in increasing quantity either to meet demand for payment

¹ See ch. x, §36.

or for transferring the proceeds to the more profitable discount market. Speculation is discouraged, profit margins being lowered by the rise in the bank rate. The general effect of a rise in the bank rate is to lower prices by restricting the volume of credit, by stimulating deposits of cash, and by forcing realization of goods and stocks. This general fall in prices encourages exports (since foreigners are tempted to make purchases in a cheap market) and discourages imports (since it is not profitable to sell in a falling market). In the case of a country like England, occupying a strong position in the international short-term loan market, the raising of the bank rate is very effective in preventing the outflow of gold by checking the volume of fresh loans granted to foreigners.

The lowering of the bank rate has opposite effects. It leads to a fall in the market rate, lowers the deposit rate, increases borrowing, raises the prices of commodities and securities, encourages the transfer of foreign balances abroad, contracts the exports and expands the imports. A low bank rate (e.g. in the United Kingdom, the U.S.A. and India today) generally creates easy money conditions and is made possible by a plentiful supply of money.

(ii) *Open-market operations*.—Either as an alternative to changing the bank rate or as a supplementary measure to make the bank rate policy more effective, a Central Bank may conduct what are called open-market operations. These consist in the Central Bank *directly* (i.e. over the heads of member-banks) selling and buying securities, bills and Government stock in the open market. Thus if it desires to create tight money conditions and check speculation, it will sell securities to the public for cash and thus decrease its supply in the market; and if it wishes to encourage easy money conditions, it will buy securities from the public and thus expand currency and credit and put additional funds into the market. The Reserve Bank of India has been equipped with the power of conducting such open-market operations.¹

§21. **The Bank for International Settlements**.—Since the war the need for cooperation among the leading Central Banks of the world regarding monetary policy is being increasingly felt. Such a policy is likely to be easier now that the Bank for International Settlements has been established since 1930 at Basel (under the famous Young Plan) to control the German Reparations payments. It is, however, contemplated by its statutes that the bank should

¹ See Part II, ch. vi, §19.

develop into a *Central Bank for the Central Banks* of the world. The relations between the Bank for International Settlements and the Central Banks are reciprocal. For example, the former may hold the gold deposits of the latter and vice versa. It remains to be seen how far the idea will work. The failure of the World Economic and Monetary Conference of 1933 and the division of countries into various monetary groups¹ today does not seem to justify any high hopes of international cooperation in the near future.

SUMMARY

CREDIT

Many economic transactions in modern civilized societies are based on trust or *credit*. Credit is commonly opposed to cash. Things or rights to things are transferred in exchange for a *promise* to pay in future. There are various forms of credit instruments in use, e.g. promissory notes (including Government currency and bank notes), cheques and bills of exchange. All of them serve to economize the use of the precious metals as money. The cheque system is specially effective in this connexion when associated with clearing-house arrangements. Credit is vital to large-scale transactions in commerce and industry. If properly organized, it discriminates in favour of the more competent business men and against the less competent. This is to the advantage of the community. So far as credit is used for increasing capital equipment, it may be said to stand for capital. Credit requires careful regulation; otherwise it will give rise to various evils like speculation and over-production.

BANKING

Banks are the principal managers and dispensers of credit. Their credit is mainly based on the deposits which they receive, and may take various forms such as discounting, issuing of notes, and granting loans. Ordinary commercial banks can give only short-term loans.

Industrial banks and land mortgage banks are special types of banking institutions which undertake to provide long-term finance. The tendency towards amalgamation has recently been on the increase in banking, with advantages and dangers similar to those experienced from the formation of trusts and combines in industry.

It may almost be said that branch banking is a corollary of amalgamation. An even distribution of risks and funds is its principal merit. Monopolistic control and neglect of local interests is its principal danger. Receiving of deposits of various classes such as current, fixed and savings deposits is one of the main functions of a commercial bank. Issue of notes is no longer one of the ordinary functions of such a bank.

¹ e.g. the Sterling area, the Gold bloc and the Dollar group.

'Loans create deposits.' This statement has reference to the common practice by which banks lend, i.e. by allowing the borrower to behave like a depositor. If a bank agrees to advance a loan of Rs. 10,000 to X, it usually does this by crediting the amount to the account of X, who can thereafter draw upon it by means of cheques like any ordinary depositor.

To suit different needs banks advance loans in different ways (e.g. loans on collateral security, discounting of commercial paper, overdrafts, cash credit). The prudent banker combines these different methods of investing his funds in such a manner as to secure the largest profit on his transactions while at the same time maintaining himself in a state of preparedness for meeting all reasonably calculable emergencies.

The effects of recklessness or bad management in one bank often spread far and wide, inflicting injury even on other sound banks, as well as on society in general. Different methods of regulating banks have therefore come into use (e.g. laying down a minimum proportion of cash reserves, restriction of loans to specified purposes, publicity of accounts, periodical inspection).

The *issue of bank notes* is nowadays a function of a State bank or a private bank closely associated with and controlled by the State.

For preventing the evil of an overissue of notes, some restriction on the power of issuing notes is necessary. But the restriction should not be so great as to make the system too rigid. The Bank Charter Act of 1844, which in its amended form still regulates note issue in England, errs on the side of excessive caution. It requires that all addition to notes beyond a fixed fiduciary limit must be fully backed by gold. The proportional reserve system, as opposed to the fixed fiduciary reserve system, makes the supply of notes more elastic.

The need for the establishment of *Central Banks* in the principal countries of the world is now generally recognized in order to secure financial stability. Central Banks are described as bankers' banks. They are expected to supply the credit needs of the other banks; they are the custodians of the country's banking reserves; and they see to it that these reserves do not get unduly depleted. Their policy is guided by national considerations rather than considerations of profit. They perform various banking and agency functions for Governments, and they are generally assigned the function of note issue to make their control over currency and credit effective. One of the important aims of central banking policy is to secure internal stability of prices by a regulation of the volume of currency and credit. The principal weapons in the hands of a Central Bank for carrying out its responsibilities are (i) the *bank rate policy*, and (ii) *open-market operations*. Through a high bank rate, money is rendered scarce in the market, and abundant through a low bank rate. The same ends are also achieved by the Central Bank through open-market operations, i.e. through the sale or purchase of securities: the former serves to draw off funds from the market, and the latter to put more funds into the money market.

The *Bank for International Settlements* is a kind of Central Bank for the Central Banks and is intended to facilitate international cooperation in monetary and financial matters.

CHAPTER XII

EXCHANGE : INTERNATIONAL TRADE

§1. **International trade compared with domestic trade.**—International exchange, it might be urged, is in its essence not different from the domestic exchanges which take place within a nation. Although we have got into the habit of talking of India's trade with England or Germany's trade with Russia, and so on, the bargains are not normally between one country as a whole and another, but between one individual or firm in a country with another individual or firm in a foreign country. The parties, no doubt, do not belong to the same country, but this does not alter the fact that the principles underlying the exchange are fundamentally the same as if it had occurred between people living in the same country. Both the parties to the exchange enter into it voluntarily and each believes that on the whole he gains by it. Otherwise, why should he enter into the transaction at all?

There are, however, certain features which distinguish international from domestic trade. The most important difference is that the forces of supply and demand do not operate so freely in determining international as in determining internal exchange.

Within any given country labourers move from place to place with comparative ease, and this movement helps to bring about a certain uniformity in the level of wages throughout the country. But people do not move so freely from one country to another.¹ In order to take advantage of higher wages, it would be most unusual if an Indian labourer, for instance, were to transfer himself to South America. Various things come in the way of such free movement—attachment to one's own country, difficulties of language, differences as regards legal practice and as regards social and political customs and institutions. What holds good of labour also applies to capital, though in a smaller degree.² The habit of investing abroad has grown in recent times. But even now people generally prefer to invest their money in their own country and require a special inducement to invest it

¹ See ch. vi, §8.

² See ch. vii, §11.

abroad. The result is that considerable differences may persist in profits earned by capital as between one country and another. Within the same country, on the other hand, profits tend to approximate to the same level from place to place, and from industry to industry.

Again, trade between different countries is hampered by the existence of import duties, whereas normally we do not have to pay a duty when we send commodities from one place to another within the same country.

Another complication is that different currency systems prevail in the different countries. Payments in connexion with international trade involve the conversion of one currency into another, and give rise to the special set of problems dealt with under Foreign Exchanges.¹ But the principal characteristic which makes it necessary to treat international exchange separately is the immobility of capital and labour between different countries. It may indeed happen sometimes that within the same country there may be parts of it between which there is no free flow of capital and labour. When this is the case, *economically speaking* the trade between such parts is to be explained in terms of international trade. Similarly it may happen that two countries which are politically independent may develop a system of absolutely unhampered trade and there may be none of the usual barriers—political, social, legal or linguistic—impeding the free movement of labour and capital. In this case the trade between the two countries is of the nature of internal rather than international exchange. Nations are economically foreign to one another only in proportion as hindrances exist to the free passage of capital and labour from one to the other.

§2. **Theory of comparative costs.**—Suppose there are two countries *A* and *B*. In *A*, one unit of capital and labour (productive power) will make, let us say, $10x$ or $20y$. Let us suppose that in *B*, one unit of productive power will make $10x$ or $15y$. Then if each country devotes one unit of productive power to each of the commodities *x* and *y*, the total product will be $20x$ and $35y$ ($10x+20y$ in *A* plus $10x+15y$ in *B* = $20x+35y$). But if each is to devote its efforts to the production of that commodity in which it has the greatest relative advantage, then *A* will devote its two units of productive power to making *y*, and *B* will devote two units of productive power to making *x*. The total combined product

¹ §§13-21.

in this case will be $20x+40y$, i.e. $5y$ more than before. It is therefore advantageous for both A and B that A should make only y and B should make only x , and that A should exchange some of its y for some of B 's x . The balance of advantage that emerges from this international exchange is, as we saw, $5y$ in our example. But we have yet to answer an important question. How is this $5y$ divided between A and B ? The answer to this question is that the division will be in proportion to the *intensity of reciprocal demand*. In other words, it will become a question whether B 's need for y is greater than A 's need for x . If it is greater, then A will benefit more than B from this specialization in production followed by international exchange. Clearly, however, the terms of exchange would not go beyond what each country can do by itself. For instance, taking the figures in the above example, A will not consent to part with more than $2y$ for $1x$. Because if necessary it can itself make $1x$ with the capital and labour it requires for making $2y$. B in its turn will not consent to receive less than $1\frac{1}{2}y$ in exchange for $1x$. Because with the capital and labour it requires for making $1x$ it can itself make $1\frac{1}{2}y$. The terms of the exchange will thus fluctuate between $1\frac{1}{2}y$ and $2y$ for $1x$. This is what is meant by saying that international values or terms of international exchange are determined according to the principle of *comparative cost*.

It is helpful to regard international trade as a developed form of barter. The exports of a country are the price it has to pay for its imports. Looking at the question in this manner we see at once the fallacy of regarding a decline in exports unfavourably and rejoicing when exports increase. This is one of those false mercantilist notions which appear again and again in popular arguments. A decline in exports is in itself not an evil, unless it causes a decline in imports also. If imports remain the same or increase, while exports decrease, there is nothing to be sorry for. On the contrary, we ought to congratulate ourselves that for our imports we have to pay a smaller price than before in the shape of exports.

§3. **Exports pay for imports.**—Since international trade is essentially of the nature of barter, it follows that if we import goods (and services) of a certain value from foreign countries we must in the long run export goods (and services) of an equivalent value in payment for our imports.

The words 'in the long run' must be noted carefully. Because some of the international exchanges may be on the

basis of credit and since payment is thus often postponed, it is not necessary that at any given time or in any given period there should be an exact correspondence between the value of things imported and the value of things exported. But this gap must eventually be bridged when payment of what is originally bought on credit does take place.

Similarly, when one country, or the inhabitants of one country, grant a loan to another country or its inhabitants, the exports of the former necessarily are greater *for the time* than its imports to the extent of the loan. But later on, when the interest and principal of the loan are being paid, this will make the imports of the creditor country greater in value than its exports.

There are a few exceptions to the statement that exports must (sooner or later) balance imports. Some payments may be made from one country into another for which, from the nature of the case, there can be no corresponding tangible return. The following are among the items falling under the category : payments received by students studying abroad, money which tourists take out of their country and spend in countries which they visit, money sent by people residing abroad to their families or friends in their own country, tributes or indemnities (e.g. German Reparations) exacted by one country from another.

Of the goods and services exchanged between people of different countries, not all are officially recorded. If therefore we relied only on what is officially recorded (i.e. visible exports and imports) we should be omitting many items of actual export and import : we should be omitting the invisible exports and imports. In order to prepare a complete balance sheet in respect of a country's transactions with the outside world, we must supplement the official records by the best estimates we can obtain of the so-called invisible items. By 'invisible' we simply mean 'not officially recorded'.

The following list will give an idea of the many factors which enter into a complete balance sheet of international payments : (i) merchandise; (ii) treasure; (iii) business services rendered by one country to another, e.g. transport services (which lead to payments of shipping freights, port dues), banking and financial services, insurance services; (iv) interest on loans advanced by one country to another and profits on capital invested in foreign countries; (v) Governmental expenditure in other countries in respect of diplomatic and consular services, Home charges in the case of India, Reparations; (vi) transactions in connexion with the repay-

ment of loans made by one country to another; and (vii) funds brought in by immigrants and returned emigrants, remittances by emigrants, charitable and educational donations sent from one country to another, expenses of tourists, travellers in foreign lands and of students studying abroad.

Of these, some items, e.g. (i) and (ii), are officially recorded and are therefore visible, while others like (iii) to (vii) are not recorded and are therefore 'invisible'.

§4. **The balance of trade and balance of account (of payments).**—In the light of what has been said above, the distinction between the balance of trade and balance of accounts may now be explained. When we take into consideration only the visible exports and imports, we get the concept of the 'balance of trade'. If the exports exceed the imports, we speak of a favourable balance of trade; and if the imports exceed the exports, we speak of an unfavourable or adverse balance of trade.

But we have already seen that there are besides the *visible* items many *invisible* items—on the credit or the debit side. When we take into account the invisible as well as the visible items we get an idea of the balance of accounts or balance of payments, as distinguished from the balance of trade. It is wrong to suppose that a favourable balance of trade shows that all is well with the country and that an unfavourable balance is always a matter for anxiety. England, for example, has usually an adverse visible trade balance, i.e. her imports exceed her exports, and apparently this indicates that England is a debtor country. But if we go deeper into the matter and (allow for) her various invisible exports (or credit items) such as her shipping services, the sale of her ships abroad, and the services she performs for foreigners in connexion with banking, insurance, etc., we shall find that the gap between imports and exports is considerably narrowed. We must also remember that part of her imports represents payments in connexion with British capital lent abroad.

The case of India is very different. In normal years, we have a favourable balance of trade.¹ But India is really a debtor country, as can be seen by taking into consideration her various invisible imports (or debit items) such as (i) interest on loans raised abroad; (ii) repayments of loans previously incurred; (iii) remittances abroad by European

¹ See Part II, ch. v, §16.

merchants, lawyers, Government officers in India, etc.; (iv) profits of foreign banks and insurance companies, freight charges paid to foreign shipping companies; (v) Home charges, i.e. expenditure on Government account abroad (in England) in connexion with furlough, pay, pensions of officers and stores purchased by the Government of India; and (vi) remittances to Indian students studying abroad.

During the last few years our export trade in merchandise has declined, and exports of gold from India have largely helped in adjusting our balance of payments.¹

§5. **Advantages of international trade.**—(i) International trade enables a country to obtain commodities which it could not produce at all or could produce only with great difficulty. Thus England secures tea, sugar and cotton in this manner. Similarly, any deficiency of the home supply of a commodity (e.g. food grains as in the case of England) can be met by foreign imports.

(ii) It brings about a more efficient employment of the productive forces of the world, since each country employs itself in producing those things in respect of which its capital and labour are relatively most efficient. Thus a country is enabled to obtain many commodities more cheaply than if it were to produce everything itself. The doctrine of comparative cost explains how this advantage is reaped.

(iii) International trade enables a country fully to exploit its natural resources which would remain unexploited in the absence of outlets abroad, e.g. jute, raw and manufactured, is produced in India largely for export.

(iv) International trade, by extending the size of the market, and promoting division of labour and rationalization of industry, tends to lower the costs of production.

(v) There are certain cultural and moral advantages which follow from international trade. History proves foreign commerce to have been a great instrument of civilization. The different nations come into constant contact with one another in the course of international trade, and cannot help learning from one another. Certain desirable points of character may also be developed in this manner.

(vi) International trade, according to the classical free trade school represented by Mill, is a principal guarantee of the peace of the world, as international commerce first taught nations to look upon the wealth and prosperity of other nations as the direct source of their own wealth and progress.

¹ See Part II, ch. v, §20.

Unfortunately, this belief has been apparently shattered by the war of 1914-18 which seems to show that foreign commerce emphasizes international rivalries instead of promoting world peace. Nevertheless, there is no doubt that if the habit of taking long-period views becomes more common, people will see more readily the essential truth in Mill's argument. Even now enlightened opinion is on the side of a maximum development of international exchange. Hence efforts are being made to secure the removal of tariffs, quotas and exchange restrictions, which in recent years have seriously restricted international trade.

§6. Possible disadvantages of international trade.—(i) International trade may sometimes lead to the sacrifice of the greater interest of the future to the smaller interest of the present. Certain valuable natural resources which may be limited and which require to be tapped economically may be exploited too rapidly and wastefully for purposes of export. As the American economist Carey said, a country which exports mainly raw materials may be said in a sense to export its land itself.

(ii) International trade may make a country dependent upon other countries and expose it to serious risk, if owing to war or other causes its trade abroad is cut off. This dependence is a grave matter in the case of essential requisites like food supply and means of defence.¹

(iii) International trade may seriously disturb the distribution of labour and capital in a country, especially when foreign goods are 'dumped' into it at impossibly low prices.

(iv) International trade may often result in the importation of cheap but worthless and even harmful products, the consumer not being always the best judge of his own interests.

(v) Unfettered foreign trade may adversely affect either the agricultural or the manufacturing groups of industries and thus lead to a one-sided development of the economic life of the nation. Thus England has sacrificed her agriculture and India has become predominantly agricultural. A certain degree of diversification of the national industries is to be desired both in the interests of a more stable economic life and its beneficial effects on national character.

On a balance, however, we may say without hesitation that the advantages of international trade far outweigh the

¹ See §9 (iii).

possible disadvantages and that it is quite feasible to minimize the disadvantages by a suitable regulation of foreign commerce.

§7. **Free Trade versus Protection.**—Free trade implies freedom of international trade from restrictions. It is not incompatible with the levy of low *revenue* duties either on exports or imports to meet the demands of the national exchequer. Protection, on the other hand, implies a deliberate regulation of foreign trade in order to protect home industries from foreign competition and stimulate their growth. This is usually effected by levying protective import duties, although export duties may also enter into the scheme of protection. Other methods are: (i) grant of a bounty to the home industry on the basis of production, (ii) fixing of quotas or definite amounts or proportions of the imports of a commodity from a foreign country in relation to home production (as in the case of cotton piece-goods imported into India from Japan), and (iii) trade agreements or commercial treaties on the basis of reciprocal concessions.

Today, practically the whole world has become strongly protectionist in sentiment as well as in actual commercial policy. Even England, which was until recently a passionate adherent of free trade, has gone over to the protectionist camp. The world seems to be reverting to the old mercantilist policy of the seventeenth and eighteenth centuries, when foreign trade was subjected to all sorts of restrictions. The growth of a strong feeling of economic nationalism, especially during the post-war period, the discredit into which *laissez-faire* philosophy has fallen, and the increased scramble among nations for world markets, have all resulted in the adoption of a high tariff policy, especially in order to combat the consequences of currency depreciation in foreign countries, the growth of dumping, and the world economic depression of recent years.

§8. **Arguments in favour of free trade.**—The free traders make no difference between foreign and domestic trade. Their main argument is simply a corollary from the principle of division of labour (in this case international division of labour). In their view free trade is calculated to secure '(i) the greatest mass of goods in the world as a whole, and (ii) the maximum amount of immediate comfort for each consumer'. It ensures the flow of the resources of a country into those channels where they can be employed to the greatest advantage. It thus prevents dissipation of these resources, and their artificial diversion to relatively unprofit-

able industries which results from protection. The real rewards of both capital and labour tend to be greater under free trade than under protection.

Free traders also hold that tariff wars lead to military wars and thus protection is viewed as a menace to world peace.¹

§9. **The case for protection.**—(i) *Infant industries argument.*—One of the principal objections to the doctrine of free trade urged by the protectionists is that, while laying emphasis on the well-being of the world as a whole, it tends to throw into the background the idea of the nation as a unit with interests often at variance with those of other nations. A free exchange of goods may be positively harmful to economically backward countries like India, preventing them from ever producing those commodities in respect of which they may have the greatest *potential* advantages. The actual superiority of other countries is often to be attributed merely to the earlier start they have made, and is not always based on superior natural advantages. A country may enjoy very great natural advantages but may be unable to exploit them for lack of skill, experience or capitalistic enterprise, or of well-organized transport and credit, which are essential for modern industrial development. In order that all these deficiencies should be made good, industries may have to be protected from foreign competition, because otherwise they will not be able to make a beginning and continue to exist for a sufficiently long time to develop all the elements of efficiency without which competition on equal terms with foreign goods would be impossible.

All these considerations have gained additional weight from the fact that competition of established industries in foreign countries has in these modern days become particularly intense owing to the organization of industry in the form of powerful combinations, the recent improvements in transport, low freights, the system of export bounties, etc. The case for providing artificial props to young industries ('the crutches to teach the new manufacturers to walk' as Colbert called protective duties) in industrially backward countries like India, is thus very strong. When these industries develop under the stimulus of protection, the hope is that they will eventually be able to dispense with all artificial aids, and that the loss entailed (in the form of high prices to consumers) during the initial stages of development

¹ See §5 (vi).

will be more than covered by the ultimate advantage to the nation.

(ii) *Diversification of industry*.—As already mentioned above, the development of varied forms of industry is in itself a desirable goal as it affords a field for the employment of different grades of skill, and exercises a salutary influence on national character. A country with a predominantly agricultural population tends to be on the whole unprogressive and unduly conservative in outlook. Moreover, the economic life of a mainly agricultural country is apt to be excessively unstable, and in a country like India the vagaries of the monsoon make the instability all the greater, exposing the country from time to time to the danger of famines. The possession of diverse industries would make its economic life broad-based and relatively more stable.

(iii) *National self-sufficiency*.—Protection is also advocated on the ground that it can be used for making a country economically self-sufficient, especially in regard to key industries (e.g. steel, iron, food-producing industries) which are indispensable for the prosperity of other industries and national safety. Dependence upon foreign countries in these matters is most undesirable as the war emphatically showed in the case of both England and India. It should, however, be remembered that economically it is better for all the nations to widen the scope of international commerce as far as possible instead of restricting it by protection or otherwise.¹ Self-sufficiency is in itself not the ideally desirable thing that people often take it to be. A hermit nation is not any more worthy of admiration than a hermit individual. Of course, economic considerations have sometimes to yield to other considerations. In the interests of national safety, as argued above, a nation may have to produce certain things itself irrespective of cost instead of following the economically profitable course of buying them from foreign nations. But it is not the part of wisdom for a nation to organize its normal economic life on a war-time basis.

(iv) *Other arguments*.—The policy of protection is also defended by a host of other arguments. Some of these are, however, clearly fallacious, although they are frequently urged. It is, for example, often asserted that protection increases employment. This can be disproved on theoretical grounds, as well as by an appeal to facts. In so far as protection causes a diversion of the nation's energies to

¹ See §5.

production for which it is not fitted by nature, it must lead to a shrinkage of the national dividend, which after all is the ultimate source out of which employment can be provided. For a similar reason it is fallacious to argue that protection raises the scale of wages. This fallacy is often due to failure to distinguish between nominal and real wages. Wages may be nominally high. But prices are also likely to be high in a protectionist country, and the labourers may after all not be better off than in the free trade countries. A judicial and fair-minded examination of the actual conditions in free trade and protectionist countries does not support the notion that protection affords any special security against unemployment or that it guarantees high wages.

§10. **Limitations of protection.**—Protectionists often make light of the sacrifice involved in protective duties, by airily asserting that after all it is the foreigner who pays the duties. This shows deplorable lack of logic. If the home consumer does not bear the burden of the duties, this means that there is no rise in the price of the article taxed. But in this case the protective duty has failed to protect. The whole difficulty of the home producer is that owing to foreign competition he has to fix his prices at a lower level than is profitable. He asks for a protective duty because through it he wishes to compel the foreign producer to quote a higher price.

Protection, if it is discriminate, may ultimately increase the wealth and taxable capacity of the people, and the public revenues may benefit. But protectionists sometimes talk as if this must be the immediate effect of protection, which again is illogical. Because if protection is successful, it must progressively diminish foreign imports, making the yield of the protective duties less and less. Whatever the other advantages of protection may be, a direct and immediate increase of public revenues is not an advantage to be confidently expected.

From all this discussion it should have been clear that great care and caution is necessary in the application of the remedy of protection. If blindly applied it will prop up a host of weak and feeble industries, misdirecting the flow of a country's capital and labour into unsuitable channels, and by removing the healthy stimulus of foreign competition it will encourage inefficiency in production.

Another great danger connected with protectionism is that of political corruption which may be used by a powerful industry for securing protection for itself, or its continuance

even after it has ceased to be necessary. Open public inquiries into claims by the different industries for protection by an impartial tribunal on which all interests—especially those who are going to be hit directly if the protection asked for is granted—may help to mitigate the evil somewhat. But nobody should imagine that the danger is unreal or negligible.

Protection can be legitimately given in certain special circumstances, e.g. for safeguarding a country against dumping. Less commonly it is also advocated for retaliatory purposes for securing removal or reduction of import duties levied by foreign countries and for regulating foreign trade on a reciprocity basis. We may here explain briefly what is meant by dumping.

§11. **Dumping.**—People often refer to any kind of severe competition from abroad as dumping. But in its more accepted and technical sense, it means the sale of imported goods at a price lower than the prevailing market price in the country of production or origin. This may be due to accidental over-production or the deliberate action of strongly monopolized foreign industries. Generally these industries are protected in their own country. They find it advantageous to produce on a large scale in order that their costs may be reduced. But only a limited amount of the total production is sold at very high prices in the sheltered home market, and the rest is disposed of in foreign markets at very low prices. In the post-war period, specially marked by a scramble among nations for foreign markets, dumping has been extensively practised. Currency or exchange depreciation, which temporarily stimulates the exports of a country, has also come into prominence as a method deliberately adopted by certain nations in the interests of their export trade. India has recently suffered at the hands of Japan in both these ways.

§12. **Drawbacks of protection.**—The safest approach to protection is to consider it as at best a necessary evil—as a kind of purgatory through which a nation has to pass before reaching the heaven of full industrial development and economic prosperity. Unless it is properly regulated, both as regards the selection of suitable industries to be protected and the rate and period of protection, it will prove unduly costly and will bring more harm than good. Protection in other words should be *discriminate*.¹

¹ See Part II, ch. iv, §4, for discriminate protection in India.

Under certain circumstances a policy of protection may be necessary in spite of its disadvantages. But that it is attended with serious disadvantages must be clearly recognized, so that instead of looking upon it as an unfailing and irreproachable remedy for industrial backwardness, we should accept it with due caution and becoming hesitation.

In the first place, protection will necessarily increase the cost of living and the consumers will suffer. Industries which are not protected will also suffer owing to increase of expenses, e.g. wages will tend to be higher because of the increased cost of living. Also the articles receiving protection may be such as are in regular use in other industries. The consideration that protection means increased cost of living should have special weight in India where the average consumer is extremely poor.

FOREIGN EXCHANGES

§13. Definition.—By 'foreign exchanges' we understand the system by which the obligations, arising out of commerce and other international dealings are discharged and the mechanism by which the money of one country is converted for this purpose into the money of another country through bills of exchange, drafts, etc.

§14. How is money remitted from one country to another?—There is no essential difference between the mechanism of internal and international trade except that in international trade the creditor must ultimately be paid in his own money by his foreign debtor.

Let us take a simple illustration. Let us suppose that a Bombay merchant *A* has sold 100 bales of cotton of the aggregate value of Rs. 10,000 valued at £750 at the current rate of exchange (1s. 6d. per rupee, i.e. £1=Rs. 13-5-4) to a merchant in London, *B*. Similarly, let us assume that another London merchant *C* has shipped cotton piece-goods of the same value (£750) to a Bombay merchant *D*. Now it is obvious that instead of *B* sending gold to *A* in India, and *D* in India similarly remitting gold to *C* in London, it would be much more economical, safer and more convenient, if an arrangement could be made under which *D* in India paid to *A* living in the same country, and similarly *B* in England paid to *C* resident in the same country. Actually, however, it is not easy for the two parties *D* and *A* in Bombay and *B* and *C* in London directly to meet each other and settle with each other. The amounts involved

in the several transactions may not be identical, the period for which credit is allowed may not be the same, and they may not possess adequate knowledge regarding each other's standing. A system has, however, developed under which in each country, through banks and exchange dealers, the exporters can arrange to receive payments for the goods exported and the importers to remit payment abroad for goods imported. Thus our Bombay exporter *A* would walk into the office of an exchange bank and sell his export bill drawn in sterling upon his debtor *B* and get the equivalent amount of rupees at the current rate of exchange,¹ the necessary deductions being made for interest on the bill during its currency, etc. The bank will then send this bill to its branch in London, where on the due date the money will be collected from *B*. In the same way, the London exporter *C* may sell his export bill drawn upon *D* in Bombay to a London bank, which sends it to its branch in Bombay for collection; or our Bombay importer *D* may alternatively buy a draft or T. T. (Telegraphic Transfer) in case of urgency from an exchange bank in Bombay, and send it to his creditor *C* in London, just as the London importer *B* may buy a draft on Bombay from a London bank and send it to his creditor *A* in Bombay. Thus a large volume of international credits and debits is settled by export bills, drafts and telegraphic transfers without any gold being actually exported or imported.

§15. **The mint par of exchange.**—Now the next question is, at what rates are the export bills, drafts and telegraphic transfers sold and bought by banks? The rate of exchange means the price of the different foreign currencies in terms of the local currency. Thus speaking of the rate of exchange in Bombay, we say that Re. 1 = 1s. 6d. or 1s. 6½d., or 1s. 5½d. as the case may be. This indicates the relation at any given time between our rupee (local currency) and the British pound sterling. According to the rate that may be current, the bank will determine what it will pay for an export bill purchased by it or what it will charge for a draft or telegraphic transfer.

Now these rates (as in the case of commodity markets) vary according to the supply of foreign exchange (bills or drafts) and the demand for it, which in their turn are governed by the volume of the international credit and debit items respectively of a country. When two countries have

¹ Sometimes he may also sell forward to the bank, i.e. in advance of his goods being exported.

the *same* metallic standard (Gold Standard or Silver Standard) we can speak of the *mint par of exchange* between them, which is the fixed intrinsic value of the currency unit of one country expressed in terms of the currency of another which has the same metal as its standard of value. The value of the currency unit is taken to depend on the quantity of pure metal that it contains as fixed by law, and the mint par tells us how much of the other country's currency contains the identical quantity of the same pure metal. Thus during the pre-war period or the period from 1925-31, the mint par of exchange between London and New York was £1=\$4·8665, i.e. the sovereign contained as much fine gold (113·0016 grains) as 4·86 dollars (each dollar containing 23·22 grains of fine gold). The mint part of exchange thus supplies the basis of the rate of exchanges between two countries with the same metallic standard. Obviously there is no fixed mint par of exchange between a Gold Standard country like England (before 1931) and a Silver Standard country like India (before 1893). Here the foreign exchange rates are determined by the relative market values of silver and gold, which are constantly fluctuating.

§16. *Specie (gold) points.*—When two countries are on an *effective* gold standard, the exchange between them fluctuates only within narrow limits. The student should remember that under an *effective* gold standard, the currency authority sees to it that gold is available to anybody who asks for it *at one uniform rate*, in return for legal tender. Thus in pre-war England, legal tender money (e.g. Bank of England notes) could always be converted into gold at the fixed rate of 113·00016 grains of fine gold for £1. The same amount of gold could also be had in the United States for \$4·8665 in legal tender money. Thus before the war the gold points for London in relation to New York were \$4·8365 (export point) and \$4·8965 (import point), the cost of remitting specie being about \$0·03 (either way), and the mint par of exchange being \$4·8665 to the pound. If for a bill on New York, less than \$4·8365 was obtainable for £1, the would-be London buyer (i.e. importer) of the bill would prefer to turn his £1 into gold and ship it to New York, where it would fetch \$4·8665 (mint par). That is, for an outlay of £1 *plus* \$0·03 he gets a command in New York over \$4·8665; or which comes to the same thing, for £1 he gets \$4·8365 in New York (\$0·03 being the cost of sending £1 worth of gold to New York). For a similar reason, a would-be London seller (i.e. exporter) of a New York bill would not offer more

than \$4.8965 for £1 in London, because it would be less expensive for him to receive \$4.8665 worth of gold from his debtor which would fetch £1 in London. The total outlay in this case would be not more than \$4.8665 + 0.03 (i.e. the cost of importing gold to London) = \$4.8965. These gold points are determined, as hinted above, mainly by the cost of moving gold in either direction between the two countries concerned. As this cost (packing, freight, insurance charges, commission, interest, etc.) is very small, the deviations of the market exchange rates from the mint parity are also very small. Exchange is said to be at the *gold or specie export point*, when it is cheaper to ship gold to pay foreign creditors than to buy bills on a foreign centre from a bank. Similarly, exchange is said to be at the *gold or specie import point*, when it is cheaper for a creditor to send for specie (gold) from abroad than accept a lower price (in his currency) for his export bill. It is obvious that exchange will reach the outgoing specie export point when the international debits exceed the credits, and similarly it will reach the incoming specie or gold import point, when the credits exceed the debits in value.

§17. **Favourable and unfavourable exchange.**—When the international debits of a country exceed its credits, the rate of exchange, i.e. the local price of the export bill, will rise above mint par (exchange will be at a premium), since the supply of these bills will fall short of the demand for them. Exchange is then said to be unfavourable to the debtor country, as more of local currency must be paid for a certain amount of foreign money; or, what amounts to the same thing, less foreign currency will be available for a given amount of local currency. It is also considered unfavourable because it may indicate the need for exporting gold from the country to correct the adverse balance of accounts. Exchange in such a case is obviously unfavourable to the importer, who has to pay more in terms of his own currency. But for the same reason it is favourable to the exporter who receives more of the local currency. Thus if the rupee-sterling exchange is 1s. 4d. rather than 1s. 6d., it is favourable to the Indian exporter, since he gets Rs. 15 for £1 worth of goods sold abroad. But it is adverse to the importer since he has to pay Rs. 15 for £1 worth of goods imported; whereas he would have to pay only Rs. 13-5-4 if the exchange were 1s. 6d. In this way the advantages to exporters are counteracted by the disadvantages to importers, and it cannot be said that an 'unfavourable' exchange is necessarily in-

jurious and a 'favourable' exchange necessarily beneficial to the country as a whole.

When the credits exceed the debits, the rate of exchange will fall below mint par in terms of local currency (exchange will be at a discount), since the supply of export bills is larger than the demand for them. Exchange in this case is said to be favourable to the creditor country, since less of the local currency needs to be paid for foreign currency (or what amounts to the same thing, more foreign currency is available for a given amount of local currency). It is also favourable in the sense that it may cause an inflow of gold from abroad for liquidating the favourable balance of accounts. Exchange in this case is obviously favourable to the importer since he has to pay less of his currency, but for the same reason it is unfavourable to the exporter who receives less value in terms of his own currency. Thus if the rupee-sterling exchange is 1s. 6d. per rupee instead of 1s. 4d., it is favourable to the importer, who now pays only Rs. 13-5-4 for £1 worth of goods (instead of Rs. 15), but is unfavourable to the exporter who receives less than before for his exports.

The terms 'favourable' or 'unfavourable' are thus somewhat misleading. In the course of international trade sometimes we are bound to have a temporary excess of exports and at other times an excess of imports. In the former case exchange will tend to be favourable, and in the latter case, unfavourable. There is generally speaking no occasion for rejoicings or regrets in all this. The terms favourable and unfavourable are reminiscent of the mercantilist way of thinking, which is not our present way. The mercantilist policy welcomed an excess of exports over imports because this showed that the nation was selling more than it was buying, and this was regarded as a very desirable state of things. It also led to an inflow of gold into the country, and the mercantilists attached great importance to gold.

§18. **Different classes of exchange rates.**—The rates quoted at any time for foreign exchanges vary to some extent according to the convenience offered by the various forms of remittance. (i) Thus if *immediate* payment is required we can buy (at a somewhat higher price than ordinary bills) *telegraphic transfers* (T. T.) or *cables*. Other things being the same, the *telegraphic transfer* (or *cable*) *rate* is the highest or dearest rate and the *long rate*¹ the cheapest rate

¹ See (iv).

(in local currency), since there is no waiting required in the former case (and therefore no interest is lost and no risk involved in waiting is incurred). For a consideration, we can get an exchange bank to telegraph their agents at the foreign centre, so that payment is effected at once to the desired parties. (ii) *Sight rates* [*Demand Draft* (D.D.) or *cheque rates*] refer to drafts or bills drawn on demand and bills having only three days to run before maturity. (iii) *Short sight rates* are quoted for bills having up to ten days to run before they fall due for payment. (iv) *The long exchange* is the rate quoted for bills having three months or more to run.

§19. **Modes of exchange quotations.**—Unfortunately, there is no uniform mode of exchange quotations followed by all countries, and thus a great deal of unnecessary confusion is caused, especially when the expressions 'rising' and 'falling exchanges' are used. There are two principal modes of exchange quotations: (i) One method is to take the local currency as a fixed unit. Thus as between the rupee and sterling, the rupee is taken as fixed and sterling as variable and we say, e.g. that the rupee is equal to 1s. 6d. (or more or less in sterling). We might as well have said that £1 = Rs. 13-5-4 (or more or less rupees). It is simply a matter of convention that the first method of quoting is adopted. (ii) In quoting the exchange with Japan, according to the established convention, the foreign currency is taken as fixed, the unit adopted being 100 yens, and we say that 100 yens is equal to so many rupees (Rs. 78 on 21 May 1936) and to so many more or less rupees according to the exchange fluctuations between India and Japan. The exchange in India on New York also is expressed as \$100 equal to so many rupees (Rs. 267 on 21 May 1936). In America, this second method is consistently followed. The foreign currency unit is kept fixed and is always expressed in terms of local currency (i.e. in dollars). Apart from the merit of consistency, this plan makes for the proper use and understanding of the expressions 'exchange at a premium' and 'exchange at a discount'.

§20. **Purchasing power parity.**—In the pre-war period, as most of the important trading nations of the world were on an effective Gold Standard, fluctuations in exchanges between them were restricted to a narrow range on either side of the mint par of exchange. Many countries are not on a Gold Standard now, and more will probably be forced to abandon it, because those that are sticking to the Gold Standard find themselves faced with exceptional difficulties in the

competitive struggle for world markets and in lifting themselves out of the present economic depression. In these circumstances it is no longer possible to explain exchange fluctuations with reference to mint parity. A substitute has however been found in the new *purchasing power parity theory* associated with the name of the Swedish economist Cassel. According to this theory the fundamental factor, which in the long run determines the rate of exchange between any two countries, 'is not the relative amount bought and sold across the national frontiers in a given period (i.e. the trade balance), but it is the price levels in these countries which are the cause of these trade movements.'¹ The old mint parity itself may be said to have measured the relative purchasing powers of the various Gold Currency Standards, since gold, owing to its free international movement, tended to acquire the same value all over the Gold Standard area. If, that is to say, the pound sterling in the pre-war period was equal to \$4.8665, this was because the pound on the one hand and \$4.8665 on the other, had the same gold value. Their purchasing power over gold was identical and this gold in its turn purchased the same quantity of goods and services in all the Gold Standard countries. But with the advent of inconvertible Paper (Currency) Standards during the war and the varying degrees of inflation which occurred in the different countries, there was a greater rise in the general price level in some countries than in others. The purchasing power of these several monetary units fell more in some countries and less in others, and the fluctuations in the rates of exchange became very violent. Cut adrift from the old mint parity, they appeared to be entirely arbitrary. In the old days we could say that exchange fluctuations were restrained by the mint parity. In terms of the new doctrine we now say that the determining influence is the respective purchasing powers of the various currencies in terms of goods and services, or rather that this regulating influence of relative prices is and has always been operative; only, in the old days, we were content to state the purchasing power parity of currencies with reference to gold directly and with reference to goods and services only by implication and inference. The theory of purchasing power parity may be explained in the words of Dr Cassel himself. 'Given a normal freedom of trade between two countries, A and B, a

¹ See T. E. Gregory, *Foreign Exchanges before, during and after the War*, p. 80.

rate of exchange will establish itself between them, and this rate will, smaller fluctuations apart, remain unaltered as long as no alteration in the purchasing power of either currency is made and no special hindrances are imposed upon trade. But as soon as inflation takes place in the money of *A*, and the purchasing power of this money is, therefore, diminished, the value of the *A*-money in *B* must necessarily be reduced in the same proportion. And if the *B*-money is inflated and its purchasing power is lowered, the valuation of *A*-money in *B* will clearly increase in the same proportion. If, for example, the inflation in *A* has been in the proportion of 320 to 100, and the inflation in *B* has been in the proportion of 240 to 100, the new rate of exchange will be three-fourths of the old (say mint par) rate. Hence the following rule: When two currencies have been inflated, the new normal rate of exchange will be equal to the old (mint parity) rate multiplied by the quotient between the degrees of inflation of both countries. There will of course always be fluctuations from this new normal rate, and in a period of transition these fluctuations are rather apt to be wide. But the rate calculated in the way indicated must be regarded as the *new parity* between the currencies. This parity may be called the purchasing power parity, as it is determined by the quotient of the purchasing powers of the different currencies.¹

The following illustration² makes the idea quite clear. Suppose that as compared with 1913, which is taken as the base year, prices in the United Kingdom have risen to an index of 150 and that French prices have risen to an index of 300. If the pre-war rate of exchange were 25 francs to the pound, the new normal will be 50 francs to the pound. Thus:

$$\begin{aligned}
 300 \text{ present francs} &= 100 \text{ pre-war francs} \\
 &= 4 \text{ pre-war pounds} \\
 &= 6 \text{ present pounds} \\
 50 \text{ present francs} &= 1 \text{ present pound} = \text{Purchasing} \\
 & \hspace{10em} \text{Power Parity.}
 \end{aligned}$$

If the actual exchange rate differs from the purchasing power parity thus arrived at, then we are justified in inferring that equilibrium is not established and that, in the course of

¹ G. Cassel, *Money and Foreign Exchange after 1914*, p. 140.

² See D. T. Jack, *The Restoration of European Currencies*, pp. 15-16.

time, forces will come into play to bring the actual exchange rate and the purchasing power parity closer together.

Suppose in the above example, the actual exchange between the franc and sterling does not coincide with the calculated parity and that the pound instead of being quoted at 50 francs, is quoted at 55 francs. In that case, French products will be cheap to British purchasers and British goods will be dear to French purchasers. A British merchant by spending £100 could obtain 5,500 francs, and with that sum in francs he could buy French goods, which when sold in England, could fetch £110. Conversely a French merchant could only get £100 for 5,500 francs and for that sum would merely be able to purchase British goods to the value of 5,000 francs. British imports from France would thus receive a stimulus and British exports would be checked. The increased demand for francs arising in this manner would raise the value of the French currency until the exchange settled at about 50 francs.

§21. **Limitations of the doctrine.**—There are various difficulties in applying the doctrine in practice. In the first place, the only way of measuring price levels in the different countries is by using index numbers, and index numbers are by no means accurate and infallible guides and might easily lead one astray. Special caution is necessary in using them for the purpose of comparing the range of price levels in two or more countries over a particular period, because the figures are compiled in different ways in different countries. Moreover, the basic year selected may not be equally suitable in all the cases concerned. For example, there may have been some local peculiarity in the circumstances of the basic year for a particular set of index numbers, or the character of the production may have changed during the period in one or more of the countries. As regards the statistical employment of the doctrine of purchasing power parity, the employment of index numbers implies the important assumption that changes in the prices of goods entering international trade have been followed by similar changes in the prices of all other goods. As J. M. Keynes has put it: 'The theory does not provide a simple or ready-made measure of the "true" value of the exchanges. When it is restricted to foreign-trade goods, it is little better than a truism. When it is not so restricted, the conception of purchasing power parity becomes much more interesting, but it is no longer an accurate forecaster of the course of the foreign exchanges.' The theory can supply only a very approximate guidance, and

its practical utility is of a strictly limited character. It indicates the limits for the fluctuations of foreign exchanges, but not in the precise manner that was possible when the Gold Standard was in general use.

SUMMARY

International trade results mostly from individual voluntary bargains entered into by people resident in one country with people resident in other countries. Problems of international trade have to be treated separately from problems of internal exchange because labour and capital do not move freely from one country to another as they do from place to place in the same country. The existence of tariffs and the fact that the currency systems of different countries vary also raise special questions which have not to be faced in internal exchanges. The character and the terms of international exchange are determined in accordance with the principle of comparative cost. Nations engage their capital and labour in those industries with regard to which they have the highest relative advantage over other nations. More wealth is thus produced and becomes available to the countries dealing with one another in the course of international commerce. However, although all derive a benefit, the benefit is not uniform. The proportion in which the benefit of international trade is distributed among the parties depends on their relative intensity of demand for each other's goods.

'Exports pay for imports.' This proposition is subject to the following explanations:

(i) Sometimes imports may be greater than exports, because payment is postponed.

(ii) International loans *for the time* tend to increase the imports of the borrowing country without an immediate equivalent increase of exports.

(iii) When the process of repayment begins the position is reversed, and the borrowing country's exports tend to be in excess of its imports.

(iv) Under exports and imports, all items—*visible and invisible*—officially recorded or not, are to be included.

International trade brings within our reach utilities not otherwise attainable, ensures the most efficient employment of the productive resources of the world and the full exploitation of natural resources, makes production more economic by enlarging its scale, and is one of the most potent instruments for the spread of culture and civilization. Properly appreciated it ought also to act as a powerful preventive of international warfare.

On the other hand, it may lead to too rapid an exhaustion of the natural resources of a country, and endanger national security by fostering a habit of dependence on other nations for essential requisites. It may subject a country to violent economic dislocation due to dumping. It may lead to the importation of shoddy or harmful articles. And finally it may cause economic development to be too one-sided. These evils, however, can largely be prevented by the regulation of international commerce, and the presumption is in favour of promoting its utmost expansion. This general attitude is not inconsistent with the policy of *discriminate pro-*

tection. Some departure from free trade or protection is justifiable on certain special economic or political grounds, e.g. (i) for the temporary protection of infant industries, (ii) for securing a certain amount of diversification of industry, (iii) for the development of important key industries, and (iv) as a temporary remedy against dumping. (v) Protection is also sometimes advocated as a negotiatory factor or an instrument of retaliation. It is, however, risky to engage in tariff wars.

Protection is a remedy which is not to be applied light-heartedly but with due care and caution. It increases the cost of living and may cause a shrinkage of the public revenues. It should not be used so as to encourage inefficiency in production, and steps should be taken to minimize one of the greatest evils associated with it, namely, political corruption.

FOREIGN EXCHANGES

By foreign exchanges we understand the system by which international obligations arising in the course of trade and other transactions are discharged. This is mainly done through bills and other instruments of exchange on foreign centres, and the theory of foreign exchange explains the laws governing the value of these bills and instruments, i.e. the value of one national currency in terms of other national currencies. So long as the principal currencies of the world were on a gold basis these relative values depended very closely on the amount of gold which the currency unit of each country could be converted into. Fluctuations of exchanges depended mainly on the cost of sending gold as compared to the cost of remitting money in the form of a bill of exchange. Now that the Gold Standard has been largely abandoned, the limits of fluctuations in foreign exchanges, formerly indicated by the *gold points*, have become less easily calculable. In terms of the doctrine of *purchasing power parity* we have now to be content with saying that at any given time the rates of exchange will tend to be such that at those rates the internal and external purchasing power of any currency will be the same. In order to make calculations on this basis we have necessarily to employ index numbers which, however, can give us only approximate indications and not precise information as to the limits within which exchanges will fluctuate. These limits again are liable to change from time to time with changes in the purchasing power of the respective currencies. When the Gold Standard was generally prevalent, the gold value of every currency unit was definitely and unalterably fixed. Now we have to fall back on the power of each currency to purchase commodities and services, and this is not fixed. The centre round which the foreign exchanges will move will thus be constantly shifting.

The terms '*favourable*' and '*unfavourable*' exchange are harmless enough if they are stripped of their mercantilist associations. The value of one's currency is likely to rise and fall in terms of other currencies in accordance with changes in supply and demand or temporary excess of exports or imports. From a banking point of view, however, it may sometimes be desirable to correct an unfavourable exchange if there is a danger of its causing so much gold to leave the country as seriously to deplete the banking reserves, bringing about too great a contraction of credit.

The price of bills and other instruments of exchange nominally of the same amount varies in accordance with various conditions such as their period of maturity, etc.

All countries do not adopt the same uniform *method of quoting exchanges*. In some cases the local currency unit is taken as fixed and the foreign currency units as the variable. In other cases the reverse process is adopted. For various reasons it is better to follow the second method.

CHAPTER XIII

DISTRIBUTION : RENT

§1. **The national dividend theory of distribution of wealth.**—Before embarking upon a detailed discussion of the theory and problems of distribution it is convenient to give a brief preliminary view of distribution of wealth.

Distribution of wealth, as we know, means the apportionment of the aggregate of goods and services, among the owners of the four factors of production who have collaborated in the process of their production. The study of distribution involves the consideration of the following three main questions :

(i) How much is there to be distributed?

(ii) Among what factors is the joint product to be divided?

(iii) What determines the share of each factor?

In what he calls the national dividend theory, Marshall furnishes a succinct answer to all these three questions on the following lines.¹

§2. **How much is there to be distributed?**—‘The Labour and the Capital of a country acting on its natural resources produce annually a certain *net* aggregate of commodities, material and immaterial, including services of all kinds. This is the true annual income or revenue of the country or the National Dividend.’ The national dividend is thus the heap or pool of goods and services of every kind produced annually in the country. Into this pool, we may imagine, are thrown the contributions of all the productive agents in society. The national dividend can be measured by the money value of the gross produce of society, from which are to be deducted (i) the value of the raw and half-finished commodities used, and (ii) the replacement fund necessary for repairing and replacing plant and machinery. The need for making this allowance is indicated by the word ‘net’ in Marshall’s statement. The net income due on account of foreign investments must be reckoned in as an addition to the national dividend. Its net aggregate amount determines what is available for distribution and sets a limit to the shares received by the various agents of production.

¹ Marshall, *Economics of Industry*, pp. 252-3.

§3. **Among what factors is the joint product to be divided?**—'The National Dividend is at once the aggregate net product of, and the sole source of payment for, all the agents of production within the country. It is divided up into the earnings of labour; interest of capital; producer's surplus or rent of land' and lastly the profit of business enterprise. 'It constitutes the whole of them, and the whole of it is distributed among them; the larger it is, the larger, other things being equal, will be the share of each of them.' It should be noted that the *problem of distribution is envisaged here as one of functional distribution and not of personal distribution*. That is, we have to explain the four main streams into which the national dividend flows, reaching the four main social groups of labourers, capitalists, landlords and entrepreneurs. It is not possible to ascertain and explain the income that accrues to each man, woman and child. Individuals are aggregated into appropriate classes or groups corresponding to the four factors of production.

§4. **What determines the share of each factor?**—This last is the most fundamental and controversial problem. Marshall's general answer to this question is as follows :

'It (the national dividend) is distributed among them (i.e. the agents of production), speaking generally, in proportion to the need which people have for their several services, i.e. not the *total* need, but the *marginal* need. By this is meant the need at that point, at which people are indifferent whether they purchase a little more of the services (or fruits of the services) of one agent, or devote their further resources to purchasing the services (or the fruits of the services) of other agents. Other things being equal, each agent is likely to increase the faster, the larger the share which it gets, unless indeed it is not capable of being increased at all (e.g. land). But every such increase will do something towards filling up the more urgent needs for that agent; and will thus lessen the marginal need for it, and lower the price at which it can find a market. That is to say, an increase in the proportionate share, or rate of remuneration of every agent is likely to bring into play forces, that will reduce that share, and leave a larger proportionate share of the dividend to be shared among others.'

Each factor of production thus draws from the national dividend a reward in the measure of its respective marginal efficiency, allowing for the possibility, within certain limits, of substitution of one factor for another. To quote Marshall once again: 'Every agent of production, land, machinery,

skilled labour, unskilled labour, etc., tends to be applied in production as far as it profitably can be. If employers and other business men, think that they can get a better result by using a little more of any one agent they will do so.'

The national dividend theory of distribution is thus an application of the general theory of value to the problems of distribution. The shares of the factors of production are regarded as the prices paid for their (marginal) services determined by demand in relation to supply as in the case of the values of ordinary commodities. Nevertheless we cannot identify the theory of distribution with the general theory of value. On the demand side the analogy appears to be complete. The price paid to an agent of production is determined by its marginal utility or service as in the case of ordinary commodities. But there are certain peculiarities on the supply side. For example, one agent of production (land) has no supply price, in the sense that its supply is fixed and is not therefore directly affected by changes in its share (rent). Again, the supply prices of the other factors of production, especially of labour, cannot be calculated as precisely as the supply prices (cost of production) of commodities. It is, therefore, necessary to study the theory of distribution separately, instead of disposing of it by stating that it is just another illustration of the general theory of value.

§5. Nature of distribution of wealth.—We have said that the aggregate of goods and services is divided among the various factors of production. In actual practice, however, rents, wages, interest and profits are ordinarily paid in the form of money. But then the money merely represents a certain claim on the goods and services which we can purchase with it. So that our proposition stands; its essential truth is not affected by the intervention of money. Moreover, we know that sometimes payment is made in kind for the various kinds of effort required for the production of wealth. For example, labourers may get their wages partly or wholly in the form of grain, clothes, etc. Here the Indian student will naturally be reminded of the practice, still prevalent to some extent in this country, by which the different village servants and artisans are assigned a certain proportion of the produce raised in the village.¹

We might as well deal here with another little difficulty. Some of the payments representing the shares of the various factors of production are paid *before* the process of production

¹ See Part II, ch. ii, §§3-4.

is complete. How then can we say that the different shares come out of the goods and services produced by the cooperation of the four agents of production? This objection, however, is superficial. Wages, for example, are no doubt paid in advance. But in order that the labourers should be *continuously* employed and paid, the employer must be able to put the goods produced by the help of the labourers on the market and sell them profitably. If this cannot be done, he will sooner or later close down his establishment and dismiss the workers. In this sense the real source of the wages is the wealth produced by the cooperation of labour. What holds good of wages also holds good of the other shares or kinds of income, namely, rent, interest and profits. They are all derived, let us repeat, from the aggregate of goods and services brought into existence by the combined effort of those who provide land, labour, capital and organizing ability.

It is obvious that the shares allotted to these agents of production are not equal. They depend on a series of bargains which the organizer or employer (who takes the initiative and is the most active of all the agents of production) strikes with the other three agents of production. The bargains are freely entered into by the parties concerned and are not forced on them by some outside power like the Government. What determines the terms of these bargains and what determines the profit which the employer himself earns? These are the questions which we have to deal with. In other words, we have to examine the forces and the causes underlying rent, interest, wages and profits.

× §6. **Private property as the basis of distribution.**—Before discussing more in detail each of these four kinds of income it will be convenient to study the institution of private property, which may be regarded as the basis of the existing system of distribution. It underlies the whole of our present scheme of distribution of wealth. It is the mainspring of modern economic life and the *bête noire* of the socialist, who regards it as the prime cause of whatever is irrational and unjust in the present system of distribution.

§7. **Evolution of private property.**—In the earliest stages of civilization there was of course neither communal nor private property, as men lived from hand to mouth. The idea of group property arose gradually when, for example, packs of savage men came to regard certain preserves as their own. The earliest forms of private property were probably certain moveable objects like personal ornaments and

weapons which were looked upon as an extension of personality. Domestication of animals in the pastoral stage led to an extension of private property in herds or flocks and even in women, children and slaves, who were now required to look after the cattle. The land or pastures belonged to the group under tribal customs. Private property had its origin in 'user' and 'seizure' but had a social sanction because by encouraging thrift and energy in the individual it ultimately led to group welfare.¹

The transition to the agricultural stage, with its fixed abodes and settled life, greatly extended the scope of private property, especially in immoveables, fixed abodes and ultimately land. Nevertheless, private property in land was slow to develop and passed through several stages such as temporary allotments of arable land, the 'open-field' system with its communal practices, superimposition of feudal or overlord rights upon the rights of the village community, etc. In some cases, as generally on the continent of Europe, the overlord was eventually swept away to make room for the peasant proprietor. In other countries like England, he managed to deprive the tenants of their customary rights and to concentrate large estates of land in his own hands. At first there was no freedom to dispose of land, but later full rights in this respect were acquired. The old communal restrictions on land (e.g. common rotation of crops) were now abandoned, and the landed proprietor was allowed to develop his land in the way he thought best without in any way being bound by what others did. It was recognized that this was after all the best policy from the standpoint of social welfare and that the spur of private property was essential to call forth the best efforts of private enterprise for utilizing a limited supply of land in the most effective manner possible so as to meet the needs of a growing population. There were also several other social and political uses of strengthening the rights of private property in land. With the Industrial Revolution other forms of wealth came into prominence, and the scope of private property was extended to such things as coal-mines, factories, patents and copyrights, shares and bonds, in fact to all exchangeable things. At the same time the number of possible property-owners was enlarged. In addition to the sovereign, the Church, the family and individuals (including women and children), joint-stock companies, trusts and other institutions were also allowed to

¹ See Seligman, *op. cit.*, pp. 125-6.

hold private property. Thus today the field of corporate property has become very extensive.

§8. **Attributes of private property.**—The following rights are implied in the concept of private property: (i) of use, (ii) of gift, (iii) of disposition by contract, and (iv) of bequest. These may be briefly explained:

(i) The *use or exploitation* of private property was the earliest right to be recognized, but is subject to the eminent domain of the State which has the power to acquire private property for public purposes (e.g. for laying out a railway track or constructing public buildings), or to secure the workers' safety, etc.

(ii) The *right of gift* is now recognized as an extension of the right of use. It is subject in some countries to certain old feudal restrictions.

(iii) The owner of property has the right to *dispose of* it by selling, or mortgaging, or letting it. This right was not allowed so long as property was owned by the family as a whole, as is the case even now with regard to ancestral family property in India.

(iv) The *right of bequest*, i.e. the right to regulate by a will the succession to property after the owner's death, has developed slowly. This again is defended on the ground that it is necessary for securing efficient production and for preventing extravagance during the lifetime of the owner. The right of bequest by the testator and the right of inheritance by the survivors are fundamentally opposed. The modern tendency has been to widen the right of bequest and curtail inheritance. In order that the right of bequest should not be exercised to the detriment of the children, it is sometimes limited in their favour (as in France). In India it can be exercised only as regards self-acquired property and not ancestral property.

§9. **Inheritance.**—Inheritance of property has been opposed on the following grounds: (i) It encourages idleness because it makes possible the acquisition of wealth without having to labour for it. (ii) It undermines parental authority and leaves no scope for judicious distribution of property among the inheritors according to their needs and deserts. (iii) In India equal inheritance of landed property has led to the evil of excessive subdivision of holdings. (iv) It leads to and emphasizes inequality of wealth distribution.

On the other side it is argued that the law of inheritance is based on the natural expectations of children or near relations for support.

On balance, the right of bequest is more easily defensible than inheritance, though both need to be limited more or less in the general social interest—inheritance needing more limitations than bequest. John Stuart Mill favours limitation on the ground that the State is really a partner in private business. It provides security and protection and has therefore a just economic claim to property left by a deceased person. State appropriation of at least a part of the property, on a progressive scale, especially in the case of the more distant relations, has been advocated in many countries. In England, there has been a great development of progressive inheritance taxes, and death duties ranging from 15% to 25% are levied by the State.

§10. *Theories of private property.*—What constitutes the basis of private property has been the subject of much controversy.

(i) *The occupation (possession) theory* may explain the origin of the present legal title to certain forms of property, but cannot be used as a justification of private property except in the case of previously unoccupied or unutilized wealth.

(ii) *The natural right theory* regards private property as part of the law of nature. 'Natural' or 'inalienable' rights are vague terms and on analysis fail to provide an adequate ground for private property. Perhaps what is suggested is that private property is an indispensable condition of full self-realization of the individual, and as such should be sanctioned by law.

(iii) *The labour theory.*—The classical economists argued that every person had a right to the product of his own labour. This certainly appears plausible on economic grounds, for no one would exert himself to the best of his ability unless he were assured of the fruits of his labour. But even this theory is not free from difficulties. Land in its original condition is a free gift of nature and therefore the labour basis is not available here. In fact all material objects contain an element of nature, and nothing is the result of labour alone. Then again inherited property cannot be justified on the labour basis. Further, under the complex modern system of division of labour, it is impossible to separate the specific produce of the labour of a particular individual from the total value of the product.

(iv) *The contract basis* which states that men have a right to expect fulfilment of the contracts made with them, has therefore been suggested. It is in a way only the modern

development of the labour theory. Under the wage system men contract with each other for a certain payment in exchange for a certain amount of work. Contract then becomes the basis of distribution, and confers the same sanctity as was given by labour to the right of property in the result.¹

(v) *The legal theory*.—Under this theory, it is held that whatever is recognized as such by law is rightfully private property. This is not an economic basis. 'The legal theory tells us what property is, not what it should be' (Seligman).

(vi) *The social utility or utilitarian theory*.—Defenders of private property nowadays rely mainly on the argument that it is a necessary instrument for securing the best utilization of natural resources. The greatest possible effort and enterprise on the part of individuals will be forthcoming only if the inducement of private accumulation of wealth and property is held out. It is clear, however, that if we accept this basis, we must also accept certain limitations of private property suggested by the same consideration of ultimate social benefit. Thus it may not be socially desirable to leave everybody free to use his property as he likes. From this point of view, a check on absentee landlordism may seem to be called for, as also on the process of subdivision of land. Private property rights in certain national assets like forests, mines and railways must also be suitably limited. Private property in such things as highways and docks has by experience been proved to be highly undesirable. Similarly, it is no longer a question that property in human beings (slavery) is economically as well as morally to be condemned. Copyrights and patents may be necessary, but their period must not be unduly long. All this, however, does not mean that the only way to prevent abuses of private property is to abolish it altogether.² Such an extreme remedy is likely to be worse than the disease. In the meanwhile, through the progressive enlargement of the economic functions of the State, the manipulation of the taxation system, the provision of free education and other facilities intended to equalize opportunity for all, through legislation in the shape of Factory Laws and Tenancy Laws, the principal abuses of private property are being increasingly brought under control.

We shall now undertake a detailed treatment of the four main shares in the national dividend: rent, wages, interest and profits.

¹ J. A. Todd, *The Science of Prices*, p. 168.

² See §20.

RENT

§11. **Economic rent and contract rent.**—In popular parlance the term 'rent' is used to mean a sum paid by one person to another for the lease of land. This contract rent, as it may be called, often includes, besides economic or pure rent,¹ other elements such as interest on capital invested by the landlord in his land and farm buildings, and charges of supervision. Moreover, influences other than competition, which is assumed to be the basis of economic rent, may affect contract rent. Thus rent actually paid may be more than the economic rent, e.g. when there is monopoly in land or when there are no alternative occupations; or it may be less because it is customary or because considerations of a philanthropic nature may influence the landlord in dealing with his tenantry.

§12. **Preliminary analysis.**—As a preliminary to an analysis of economic rent, it is desirable that we should remind ourselves of the wide sense which we attach in economics to 'land', the income from which we call 'rent'. Land means all those utilities which nature supplies free but in limited quantities. It is important to bear in mind the fact that land is limited in quantity. If the demand for cloth increases, more cloth can be produced. And this can happen to an unlimited extent relatively to man's power of consumption. Greater effort stimulated by a greater demand will call forth a greater supply. But this does not apply to land. No matter how much the demand may increase, its supply remains the same. Particularly is this the case in old countries like India where practically all the cultivable land is occupied.²

Besides being limited in quantity, land varies in quality. Some lands are more fertile than others. The most fertile lands are naturally the first to be occupied and cultivated. When population increases, however, recourse must be had to inferior lands, or the superior lands must be more intensively cultivated.

¹ See §13.

² It will be noticed that after asking the reader not to forget the wide sense in which the term 'land' is used in economics, we are gradually sliding back to the more common meaning of the term. There is really no harm in doing this, because it will be found that although the exposition of the theory of rent is most easily understood with reference to land in the ordinary popular sense of the term, its application can be extended to any other thing included in the wider signification of land.

As we shall see presently, the theory of rent, first clearly formulated by Ricardo, is based on the assumption that the more fertile lands are cultivated first. Carey, an American economist, objected to this assumption (and therefore to the theory which was based on it) that it was historically untrue. He argued that 'in every quarter of the world cultivation has commenced on the sides of the hills where the soil was poorest, and where the natural advantages of fertility were the least'. But this objection loses its force, if the term 'fertility' is understood to include not only the physical and chemical properties of the soil but also other elements such as accessibility. Land very rich so far as physical and chemical properties are concerned, may be situated in the midst of a jungle infested by wild animals and may be disease-ridden. So long as these handicaps remain, people will prefer other land even though it may be naturally less fertile. The most 'fertile' land, therefore, means the land which, in any given set of circumstances, is best adapted for cultivation and is calculated to yield, all things considered, the best return for the available capital and labour. In other words, we widen the conception of fertility so as to include such elements as accessibility to markets, safety to health, and security. Fertility is relative to time, place and circumstances, and all that is necessary for our purpose is to recognize that, at any given time, taking into account all circumstances, certain lands appear more desirable, and certain others, less desirable. It is not claimed that the grading of land in this manner, which is appropriate to one period and set of circumstances, will hold for all time and in spite of any change in circumstances.

§13. **The Ricardian theory of rent.**—Now we may proceed to state the theory of rent on the lines of Ricardo. Let us suppose that the land in a given country falls into grades *A*, *B* and *C*; *A* being the most fertile, *B* less fertile, and *C* the least fertile. *A* will be cultivated first, and then when population increases and the demand for food with it, *B* will be brought under cultivation, and when there is a further increase in population, *C* will also come under cultivation. Let us suppose that capital and labour worth Rs. 10,000 is spent on land belonging to grade *A* and that the yield is 100,000 seers of wheat. More wheat is required for a growing population, so that gradually capital and labour worth another Rs. 10,000 is employed on land of the *B* grade. This grade being inferior to *A*, the yield is only 80,000 seers. The community grows further in numbers, and requires

more than the total of 180,000 seers realized from *A* and *B*, and therefore *C* is taken under cultivation and a further dose of capital, say, another Rs. 10,000-worth, is applied to it. *C* being the worst grade of all three, the yield is now only 50,000 seers. But according to our hypothesis this additional 50,000 seers is urgently required. Now all this wheat being of the same quality must sell at the same price. Possessors of *A* would demand at least Re. 1 for 10 seers, though they would welcome any higher price than this. Similarly, owners of *B* would be prepared to accept Re. 1 for 8 seers, though, of course, they would also welcome any higher price that they could get. The minimum price which would suit growers on *C* would be Re. 1 for 5 seers. It is obvious that out of these three possible prices the only one that will suit all the growers is the last. This price is necessary if *C* is to remain continuously under cultivation. (And *C* must remain under cultivation; otherwise the demand of the community for food is not satisfied.) At the price of Re. 1 for 5 seers, all the expenses of production on land *C* will be just covered.¹ The owners would get the full value at current rates of the different kinds of effort employed (including wages of the ordinary labour and of management plus interest on the capital) aggregating to Rs. 10,000. At the uniform price of Re. 1 for 5 seers *B* will realize Rs. 16,000, that is, Rs. 6,000 more than *C*. *A* will realize Rs. 20,000, that is, Rs. 10,000 more than *C*. In this example, *C* is the worst land in use. It is called marginal land or land of marginal fertility. Lands *B* and *A* are above the margin and are called super-marginal lands. *C* yields just enough to cover all expenses and no surplus or rent. It is also known as the no-rent land.

A surplus or rent is obtained on *B* and *A*. The rent on *B* may be expressed either as 30,000 seers of wheat (80,000 minus 50,000=30,000), or as Rs. 6,000 (that is, the value of 30,000 seers at the market rate). The rent on *A* is 50,000 seers of wheat (100,000 minus 50,000=50,000), or Rs. 10,000 (that is, the market value of this extra 50,000 seers). Rent

¹ The student must not make the common mistake of supposing that it would not be profitable to cultivate *C*, if the price is Re. 1 for 5 seers. It would be profitable in the sense that labour, capital and organization would all get their normal remuneration out of this price. But no unearned surplus over and above this would be available, as in the case of the superior grades of land.

on the superior lands is thus measured from the marginal or no-rent land upwards. It expresses the *differential advantage* of the superior lands over the marginal land. Rent is also an *unearned surplus* or an *unearned increment*, as it is sometimes called. It does not represent the reward to any special kind of effort or capacity. The lands *A, B, C* are assumed to be cultivated in the same manner and with equal efficiency. *A* and *B*, however, being superior in fertility yield a surplus over *C*. The same truth is expressed by saying that *rent arises from the operation of the Law of Diminishing Returns.*

Man's desire for more and more food compels him to resort to worse and still worse lands. This is the same thing as saying that the returns to successive doses of capital and labour go on diminishing. As we have seen, the Law of Diminishing Returns has an extensive aspect, and up to the present our exposition of the theory of rent has had reference to this extensive aspect. However, rent can also be seen to follow from the Law of Diminishing Returns in its intensive aspect. If more wheat is wanted we have to pass on from the superior to the inferior land. But another way is to cultivate the same land more and more intensively. Thus in the above example instead of fresh doses of Rs. 10,000-worth of labour and capital being applied to progressively inferior lands, we may suppose them to be applied to the same (superior) land. Then the first Rs. 10,000 applied to *A* yields 100,000 seers, the next Rs. 10,000 yields 80,000 seers, and the third dose of Rs. 10,000 yields 50,000 seers. Here again the price must be uniform and it must be 5 seers per rupee; otherwise why should the farmer proceed with the cultivation at progressively increasing expense? Here the third Rs. 10,000 is designated as the marginal dose of capital and labour. As compared with this, a surplus is realized on the first and second doses, and this surplus is rent. The above reasoning is illustrated in Fig. 17.

The rectangles I, II, and III represent the yield respectively to the first, second and third application of capital and labour worth Rs. 10,000, either to different lands *A, B, C*, in decreasing order of fertility, or intensively to the same land *A*, each succeeding dose of capital and labour yielding a smaller return than the previous one. The shaded portions of the rectangles I and II represent the rent or surplus produce on lands *A* and *B*, or on the first two doses applied to land *A*. Land *C*, or the third dose applied to land *A*, does not yield any rent.

§14. **Rent does not enter into price.**—This should not be difficult to understand, if we remember that the price is determined by the cost of production of the marginal land, and that marginal land is no-rent land. In the example we

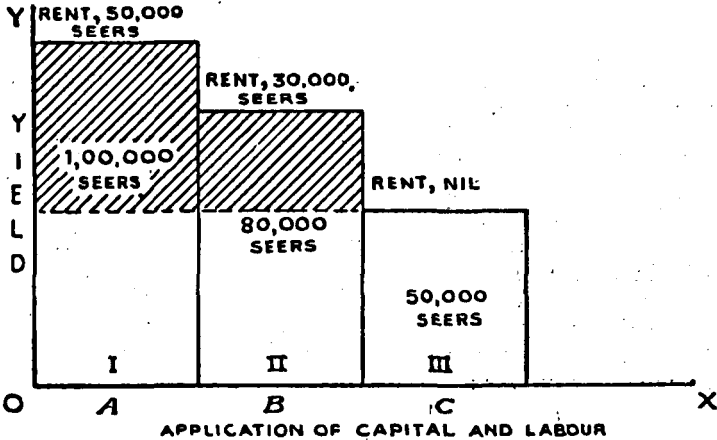


FIG. 17.—DIAGRAM ILLUSTRATING HOW RENT ARISES FROM THE OPERATION OF THE LAW OF DIMINISHING RETURNS

have used above, we saw how the price was Re. 1 for 5 seers, because the expenses of production on marginal land *C* were Rs. 10,000 for 50,000 seers of wheat; Rs. 10,000 here included wages, interest and profit but not rent. The demand of the community could not be satisfied without bringing *C* under cultivation, and *C* could not be brought under cultivation unless the price was such as covered its cost of production. This price, however, is more than necessary to cover the cost of production on lands *A* and *B* and this excess emerges as rent in the case of these lands above the margin. *Rent is a price-determined surplus; it does not itself determine the price.* (It is the result, not the cause of price.) As Ricardo puts it: 'Corn is not high because a rent is paid, but rent is paid because corn is high.' Supposing no rent is actually paid for lands of the grade *A* and *B*, this would simply mean that the surplus would accrue to the tenants instead of the landlords. But it would not make any difference to the price, which is regulated by the expenses of production on the marginal land.

§15. **Exceptions.**—The relation between rent and price as discussed above holds good only of pure economic

differential rent, which is so called because it measures the difference between marginal land and land above the margin. *There is, however, a variety called scarcity rent and this does enter into price.* Demand for land may become so intense that the farmer may have to pay rent even for the worst land. But he is in a position to compensate himself by charging a higher price. The greater intensity of demand means the greater ability or willingness of the consumers to pay a higher price.

Again, if land is diverted from one use to another, rent arising in connexion with the first use may form part of the price in the second use. Suppose land used for wheat is required for cotton. In our example, land B earned some rent. Suppose a farmer wants to raise cotton on it. He will in that case have to pay the landlord at least as much rent as B was earning when it was being used for wheat, although for cotton it might rank as the worst or the marginal land. As we saw, the grading for wheat in order of fertility or productivity was :

A B C

The order for cotton might be :

X Y B

X and Y, let us suppose, were superior lands which were already under cotton. Now B is taken up also for cotton; and happens to be the worst land in use for that purpose. So the price of cotton will be influenced by the rent paid for B in its use for wheat.

Lastly, as in India, the Government may levy rent (*assessment*) on every bit of land in use in a country, whether it is good or bad. *The rent thus levied on marginal lands must enter into price.* It might, however, be pointed out that the term rent here is not used in the strict economic sense. In reality it is just a tax, and there is nothing differential about it.

§16. **Rent and economic progress.**—As economic rent depends on price, it follows that if the price rises, rent will rise; and if the price falls, rent will fall. A rise of price may be brought about by an increase of demand, so that while additional capital and labour will be applied the yield will diminish (the margin of cultivation will be pushed forward, i.e. inferior land will come into use or less will be realized from further applications of productive effort to the same land). A rise of price may also be caused by production

becoming more difficult or more costly. A fall in price, on the other hand, may be caused by fall in demand and therefore the recession of the margin of cultivation, or by an improvement in the arts of production. Economic progress will lead to rise in rents in so far as it means increase of population and increase of demand. It will lead to a fall in rents in so far as it is attended with improvements in the arts of production.

Rents in an old country may fall as a result of virgin lands in new countries being brought under cultivation. This happened in England when new sources of supply became available and cheap corn began to be imported from the United States. The margin receded in England as, owing to the fall of prices, the less fertile lands ceased to be employed for growing wheat. It is conceivable that a similar phenomenon will show itself in India as a result of competition from imports of wheat from a country like Australia.

§17. **Other applications of the theory of rent.**—Having explained the theory of rent with reference to agricultural land, it remains briefly to indicate its applications to other natural resources. It is a matter of common knowledge that business premises on central sites in an industrial and commercial city command high rents which diminish as the premises are situated farther and farther away from the centre. Here the nearness to the central locality corresponds to fertility, because nearness confers many advantages, such as ability to attract the largest number of customers. The buildings further removed from the centre are like the less fertile lands. As the demand for business premises increases, less and less favourably situated buildings are occupied; or alternatively more and more stories may be built on the same spot. But this means greater expense and smaller sales, as people would naturally buy on the ground floor by preference and comparatively few would take the trouble of visiting shops on the upper stories. Building more and more stories is thus analogous to working the same land more and more intensively.¹

§18. **Rent of ability.**—An interesting parallel to economic rent emerges when we compare the difference in earnings as between one man and another, whether in business or in any of the professions, owing to difference in inborn ability. In so far as the difference in ability is due to (nature) the

¹ The student should work out for himself similar analogies with reference to mines, fisheries, etc.

larger earnings of the man with superior brains are to be compared with the higher rents of the more fertile lands. The surplus earnings due to greater innate capacity are sometimes referred to as *rent of ability*.

§19. **Quasi-Rent.**—We saw above that economic rent arises because the supply of land is not variable according to demand. This inability to vary supply according to demand may, however, be experienced in the case of other factors of production also, and so long as it lasts, the yield from them, instead of determining price, is dependent on the current price, like economic rent. Thus an individual employer may introduce a new method or a new machine, the effect of which is a considerable lowering of his costs as compared to the costs of other employers. When the other employers notice this and follow suit there will be a general fall in the cost of production, which will ultimately bring the price down. This process, however, takes time, and in the meanwhile our pioneer employer will earn an exceptional profit—in excess of the normal profit. This *temporary* difference in earnings arising on account of imperfect elasticity of supply has been given the name 'quasi-rent' by Marshall. It is easy to see that in a dynamic society quasi-rent understood in this sense must constantly emerge and vanish. Owing to the protection recently given to the sugar-manufacturing industry in India, the number of these manufacturing establishments has grown rapidly, creating a demand for sugar technologists. For some time, therefore, those trained as technologists will reap higher rewards than are earned by men of similar ability and attainments in other lines. But this can last only until, attracted by the relatively higher earnings, more men qualify as technologists, and the additional supply will eventually bring down the level of earnings to normal. Just as there may be a temporary shortage of supply, there may also occur a temporary superfluity of supply in relation to demand. A machine may become out-of-date. But it may not be practicable to scrap it at once and substitute the new machine. In the meanwhile, the yield from the old machine may dwindle below normal. A similar fate may overtake the earnings of a profession which has become overstocked. If lawyers as a class are earning less than doctors, this may possibly decrease the number of people trained as lawyers amongst the next generation. But pending this adjustment, the average remuneration in the legal profession will be subnormal. In this case the 'quasi-rent' is a negative quantity. Quasi-rent is so called

because although like rent it is *differential*, unlike rent it is not *permanent*.

§20. **Are rent-receivers social parasites?**—According to the analysis of economic rent given above, it is a surplus over and above the normal returns to all the factors of production employed. That is why it is called an unearned increment. If it is admittedly unearned, why should society tolerate it? Why should the benefit of what is unearned accrue to individuals instead of to society in general? It is this line of reasoning which makes socialists press for nationalization of all land or, failing that, the appropriation by the State of the full economic rent. However, if we remember the wide meaning attached to the term 'land' and also that, as explained in the previous section, something of the nature of rent (quasi-rent) is constantly arising in connexion with other factors of production, nationalization would logically lead to the virtual extinction of all private property. As regards the complete appropriation of economic rent by the State, in theory this is entirely unobjectionable. But in practice we have to set about this business very warily and cautiously, because what is nominally called rent may actually contain other elements, i.e. interest and profits. In any given case it is often extremely difficult, if not impossible, to dissociate economic rent from the other elements (which are earned, and therefore cannot be appropriated without injuring production). In some cases the whole of what the landlord receives may be made up of other elements than rent. For example, he may have purchased the land and the capitalized value of the economic rent may have been included in the price paid to the original owner. Where land is thus constantly changing hands, the pursuit of economic rent for appropriation by the State becomes a very elusive affair. Injustice is also involved in taxing unearned surpluses only in the case of land and exempting other unearned incomes. In saying all this we are not suggesting that any action by the State in the direction suggested by the socialists is bound to be futile or unjust. Sometimes unearned increment may arise in such unmistakable form, that there need be no hesitation on the part of the State to appropriate it. Such cases often arise in crowded cities when sites suddenly go up in value unexpectedly and without the owners doing anything to add to their value. Even here, however, the question arises whether some of the owners who were more than usually shrewd had not intelligently anticipated developments and deliberately acquired the sites in the expectation

of profiting by the transaction. If so, is it equitable to rob them of the legitimate rewards of their superior foresight, and is it not to the ultimate benefit of society to encourage such superior intelligence and foresight? Similarly in the matter of nationalization there may be cases where appropriation is clearly indicated in the larger interests of society. But more harm than good will result by trying to nationalize all natural resources. Ultimately the whole argument will be seen to turn round the question whether or not we desire to maintain in its essentials the present individualistic order of society based on private property.

SUMMARY

The *problem of distribution* requires an answer to the following *three questions*: (i) How much is there to be distributed? (ii) Among what factors is it distributed? (iii) On what principles is it distributed?

The answer to (i) is that the aggregate of goods and services produced in a year *minus* the cost of replacement and renewal of capital is what is available for distribution.

The answer to (ii) is: Land (rent), labour (wages), capital (interest) and organization (profits).

The answer to (iii) can be given on lines of the general theory of value, by saying that each factor tends to get a share representing its marginal efficiency. The problem of distribution however cannot entirely be merged in the general theory of value. For example, certain peculiarities of the factors of production such as land and labour require and receive special discussion under distribution.

Under our present system, ordinarily the reward to the factors of production first takes the form of money, which is subsequently exchanged by the recipients for such of the available goods and services as they require. Distribution depends on a series of bargains which those who organize industry or business enter into with the suppliers of land, labour and capital respectively. Payment may in some cases be in advance of production. But it nevertheless comes out of production because it would not be made unless it was expected to create assets to justify it.

Private property, which is at the foundation of distribution, has evolved very gradually through the centuries and its scope has greatly extended since the Industrial Revolution. The concept of private property implies the right of use, of gift, of bequest, of disposition by contract and of unlimited acquisition.

(i) The right of use is subject to the right of the State to compulsory acquisition for certain public purposes.

(ii) The right of gift is merely an extension of the right of use.

(iii) The right of disposition is of comparatively recent development and did not exist so long as property was owned by the family as a whole.

(iv) The right of bequest is really in opposition to the right of inheritance. The modern tendency is to limit both these rights—especially the right of inheritance—by taxation and otherwise, in the interests of society and social justice.

There are many suggested justifications for the institution of private property. However, the only basis nowadays recognized as valid is that of 'social utility'. But the acceptance of the test of social utility also involves acquiescence in various limitations of private property, if these are shown to be necessary in the public interest.

RENT

Economic rent should be distinguished from contract rent actually paid for the lease of land by tenant to landlord. The latter often includes other elements such as interest on capital, and may be influenced by monopoly, custom and philanthropy.

The *theory of (economic) rent* is best illustrated with reference to land. At any given time lands are graded into more paying and less paying. We first employ the better lands, and when more of the product is required, we obtain it in one of two ways: (i) either by working the same land more intensively, or (ii) by having recourse to inferior lands. In either case the return for a given outlay of capital and labour goes on decreasing; or in other words the cost of production goes on increasing. The price obtained must be such as to cover the highest cost. Otherwise it would not be incurred. It must cover the cost of cultivation at the margin (extensive or intensive). When the price obtained is higher than is needed to cover the costs in connexion with the employment of capital and labour, a surplus which is called rent is left above the margin. So much the landlord can exact from a tenant without trenching on the tenant's legitimate profits or remuneration. If he succeeds in extracting more, it is called 'rack-renting'. If he takes less, then the rent is to that extent enjoyed by the tenant.

The least profitable land in use is called the *marginal or no-rent land*. Rent is said to be something differential because it measures the difference between income from the marginal land and that from the lands above the margin. *Being itself the result of price*, rent cannot be one of the component elements of price. There are a few apparent exceptions to this, namely, (i) scarcity rent, (ii) rent of land in one use when diverted to another use, (iii) any tax (like the land revenue which is sometimes described as rent paid to the State) levied on all lands good or bad—all these do affect price. But these exceptions are only apparent, because all these elements entering into price are in reality not economic rent although they may be called by the name 'rent'. Economic rent by its very analysis is shown to be a *price-determined* and not a *price-determining* factor. Economic rent must not be confused with the amount that may be actually paid to a landlord by a tenant, because this may be either above or below the true economic rent, as hinted above. The payment may also include such charges as interest on the capital invested by the landlord and so on. These items must be deducted from the gross rent in order to arrive at the net rent.

As economic rent depends on price, it follows that if the price rises, rent will rise; and if the price falls, rent will fall. *Economic progress* will lead to rise in rents in so far as it means increase of population and increase of demand. It will lead to a fall in rents in so far as it is attended with improvements in the arts of production. Rents in an old country may fall as a result of virgin lands in new countries being brought under cultivation.

The theory of rent can be shown to apply to other natural resources like *mines, fisheries, building-sites*, etc. As lands differ from one another in point of fertility so men differ in point of ability. The larger earnings of the more capable man as compared with the earnings of the less capable man contain an element of rent which may be called *rent of ability*. Temporary surpluses of the character of rent arise because, although the supply of other factors of production is not invariable like that of land, it is unchangeable for short periods. The name *quasi-rent* has been given to these surpluses.

It is true that economic rent proper is not *earned* by those who receive it. But receipts called rent popularly do not always consist of pure economic rent and nothing else. Separating economic rent from the other elements with which it is generally mingled presents great practical difficulties. Nor can nationalization of land be a solution, until we have decided the major question as to whether or not we wish to retain in substance our present order of society.

CHAPTER XIV

DISTRIBUTION : WAGES

§1. **The wages problem.**—The wages problem may conveniently be dealt with under the following headings :

- (i) Definition and scope of wages.
- (ii) Methods of remuneration : time and piece wages.
- (iii) Peculiarities in the action of demand and supply with regard to labour.
- (iv) The theory of wages considered in its two aspects :
(a) Relative wages; (b) General wages..

§2. **Definition and scope of wages.**—Wages are the remuneration of labour as a factor of production, or the share which labour is entitled to receive from the national dividend. Commonly by 'wages' we understand the remuneration of hired labour. Strictly speaking, however, wages must be regarded as the remuneration to labour whether hired or not. Even independent workers like peasant proprietors and handicraftsmen receive wages. These form part of their total returns, although mixed with what they receive as interest on capital and as profits for the labour of organization, etc. On the same reasoning, the earnings of professional men like barristers and doctors partly consist of wages.

§3. **Methods of remuneration.**—There are different methods of paying wages. The principal methods are (i) *time wages or time earnings*, and (ii) *piece wages, or piece-work earnings*.

(i) *Time wages* are a fixed payment which a person gets for labour in any given unit of time, say, per hour, per week, per fortnight, per month, per year. Wages in this case are determined by the time during which the worker is occupied. The output due to the labourer is not measured for calculating the wages earned. In the Bombay cotton-mills wages are paid once a month, and in Ahmedabad once a fortnight. Salaried officers in public and private employment generally receive wages on a monthly basis: Casual workers are paid daily wages. Farm labourers are sometimes paid on a yearly basis in India.

(ii) *Piece-work wages.*—Under the system of piece-work a person receives wages according to the results of his work,

at certain fixed rates per unit of output, irrespective of the time taken by him. For instance, weavers in Bombay mills usually receive piece-work wages. Handloom weavers also generally receive piece-work wages when yarn is supplied to them by outside capitalists. Time-work and piece-work wages, however, are not entirely unrelated to each other. Even when payment is by time, it is generally understood that a certain minimum quantity of work is to be turned out during the time taken as the unit; similarly, where payment is by output, it is understood that the given piece of work should be completed within a reasonable time.

The method of paying time-wages is the older of the two methods and is readily understood by all. It is certain and regular in its working and is particularly suitable in those trades where the work done cannot be accurately measured, as in the work of supervision or repairs. The principal defect of the system is a tendency to slackness on the part of the workers, as there is no special incentive to work hard. Under the system of payment by results, a good workman can hope to earn higher wages by showing greater efficiency. The system of piece-work wages is nowadays being increasingly applied, making possible a more accurate estimate of the cost of labour by the employer. The main defect of the system is the tendency on the part of the worker to do defective work in order to increase his output and thus earn high wages. Where, however, methods of production are standardized, as in the textile trade, the system of piece-work wages can be used to advantage. Other defects of this system are that it is apt to give rise to a feeling of jealousy among the workers and a certain degree of irregularity in the earnings.¹

§4. Peculiarities of demand and supply with regard to labour.—As Marshall points out, certain peculiarities of labour on the demand as well as the supply side distinguish it from ordinary commodities and prevent a complete identification of the theory of wages with the theory of value.

(i) The first peculiarity is that the worker sells his work but retains property in himself; therefore, those who bear the expenses of rearing and training him receive but very little of the price that is paid for his service in later years. In the production of material goods, whoever incurs the expenses of production gets his return through the price obtained for

¹ Profit-sharing, already discussed in ch. viii, §10, may be regarded as one of the methods of remunerating workers.

them. Thus, the investment of capital in the rearing and early training of workers is limited not only by the means and the foresight of the parents, but also by their unselfishness. The children of wage-earners have generally to go without any special training during their early years, because the means of the parents are inadequate as are also their ability to realize the future advantages of such training and their willingness to sacrifice their own immediate interests for the ultimate interests of their children. This evil is cumulative and the decline in efficiency will be progressive from generation to generation.

(ii) The second peculiarity arises from the fact that labour is inseparable from the labourer. The seller of labour must deliver it himself. Mobility of labour and mobility of labourer are thus convertible terms. The seller of a commodity is not in this way inseparable from the commodity and the destination of the commodity. For this reason the influence of surroundings and associates on the character and strength of the worker become questions of great importance. Certain kinds of work may do great injury to the health and character of the worker.

(iii and iv) The third peculiarity is that labour cannot be stored or held up. Commodities can be held up by the producer, who may prefer to wait for more favourable prices. But a labourer cannot thus reserve his labour power. The time during which he remains idle is irrevocably lost. From this follows the fourth peculiarity, that the seller of labour is at a disadvantage in bargaining with the employer.

(v) Lastly, the growth of new supplies of labour is slow because of the time that is required to prepare and train labour. This applies particularly to skilled labour. The difficulty of adjusting supply of labour to demand for it is also due to the immobility of labour. Earnings in one kind of employment may be higher than in another. Nevertheless those who are already in a given employment tend to stick to it. The relative decline or increase in earnings in a particular occupation may affect the future supply of labour by a smaller or larger number of boys being trained for it. For the time being the supply available for each occupation is practically unalterable. Thus increase as well as reduction in the available supplies of labour is a slow process and often aggravates unemployment. The result is that the supply of labour in a trade in any one generation tends to conform to its earnings not in that but in the preceding generation.

Although we speak of a labour market where labour is bought and sold as we speak of a market for a commodity, there are important differences between the two, which must be borne in mind in expounding the theory of general wages.

THEORY OF WAGES

A. *Relative Wages*

§5. **Nominal and real wages.**—Wages are not the same in different occupations. A High Court Judge, for example, receives very much higher wages than a clerk, or a factory worker. The causes of these differences fall into two classes: (A) those differences that tend to equalize the net advantages of different occupations, and (B) those differences of wages that cannot thus be explained.

(A) We shall first consider the distinction between nominal and real wages. If we merely consider the reward of labour that is received in the form of money, we are thinking of nominal wages. Real wages, on the other hand, refer to the income of the worker in terms of real benefit. (a) To arrive at real wages we must first of all consider the *purchasing power of money*. It is easy to see that the real benefit to the worker depends not on the money he receives but on the amount of goods and services he can purchase with it. A rise or fall in the price level, especially as regards the goods consumed by the working classes, is clearly significant from the point of view of the workers' welfare, and we have already explained how real wages are found by comparing the index numbers of prices (or of the cost of the living of the working classes) to the index numbers of nominal wages.¹ During the war the cost of living increased owing to a sharp rise in prices, and although nominal wages also increased, real wages for a time declined as the rise in prices was greater than the rise in the nominal wages. Today on the other hand, the fall in the price level and the cost of living being greater than in the nominal wages, real wages of labour have in general increased (though the volume of employment has diminished owing to the depression).

(b) Secondly, we must make allowance for any *other benefits* received by the worker, such as free boarding and lodging (for example, in the case of domestic servants) or the right of grazing in the case of farm labourers, or the pensions received by public officials.

¹ See ch. x, §29.

Even after making all these allowances we shall find that the wages in the various occupations differ. The following are some of the factors which account for the variations.

(c) *Trade expenses.*—Trade expenses are high in some occupations. In others there may be no trade expenses or they may be comparatively moderate. The carpenter working on his own account must spend on tools, the barrister must maintain an establishment. The factory worker, on the other hand, has generally no such expenses.

(d) *Expenses of preparation.*—Occupations which require a long and expensive training (e.g. medicine) will get comparatively higher rewards, as without them the necessary expense and trouble would not be incurred.

(e) *Uncertainty of success.*—A higher speculative reward may really be equivalent to a smaller but certain reward. Some people are attracted by the possibility of very high earnings. Others are attracted by a modest but certain income. This is a matter of personal idiosyncrasy. It is probably true that *average* profits in business are remarkably low because many people who enter into it think only of the few striking successes and not of the many failures.

(f) *Irregularity of employment.*—The employment of labour is seasonal in some trades (agriculture, building) and irregular in others (dockyards, fishing). In such cases the high wages during the period of activity are due to the fact that there is no work for part of the year. The average wage for the year, however, is not higher than in the cases where employment is steady and continuous (e.g. in textile mills, railways).

(g) *Opportunities of supplementary earnings.*—These must also be considered, especially if we regard the family as the wage-earning unit. For example, in agriculture, there is scope for employment of women and children as well as adult males and, therefore, the wages of the latter are smaller than those, e.g., of dockyard workers who have no comparable opportunities for adding to the family income.

(h) *Strain of work.*—The higher remuneration in some trades (e.g. metal casting and metal grinding) is due to the specially exhausting character of the work.

(i) *Incidental advantages and disadvantages.*—At least a partial explanation of differences in wages is afforded by the consideration that some occupations are naturally healthy and others must necessarily have a prejudicial effect on the physique of the workers. The miner working underground is naturally at a disadvantage as compared to the farm

labourer working in the open air. Again, sometimes it is a question of social status. The so-called soft-handed occupations generally enjoy a higher status and attract a large number of people even when the wages in the manual occupations may be higher.

The above discussion will have made it clear that in comparing the real wages in different occupations we have to consider various other factors besides nominal wages. Thus only can we get an idea of the 'net advantages' of different occupations.

(B) It must not, however, be supposed that equal net advantages always mean equal wages. We must remember that even in advanced countries the choice of occupation is not entirely free, and that mobility of labour from one occupation to another is far from perfect. Owing to the great inequalities in wealth-distribution and other hindrances, equality of opportunity still remains an aspiration rather than an achievement. As Taussig points out, society is thus divided into a number of non-competing groups, and wages are not wholly determined by 'net advantage'. This applies particularly to a conservative and caste-ridden country like India.

§6. **Wages of women.**—Women's wages are generally lower than men's. The causes are their lower physical strength, inferior training and efficiency, restricted choice of career, and preoccupation with domestic duties. Moreover, women workers as a rule have ordinarily only themselves to support and often indeed they are themselves partially supported by others.¹ Again, women generally possess less bargaining power, not only because their choice of occupation is more limited than in the case of men, but also because they are rarely so well organized as men. One of the results of the war has been to throw open to women a large number of occupations that were before closed to them.

B. General Wages

§7. **The Subsistence Theory of Wages.**—So far we have explained relative wages, or causes of differences in wages in different occupations. We will now consider the causes which affect the general rate of wages or causes which determine the share of labour as a factor of production.

¹ Recent investigations in England, however, tend to show that the number of women workers with dependants is far larger than is usually supposed. Also quite a large proportion of the male workers are bachelors or widowers without dependants.

The subsistence theory, also called the Iron Law of Wages, first propounded by the Physiocrats, states that, just as the normal value of a commodity under free competition is determined by its cost of production, so the value of the commodity, labour, is determined by *its* cost of production, i.e. the minimum subsistence expenses required for the support of the labourer and that of his family in order to ensure a continuous supply of labour. If wages exceeded this minimum, population would increase and with it the supply of labour, until wages were again at bare subsistence level. If, on the other hand, wages fell below the level there would be a reduction in population and therefore in the supply of labour, until wages were again raised to the subsistence limit. Thus this theory came to be bound up with the Malthusian doctrine of over-population. Lassalle used the subsistence theory in support of the socialistic contention that under capitalism wages could not go higher than the subsistence level, the employers appropriating the whole of the surplus product created by labour. He gave a new title to the theory, namely, the Iron or Brazen Law of Wages, because of the supposed absolute rigidity of wages. This theory is no longer accepted because we now know by experience that a rise in wages is not necessarily cancelled by an increase in population. Some of it may be absorbed by a higher standard of life being established which will powerfully influence the rate of wages in future. Again, it is quite possible that by Trade Union action labourers may at least temporarily obtain wages higher than the subsistence level.

On the other hand, when starvation is the only alternative, wages *below* subsistence level may be accepted by the workers. Adam Smith, who assents to the subsistence theory, himself asserts that employers will give no higher wages than their *present* interests compel them. During the last hundred years or so, real wages have undoubtedly increased in the progressive countries of the west and have placed not only necessities for efficiency but also not a few comforts and even luxuries at the command of the working classes. In the modern statement of the wages problem the subsistence theory is transformed into the *standard of comfort theory*, wages being regarded as determined by the standard of living of the particular class to which a labourer belongs. This is, however, an abandonment of the subsistence theory rather than an amendment of it. Even in this form the theory is not free from difficulties. The conception of a living wage is very elastic and varies considerably even

as regards workers in similar occupations. Moreover, the labourer cannot always stick to his standard of life when he has to choose between a lower standard and starvation. Further, if we regarded the standard of life as the cause and wages as the effect, it would follow that the labourer has only to adopt a high standard of living to secure high wages. Obviously this is not possible unless his efficiency is so increased as to admit of the high wages. In short, the fundamental defect of the theory is that it restricts itself to the supply side of the wages problem, ignoring altogether the demand side. The cost price of labour is only a factor indirectly determining the value of labour, the more positive factor in this case—as in that of the general theory of value—being the demand factor.

The subsistence theory, however, does contain an element of truth. It rightly points out that wages cannot for long fall below a certain minimum limit if the supply of labour is to be maintained. Further, conditions may sometimes arise under which wages are largely determined by mere level of subsistence, as in India at present.

§8. **The Wages Fund Theory.**—This theory applies the demand and supply theory of value to wages. It is an improvement over the subsistence theory in so far as it allows for the factor of demand which, as we saw, was neglected by the earlier theory. According to this theory, at any given time a certain wages fund is available, i.e. a determinate amount of capital unconditionally destined for the payment of labour. There is similarly a determinate number of labourers who must work, whatever the wages. The wages fund divided by the number of workers gives us the level of wages. The wages fund thus constitutes the demand for labour, and the working population the supply of labour, and the former is distributed among the latter solely under the rule of competition. A natural corollary from this theory is that wages can rise only under two conditions: either the labourers must restrict their numbers, or the wages fund must increase. The latter is not controlled by the workers. The lot of the workers therefore depends on their numbers. Those who, like Mill, while advocating the wages fund theory also believed in the Malthusian theory of population, maintained that a rise in wages would in the end be counteracted by an increase in population. It was also argued that Trade Unions could not possibly succeed in raising *general* wages. For if wages rose in one industry, they were sure to fall in another because the total wages fund was fixed. One im-

portant criticism of this theory is that the wages fund is neither fixed nor unconditionally available for the employment of labour. The amount available for distribution as wages depends on the prosperous or depressed condition of the industry and the profit expected.

Again, it is easy to prove that mere changes in population are not followed by corresponding changes in the level of wages. Owing to famine or sickness population may decline, but it does not follow necessarily that wages will rise. Nor does increase in numbers necessarily cause a fall in wages. Similarly with regard to capital, its supply may increase without wages rising, as in nineteenth-century England. After a crisis there is usually a glut of capital. Nevertheless instead of wages rising, they may fall.

But the most serious defect of the theory is that it ignores one vital element in the wages problem, namely the productivity of labour. Ultimately, the wages fund (or circulating capital) comes from labour itself. Wages are no doubt advanced immediately from a reservoir of capital, but this reservoir is itself constantly fed by the products of labour pouring into it. The greater the efficiency of labour, the higher the wages are likely to rise without adversely affecting profits. Thus in newly-settled countries one often finds a rapid increase of population and a small volume of capital, and yet wages as well as profits are high—obviously because of the greater productivity of labour. A rise in wages does not necessarily result in an increased population as has already been pointed out. Population may increase, but if the aggregate wealth increases more than in proportion, wages are likely to rise rather than fall.

§9. **The Marginal Productivity Theory of wages.**—The earlier theories already considered were particularly defective in that they did not consider the influence of efficiency or productivity of labour in determining wages. There are a number of theories based on this general idea. Walker's *residual claimant theory*, for example, accepts it by implication. It states that labour is the 'residual claimant' of what remains after rent, interest, and profit have been paid. Everything that increases production should, therefore, be welcome from the standpoint of labour. This is a sound position, but it is more appropriate to call organization rather than labour the residual claimant. The theory hints at the true explanation of wages without furnishing it completely.

The *marginal productivity theory* is much more satisfactory in this respect. The emphasis comes to be shifted

from the concept of a 'fixed fund' to that of a 'continuous stream' of products turned out by labour, out of which, it was argued, wages were paid. A more optimistic turn was thus given to the wages theories, as it was shown that labour's reward depended upon its efficiency and varied in proportion to it. This new outlook was the result of the extraordinary expansion of industry in recent times and of increased specialization. It was realized that often it was more profitable to employ a highly-paid worker rather than a low-paid worker. The central idea of the marginal productivity theory of wages is that wages are determined by the productivity of labour. The theory may be stated thus :

In every business concern there is a point beyond which it will not pay the entrepreneur to engage more labourers. At this point there is a certain product ascribable to labour. Wages tend to be equal to this marginal product, i.e. the product of the least productive worker. The last labourer employed produces just enough to cover his cost to the employer. All the labourers being assumed to be of the same quality, they will all receive the same wages, i.e. the wage representing the product of the marginal labourer. By the law of substitution, employers will take on workmen so long as wages can be paid from the price of their joint product and still leave normal profits and interest on capital. Competition will ensure that not less than this marginal product will be paid to labour, for then capital would enjoy more than marginal gains and would demand more and more labour to reap further gains. This competition for labour would raise wages until no special gain was to be made by its further employment. The 'marginal productivity theory'¹ explains the phenomenon of wages on the same lines as the marginal utility theory explains the phenomenon of value in general, and needs to be supplemented in the same manner, i.e. by bringing the supply side into equal prominence with the demand side. Wages, that is to say, must not only be the monetary equivalent of the marginal productivity of labour but must also be equal to the cost of production of labour as determined by the standard of living. We assume

¹ Taussig prefers the term 'discounted marginal product' on the ground that not the whole of what labour produces is distributed as wages, but the product of labour *minus* a certain discount for interest, etc., as wages are paid in advance of production.—Taussig, *op. cit.*, vol. II, p. 214.

that the labourer is prepared to take whatever action may be necessary to maintain his standard of living, so that enough can be earned for making a certain standard of life possible. If necessary, he will refuse to marry and bring up a family. The supply of labour will in this way diminish and wages will rise until they cover the cost of production (as determined by the standard of living), and at the same time express the productivity of labour at the margin.

In actual experience wages may differ from their level as determined by strict theory, because the assumptions on which the theory rests are incompletely realized in practice. We have to reckon with any number of disturbing influences which we conveniently bring under the term of 'economic friction'. These include such things as the imperfect mobility of capital and labour, the influence of custom and law and of Trade Union action, and so on. The theory, however, must not for that reason be dismissed as useless. It is valuable as it gives us a norm towards which wages do in fact tend to approximate.

§10. **Trade Unions and wages.**—Before the rise of Trade Unions workers were at the mercy of employers, who, as Adam Smith noted, 'are always and everywhere in a sort of tacit, but constant and uniform combination, not to raise the wages of labour above their actual rate'. The effect of Trade Union organization was to put labourers on a level with employers in point of bargaining power. It should be clearly understood, however, that Trade Union action can help labourers only in getting their due, i.e. the wage as determined by the marginal productivity of labour. It cannot secure a *permanent* rise of wages beyond this level because in that case the employer will get less than normal profits and will stop production and transfer his capital elsewhere.

Other things being equal, a strong Trade Union is in a better position for raising wages when the demand for the product is inelastic rather than when it is elastic; because in the former case the employer will be able to take the higher cost in wages out of higher prices charged to the consumer.

It may sometimes happen that while a certain type of labour is indispensable for the production of a commodity the cost of this labour forms but a small proportion of the total cost. In this case if the labour is strongly organized, it may succeed in securing a very high and permanent rise in wages, since the total cost is not thereby affected appreciably.

SUMMARY

Wages are the remuneration of labour, usually of hired labour. The term 'wages' in economics has a wider scope than in popular usage, and includes salaries as well as part of a composite income received by independent workers such as the professional classes, peasant proprietors and artisans.

There are two principal methods of remunerating labour: (i) *Time wages* paid for labour employed during a fixed unit of time, and (ii) *Piece wages* according to the results of the labour (output). Each method has its own advantages and drawbacks.

Labour shows certain peculiarities on the demand as well as the supply side, so that the determination of wages takes place in a manner different from the determination of the prices of ordinary commodities. (i) The worker sells his work but retains property in himself; (ii) The mobility of labour and of the labourer are identical; (iii and iv) Labour is perishable; the seller of labour cannot hold his work in reserve and is therefore at a disadvantage in bargaining; (v) Lastly, the adjustment of supply to demand is slow in the case of labour.

The theory of wages has two aspects (i) Relative wages, and (ii) General wages.

(i) *Relative wages*.—Wages are different in different occupations partly because of the causes underlying the distinction between *nominal* and *real wages* and partly because of the division of society into more or less non-competing groups. *Nominal wages* mean the money wages received by the labourer, while *real wages* refer to the real income or real worth of his labour in terms of necessaries, comforts and luxuries. Real wages depend upon the following factors: the purchasing power of money, existence of other forms of payment besides money payment, differences as regards expenses of previous preparation, degree of uncertainty of success, regularity or irregularity of employment, opportunities of supplementary earnings, strain and stress of work, and incidental advantages or disadvantages (e.g. higher or lower social status, etc.).

Society comes to be divided into non-competing groups owing to the expenses of education, influence of environment, differences in inborn ability, labour monopolies, general immobility of labour, etc. In the lower groups supply of labour is in excess of demand and wages are low; in the higher groups, wages are higher since the competition is more limited.

Women as a rule receive lower wages than men, because of custom, lower physical strength, smaller general efficiency, restricted choice of occupations, lack of training, and preoccupation with domestic duties. Moreover, women's wages are often of a supplementary character.

General wages.—The main theories dealt with are (i) the Subsistence Theory; (ii) the Wages Fund Theory; and (iii) the Marginal Productivity Theory.

(i) *The subsistence theory* (also called the Iron Law of Wages).—Wages according to this theory are determined by the cost of subsistence of the labourer and his family and cannot in the long run either fall below this minimum or exceed it.

This theory neglects the possibility of a check to population in a progressive society in order to maintain a higher standard of life. It is not supported by actual facts, which show an improvement in the standard of life of the worker in the west. A modern refined version of the theory is the *standard of comfort theory* of wages. But in the new as well as in the old form, the theory is open to the objection that it neglects altogether the demand side of the wages problem.

(ii) *The wages fund theory*.—This was for a long time regarded as the classical theory of wages and is a more precise statement of the popular law of supply and demand as applied to wages. Wages, according to this theory, depend on the one hand on the size of the wages fund and on the other hand, on the number of workers. There is, however, actually no fixed wages fund unconditionally available for being applied to the payment of wages. This theory also ignores the factor of productivity or efficiency of labour, for labour like capital *earns* its own remuneration.

(iii) *The marginal productivity theory*.—This theory supplies a serious deficiency in the earlier theories and duly stresses the influence of *productivity* of labour. The best known among the various productivity theories is the one which applies the concept of marginal utility to labour. If this theory is amended so as to bring the supply factor of labour into sufficient prominence it may be allowed to pass as the most acceptable theory. We must, however, remember that wages as actually paid are determined by a multitude of factors, such as Trade Union action, public opinion and custom. Two limits are suggested to the level of wages, an upper limit set by the productivity of the worker and a lower one set by the standard of life of the particular grade of workers. Wages vary between these two limits according to the relative bargaining strength of the employer and the worker.

Trade Union action can help labour in getting its due share, i.e. wages as determined by its marginal productivity. It cannot, however, go further and secure a permanent rise of wages beyond the limit of marginal productivity.

CHAPTER XV

DISTRIBUTION : INTEREST AND PROFITS

INTEREST

§1. **What is interest?**—We have seen how capital is one of the essential factors of production. The share allotted to it as its remuneration is called interest, which is generally stated as a percentage per annum on the amount lent. Interest may be described as the price for the use of capital. The higher the rate of interest, the greater the supply of capital and the lower the demand for it; the lower the rate of interest, the smaller the supply and the greater the demand.

§2. **How interest is determined.**—Interest is determined by the interaction of supply and demand in the usual manner. We have already examined the forces governing the supply of capital.¹ The total demand for capital is made up of (i) demand for productive purposes (e.g. purchase of a plough or bullocks for agricultural purposes), and (ii) demand for unproductive purposes (e.g. for meeting the expenses of a funeral, or when the State raises loans for carrying on a war).

But in normal times, in modern advanced countries, capital is mostly borrowed for productive employment and the productivity of capital is thus one of the principal determinants of its value, i.e. of the rate of interest.

Demand Side.—Capital earns interest because more wealth can be produced with its aid than without. Borrowers of capital are prepared to pay interest because they realize its utility to themselves. The amount of capital available at any given time is limited, and competition among borrowers for this limited amount compels them to pay interest. This is the demand side of the matter.

Supply Side.—The saving of capital, as already shown, involves the effort of postponement or waiting. During the period that capital is employed in further production of wealth, the capitalist denies himself the use of so much wealth in immediate consumption. Unless he receives some compensation (as interest), he would not undergo whatever sacrifice

¹ See ch. vii, §10.

is involved in this forbearance. This is the supply side of the matter.¹

§3. **Marginal theory of value and interest.**—Looking upon interest as a special case of the problem of value, it can be explained in terms of the marginal theory. Among the whole body of investors or lenders, there are some who are more willing to lend or invest and therefore contented with a lower rate of interest; and there are others who are less willing and who therefore require the inducement of a higher rate of interest. The aggregate amount of capital demanded cannot be made up without the cooperation of the less willing as well as the more willing. Under these conditions, so far as the supply side is concerned, the marginal investor's rate will be the market rate of interest.

Similarly, among the borrowers there are some who are more anxious to borrow and therefore prepared to pay a higher rate of interest, and there are others who are not quite so anxious and who will therefore offer a lower rate of interest. Under these conditions, so far as the demand side is concerned, the market rate of interest will be fixed by the marginal borrower.

The rate of interest will thus represent the coincidence of (i) marginal demand (or marginal utility, or marginal productivity) with (ii) marginal supply (or marginal cost of production).

§4. **Gross interest and net interest.**—We have already learnt that in the same market at the same time there cannot be more than one price for the same commodity. So that where capital can be easily shifted from one use to another, it ought to yield the same interest in every use. If in one case it yields, say, 6% and in another 10%, its supply will decrease in the first use and increase in the second. The rate will go up in the first and go down in the second, and eventually a uniform rate of, say, 7% will be established in both the uses. In actual experience, however, we find that the yields in different kinds of investment vary. This we

¹ The 'agio' theory, as propounded by the Austrian economist, Böhm-Bawerk, emphasizes the supply side of interest by stating that men prefer present to future goods, i.e. there is an agio on present goods. By lending money, they force themselves to wait for future goods instead of using the money on present goods. The rate of interest thus measures the 'agio' or premium on present goods and the discount on future goods. This is a good enough explanation of interest so far as it goes. But it does not go far enough because it ignores the demand side. Interest would not be paid unless the capital on which it is paid were productive.

explain by saying that the *net interest*, i.e. the return for the use of capital as such, is the same in every case—the variation being due to such elements as more or less risk, greater or less inconvenience, and more or less labour of management. If by investment in Cash Certificates we get 4% and on bonds issued by a municipality we get 6%, this is because the security in the first case is greater than in the second. Assuming that the average investor regards investment in Cash Certificates as perfectly safe, the 4% yield on them will stand out as net interest. The 6% derived from the municipal loan would be accounted for thus :

$$\begin{array}{r} 4\% \text{ net interest} \\ 2\% \text{ insurance for risk} \\ \hline \text{Total } 6\% \end{array}$$

The *sahukar* or the pawnbroker lending small amounts to numerous clients charges comparatively heavy rates. An important reason for this is the natural desire of the lender to recompense himself for the extra risk and the extra worry involved in realizing petty amounts from a large number of impecunious and improvident borrowers.

§5. **Interest and progress.**—It was John Stuart Mill's idea that with economic progress, the rate of interest must go on progressively diminishing, because with increasing wealth, saving would be easier and more and more abundant. However, progress also means increase in human wants to which there is really no limit. To satisfy these wants more and more capital will be wanted. We cannot say that the demand for capital will grow less fast than its supply, and therefore we cannot assert that economic progress must necessarily bring about a lowering of the rate of interest. It is also clear that a low rate may be due to decline of enterprise and a consequent fall in the demand for capital. Periods of acute economic depression like the present are often marked by low rates of interest.

Owing to the growth of security in modern times, there is undoubtedly a lowering of rates as compared with the medieval period. In the old days rates were usurious because of poor security, and borrowing was made mainly for the relief of distress rather than for productive purposes.

§6. **Ethics of money-lending.**—In medieval Europe money-lending (usury) was regarded as a deadly sin. This was because the borrowers were as a general rule men in distress, and money-lending looked like taking an unfair advantage of one's fellow-beings who happened to be in diffi-

culties. Religious bigotry further emphasized the prejudice against money-lending, as the lenders were mainly Jews and the borrowers Christians. All this, however, has now changed. As money began to be borrowed for purposes of commerce and industry in which the borrower made handsome profits, the prejudice against money-lending gradually weakened, until it has now disappeared altogether. Loans are now made mostly for productive purposes and are paid for out of the extra gains which the loans make possible. Nor is it any longer true that the class of lenders is mainly composed of rich persons and the class of borrowers of poor persons deserving of special sympathy and protection.¹

Even in these modern days, however, we find among socialists those who are moved to indignation by the spectacle of a certain number of people living entirely on the interest from their investments without doing any work to earn their livelihood. But if these people have themselves saved the money, they have already undergone a sacrifice in the past for which they are now earning their reward. It may, however, be that some of them have not themselves saved their wealth but have inherited it from those who had acquired it. Is it right that they should be permitted to enjoy the fruit of other people's labour? So long, however, as the institution of private property continues we must recognize not only the right of enjoying the wealth which one has acquired oneself but also the right of bequeathing this wealth.²

Some socialists would go to the length of proposing the complete abolition of private property. With reference to capitalists they urge that as a class capitalists make gains wholly disproportionate to any service rendered by them and that they wield too great an influence in society as at present organized. This, however, raises the large question of a possible organization of society on a fundamentally different plan—a question which cannot be fully discussed here. We have, however, in the next chapter,³ indicated the general

¹ This, however, still holds good in the case of India, where owing to the small progress of modern industrialism the major portion of the borrowing is for unproductive purposes and the borrowers as a class are impecunious and improvident. But the *sahukar* has always been regarded as indispensable and is a respected member of the village community. The reasons why he has to some extent come into bad odour in recent times have been explained in Part II, ch. iii, §18.

² See ch. xiii, §§8, 9.

³ Ch. xvi, §§17-19.

features of the rival organization as proposed by socialists and discussed its pros and cons.

PROFITS

§7. **Analysis of gross profit.**—The remuneration to the entrepreneur (organizer, enterpriser or venturer) who supplies the fourth factor in production, namely organization, is called profits. The work of organization consists, as we have already said, in (i) the efficient grouping of the other three factors of production, land, labour and capital, and (ii) taking the risks associated with business enterprise.

In ordinary language, by the term 'profits' we simply convey in a loose manner the excess of money return over money cost (gross profit). And the money cost may sometimes not include all the other elements that must strictly speaking be allowed for in calculating the amount which remains as profits. Those who have organized a business and are running all the risks in connexion with it may have themselves contributed some of the necessary (i) 'land' (natural resources); (ii) capital; and (iii) labour (labour of directing, inspecting, management—work for doing which they might have had to pay a salary to an outsider). From his gross receipts the entrepreneur must deduct the returns attributable to (i), (ii) and (iii) because these are not profits proper, but rent, interest and wages of management respectively.

Other items that must be deducted from gross profits are depreciation, maintenance and insurance (against fire, burglary, etc.).

§8. **Net or pure profit.**—What remains after all these deductions are made can alone be called 'profits' (net or pure profit), if we wish to use the term scientifically and accurately. Profits proper are, as already stated at the very outset, a return for the work (whoever does it), of (i) directing and organizing the business, and (ii) taking the risk of loss. Some risk is of course always inherent in modern business, because the goods produced may after all not be wanted by the public or the prices may turn out to be lower than expected and so on. The entrepreneur can insure his business against some of the risks, and in this case, the premia he pays to the insurance companies will figure as part of the cost he has undergone. But there are always other risks which cannot possibly be insured against. The position of the employer is different from that of the owners of the other

factors which he hires and employs. Whether he gains or loses, he has to pay the rent and interest and wages for the use of these factors. He has to pay for the services of these factors before he has marketed the goods and knows whether he has made a profit or a loss. *He takes for himself whatever surplus remains after the payments to the other three factors have been made.* Hence he is sometimes described as the residuary legatee. One of the principal things which distinguishes profits from payments to land, labour and capital, is that, *whereas rent, wages and interest are comparatively fixed and certain, profits are fluctuating, uncertain and speculative.*

§9. **Profits and cost of production.**—Do profits enter into cost of production and therefore determine the price of goods? The answer to this is that *normal profits or profits earned by the representative firm* do enter into the cost of production. Average ability of management and other average advantages are here assumed. Where the ability or other advantages are exceptional, a surplus over marginal profits will be enjoyed. This surplus due to superior capacity, superior luck or superior opportunity is of the nature of rent. We may say that the position of the entrepreneur or firm which is below the average has no significance in fixing the price because such businesses will sooner or later be pushed out in the competition with their better-placed rivals.

§10. **Causes of differences in normal profits.**—The variations in profits may be (i) apparent, or (ii) real. They are only apparent when, for example, the comparison is not between similar things. In one case certain elements which really should have been excluded as not belonging to profits proper may have been included; whereas in the other case care may have been taken to separate these elements from pure profits.

(In joint-stock companies we generally find these various elements differentiated to a large extent. So that we know that what the debenture holders get is pure interest and what the ordinary shareholders get is profits. The directors get wages of management in the form of a regular salary in addition to their share of profits which they get as shareholders.)

When the profits in one kind of business are really different from those in another, these differences can generally be referred to differences as regards degree of risk, difficulty of management, expenses of preliminary training, etc.

§11. **The entrepreneur not a parasite.**—It is a mistake to suppose that the entrepreneur is a kind of parasite on industry and that profits are a kind of robbery. *Without profits there would be no enterprise, and without enterprise there would be no progress.* As Nicholson points out: 'enterprise, in the highest forms, is a combination of exceptional ability with exceptional risk. The ability is of the kind that defies definition; it is analogous to the genius of the soldier as distinguished from the knowledge of the military student. . . . It is enterprise of this kind that has played the greatest part in economic progress; it is the necessary practical complement to the discoveries of the creative genius in science.' According to Marshall, society on the whole gets the services of entrepreneurs very cheap, because although some of them (e.g. Henry Ford) seem to make heavy profits, others sustain heavy losses and on an average profits are very modest.

SUMMARY

INTEREST

Interest is the remuneration or the price for the services of capital. The supply of capital involves the effort of postponement or waiting which would not be forthcoming without the inducement of interest. The demand for capital is based upon its uses in production (although some of the demand is also for unproductive purposes). The rate of interest represents the coincidence of marginal demand for, and marginal supply of, capital. Net interest tends to be uniform in all uses of capital. Gross interest is made up of net interest plus an addition which may be necessary to cover extra risk, labour or inconvenience.

Economic progress is associated with two sets of opposite tendencies: one making for a decrease and the other for an increase in the rate of interest. By stimulating and facilitating savings and promoting security it increases the supply of capital and so far leads to a fall in the rate of interest; while on the other hand, economic progress implies expansion of human wants and therefore an increased demand for capital and a higher rate of interest.

The old mediæval prejudice against money-lending gradually disappeared as loans came to be advanced for productive enterprises which paid their way. There is today a better appreciation of the need and justification for interest. Interest is a necessary and equitable return for the sacrifice involved in most saving. Interest no doubt is often obtained on inherited capital, but so long as we agree that private property is on the whole necessary we must tolerate interest being earned on such capital. The view sometimes expressed by socialists that the interest paid to capital is necessarily at the cost of labour is untenable.

PROFITS

Profit is the remuneration to the organizer, being the reward for his work of bringing together and coordinating the other three factors of production and assuming risks which are inseparable from business.

Profits as ordinarily understood are *gross profits*, and contain, besides pure or *net profit*, other elements such as interest on capital, rent on land and the wages of labour (superintendence) supplied by the organizer himself. Allowance must also be made for depreciation, maintenance and insurance.

While some risks are insurable and the premia paid to cover them appear as part of the costs, other risks must be assumed by the entrepreneur personally. He may be regarded as a 'residuary legatee' entitled to the surplus, if any, left after all the other shares (wages, interest and rent) have been paid off. Profits, therefore, unlike the other shares, are necessarily fluctuating and uncertain.

Profit made by the average or representative firm may be called *normal profit*. This enters into the cost of production because production would not be continuous unless the price covered normal profit as well as other costs. Extra profits (i.e. over and above normal profit) made by the superior firms, conducted by men of exceptional abilities, are, however, of the nature of rent (rent of ability) and do not enter into costs of production.

Some variations in profits are apparent, others are real. The former arise owing to the different methods of calculating profits. The latter are the result of varying degrees of risks, difficulties of management, etc.

For economic progress enterprise is essential, and profits are the indispensable reward of it.

CHAPTER XVI

DISTRIBUTION : SOME GENERAL PROBLEMS

§1. **Scope of the chapter.**—In this chapter it is proposed to discuss certain general problems suggested in connexion with the distribution of wealth. The problems dealt with are as follows :

- (i) Problems of Labour in relation to Capital;
- (ii) Inequality of wealth and income; and
- (iii) Socialism.

PROBLEMS OF LABOUR IN RELATION TO CAPITAL

A. Industrial Disputes

§2. **Causes of industrial disputes.**—The three main problems of labour that arise in relation to capital in the modern economic organization are : (A) Industrial disputes, (B) Trade Unions, and (C) Labour legislation. We shall deal with them successively.

Industrial harmony and full cooperation between workers and employers, 'the two coefficients in a joint result', are essential for ensuring and maintaining industrial prosperity. It is, however, a regrettable feature of the present economic system that there is growing and serious labour unrest in many countries, as shown by the increasing frequency of industrial disputes, strikes and lockouts.

(i) Most of the strikes and lockouts are concerned with *wages*. In the immediate post-war period the rise in prices and the cost of living, together with the economic upheaval and the general malaise created by the war, produced a large crop of strikes aimed at securing an increase in wages. After a short interval of comparative peace, the economic depression since 1929 has again been marked by a recrudescence of strikes. The employers attempted cuts in wages which were keenly resented and resisted by Trade Unions.

(ii) Another bone of contention between labourers and employers is the *length of the working day*. The labourers are naturally anxious to make it as short as possible and, equally naturally, the employers are anxious to have it as long as possible in order to get full value in work for the wages paid. The working class ideal is an eight-hour day.

In India also long hours of work have frequently provoked strikes and called for the intervention of the State to reduce them by legislation.

(iii) The *fear of unemployment* or of under-employment has often led to opposition on the part of the working classes to the introduction of labour-saving devices and of rationalization of industry, and to the adoption of *ca' canny tactics* (i.e. deliberately doing work slowly so as to make it last longer). The right to work or to maintenance is usually an important item in the working-class demands.

(iv) The *growing class-consciousness* among the working classes and socialistic propaganda have resulted in their pitching their demands higher and higher. They are no longer content with increase in wages. Besides improvement in social and economic status, they demand some share in the profits and a voice in the management. According to Guild Socialism, the ultimate ideal of the working class is that the producers or workers in each industry should be organized into guilds of producers and should thus control production. This is the usual meaning of industrial democracy. The Syndicalists and the Marxian Communists represent even more extreme forms of working-class agitation. The example of Russia and the vigorous communist propaganda in other countries constitute at present probably the most powerful influences tending to unsettle labour, even in comparatively backward countries like India.

§3. **Need for industrial peace.**—We have already stressed the importance of industrial harmony for the maintenance of industrial prosperity. Frequent stoppages of work caused by strikes and lockouts inflict injury on the workers as well as on the employers. Workers lose their wages, and have to fall back on Trade Union funds, i.e. their own money. Nor is the loss and suffering confined to workmen and employers alone. The disorganization of production often causes the most serious inconvenience to the general public also, e.g. in the case of strikes in public utility services like railways. Perhaps the most tragic part of many industrial disputes is that when finally an agreement is arrived at, it is generally on the lines of suggestions made in the very beginning of the dispute so that its unnecessary prolongation merely adds to the sacrifice of all concerned and to the feeling of embitterment and hostility. It is, therefore, important to take suitable steps (i) to prevent the occurrence of industrial disputes, and (ii) quickly to settle them when they do occur.

§4. **Prevention of industrial disputes.**—The existence of efficient organizations on either side—sound Trade Unions of workers and Employers' Associations, competent to speak for their respective sides—will prevent the occurrence of sporadic strikes and lockouts and the formulation of grievances *after* rather than *before* going on strike.

Another much discussed method in recent years is the joint control of industry by workers and employers organized into Joint Councils, such as those established in Great Britain on the lines recommended by the Whitley Committee of 1917. This committee advocated for each industry (i) Workshop Committees in individual firms; (ii) District Councils; and (iii) a Joint (National) Industrial Council for the whole industry.

(i) The *Joint Workshop or Works Committees* represent workers and employers in an individual establishment and are responsible for fixing the conditions under which work is carried on. These committees are intended to some extent to overcome the disadvantages arising from the fact that under modern conditions the old personal relationship between operative and employer has disappeared.

(ii) The *District Councils* are intended to link up the Joint Works Committees with

(iii) *Joint Industrial Councils* of employers and employees representing the whole industry. The Whitley Councils were to meet regularly and to discuss not only questions of wages and hours, and other conditions under which work is carried on, but also broader issues such as education and welfare. The whole Whitley scheme is voluntary in character and has tended to promote greater harmony with favourable reactions on production and efficiency. It is, however, handicapped by two difficulties. First, the scheme being voluntary, the agreements entered into by these councils and committees cannot be legally enforced. Secondly, the organization of the Whitley Councils cuts across that of the Trade Unions. The latter are mainly organized by trades and not by individual workshops.

The plan of profit-sharing has already been discussed in a previous chapter. It has not fulfilled its early promise, and today the enthusiasm for it has greatly abated. It has been adopted, however, on a considerable scale in France.

§5. **Conciliation and arbitration of industrial disputes.**—We may next consider the machinery for settling industrial disputes *after* they occur. In industry as in international politics war is coming to be recognized as a last resort, and

the need for conciliation and arbitration of disputes is being increasingly recognized.

The essence of conciliation lies in joint conference, and success depends on the existence of responsible and well-organized associations of employers and employees. Adjudication of a dispute that has come to a head may be called arbitration, which is usually effected by the help of outsiders. Conciliation and arbitration may be effected through private or public agencies. Again it may be voluntary or compulsory. Voluntary public arbitration exists in Great Britain, and India has followed this example, while the best known examples of compulsory arbitration are found in New Zealand and Australia. In Great Britain the beginnings of a policy of settling industrial disputes can be traced to the Conciliation Act of 1896, which was permissive in its character. Conciliation or Arbitration Boards could be registered on application to the Board of Trade, which was empowered to appoint conciliators and arbitrators for bringing together the parties to the dispute. A further step was taken when under the Act of 1911 an Industrial Council, consisting of a joint panel of twenty-six members equally representative of employers and labour and a permanent official, was appointed. The Council was to inquire into trade disputes and was to be regarded as supplementary to the organization set up by the earlier Act. The Industrial Courts Act of 1919 established in Great Britain a machinery for the voluntary arbitration of industrial disputes by setting up a standing Industrial Court consisting of an independent Chairman and other independent persons and an equal number of representatives of employers and employees, all appointed by the Ministry of Labour. Both the parties to a dispute may by mutual consent refer any dispute to the Court, which after making inquiry and taking evidence, makes a full report. But the voluntary principle is still observed and the decision of the Court is not binding. Public opinion is regarded as the decisive factor in settling disputes, and the main function of the Court is to help the clear framing and discussion of the issues regarding costs, profits and wages. The Indian Trade Disputes Act of 1929 closely follows the English model. As already mentioned above, the most outstanding examples of compulsory arbitration through the agency of the State are furnished by New Zealand and Australia. Strikes and lockouts are forbidden. Either employers or employees may submit their disputes to the Arbitration Tribunals whose decisions are binding. One or several legally trained persons

constitute these tribunals, which may also have some members who are well acquainted with the particular industries.

The most serious objection to compulsory arbitration of industrial disputes is that it discourages settlement by the disputants themselves and encourages the tendency to depend upon some external authority for the preservation of peace. Compulsory arbitration also does not appear to be suitable to a highly industrialized country like England where the technique of production is always changing.

B. Trade Unions

§6. **Trade Union functions.**—A modern Trade Union, unlike the medieval Craft Guild, is entirely an association of wage-earners or workers in the same or allied trades. It discharges two main groups of functions. In the first place, it serves as a Mutual Benefit or Friendly Society and pays allowances to its members when in difficulties caused by sickness, accident, unemployment, superannuation, etc. It thus tries to make its members independent of public or private charity.

A far more important function performed by the Trade Union is that it safeguards and promotes the economic interests of its members as against employers. Its chief aim is to secure for its members higher wages, shorter hours of work, safe and pleasant conditions of work, and to defend individual workers from arbitrary and unjust treatment by their employers.

The need for combination among workers and for collective bargaining under the modern economic conditions is obvious. As Marshall puts it, 'a single large employer is a combination in himself', and unless he is met by a combination of workers there is little chance that the worker, bargaining in his individual capacity, will secure a fair wage. That workers should combine is all the more necessary nowadays as employers have their own powerful associations, and there is a great deal of justification for the claim made by Trade Unions that they make economic friction work for the labourer instead of against him. The chief weapon used by Trade Unions in discharging this function is the strike.

Trade Unions also perform a third function, which may be called the political function, by financing and running electioneering campaigns for securing the election of their own representatives to the legislature.

§7. **The Trade Union movement.**—The modern Trade Union movement is essentially a product of the conditions

created by the Industrial Revolution in England. For a long time the legal position of Trade Unions was very unsatisfactory. The Combination Laws of 1799 and 1800 prohibited all combinations of workers as being criminal conspiracies in restraint of trade. Although these restrictions were repealed in 1824, Trade Unions still remained unrecognized, were without a proper form or constitution, and liable to be sued for loss to the employer caused by strikes. The Trade Union Act of 1871 removed these handicaps and provided for the registration of Trade Unions. The Acts of 1906 and 1913 further improved their position, so that Trade Union funds are now protected from liability for losses caused to employers by the action of their members. The position of the British Trade Unions has been greatly strengthened in recent years. To no small extent this is due to the whole-hearted manner in which they cooperated with the Government during the critical period of the war.

The early Trade Unions were organized on a craft basis (e.g. the Amalgamated Society of Engineers, all its members belonging to the same profession though drawn from many trades : railway, steel and iron, etc.). The 'Industrial Union' has recently come into greater prominence.¹ It has brought within its fold all the workers belonging to different grades engaged in industry (for example, the Miners' Federation, and the National Union of Railwaymen in Great Britain). The craft union is of a horizontal type and promotes professional spirit and solidarity. The danger, however, is that the employer may play off one union against another. The industrial union is of the vertical type of combination, and is better fitted to promote workers' interests generally. This type is naturally welcomed by the guild socialists who favour control of industry by workers.

Whatever the type of union, there has been a striking movement in favour of amalgamations and federations on a national basis. The best known and most effective national organization in Great Britain is the Trades Union Congress which holds annual sessions, its most powerful organ being the General Council which has close ties with the British Labour Party.

¹ The early policy of Trade Unions was to admit only skilled workers as members. The 'New Unionism', which dates roughly from the end of the nineteenth century, has brought unskilled persons and women within the scope of Trade Unions.

The Trade Union movement in India is still in a condition of infancy. Its history and present position are dealt with in Part II, Chapter IV.

§8. **The influence of Trade Unions.**—The effects of the Trade Union movement have been a matter of some controversy.

In favour of the movement it can be said that it is an indispensable organization for securing a fair share of the national dividend to the working classes and preventing the inequalities of wealth from being cumulative in their effects.¹ By holding out for standard rates of pay, Trade Unions protect the workers' standard of living. A well-organized and strong Trade Union, conducted with a due sense of responsibility, smooths the course of economic activity by effecting peaceful settlement of disputes with employers and promoting mutual good feeling. It also helps in bringing about peacefully necessary changes in wages in either direction, and is not opposed to the efficient and economical management of industry. Trade Unionism, however, must be judged mainly by its influence on the character of the workers.² It found many workers debased and oppressed and gave them self-respect and protection, and even today there are a number of 'sweated' trades in which such help is badly needed. Trade Unionism strengthens the moral character of workers and promotes the necessary *esprit de corps* among them. These influences are reflected in a better standard of industrial efficiency and a permanent increase of wages with no adverse effects on profits or on industrial enterprise.

The chief drawback of the movement is that, in their anxiety to better the lot of their members, Trade Unions are apt to concentrate on a particular rate of wages and a particular group. They are inclined to think that higher wages in general can be secured by limitation of output and restriction of competition. In doing so they clearly overlook the fact that ultimately the only source of a large and permanent advance in wages is increase in productive efficiency and in the total output of goods and services. This explains the reluctance, if not the actual hostility, of Trade Unions and their leaders to accept labour-saving devices³ and their adoption of 'ca' canny tactics; the attitude shows that the fallacy of a fixed wages fund still has a hold over the working classes.

¹ See Taussig, *op. cit.*, vol. II, pp. 316-7.

² Marshall, *Elements of Economics of Industry*, p. 388.

³ Taussig, *op. cit.*, vol. II, p. 317.

Another complaint against Trade Unions is with regard to their policy of restricting membership and attempting to establish a labour monopoly. This tendency is specially noticeable in the case of unions of skilled workers. It is sometimes possible for strongly organized Trade Unions to secure very high wages for their members in particular trades, partly at the cost of the employers and partly at the cost of the general community. But this cannot fail ultimately to produce adverse reactions on the particular trades themselves.¹ High wages may also compel employers to introduce labour-saving devices to which the workers are naturally opposed for fear of unemployment.

Another objection often raised is to the insistence of Trade Unions upon a standard minimum wage for all members of the union irrespective of the varying efficiency of individual members. It is argued that this leads to the *minimum* wage becoming the *maximum* and prevents masters from giving higher wages to the more efficient workers. It may work out disadvantageously to workers themselves in some ways because, for example, employers will not be able to give any work to men past their best years on wages below the standard rates, although the men may be glad to accept lower wages. At the same time the standard wage constitutes the very backbone of the system of collective bargaining and it is difficult to see how it could be dispensed with without making Trade Unions ineffective.² What should be attempted is fair standardization which furthers social interest, while rigid standardization injures it.

A further danger is the possibility of militant Trade Unionism seeking to paralyse the social and economic life of the community by too free a use of the weapon of general strike under syndicalist influences (as was threatened in England in 1926). This can, however, generally be held in check by a well-educated and well-organized public opinion.

The Trade Union movement has on balance conferred large benefits on both the working classes and the general community, the gains far outweighing the losses. Responsible Trade Unions, conducted soberly, can only result in social good and deserve the support of the public.

C. Labour Legislation

§9. Need for labour legislation.—We have, in this and in the previous chapters, made a reference to the evils of

¹ See also ch. xiv, §10.

² Todd, *op. cit.*, p. 197.

modern industrialism and the factory system. These evils—long hours of work, particularly for children and women, insanitary and otherwise unsatisfactory conditions of work in the factories, absence of protection against dangerous trades and of compensation for injuries received during the course of employment, the truck system (paying wages in kind)—first appeared in England in the wake of the Industrial Revolution. They were for a long time left unremedied, because in the first place there was widespread public ignorance of their existence. Secondly, even when they came to light, Parliament was reluctant to intervene owing to the predominance of the *laissez-faire* philosophy so fervently preached by the classical economists. The capitalists and manufacturers were naturally averse to any regulation, and stood out for full freedom of enterprise. Even the old Elizabethan Labour Code regulating apprenticeship and wages was removed from the Statute Book in the name of freedom early in the nineteenth century. The Combination Laws of 1799-1800 prevented any concerted action being taken by the workers themselves for the betterment of their conditions. Gradually, however, the public conscience was aroused in the matter and it was realized that a policy of *laissez-faire* was unsuitable when applied to children and women and in general to the individual factory-worker or wage-earner who, left to himself, was far too weak to protect himself. Philanthropists, social reformers and socialists all joined in a strong and persistent agitation asking for State intervention, which was also favoured by the growing Trade Union movement. The rise of the Labour Party, the awakening created by the war and the establishment after the war of the International Labour Organization (1919) as a branch of the League of Nations have all helped the cause of labour legislation.¹ Modern labour legislation covers a wide range of subjects, some of which are reviewed below.

§10. **Factory and Mines Acts.**—Labour legislation in England began with Factory Acts,² which regulated the

¹ For labour legislation in India, see Part II, ch. iv, §22.

² The first Factory Act, passed in 1802 in England, was very modest in its scope applying as it did only to Poor Law apprentices employed in cotton factories. Other Acts followed in 1819, 1843 (regulating work in coal-mines), 1847 (which introduced a ten-hour day for women and children), 1867 and 1908. The last-mentioned Act (Miners' Act) introduced an eight-hour day in coal-mines.

employment of children and women by imposing restrictions on the age of employment of children and on hours of work of both children and women. Later on the employment of women underground in mines, and during the night was prohibited. Certain precautions for the safety of the operatives during work, such as the fencing of machinery, etc., were also prescribed, and factory inspectors were appointed to enforce the provisions of these Acts. For a long time no attempt was made to limit the hours of work of adult males, as it was thought that they could very well look after themselves, especially as collective bargaining was rapidly replacing individual bargaining. The limitation of hours of work of children and women, however, indirectly led to that of the hours of work of men, because in many trades where children and women were employed their help was essential to men, and also because of the influence of example. Modern Factory Acts contain elaborate provisions about hours of work, holidays, rest pauses, shift systems, sanitary arrangements and fencing of machinery; and they have undoubtedly succeeded in greatly improving the inhuman conditions that prevailed in the early days of the factory system in England and other countries which came under the influence of the Industrial Revolution. The successive shortening of the working day has not justified the fears of the employers, who apprehended a reduction in the output. On the other hand, there has been gain in efficiency. The working-class ideal today is an eight-hour day, which has been already realized partially in Great Britain. If introduced gradually there is much to be said in its favour from the point of view of both employer and worker. Anyhow, the demand of the worker for reasonable and 'cultured' leisure is becoming irresistible.

§11. **Workmen's Compensation Acts.**—The second important direction in which labour legislation has progressed is that of compensation to workmen for injuries received in the course of employment. The modern factory and machine system of production is liable to produce frequent mishaps and accidents. In England the Employers' Liability Act of 1880 and the Workmen's Compensation Act of 1897 made provision for the payment of a scale of compensation to workmen or their heirs in case of fatal injuries. The risk of loss to the employers has been largely covered by insurance, the employers paying premia to get their men insured against accidents. This legislation has made the factory owners more careful about defective machinery and about securing prompt

medical treatment for injured operatives. It has also helped to make the labour force more stable and more contented.

§12. **Sickness and unemployment insurance, old age pensions and maternity benefits.**—The third main item of labour legislation relates to provision against other hardships. A workman may fall sick and in consequence lose his wages or even his job, or he may be periodically thrown out of employment or become unfit for work through old age. Women workers also need to be released from work some time before and after child-birth. England and Germany have adopted comprehensive schemes of national insurance which have brought about a substantial improvement in the economic and social status of the worker. The National Health Insurance Act of 1911 in Great Britain, administered by the Ministry of Labour through Employment Exchanges, provides for the compulsory insurance of the worker against sickness and unemployment on a contributory basis, the employer, the employee and the State all sharing the burden thus imposed.¹ The Act was of an experimental character so far as unemployment insurance was concerned and its scope was extended in 1916 and 1920. The Old Age Pensions Acts of 1908 and 1911 provided for the grant of a pension by the State through the Ministry of Health to all persons above seventy, provided their means were below a certain small minimum. In the interest of women workers, most western countries have introduced maternity benefits and prohibited the employment of women for some period before and after child-birth.

§13. **Legal minimum wage, Truck Acts, etc.**—Lastly, in some countries special legislation has been passed to regulate wages in certain selected industries. For example, the Trade Boards Act of 1909 in Great Britain provided for the fixing of minimum rates of wages in certain 'sweated' trades (such as lace-finishing and ready-made clothing) by Trade Boards consisting of an equal number of representatives of employers and employees and some additional independent appointed members. The scope of the Act was extended in 1913 and again in 1918. The Coal Mines Minimum Wage Act of 1912 applied the same principle to wages of miners under certain circumstances. In this connexion, reference may be made to the draft convention on the subject of a statutory minimum wage adopted by the International Labour Conference in 1923. It contemplates the creation of a wage-

¹ See ch. xviii, §7, for further particulars.

fixing machinery in the case of trades or parts of trades (and especially homeworking trades) in which no arrangement exists for the effective regulation of wages by collective agreement or otherwise, and wages are exceptionally low. It may be added that the wage-fixing Trade Boards in Great Britain are set up by the Ministry of Labour after a preliminary investigation. In those trades where powerful Trade Unions exist they can very well take upon themselves the work of Trade Boards. In certain countries like New Zealand, Australia, and some States in the U.S.A. a general national minimum wage has been established by legislation. It is obvious that it is by no means easy to fix a national minimum wage even for one country, which will neither be too low to serve its purpose, nor so high as to constitute a serious burden on industries, and which, while suiting all industries alike, will adapt itself readily to changing social and economic conditions.

Truck Acts exist in several countries today prohibiting employers from paying wages in kind. Before they were passed serious abuses existed. Workers were compelled to buy their requirements from the employers' shops at unduly high prices. The quality of the goods stocked also left much to be desired. The Truck Acts make payment of wages in cash compulsory.

The foregoing survey of labour legislation is a convincing proof of the new liberal attitude of the State and of public opinion towards the working classes. This attitude is fully justified on grounds of social and economic efficiency as well as on humanitarian grounds.

INEQUALITY OF WEALTH AND INCOME

§14. Causes of inequality.—Even the most casual observer of the economic organization of today will not fail to be impressed by the striking inequalities in the distribution of property and income which it permits. This is also borne out by statistics relating to the incomes assessed under the Income Tax Acts and those relating to properties taxed under the Probate Laws. Taussig suggests that distribution both of wealth and income has roughly a pyramidal form. "To put the analogy more carefully, its form is like an inverted peg-top—the lowest range small, then a very large extension and thereafter steady shrinkage, as the highest point is reached."¹

¹ Taussig, *op. cit.*, vol. II, p. 253.

These inequalities of wealth, which are particularly glaring in the old countries, have been the target of violent and bitter socialistic criticism.

The causes of inequality of wealth may be considered under two main heads: (i) Differences in inborn ability or natural endowment; (ii) Environment and inheritance of property.

Differences of inborn ability are and have always been an important factor in determining the distribution of wealth. The abler workers earn higher wages than the less able. The exceptionally capable business man earns much higher profits than the man of average ability. One point is quite clear; so long as such differences in respect of inborn gifts continue to operate—and there is no reason to believe that they will cease to operate in the future—inequalities of earnings and possessions are inevitable and will persist even although the other causes of inequality were to be altogether eradicated.

The feeling against inequality would not, however, have been so poignant had natural causes alone been in operation. We know that inequalities are perpetuated and aggravated by the operation of artificial factors such as the influence of environment and inheritance of property. The environmental influence tends to be particularly strong in conservative caste-ridden societies like the Indian society. But it is by no means negligible even in the progressive advanced countries of the west. The influence of example and nurture, heredity and custom, makes vertical mobility of labour difficult if not impossible. Every person tends to remain in the same social group to which his parents and forefathers belonged, so that those born in wealthy families secure better opportunities than those born in poor families, and the better start they get enables them to maintain and improve their superior social status and economic condition.¹

Closely connected with environment and opportunity is the factor of property and its inheritance. One of the principal causes of inequalities of wealth is the fact that there is great variation in the amount of property received by different persons by way of inheritance and bequest. Some receive huge amounts and others receive little or nothing. Variations of law and custom are also of considerable importance in this connexion. For example, the system of primogeniture, under which only the eldest son inherits

¹ We have already explained the causes of differences of earnings in different occupations in ch. xiv, §5.

the real estate of his father to the exclusion of younger brothers, would obviously intensify inequality of wealth and promote its concentration, especially in the case of land, in a few hands. The principle of equal inheritance among all sons—as in India—on the other hand, would lessen such inequalities. A factor allied with inheritance and bequest of property is the inequality of saving. As Cannan points out :¹ 'It is the rich who save most, both in absolute amount and in proportion to their incomes, so that saving does not mitigate inequality arising from other causes; it aggravates it.'

Thus private property, inheritance and bequest, and saving are largely responsible for the existing inequalities of wealth and income.

§15. **Evils of inequality.**—Such glaring inequalities of wealth tend to create grave social discontent and promote inter-class hatred and jealousies.² Wealth so unequally distributed fails to yield the maximum social satisfaction which it would yield if it were rationally distributed. It also prevents the full utilization of the latent intellectual capacities of all classes of the population. Last but not least, possession of large incomes means almost tyrannical power enjoyed by a favoured few over thousands of their fellow men. There may be a few instances of enlightened millionaires like Henry Ford showing a laudable sense of moral and social responsibility. But the common run of wealthy employers cannot be depended upon to regard large incomes and possessions as a social trust to be administered for the benefit of the community.

§16. **Remedies.**—All inequalities of wealth are obviously not of the unjustifiable sort. Those that reflect differences of ability cannot be condemned socially. Large fortunes, honestly acquired by sheer force of superior merit and ability, are in the words of Seligman, 'not a tax on the community but a draft on Nature'. It is, however, highly desirable to eradicate or at least to minimize as far as possible inequalities that are the result merely of environment, opportunity, property and heredity.

¹ E. Cannan, *Wealth*, p. 186.

² cf. 'The riches of the rich intensify the poverty of the poor. . . . Not what he has, but what he thinks he might have and ought to have, determines a man's state of mind. Hence, the worker of today is discontented and derives not the slightest comfort from the knowledge that in any earlier age, his real income would probably have been less than it is.'—H. Clay, *Economics for the General Reader*, pp. 431-2.

The State can do much to equalize opportunity for all by providing for the proper bringing up of all children, by free and compulsory education, by giving scope for special talent wherever it may be found, by removing social and caste barriers, and by taking all such measures as may tend to improve the economic condition of the masses.

Inequalities arising from property and its inheritance and bequest present a more difficult problem. The drastic socialistic solution of abolishing all private property in land and capital would overshoot the mark and give a definite setback to progress. The spur of private property is still necessary to call forth the best exertion of man's abilities and energies.

What is more feasible is limitation of private property, partly by not recognizing it in the case of certain social-utility enterprises like railways, supply of electricity, water, gas, etc., and partly by imposing restrictions on inheritance and bequest, taking care, however, to leave intact the stimulus to saving. Reference has already been made to death duties and inheritance taxes. If they are not excessive and do not trench upon capital, they are useful in checking the growth of inequality. Progressive taxation of large incomes and expenditure on the amelioration of the numerically larger section of the society, also secure a similar purpose.¹ To aim at the establishment of a flat equality of wealth and income would be running grave social and political risks. This is, however, not to justify the present position as regards distribution of wealth and property. In many ways it is admittedly irrational and inequitable, and urgently calls for amendment in the interests of social peace and economic progress.

Let us repeat in conclusion that inequalities of wealth are to some extent necessary to ensure social progress by stimulating individual initiative and enterprise. But change is required both as to the manner in which they are allowed to arise under present conditions and as to their extent.

SOCIALISM

§17. **What is socialism?**—Socialism may be described in the words of Bertrand Russell² as 'the advocacy of communal ownership of land and capital in place of the present capitalistic system based upon individualism and private property'.

¹ See ch. xvii, §9.

² *Roads to Freedom: Socialism, Anarchism and Syndicalism*, p. 23.

Socialism aims at the establishment of a cooperative commonwealth, socialization of all means of production, and regulation of distribution according to some method of joint control for securing the common good.

Modern socialism was born as a protest against the evils of the Industrial Revolution and of the existing social order which can make such evils possible. While welcoming the great technical and industrial advance achieved under the capitalistic system, socialists urge that the system itself is radically vicious and that it should be replaced by another social order which would avoid the evils while retaining the advantages of the capitalistic system. It is true that with the exception of Soviet Russia, which has adopted communism—the most extreme form of socialism—no State has yet been reorganized on socialistic lines. Nevertheless socialistic propaganda has most powerfully affected the trend of economic thought and public opinion. It has been responsible for the enlargement of the economic functions of modern Governments and has deeply tinged the legislative programmes of all the advanced countries.

§18. **Socialist doctrine.**—Socialistic propaganda falls into two classes : (i) negative or destructive, and (ii) positive or constructive.

(i) *In its negative aspect* it is concerned with exposing the various defects of the existing individualistic system, especially its wastefulness and aimlessness. Every producer acts on his own estimate of the community's needs. There is no coordination of effort among the different producers, so that too much or too little may be produced. Also profit being the sole motive influencing the producers, articles which are really harmful to the consumers are often produced to satisfy unhealthy or perverted tastes. A special grievance of the socialists is that, under the existing economic system, the reward of the worker is disproportionately small in relation to his contribution to the social product. According to the labour theory of value maintained by Marx—who may be regarded as the exponent of modern socialism—while the whole productive result is due to the labourer, he gets back only a small part of what he produces—just enough for his bare subsistence—the whole surplus above this being taken by the capitalist. The theory has been strongly criticized on the ground that it totally ignores the contribution made by the other factors of production. In its extreme form it has been abandoned by many modern socialists, though their contention remains that the workman fails to

get his due under the present system. Private property, the socialist argues, is the outcome of the original aggression of the strong against the weak, and it makes possible the continued exploitation of the weak. The advent of machinery and the Industrial Revolution have immensely increased the power of the capitalist over the workman, who has come to be completely dependent upon the capitalist.

(ii) The socialists are not agreed among themselves as regards the methods of establishing a socialist commonwealth. Some of them are evolutionary socialists, like the State socialists or the Fabian socialists in Great Britain. They believe in the gradual introduction of socialism, and advocate constitutional methods through the acquisition of greater control of the political machinery. Others, like the Marxian communists, favour the forcible overthrow of capitalist society and the establishment of the proletarian State. The syndicalists advocate 'direct action', that is, general strikes calculated to paralyse the capitalistic society and the State. They wish to abolish the State and establish Trade Union government. The Guild socialists support self-government in industry, which is to become the basis of social organization. They desire, however, to retain the State for certain purposes such as the maintenance of peace and order and the protection of the economic interests of the consumer.¹

On the constructive side, the socialists are weaker than in their destructive criticisms of the present economic system, and there is great variation in their proposals for social reconstruction. For example, the State Socialists would leave the management of all industrial enterprises to State control through managers and labourers paid and controlled by the Governmental departments. Private property would be allowed to remain in articles of consumption but not in the instruments of production. The communists, however, are not prepared to recognize any form of private property (if they can help it). They want the community as a whole to be the direct owner of all things.

Probably the most acute disagreement among the socialists is regarding their formula of distribution of wealth. The communist formula is, 'From each according to his capacity, to each according to his needs'. Others advocate equality of wages based on the performance of equal amounts

¹ For an interesting study of the various schools of socialism the reader is referred to C. E. M. Joad, *Modern Political Theory*; and F. J. C. Hearnsshaw, *A Survey of Socialism*.

of labour; allowing for the attractiveness or the disagreeableness of each occupation. The majority of the socialists advocate wages as based on efficiency to be determined by a hierarchy of officials. This plan, which involves the difficulties inherent in a centralized bureaucracy, is not favoured by the advocates of Guild socialism and Municipal socialism, who prefer decentralization and functional democracy.

All socialists, however, emphasize the idea of service, and have a faith 'that men and women are capable of giving and of sustaining more effective service than capitalism is able to demand from them under the impulsion of motives largely social'.¹ Socialists believe that it is possible to build upon the impulse which makes people work willingly and well for the common benefit and without any thought of pecuniary reward.

§19. A critical estimate of socialism.—The chief achievement of socialism is undoubtedly its merciless exposure of the principal evils of the present system. The socialists have directed a never-ceasing fire of criticism against the regime of unrestricted competition, the injustice and waste which it involves and the formidable danger to the worker and the community in general from powerful capitalistic combinations which have arisen as a result of excessive competition. The socialists have also on the whole succeeded in securing considerable support for their contention that under the capitalistic system, the worker fails to get his due share in the distribution of wealth. Further, they have called the attention of all thinking men to the present glaring inequalities of wealth and opportunity which the system tolerates. It must also be admitted that if the barren creed of *laissez-faire* has now been abandoned in practice by all enlightened Governments in the world, the credit of this must go largely to the socialists. By denouncing exploitation in every shape and form, socialism has succeeded in arousing the communal conscience, and its appeal for self-sacrifice and social service has been powerful and effective. It has thus stimulated several much-needed reforms in the shape of anti-trust legislation, Factory Laws, labour insurance, statutory minimum wages, arbitration and conciliation of industrial disputes, progressive taxation, extension of suffrage, extension of education, improved sanitation and municipal operation of social utility services. Under socialistic influences

¹ G. D. H. Cole, *The Intelligent Man's Guide through World Chaos*, p. 585.

the State has been fulfilling more effectively than ever before its duties as an agent for the realization of the collective ends of the community.

Like all partisans, however, socialists of every school have been guilty of exaggeration both in decrying the evils of the capitalistic system and in praising their own particular brand of socialism. In dwelling upon the fact that under present conditions the worker does not get his proper share of wealth, they are perhaps not wrong. But they have been proved to be entirely wrong in suggesting that the worker's lot is getting steadily worse. There is no gainsaying the fact that the industrial worker of today enjoys a much better and stronger economic position than he did before the Industrial Revolution. Again, their indictment of capitalism is often based on fallacious reasoning, as in the case of the labour theory of value. We have also noticed the disconcerting lack of harmony in their plans for social reorganization and their notions of a proper basis of wealth-distribution. Nor has their insistence on the actual efficacy of the motive of social service in place of the motive of profit succeeded in carrying conviction. It is probably true that the motive of social service has not been properly developed under the capitalistic system. But in the best of circumstances it is very uncertain how far social service would effectively replace self-interest as a stimulus to action, so long as human nature remains what it is. The average man is neither so anxious to work nor so zealous about the common welfare as socialism demands, and if the spur of self-interest is removed the likelihood is that the volume of production will shrink seriously. We must also not forget that most of the socialistic plans require for their working the establishment of a vast bureaucracy. This will bring in red-tapeism and tyranny of the bosses, such as is highly detrimental to individual enterprise and self-help.¹

As regards the methods by which socialists desire to usher in the new order, the communists regard revolution as indispensable and have used it with apparent success in Russia. However the Russian experiment is much too recent and we know far too little to form any settled opinion. Once the existing order is thrown into the melting-pot, nobody can predict what exactly will take its place. For this reason and because violence begets violence and reaction, it would seem

¹ Guild socialism, which seeks to establish control by local bodies, is less open to objection on this score than State socialism or collectivism.

necessary to stress the need for caution and deliberateness in introducing changes in the social structure. The Fabian socialists, who prefer evolution to revolution, can rightfully claim that, following their peaceful constitutional methods, they have been instrumental in securing a good deal of permanent, if not very startling, advance in many directions. That this is after all merely social reform and not socialism proper, is a criticism which will trouble only doctrinaire socialists. But most people are satisfied so long as definite progress, however gradual, is achieved and will not lightly destroy a fabric of civilization which, with all its faults, represents an advance on anything that has preceded it, and which has been built up by centuries of painful human effort.

SUMMARY

PROBLEMS OF LABOUR IN RELATION TO CAPITAL

A. Industrial disputes.—Growing industrial unrest is one of the most regrettable features of the present economic system. Its main causes are the desire of the workers for better pay, a higher standard of life, better conditions of employment as regards hours of work; their anxiety to secure greater economic stability; the growing consciousness among the working class of their rights; the spread of socialistic and communistic ideas; the growth of solidarity among the working classes in general; the increasing truculence of working-class organizations; and the economic and political upheaval which has followed the war of 1914-18.

Industrial harmony is obviously a necessary pre-condition of economic prosperity. Frequent strikes and lockouts inflict serious harm on workers, employers and the community at large. Some organization is therefore necessary (i) to prevent industrial disputes, and (ii) to settle them amicably when they do occur.

The first object may be achieved by the establishment of efficient organizations both on the side of the employers and on that of the employees, competent to speak for their respective side. Joint councils (on the lines of the Whitley Committees) representative of both the parties, for fixing and securing the observance of conditions of work and certain modifications of the capitalistic system, such as profit-sharing, are useful in this connexion.

Industrial disputes when they do occur can be dealt with by private or public conciliation. Arbitration is usually voluntary, although in a few countries like Australia there is compulsory public arbitration, strikes being altogether prohibited.

B. Trade Unions.—Industrial workers are organized today into Trade Unions. A Trade Union serves as a mutual or friendly society and helps its members who may be in distress. Its more important function is that it safeguards and promotes the economic interests of its members as against

the employers, through collective bargaining and by resorting to strikes, if necessary.

The *Trade Union movement* is essentially the product of the conditions created by the Industrial Revolution in England. It has passed through several phases. To begin with, Trade Unions were illegal and were looked upon as criminal conspiracies. Later they ceased to be regarded as criminal, but were still unrecognized by law. Later still they were legalized and gradually acquired protection, privileges and immunities.

Trade Unions are organized either on the *craft* (professional) *basis*, or on the *industrial basis*. The latter type is at present gaining ground. Whatever the type, Trade Unions are being amalgamated and federated into nation-wide organizations often exercising great influence on the whole labour movement and the country's politics. Well-organized and responsible Trade Unions are highly beneficial to the working classes as well as the community in general. Their chief danger comes from their particularist tendency and policy of restriction of competition and limitation of output. Another danger is their alliance with the idea of the *general strike*, particularly favoured by the syndicalists. On balance the Trade Union movement has undoubtedly conferred great benefits both on workers and on society at large.

C. Labour legislation.—The principal evils of the modern industrial system, such as unduly long hours of work, exploitation of the labour of children and women, intolerable conditions of work in factories and absence of any systematic relief to workers in times of economic stress, were for a long time left unredressed. Owing to the spread of better knowledge about the abuses of the factory system, the quickening of public conscience and more effective labour organization, it has been possible to impose a considerable check on these evils through suitable labour legislation. The scope of such legislation has been continuously on the increase, and today most of the advanced countries like England and Germany possess a complete labour code affording many-sided protection to the worker. A great stimulus has been imparted to such legislation in recent times by the establishment of the International Labour Organization of the League of Nations.

The main items of labour legislation are: (i) Factory and Mines Acts; (ii) Workmen's Compensation Acts; (iii) Sickness and Unemployment Insurance, Old Age Pensions and Maternity Benefit Acts; and (iv) Legal Minimum Wages and Truck Acts.

(i) Factory and Mines Acts regulate the hours of work, age of employment, lay down rest pauses, holidays, conditions in factories and mines, and prohibit the employment of children and women in certain trades (e.g. for underground work in mines) and during certain hours (at night).

(ii) Workmen's Compensation Acts make the employers liable for injuries received by workers in the course of employment, and provide for a scale of compensation according to the nature of the injuries received.

(iii) The third main item of labour legislation is the statutory provision against certain disabilities to which the worker is exposed, such as sickness, unemployment, old age, and, in the case of women workers, child-birth. National insurance schemes on a contributory basis have been introduced

in Great Britain and Germany to deal with sickness and unemployment. Old age pensions are paid by the State in a few countries. Maternity benefits are provided for by legislation or otherwise in many countries.

(iv) In some countries minimum wages have been prescribed by law, and representative Trade Boards have been established for fixing wages in sweated industries where, owing to lack of labour organization, excessively low wages prevail. A general (national) legal minimum wage has been adopted in a few countries like New Zealand and Australia.

Truck Acts (prohibiting payment of wages in kind and insisting on cash wages) also exist in England and some other countries.

INEQUALITY OF WEALTH AND INCOME

Striking inequalities in the distribution of wealth are a characteristic of the modern capitalistic organization. The inequalities are partly due to differences of inborn ability and partly to social organization, the system of laws governing inheritance and bequest of property, and to the factor of saving. Inequalities not due to differences of ability promote social discontent and inter-class hatred, prevent the maximum possible human satisfaction and happiness being realized and the fullest utilization of available talent, and lead to the exercise of tyrannical power by the few over the many. The inequalities can and should be mitigated by State intervention aiming at equalization of opportunity, e.g. through free and compulsory education and through every possible device for discovering and encouraging talent wherever it may be found. Private property no doubt causes and aggravates inequality, but because of its great value as a stimulus to exertion, it is desirable to maintain it. It is, however, possible to limit it without bringing about adverse reactions. For example, certain important social utility enterprises may safely be nationalized or socialized. Restrictions may be placed on inheritance and bequest, and taxation and public expenditure may be so manipulated as to make distribution more equitable and socially beneficial.

SOCIALISM

Socialism aims at the establishment of communal instead of individual ownership of all means of production (land and capital) and State control of distribution with a view to securing the common good.

Socialistic propaganda has a *destructive* and a *constructive* side.

In its destructive aspect it is concerned with pointing out the various failures of the capitalistic system, its wastefulness, its absence of coordination between production and consumption, its harmful effects on consumption and human welfare due to the exclusive domination of the profit motive; the greatest fault of the capitalistic system, according to socialists, is that it makes possible the exploitation of the worker by the capitalist. The worker gets far less than he contributes and the capitalist far more. *Vis-à-vis* the capitalist, the worker's position is hopelessly weak, so that more and more the weak are exploited by the strong.

Among socialists there is much difference of opinion as regards (i) the exact character of the new social organization which is to replace the

present individualistic system; and also (ii) as regards the methods to be used for realizing the ideal.

With regard to the first point, the subject on which there is serious divergence of opinion is that of private property. Some socialists would like to abolish it altogether. Others would allow private property only in articles of consumption but not in the instruments of production. Further the varying ideals about distribution of wealth are indicated by the formulas accepted by different schools of socialists such as 'From each according to his capacity and to each according to his needs', 'Equal wages for equal amounts of labour', 'Wages according to efficiency', etc.

Other matters of controversy are (a) the position to be assigned to the State (some advocating its complete abolition and the establishment of Trade Union government in its place); (b) the nature of the administrative machinery which would run the new organization—whether it should be a centralized bureaucracy or a functional democracy with decentralization as its watchword.

(ii) As regards the methods to be adopted for establishing the new order, the broad distinction is between (a) the evolutionists like the Fabians who believe in gradualness and constitutional means; and (b) the revolutionists like the Marxian communists and the syndicalists.

The weak spots in the socialistic argument are its excessive reliance on the motive of social service as the spring of human action and its faith in the efficacy and honesty of the bureaucracy which is postulated in almost every type of organization proposed by the socialists of the different schools.

On the other hand, socialistic propaganda has been most successful in pointing out the evils of *laissez-faire* capitalism. Its influence has been great in enlarging the scope of Governmental activity in economic matters and in introducing a great volume of much-needed legislation affecting economic relations and aiming at protecting the weak from exploitation by the strong. It has quickened the public conscience and enormously hastened the pace of social betterment.

CHAPTER XVII

PUBLIC FINANCE

§1. Nature and divisions of public finance.—In this chapter, it is proposed to deal with public finance or the economics of Government, which, as pointed out in Chapter I, constitutes the fifth division of economics.

Public finance 'is concerned with the income and expenditure of public authorities, and with the adjustment of the one to the other'.¹ There are two main divisions of Public Finance, (i) Public Income or Revenues; and (ii) Public Expenditure. Two more branches may be added to these, (iii) Public Credit or Debt; and (iv) Financial Management or Administration. The last branch forms part of the study of politics and administration and need not be considered here.

With the growing activities of the State the principles and problems of public finance are naturally receiving increasing attention at present.

§2. Three different systems of public finance.—There are three distinct systems of public finance :

(i) *The system of predetermined income*, the expenditure being adjusted to the income. This system is characteristic of private economy. Persons and institutions with fixed incomes must adopt it. When land revenue, with its more or less fixed yield, was the only important source of revenue in India, for example, the Government was forced to adopt this system.

(ii) *The system of predetermined expenditure*, revenue or income being adjusted to expenditure. This is typical of most modern civilized countries, and the Indian financial system is gradually assuming this character. Under this system the executive Government, acting through its Finance Department, prepares its budget (or a forecast of expenditure) upon the basis of public needs conforming to a certain level of urgency. The budget so prepared is submitted to the Legislature which is asked to vote taxes and funds sufficient to meet these public needs.

We cannot, however, draw a hard and fast line between the rules of public economy and private economy, for it is

¹ H. Dalton, *Principles of Public Finance*, p. 3.

clear that in the long run the State, like the individual, must cut its coat according to its cloth. While useful State expenditure is illimitable, the taxable capacity, or the income of the citizens from which the public revenues are derived, is limited at any given time.

(iii) Lastly, there is the *commercial system* under which neither income nor expenditure is predetermined. Both are allowed to vary from time to time as may be found convenient. This system is followed in business whether conducted by a private or public agency.

PUBLIC REVENUE

§3. **Sources or classification of public revenues.**—The sources of public revenues fall into four main classes :

(i) *Direct revenue* from State property in land and forests and commercial undertakings. This is non-taxation revenue, which the State like any private person derives from its properties and business by charging prices for specific services rendered and by the sale of commodities, as in the case of postal rates, or railway fares for the use of Government railways, or charges for the supply of water through the Irrigation Department. So also is income from lands directly owned by the Government or from shares and other investments made by the Government (as in the case of Suez Canal shares held by the British Government).

(ii) *Derived revenue*, i.e. derived by the State from the income of its citizens in the form of (a) taxes and (b) fees, e.g. license fees.

(iii) *Anticipated revenue* in the form of public borrowings, which in essence constitute an anticipation of future revenue, out of which interest charges are met and repayment of the principal is effected. The whole question of public debt is treated separately.¹

(iv) There is a miscellaneous class of public revenues comprising such items as (a) tributes and indemnities, (b) fines, (c) profits from currency and note issue, and (d) gifts, etc.

§4. **Definition and characteristics of taxation.**—We shall now proceed to consider taxation revenue and the principles underlying a good tax system.

A tax is a compulsory contribution of the wealth of a person or body of persons for the service of the public

¹ See §§30-4.

powers.¹ This definition indicates four main characteristics of a tax :

(i) First, a tax is a *compulsory* payment. As previously remarked, the State levies taxes in its sovereign capacity, determining the amount of the tax, the persons affected, etc.

(ii) Secondly, a tax being a compulsory *deduction* from the wealth of a person necessarily involves sacrifice.

(iii) Thirdly, a tax is taken from the *wealth* of a person. But wealth may be taken not only in the form of money but also of services (e.g. military service) and commodities (e.g. land revenue was often paid in kind in olden times in India).

(iv) Fourthly, in the case of taxation proper, there is no direct *quid pro quo*, i.e. no exact equivalence between the tax paid by the individual and the service rendered to him by the State or benefit received by him from the State. The *service of public powers or general utility* is the predominant element, and its value is neither calculable nor is it the same for every citizen.

§5. **Fees and rates as distinguished from taxes.**—It is on this ground mainly that certain payments charged by the State in the shape of fees and rates should be distinguished from taxation proper. A *fee* is a voluntary payment for service rendered by the State in the public interest, but conferring a specific advantage on the person paying it (e.g. education fees or registration charges). A *rate* is a voluntary payment or price paid to the State for certain specific commodities or services (e.g. the postal rates, or railway fares or the water rate). Many of the payments made to a Municipality or a Local Board are rates rather than taxes, while most of the payments made to a Government belong to the category of taxes.²

§6. **Canons of taxation.**—There are four main canons or principles of taxation as stated by Adam Smith in his *Wealth of Nations*, namely, (I) Equality, (II) Certainty, (III) Convenience, and (IV) Economy. To these later writers have added three more: (V) Productivity, (VI) Elasticity, and (VII) Simplicity. The first of these, namely the canon of *Equality*, raises some fundamental issues of a controversial character.

¹ C. F. Bastable, *Public Finance*.

² See J. S. Nicholson, *Principles of Political Economy*, vol. III, pp. 261-5.

§7. (I) **Equality of taxation.**—Smith stated the canon of equality thus: 'The subjects of every State ought to contribute towards the support of the Government, as nearly as possible in proportion to the revenue which they respectively enjoy under the protection of the State.' This canon is found to contain the germs of several distinct theories of what constitutes equitable or just taxation such as: (i) the equality of sacrifice theory, (ii) the faculty or the ability theory. Other theories of lesser importance are (iii) the benefit theory, and (iv) the social function of taxation theory.

Owing to the great inequalities of wealth prevailing in modern society, the question, what is a fair basis of taxation, has been a subject of acute controversy. Obviously, equality of taxation cannot be attained through equality of payment. Differentiation between the rich and the poor citizens is necessary to attain justice in taxation. Adam Smith suggested the basis of ability of the taxpayer to contribute to the State. Now the term 'ability' is capable of a twofold interpretation, subjective or objective, according as emphasis is laid on the convenience or sacrifice involved in the payment of the tax (subjective), or on the ability or faculty of the taxpayer as indicated by his property or income, i.e. according to his taxable capacity (objective). We thus get two main principles, one underlying the equality of sacrifice theory and the other underlying the faculty theory, sometimes called the ability theory. We shall examine these separately.

§8. **The equality of sacrifice theory.**—This was first emphasized by John Stuart Mill, who maintained that every taxpayer should be called upon to make the same or equal sacrifice. It is generally agreed that in income-tax a certain minimum income should be free, i.e. exempted from taxation; otherwise taxation of small incomes would lead to the sacrifice of necessities of life, while that of large incomes would mean sacrifice only of superfluities or luxuries. The sacrifice imposed on the poor would thus be far heavier than that imposed on the rich. We find that in most income-tax systems there is a minimum tax-free income. Thus in India incomes below Rs. 2,000 a year are not taxed. The same idea makes some people advocate the exemption of taxes on food-stuffs, salt and other necessities of life.

§9. **The theory of progressive taxation.**—The principle of equality of sacrifice is also made the basis of progressive taxation. It is argued that money has varying degrees of utility to the rich and poor, and that as the income increases

its marginal utility falls.¹ Proportionate taxation, i.e. a fixed percentage of income, say 2%, contributed as tax to the State would mean greater sacrifice for the poor than for rich persons. Progressive taxation, under which the *rate* of taxation increases with the size of the income, is therefore essential for equalizing sacrifice. Most modern tax systems have adopted this principle, and important taxes like the income-tax and death duties are often heavily graduated. For instance, in India, the rate of income-tax (in 1936) which is 6 pies in the rupee on incomes between Rs. 2,000 and Rs. 4,999, rises to 9 pies on incomes between Rs. 5,000 and Rs. 9,999 and so on until it reaches 26 pies on incomes of Rs. 1,00,000 and upwards. The super-tax is similarly graduated. The socialist parties in various countries prefer progressive taxation to proportional taxation as one method of reducing inequalities of wealth by taxing the rich more heavily and spending the tax proceeds for the amelioration of the condition of the masses.

§10. **Criticism of progressive taxation.**—The principle of progressive taxation has been criticized on the following grounds :

(i) The standard is essentially subjective and therefore cannot be other than arbitrary. We have not as yet evolved any accurate method of measuring sacrifice involved in the taxation of large and small incomes.

(ii) Also the utility of a given income is not the same to all individuals.

(iii) We are not justified in discriminating between the rich and poor in taxation since we do not make any such discrimination in our ordinary economic transactions.

(iv) Progressive taxation strengthens the motives for evasion.

(v) It encourages extravagance, weakens the desire to save and leads to emigration of capital.

(vi) Lastly, it is not the purpose of a tax system to alter the existing distribution of wealth. Its main function should be financial, i.e. to raise a certain amount of revenue, enough to enable the State to meet its needs.

There is some force in these objections, but not so much as to weaken appreciably the case for progressive taxation. A certain element of arbitrariness in taxation is inevitable, and the tendency towards evasion will be there in all circumstances, though experience shows that it is possible to

¹ See ch. iv, §6.

minimize it by suitable measures. Lastly, if the rate of progression is moderate, extravagance and transfer of capital need not occur on any alarming scale.

§11. **The faculty or ability theory of taxation.**—As previously stated, the word 'ability' as used by Adam Smith is objectively interpreted to mean the capacity of the taxpayer to contribute, as judged by the monetary value of his wealth. The faculty or ability theory is much older than the sacrifice theory. At first faculty was measured by property. Later it came to mean income. Formerly, the simple rule of arithmetical proportion was applied, but today the rule of progression is generally followed on the ground that the ability to pay the tax increases progressively. The faculty grows in more than arithmetical proportion to increase of income. Progression and exemption of a minimum income can be justified on the theory of faculty also. A certain minimum income requires exemption since the taxation of such income would diminish the general efficiency of labour. Similarly, as regards allowances and abatements, it is obvious that a bachelor with Rs. 500 a year possesses a higher faculty to pay than a married person with a family earning the same income.

§12. **The benefit theory of taxation** is suggested by Adam Smith's reference to the revenues enjoyed under the protection of the State. As previously stated, this theory is of special relevance in the case of the services rendered by municipalities and other institutions of local self-government. But otherwise it offers rather too narrow a basis for taxation. The essence of taxation is the absence of a direct *quid pro quo*. If the assumption that taxes should be considered as payments for services rendered by the State were unflinchingly applied, it would result in *regressive taxation*, i.e. taxation which presses on the poor more heavily than on the rich; since the weak and the poor, who are unable to look after themselves, may be supposed to derive a larger benefit from the State than the rich and the powerful.

§13. **The social function of taxation theory.**—Apart from revenue considerations, taxation can and is used for a variety of other purposes, e.g. to encourage indigenous industry through protective duties, to improve public taste and public morals, and to benefit national health by heavy duties on noxious drugs like opium and on alcoholic liquors. All these objects are legitimate enough. But we must not forget that the main function of taxation is to raise an adequate revenue for the maintenance of the State, and this must be done

with the minimum of cost—not only the cost of collection but also cost in the shape of public patience. The principle is that the goose (taxpayer) must be plucked, but without making it squeal too much. This sounds cynical. But it must be admitted that in actual practice the principle of practical expediency is often found to overbear all other considerations.

§14. **Other canons of taxation.**—The other canons of taxation are largely of the nature of administrative rules and do not raise any question of principle. They may now be briefly considered.

(II) *Certainty.*—As Adam Smith points out, the time of payment, the manner of payment and the amount of the tax to be paid ought to be clear and intelligible to all concerned. The land revenue in India when it used to be farmed to middlemen in the eighteenth century is a good illustration of the evils, such as arbitrary exactions, corruption of State officials and uncertainty of yield which follow from disregarding this canon.

(III) *Convenience.*—Every tax should be levied at the time and in the manner most convenient to the taxpayer. Thus, in India land revenue is collected in instalments which fall due after the harvest is taken. Indirect taxes on the whole conform better to this canon than direct taxes.¹

(IV) *Economy.*—The cost of collection of a tax should be kept as low as possible in order that the net yield of a tax secured by the State should be as large as possible without at the same time imposing any serious handicap on trade and production. Thus internal transit dues are to be condemned on this account. So also it is hardly worth while for the State to assess a large number of petty incomes, since it would make it necessary to maintain a large army of tax-collectors. (Incidentally this gives us another ground for exempting low incomes from taxation.)

(V) *Productivity.*—It is very desirable from the standpoint of both the State and its subjects that a given amount of revenue should be raised from a small number of highly productive taxes rather than from a large number of taxes each yielding an insignificant amount. Also, the tax system should be such as not to trench seriously upon the productive resources of the community.

(VI) *Elasticity.*—A good system of taxation should as far as possible provide for a self-acting increase in the revenue

so as to keep pace with the growth of population and wealth in a community. The income-tax satisfies this test admirably. Any increase in the wealth of the community automatically increases the yield from income-tax. Again, in any emergency like war, we have simply to raise the rate of the tax and we realize a larger revenue without any addition to the administrative machinery. The Indian Land Revenue in general and the Permanent Settlements in particular afford a contrast to income-tax from the point of view of elasticity.

(VII) *Simplicity*.—The tax system should be readily intelligible to the man of average intelligence and should not leave him in any doubt regarding his obligations under it.

The various canons discussed above give general guidance to the practical statesman. It is necessary to remember, however, that any individual tax may offend against this or that principle or canon and yet it may be a good tax. It must be judged not by itself but as forming part of a system. It is impossible so to arrange matters that every single tax should conform to every one of the canons. To mention only one of the difficulties, the canons themselves are not all consistent with one another. What is to be aimed at, however, is that the taxation system as a whole should secure rough justice. The peculiar deficiencies of one tax must be corrected by the special excellences of another.

§15. **Taxable capacity**.—While discussing the faculty theory above, reference has been made to taxable capacity. We shall now examine further the conception of taxable capacity. It has been defined by Sir Josiah Stamp¹ as the fund which 'is measured by the difference between two quantities—the total quantity of production and the total quantity of consumption', after making suitable allowances for annual replacements, repairs and renewals. In the case of India, the standard of consumption is very low, but production is also very low, so that the difference between the two gives us a very small margin of taxable capacity. Any estimate of taxable capacity must at best be a rough guess. This is particularly so in a country like India owing to the paucity and unreliability of statistical data.

§16. **Limits of taxable capacity**.—Taxable capacity, as defined above, is not an absolute figure. (i) It depends upon how revenue from taxation is used. As Sir Basil Blackett once remarked, 'it is a question of expenditure very much more than that of taxation'. If money raised by taxation

¹ Sir Josiah Stamp, *Wealth and Taxable Capacity*, p. 114.

is spent on nation-building departments, like education, health, industries and agriculture, the taxable capacity of the people can be greatly increased. If, on the other hand, a large proportion of revenue is spent on the army and other unproductive purposes the taxable capacity will remain low. Military expenditure in India is generally regarded as open to serious criticism from this point of view.

(ii) Taxable capacity also depends upon the spirit and the national psychology of the people.¹ Under the influence of patriotic fervour or some other short-lived but powerful feeling the willingness of people to suffer sacrifices may for a time greatly increase. Even in ordinary times some people (e.g. the English) bear taxation more willingly than others (e.g. the French). In India it is probably true that people on the whole do not show sufficient willingness to submit to taxation for socially useful purposes owing to a still undeveloped sense of civic duty.

(iii) Thirdly, taxable capacity depends on the way in which the taxation is raised, both as to the methods adopted and the rate at which the increase is laid on. Thus the hardship felt by the taxpayer under a single tax would be much greater than under a variety of direct and indirect taxes each falling on a different group of people in the community. Some variety in taxation is therefore necessary so as to spread its burden evenly on different classes of people.

(iv) Fourthly, taxable capacity depends upon the number of inhabitants among whom a given aggregate of national wealth is divided. If that is very large relatively to the total wealth, as in the case of India, taxable capacity will be low.

(v) Evenness or unevenness of distribution is another factor to be considered. If, for example, there are 100 persons with an income of Rs. 2,000 and one person with Rs. 2,00,000, there would be a larger taxable capacity than if the same aggregate of Rs. 4 lakhs were equally divided among 101 persons. In the first case, while 100 persons would make a minimum contribution to the income-tax, say 6 pies in the rupee, the man with Rs. 2,00,000 would contribute at the rate of, say, 26 pies in the rupee. In the second case, the contribution received from 101 persons; all with equal incomes of small range, would be much smaller than in the first case. This result follows from progressive taxation. In India, taxable capacity is low, not only because production is low and is divided among a large number of

¹ Stamp, op. cit., p. 118.

people, but also because quite a large number of incomes are more or less of the same low level.¹

§17. **Direct and indirect taxes distinguished.**—We may next examine the usual distinction between direct and indirect taxes. 'A direct tax is really paid by the person on whom it is legally imposed, while an indirect tax is imposed on one person, but paid partly or wholly by another owing to a consequential change in the terms of some bargain between them. Thus an indirect tax is conceived as one which can be shifted or passed on, a direct tax as one that cannot.'² Perhaps the best example of a direct tax is the income-tax, while that of an indirect tax is customs duties, or an excise like the salt tax in India. The latter is collected by the Government from a few licensed manufacturers or dealers but is paid ultimately by all consumers of salt in the enhanced price at which salt is sold in the Indian bazaars. On the other hand, the burden of the income-tax falls on the person assessed to it just as the burden of the land tax, which is also a direct tax, falls on the land-holder.

§18. **Merits and demerits of direct and indirect taxes.**—The main advantage of a direct tax is that it brings home to the tax-payer the responsibilities of citizenship and makes him critical of Government extravagance and suspicious of hasty and expensive social and political experiments. On the other hand, indirect taxes encourage prodigal expenditure on the part of the Governments who can raise funds with comparative ease by levying such taxes, because the people who really pay them are scarcely aware of the fact.

Direct taxes are in principle sounder and more equitable than indirect taxes since they can be better graded to suit the ability of the taxpayer. A direct tax like income-tax, for example, lends itself more readily to progression, and the richer sections of society can thus be made to contribute a fair share towards the expenses of the State. Indirect taxes are generally regressive in their nature, pressing more heavily on the poor than on the rich. For instance, the poor man and the rich man both consume practically the same amount

¹ According to Sir William Layton however, though India consists in the main of extremely poor people, it is at the same time a country where there are large accumulations of wealth, on which Government taxes rest very lightly. The extent of these accumulations is a matter of conjecture. Anyhow, Sir William Layton seems to accept the contention in the text by admitting that *in the main* India consists of extremely poor people.

² Dalton, *op. cit.*, p. 33.

of salt, and therefore pay the same amount of tax, which is unfair. To equalize the burden, the poor man should be required to pay less because his income is smaller.

Direct taxes enjoy the advantage of certainty both for the taxpayer and the State. The yield of indirect taxes is often uncertain, as also the extent of the rise in the price of the taxed commodity or service.

Direct taxes are, however, unpopular since the taxpayer cannot help being aware of them. For the same reason, there is a stronger tendency to evade them than in the case of indirect taxes, and there is greater possibility of fraud. On the other hand, an indirect tax is less felt by the taxpayer. He pays little by little every time he buys the taxed commodity. The price he pays is no doubt higher on account of the tax, but if he complains of the price at all he is inclined to blame the producer of the commodity rather than the taxing authority. He is taxed in the dark, so to speak, and fails clearly to see that he is taxed, especially as the tax is not paid in one lump sum but is spread over a series of purchases.

Direct taxes are sometimes more difficult to administer and more expensive to collect than indirect taxes. For example, an extensive assessing and collecting machinery is necessary in the case of direct taxes like the land tax in India or income-tax in order directly to deal with a large body of individual assesseees. The cost of collecting indirect taxes is on the other hand moderate, being collected from a comparatively small number of producers or dealers. It is, however, necessary to exercise care in selecting the commodity to be taxed. Preferably it should be one that is widely consumed. Another merit of indirect taxes is that through some of them alone (e.g. through the salt tax in India, or the taxes on sugar and tea in England) can the masses be reached and thus everybody made to contribute his quota towards the expenses of the State. One great point against indirect taxes, however, is that they are particularly liable to disturb the smooth course of trade and industry. This is especially true in the case of internal transit duties, which have therefore been abolished in most countries.

Direct taxes being in principle superior to indirect taxes, their predominance, as under the British taxation system, indicates a more advanced economic, political and social development. Indirect taxes play a more important part than direct taxes in India, which is therefore less advanced from this point of view. But even in the most advanced

countries, indirect taxes have to be resorted to, and account for a considerable portion of the total revenue.

§19. Importance of a study of the incidence of taxation.—An important problem of public finance is the incidence of taxation. A distinction may be drawn between *impact* and *incidence*. The impact of the tax is upon the person who first pays the tax; the incidence is upon the person who ultimately bears it. Thus, (i) if as a result of an excise duty on matches levied on the manufacturer, their price rises by the full amount of the duty, the incidence of the tax falls wholly on the buyer; (ii) if the price rises, but not by the full amount of the duty, the incidence is partly on the manufacturer and partly on the buyer; and (iii) if the price does not rise at all the incidence is wholly on the manufacturer. The transference of the burden, from the person who first pays the tax to some other person or persons, is known as *shifting*.

The question of incidence of taxation is of great practical significance, and unless careful attention is paid to it, mistakes may easily occur. We may intend the burden of taxation to fall on one set of people, but actually it may come to be borne by quite another set. We have also to consider any incidental advantages and disadvantages following from any proposed tax.

In the case of *direct taxes*, the impact and incidence of the tax are intended to fall on the same person or persons. But this does not invariably happen. For instance, an income-tax levied in the first instance on business men may be shifted by them to their customers in the shape of enhanced prices for the goods or services sold, or to their workmen in the form of lower wages. It may have other secondary effects in checking enterprise and saving. Succession duties are another form of direct taxation, and it has been argued against them that unless they are very moderate they act as checks to accumulation, promote extravagant expenditure and may be evaded through gifts *inter vivos*. All this may have adverse reactions on enterprise and wages of labour.

As regards *indirect taxes*, the original intention of the State, that the tax should be shifted in a certain manner, may not be realized at all or only partially realized, and here also there may be various secondary reactions and after-effects.

§20. Theory of incidence of taxation.—The general principle of incidence is that the shifting of a tax can ordi-

narily take place as between one person and another by a change in the bargain between them; free competition and free play of the economic forces of supply and demand being assumed. With regard to taxes on particular commodities or services two propositions may be laid down. (i) 'The first is that, other things being equal, the more elastic the demand for the object of taxation, the more will the incidence of the tax be upon the seller. (ii) And the second is that, other things being equal, the more elastic the supply of the object of taxation, the more will the incidence of the tax be upon the buyer.'¹ Thus the greater part of a tax on luxuries (the demand for which is elastic) will be borne by the seller, for if he tried to shift the whole of it by raising the price to the full extent of the tax, the demand would fall appreciably. The seller may therefore not raise the price to the full extent of the tax, preferring to keep up his sales. On the other hand, in the case of a tax on a necessary of life, like salt, with inelastic demand, the greater portion or the whole of the tax, and sometimes even more than the tax, will be borne by the consumer, since the buyer cannot much curtail his purchases even if the price is appreciably higher than before. On the other hand, the supply being elastic, the seller can restrict it and will thus be able to charge a higher price.

In considering the incidence of a tax on commodities, allowance must be made for the influence of the laws of cost (returns). Thus if a commodity is produced at increasing cost per unit, a tax on it may not raise its price by the full amount of the tax since the marginal cost of producing a smaller quantity now demanded because of the higher price, will be lower than before. If a commodity is produced at a diminishing cost, a tax on it will raise the price by more than the amount of the tax, for the marginal cost of producing a reduced quantity is higher than before. Therefore, the new price will be higher than the old price *plus* the tax. In the case of constant cost, there will be no change in the cost of production in consequence of change in demand and supply, and the price will rise by just the amount of the tax.

(iii) A third factor that must be borne in mind in dealing with the incidence of taxation is the question how far substitutes for a commodity or correlated articles are also taxed. If they are not taxed, the greater portion of the tax will have

¹ Dalton, *op. cit.*, p. 54.

to be paid by the seller, since the consumer can turn to the non-taxed substitutes.

§21. **The incidence of tax on rent.**—A tax on pure economic rent or unearned increment must ultimately be paid by the landlord. We have already seen¹ that rent does not affect the marginal cost of production on the no-rent land on which the price depends, and therefore the burden of a tax on rent cannot be shifted to the consumers. Nor can the tenant be made to pay it, since under competition he cannot retain any portion of the rent. This argument is based on the assumption that the tenant is already paying the full economic rent. However, if competition amongst tenants is imperfect, the tenant may be unable to shift a tax levied on him to the landlord, and may have to bear it wholly or in part. Or if the landlord is required in the first instance to pay the tax, he may be able to recoup himself by raising the existing rent until he is able to absorb the whole of the economic rent. In this case again the tax will be partly shifted to the occupier.

§22. **Incidence of taxes on buildings.**—This is by no means easy to determine. Ordinarily in the case of growing towns, the incidence of a tax on buildings falls on the occupier rather than the landlord, since demand for buildings is inelastic. Moreover, the landlord expects a net return on his investment at the current market rate and looks upon a tax on buildings as part of his expenses. At the same time, it is true that the supply of houses is not as elastic as that of less durable articles. Periods of business depression may synchronize with brisk building activity, and the landlords will have to bear the greater part of the tax. Sometimes such a tax may be shifted to the purchasers of the products sold by the occupier.

§23. **Taxes on monopolies.**—The incidence of a tax on a monopolist depends upon the nature of the tax imposed. If a *fixed tax* is levied upon the monopolist, its full incidence will fall upon him, since he may be supposed to have already fixed his price so as to yield him a maximum monopoly revenue. The same will be the case with a tax *proportional* to the monopoly gain. If the monopolist tried to raise the price, the equilibrium would be disturbed and his gain lessened. He would therefore prefer to bear the tax himself rather than change the price which according to his calculation is yielding him the highest income possible. If,

however, the tax is *proportional to the output*, the monopolist will try to reduce output and raise the price if he finds that he can thus escape a greater loss in monopoly revenue caused by the payment of a tax on a larger supply.

PUBLIC EXPENDITURE

§24. **Classification of public expenditure.**—A study of the actual expenditure of modern States gives us the following list:¹

(i) The maintenance and equipment of armed forces, including police, (a) in peace, and (b) in war.

(ii) The administration of justice.

(iii) The maintenance of the ceremonial head of the State.

(iv) The maintenance of the machinery of civil Government.

(v) Public debt charges.

(vi) Expenditure directly devoted to 'fostering industry and commerce' (e.g. consular service) and the performance of industrial and commercial functions, such as the supply of currency, conduct of postal service, transport services, etc.

(vii) Social expenditure on health, education, old age pensions, poor relief, provision for unemployment, etc.

There are various other points of view from which public expenditure may be classified.

(i) *According to the authority which incurs the expenditure.*—For example in India we have (a) *National or Central* expenditure on defence, currency and other matters affecting the general welfare; (b) *Provincial expenditure* on education, roads, justice, police and public works; (c) *Local expenditure* incurred by local self-governing bodies, like Municipalities and District Boards, on services which affect the local welfare, such as local sanitation, street lighting, local education, water supply, local communications.

It is obvious that there is a certain overlapping between these various authorities. Education and communications are instances in point, all the three types of spending authorities being interested in them one way or another.

(ii) *According to the nature of the benefits conferred,* (a) *special benefits* on particular members of the community, such as bounties, pensions; or (b) *general benefits* on all members, such as general administration, civil works, defence, education.

§25. **Productive and unproductive expenditure.**—A distinction is usually drawn between productive and unproductive expenditure. Expenditure on commercial undertakings, like railways, irrigation and harbour projects, is obviously productive. So is expenditure on education, parks, museums and libraries, public health and sanitation, although not so directly as in the former case.

The best example of unproductive expenditure is the large amount of revenue spent on armaments and war, although it is not easy to maintain that such expenditure is in every case superfluous or unnecessary. It is, however, desirable to keep it as low as possible. Expenditure on police and internal security and the administration of justice falls into the same class, but is inevitable and necessary for preserving that security which is the first condition of economic progress.

It is hardly necessary to point out that simply because a certain item of expenditure is productive, it does not follow that the State would be justified in incurring it. It is only when State expenditure is likely to promote the general welfare more effectively than private expenditure that State intervention is desirable. We must also carefully consider whether any benefit conferred by Government expenditure is not outweighed by possible adverse effects on saving and growth of capital due to the taxes levied to secure the necessary funds.

§26. **Public expenditure in relation to distribution of wealth.**—Expenditure incurred by the State has important effects on the distribution of wealth. Old age pensions, minimum wages laid down by law, expenditure on the education of the masses, public amenities such as parks and museums financed by progressive taxation of the rich, etc., tend to have a far-reaching influence upon the distribution of income and supply a corrective to the glaring inequalities of wealth under the present economic organization. Here again the effects of such expenditure on the industry of the classes who receive the benefit and on the savings of the classes taxed must be weighed carefully.

§27. **Theory of public expenditure and of governmental functions.**—We may conclude the discussion of public expenditure by a brief exposition of the theory of public expenditure, which is closely bound up with the theory of governmental functions. The older English writers (Adam Smith and the classical school of political economy in England) failed to develop a theory of expenditure, as their *laissez-faire* ideas set very narrow limits to the functions

undertaken by Government. The sole duty of the State, they thought, was to protect the life, liberty and property of individuals from violence or fraud. All expenditure by the State beyond that necessary for the preservation of the community against internal disorder and external aggression was held to be sheer waste and an undue burden on the community. The individual, it was assumed, understood his own interest best, and the best way of achieving the greatest good of the greatest number was to leave every individual absolutely unhampered to pursue his own interest as he understood it. The function of the Government was limited to providing the necessary conditions for the exercise of individual liberty. For about a century (from the middle of the eighteenth to the middle of the nineteenth century) this theory of Governmental functions was dominant. But the grave social evils which were seen to follow under a *laissez-faire* regime lent great point to the vigorous criticism to which it was subjected from a socialistic angle, and the net result has been a great extension of State activity. We may be said to be face to face today with Wagner's 'Law of increasing State activities' according to which there is a persistent tendency both towards an extensive and an intensive increase in the functions of the State.¹ One reason for increasing State activity is that the State has greatly improved in modern times in its efficiency, and its superiority for many purposes over private agencies is being more readily admitted. Again, certain modern developments, especially the striking growth of towns, has made it necessary for the State to assume new functions, e.g. with regard to public health, and hygiene, which could not well be left to private enterprise.

Under socialistic influences, public expenditure is being freely incurred to supply various amenities of life to the masses, such as parks, museums, art galleries, libraries, free primary education, free medical inspection of children, etc. The war was a powerful influence making for a great extension of the sphere of State activity and expenditure, and the tendency has been further strengthened by the economic depression of the last few years. The apparent helplessness of private enterprise in bringing about revival has called forth economic plans on a comprehensive scale initiated and enforced by the State. We may leave out the altogether exceptional case of Russia and its famous five-year plans. But even in the old capitalistic countries, based on individualism

¹ See Dalton, op. cit., p. 191.

and private property, the State finds itself compelled to undertake new functions and expenditure—witness the American experiment of the New Deal launched by President Roosevelt. The growth of the spirit of economic nationalism and the universal quest for economic self-sufficiency are also tending to increase State activity. Much of this restless activity may be on the whole necessary and beneficial. But on the debit side we must count the inconveniences and dangers attendant on it. Firstly, there is danger of a vast State bureaucracy being called into existence and a large army of State employees pressing their claims for specially favourable treatment. It is also a question how far the economic arts can be maintained with the progressive narrowing down of private enterprise. Another grave aspect of the matter is the rapidly growing increase of State expenditure with its accompaniment of heavy taxation, which may have an adverse reaction on trade and industry and on the growth of capital. Further, we must consider the harmful tendency towards public extravagance which in some cases may have a positively demoralizing effect. For instance, the system of unemployment relief, unless carefully watched and controlled, may seriously weaken the moral fibre of society. It is very desirable that public expenditure should not exceed the taxable capacity of the people. It should also be remembered that the need for economy and avoidance of waste are at least as great in public as in private expenditure.

§28. **Economic functions of the State.**—From the foregoing survey, it will have been clear that the economic functions of Government are becoming wider and wider. Even the non-economic functions, such as defence and justice, have generally an important economic bearing. We shall, however, now consider the functions that are *directly* economic.

(i) In the first place, *the State may itself own and manage economic enterprises.* These enterprises are of growing importance in the sphere of central as well as local Government. When local authorities undertake such enterprises, it is referred to as Municipal Socialism or Municipal Trading. The manufacture of armaments and ammunitions, which are vital for national defence, must be directly under State management. Certain monopolies like the Post Office, currency, the supply of water, gas, street traction are passing more and more into the hands of the State, the justification being that if they are owned and managed by private people, serious abuses are likely to creep in, and State regulation

may be difficult, if not impossible. Or again, the State may justifiably own and manage necessary enterprises to which private capital is not likely to be attracted or in which the return to capital may be distant and uncertain. Examples of this are railways and irrigation works in certain areas, afforestation, road-making, etc. Lastly, the State may be called upon to undertake as pioneer certain industries in order to prepare the way for subsequent private enterprises.

(ii) In the second place, *the State may seek to regulate certain economic activities* under private enterprise. We have already referred to the need for controlling such social monopolies as are left in private hands. Anti-adulteration laws offer another example of State regulation, as also factory legislation and the regulation of wages, Workmen's Compensation Acts, marine regulations, and the regulation of weights and measures.¹

(iii) In the third place, the State may encourage certain economic activities and industries through protective duties and bounties and subsidies, Government purchases of private stores, Imperial Preference, Trade Agreements, etc.

§29. Social activities of the State.—These occupy an intermediate position between non-economic functions such as defence and justice on the one hand, and the economic functions of the State on the other. General and technical education, provision of parks, libraries, village uplift, public health, housing schemes for the benefit of the working classes—poor relief, unemployment allowances and social insurance—all these activities improve the economic efficiency of the people in the long run and therefore the outlay of State funds on them is more than merely humanitarian in character.

PUBLIC DEBT

§30. The nature of public debt.—The payment of interest and the repayment of the principal thereafter form part of public expenditure until the debt is cancelled. In case the loan is used productively it may create assets which may become available in time to meet these charges. Or at least they will be there sooner or later to reimburse the

¹ 'Perhaps the State is most useful as a means of providing standards: this is positive work of great value; . . . The State provides standards of weights and measures, of purity, e.g. milk, and of money.'—M. Briggs, *Textbook of Economics*, pp. 355-6. Here the object of the State intervention is to prevent abuses of private enterprise and to ensure fair play to, and the safety of, the consumer, or the worker.

national exchequer for the expenditure incurred. There will of course be nothing to show against loans for unproductive purposes like war, and the additional taxes that will be necessary for repaying them represent a dead loss to the nation.

Historically, public credit may be regarded as the development of private credit; in England, where the King was both in theory and in practice the financier of the nation, the security for State loans was originally his personal credit. The repudiation of debt by Charles II compelled Parliament to intervene and assume control over the national debt. The Bank of England (1694) had its origin in a public debt transaction. The growth of Parliamentary control together with the economic advance in England led to a striking development of the National Debt.

Public credit differs in two ways from private credit. (i) On account of its sovereign power the State may command where private persons may only persuade, as in the case of forced loans in the past. Nowadays, however, the State seldom uses its sovereign power in this manner. The rise of constitutional government and the offer of the general revenues of the State as security have greatly improved the credit of the State, which is now generally able to borrow without using any kind of force and on appreciably cheaper terms than individuals or corporations (except in countries suffering from chronic anarchy and misrule, as some of the South American States).

(ii) Secondly, public credit is relatively more lasting than private credit since the State is a corporation that never dies, and therefore the State can borrow more easily than individuals can for distant objects and long periods.¹

§31. **Uses of public loans.**—We may now indicate some general principles which should regulate public borrowings.

(i) In the first place, *temporary loans may be floated to meet an unforeseen or casual deficit.*—It would be unwise to disturb the taxation system for such purely temporary purposes. Short-period loans (e.g. in the shape of Treasury Bills) are also justifiable during periods of slack revenue collections, as in the sowing seasons in India. It is, however, a most unsound financial practice to meet continual deficits by short-term loans (as in the case of the Government of India's deficits during 1918-23). Such accumulating temporary debts must eventually be 'funded', i.e. arrangements

¹ J. S. Nicholson, *Principles of Political Economy*, vol. III, p. 405.

must be made for the payment of the interest charges and the capital sum.

(ii) Secondly, *public borrowing is necessary to meet an emergency like war*.—As a matter of history this has in fact been the principal cause of national debts, and the war of 1914-18 has been responsible for a stupendous increase in them in all the belligerent countries.

§32. **How should war be financed?**—There has been some controversy as to how far wars should be financed by loans and how far by taxes.

(i) The greatest argument for war loans is that it is quite impossible to depend on taxation alone for raising the enormous sums necessary to conduct a modern war. (ii) Further, when a war is actually in progress it is necessary to keep up the morale of the people. If taxation is oppressively heavy this object will not be fulfilled. (iii) Lastly, it is not just to throw the whole burden of the war on the present generation by raising the necessary money by taxation alone. A war may be supposed to be fought in the national interests, affecting future generations also, and therefore they should be made to shoulder some part of the burden by being called upon to pay the interest charges and repay the principal of long-term loans.

As against these arguments, it is contended that : (i) War expenditure should be financed mainly by taxation, since under the influence of patriotism people are willing to bear heavier burdens than in peace time, and it is wholly legitimate to take full advantage of this spirit of self-sacrifice. Also such a policy would exercise a much-needed check on private extravagance during a time of national peril. (ii) Secondly, war loans under the present monetary and banking system tend to bring inflation of currency and credit, and therefore a sharp rise in prices and all the disturbing consequences that follow in the wake of a depreciated currency.¹ The subsequent reaction and fall in prices are equally disturbing and inconvenient to the community at large. It is therefore much better to raise the necessary money by taxation, which has the further advantage that it saves the nation from the millstone of high interest charges and the post-war heavy taxation to meet such charges. The burden of these charges is felt to be particularly hard to bear because the loans are for purely destructive purposes and create no assets. (iii) Thirdly, as regards the contention that

¹ See ch. x, §§23 and 35.

future generations should be made to pay at least part of the burden, in the first place, it may be questioned how far it is just to saddle posterity for the mistakes of the present generation. Even assuming that it is just to do so, there is the economic aspect of the matter which cannot be ignored. Since a war means so much sacrifice of existing wealth, material and non-material, the main burden of it must fall on the existing generations. It cannot be shifted to posterity. In so far as the war is financed by internal loans the only result would be a change in the distribution of the wealth of future generations as compared to that of the present generation, the war-bond holders of the future generation being favoured at the cost of the other citizens. It is only by raising external loans that the burden of the war could be to some extent placed on the future generations. It is of course necessary not to push taxation to such limits as to make people lose heart when a war is on. They must, on the other hand, not be encouraged to pursue an unduly aggressive or extravagant policy, and there is nothing like taxation to foster sobriety in these matters.

Weighing the pros and cons we come to the conclusion that we have to resort to taxation as well as to loans. The present tendency is to resort too readily to loans, and this must be resisted. It is desirable to push taxation as far as it will go for financing war expenditure.

§33. **Loans for productive and unproductive objects.**—A very important use of public borrowing arises in connexion with public works, which may be divided into two classes: (i) Productive works like the Indian (commercial) railways and irrigation canals; and (ii) Unproductive works, such as public buildings or technically unproductive objects like education. Loans for financing productive works hardly need justification. They are self-liquidating or reproductive, i.e. they create sufficient assets in the long run for paying both interest charges and the principal. Moreover, they add to the productive resources of the community and promote its economic development. The duration of these loans should be regulated by the period during which the benefit of such works is expected to last, and their repayment should be spread over this period, being effected in suitable instalments. The same purpose could be served by providing for a sinking fund calculated to provide at the end of a certain period an amount sufficient to repay the loan.

As regards unproductive loans for financing public buildings, parks or museums, education, etc., the older economists

were inclined to disapprove of them on the ground that such outlay did not directly pay its way. Modern economists take a less conservative view and are prepared to allow the use of loan funds on the broad ground that such expenditure is calculated to promote the economic faculties of the nation and that the return is more than sufficient in the end to cover the initial outlay.

§34. **Internal versus external loans.**—In the end it may be added that internal loans should be preferred to loans raised abroad. The former involve a mere redistribution of wealth in the country itself. The latter may lead to political and other complications. At the same time, when capital is not available within a country there is no harm in raising it abroad subject to proper safeguards.

SUMMARY

The treatment of Public Finance falls into four divisions: (i) Public revenue, (ii) Public expenditure (including the economic functions of the State), (iii) Public debt, and (iv) Financial administration. The last being an administrative question is omitted here.

There are three main systems of Public Finance: (i) The system of predetermined income, expenditure being adjusted to income; (ii) The system of predetermined expenditure, income being adjusted to expenditure; (iii) The commercial system, under which neither income nor expenditure is fixed beforehand.

PUBLIC REVENUE

The sources of public revenue can be divided into the following classes: (i) Direct revenue or non-taxation revenue; (ii) Derived revenue, i.e. revenue derived from the income of citizens by means of taxes, fees, etc.; (iii) Anticipated revenue (public debt); (iv) Miscellaneous, i.e. tributes, fines, gifts, currency profits, etc.

Taxation

'A tax is a *compulsory* contribution of the wealth of a person or body of persons *for the service of public powers.*' The contribution is (i) *compulsory*; (ii) may be in the form of money or goods or services; and (iii) used for purposes of general utility, no attempt being made to return to every individual taxpayer benefit exactly equivalent to what he pays as tax.

Unlike a tax, a *fee* is a *voluntary* payment for a *specific* benefit received by the individual paying the fee.

The *canons of taxation* are: (i) equality, (ii) certainty, (iii) convenience, (iv) economy, (v) productivity, (vi) elasticity, and (vii) simplicity.

The canon of equality is of great theoretical importance and is the parent of a number of distinct theories, such as (a) the equality of sacrifice

theory, (b) the faculty or ability theory, (c) the benefit theory, and (d) the social function of taxation theory.

According to the *equality of sacrifice theory*, the sacrifice asked for by the State from different individuals should in fairness be equal. As applied to income-tax, this theory offers justification for the widely prevalent practice of (i) exempting a certain minimum income from taxation altogether, and (ii) adopting the principle of progression. The same practice can also be justified with reference to the *theory of faculty or ability*, which sets out not to equalize sacrifice but to exact from different taxpayers what each can afford. The equality of sacrifice theory is subjective because it concerns itself with the feelings of the taxpayer. The faculty theory is objective because it concerns itself with an objective fact, namely, the ability of the taxpayer to pay more or less.

As regards *progressive taxation*, those who advocate it rely more on the equality of sacrifice theory than on the faculty theory, and from this point of view the objections raised against it are that it is impossible to measure the degree of sacrifice in each case.

Other objections are that since we do not discriminate between the rich and the poor in other things (e.g. in the market the rich and the poor alike pay a certain fixed price for any given article) there is no reason why we should discriminate in taxation. If it is said that by taxation we want to redress the inequalities of distribution the retort is that the proper object of taxation is revenue and not social justice.

In spite of these objections the case for progression is strong. In giving practical effect to it, however, the usual precautions (which apply to all taxation whatever) should be borne in mind. Taxation should never be so heavy as to injure the motive for saving and strengthen beyond control the desire to evade.

The *benefit theory* does not offer a sufficiently broad basis for taxation, and if pushed to its logical conclusion may lead to various absurdities.

The *social function theory* calls attention to the fact that although the main object of taxation is and ought to be revenue, it may to some small extent also be used for various desirable social purposes.

Other practical rules of taxation are that the taxpayer should not be left in any doubt as regards what and when he has to pay, and his convenience should be consulted as far as possible. Again, the cost of collection should bear a reasonable proportion to the amount collected, and taxes should be productive rather than numerous.

The various rules and canons are for general guidance. It is impracticable to ensure obedience to all of them in the case of every single tax. The taxation system as a whole, however, should be regulated in the light of these various principles.

Taxable capacity.—Taxable capacity is wealth produced minus wealth consumed plus wealth used for replacements, repairs and renewals. Taxable capacity increases or decreases according to whether the public revenue is well or ill used. Taxable capacity further depends (i) on the size of the *per capita* income; (ii) on whether the distribution of wealth is even or uneven (uneven distribution—however objectionable in other ways—increases taxable capacity).

Direct and indirect taxes.—Direct taxes fall and are intended to fall on the persons from whom they are collected. Indirect taxes are in the first instance collected from one set of persons, but they are shifted, and are intended to be shifted, to another set of persons.

Direct taxes have the advantage of creating a sense of responsibility among those who pay them. They also check Governmental extravagance and are easier to grade so as to distribute the burden of taxation equitably.

Indirect taxes are less difficult to administer and less expensive than direct taxes. Again, if it is a sound political principle that every citizen should be made to contribute something towards the expenses of the State, this principle can conveniently be enforced only if we rely upon certain indirect taxes.

On the whole, however, direct taxes are to be preferred, and their predominance may be taken as an index of advanced economic, political and social development. The great point in favour of indirect taxes is that they enable governments to raise a considerable revenue without exciting discontent. This is, however, not an unmixed blessing.

The *impact* of a tax is on the person who first pays it; the *incidence* is on the person who ultimately bears it.

In the case of direct taxes, impact and incidence are intended to be on the same person or persons (though the intention may not altogether be fulfilled). In indirect taxes, the intention is that the original payer should shift the burden to someone else (though here again facts may not precisely correspond to intention).

As between buyer and seller, if demand is elastic, the burden of a tax tends to fall on the seller; if supply is elastic, it tends to fall on the buyer.

The manner in which the price of a taxed commodity is affected will depend upon the relation between volume of production and cost of the commodity.

If along with a commodity, substitutes for it are also not taxed, the tax will be paid mostly by the seller.

A tax on 'economic rent' cannot be shifted by the landlord on to either the tenant or the consumer.

The incidence of taxes on buildings depends upon the relative intensity of supply of and demand for buildings, about which generalization is not possible.

A fixed tax on monopoly profits will be paid by the monopolist. A tax proportional to output may fall partly on the consumer.

PUBLIC EXPENDITURE

Public expenditure falls under the following main heads: (i) Internal and external security; (ii) Maintenance of the machinery of Government; (iii) Service of debt; (iv) Industrial and commercial functions; and (v) Social expenditure.

It can also be classified (i) according to the authority incurring it, as national, provincial or local; (ii) according to whether its benefits are general or reach particular groups of people; and (iii) according to whether it is productive or unproductive.

Public expenditure may have far-reaching effects on the production and distribution of wealth.

The field of public activity and public expenditure has been greatly enlarged in recent times owing to (i) the general abandonment of the *laissez-faire* policy; (ii) the greater efficacy of State activity as compared to private activity in certain important matters; (iii) the influence of socialistic thought; (iv) the challenge of the world-wide economic depression of the present times; and (v) the growth of economic nationalism.

Although much of this State activity may be necessary, the individualist's objections have not altogether lost their point. The dangers to be guarded against are (i) Red-tapeism and a grasping and selfish bureaucracy, (ii) Deterioration in the arts of production due to the weakening of individual initiative, and the restriction of the scope for private enterprise; (iii) Public extravagance and expenditure pandering to the populace and demoralizing it.

The *economic functions of the modern State* can be enumerated as follows: (i) Enterprises may be owned and managed by the State directly, e.g. some of the railways in India; (ii) The State may regulate private enterprise in the interests of the public; and (iii) The State may encourage certain private economic activities.

In addition to these functions, the State usually undertakes a number of other functions not in themselves economic but tending to improve the economic efficiency of the people through education, sanitation, etc.

PUBLIC DEBT

All modern States have a large public debt, partly productive and partly unproductive.

As a logical corollary of the theory of State sovereignty, the State can raise forced loans, which private individuals cannot (modern States, however, seldom exercise this power).

Public debts can further be of much longer duration and can generally be raised at more favourable rates than private loans.

Temporary loans are justifiable for meeting temporary deficits. But it is not a sound practice to have constant recourse to short-term loans for meeting budget deficits.

Modern wars are so expensive that it is impossible to finance them wholly by taxation. Any attempt to do so is likely to be futile and to lead to discontent and depression of spirits and seriously to prejudice the prospects of victory. On the other hand, as much money as it is possible to raise without bringing about these evils should be raised by taxation since it is good that people should realize that war involves sacrifice. Full advantage should also be taken of the patriotic willingness of people during war-time to undergo sacrifice. It is further necessary to minimize the evil economic consequences of excessive public loans.

Both productive and unproductive loans are necessary for the State to be able to discharge its functions properly.

Loans should as far as possible be internal rather than external.

CHAPTER XVIII

UNEMPLOYMENT AND THE TRADE CYCLE

§1. **Unemployment.**—Unemployment may be regarded as the shadow side of economic progress. The unemployment problem in its present form is a special product of the Industrial Revolution. In the pre-war period the margin of unemployment in England varied from 2%, even at the height of industrial prosperity, to 12% in times of economic depression. Since the conclusion of the war, however, unemployment has assumed much more alarming proportions in many countries of the world. 'At the beginning of 1932, there were at least 25,000,000 unemployed in Europe and America, and this total was at least four times as great as the total three years before.'¹ This estimate, it may be remarked, leaves out of account the unemployed in the countries of the other continents.

§2. **Causes of unemployment.**—The adverse effects—social, economic and political—of unemployment are obvious. Apart from individual hardship and the sense of economic uncertainty caused by it, prolonged unemployment affects disastrously the efficiency of workers and saps the moral fibre of society. The grave discontent it generates is also fatal to social and political stability.

In the first place, we may distinguish between unemployment in *particular trades* and unemployment of a more *general character* affecting many trades and several countries simultaneously.

As regards unemployment in particular trades, there are certain *seasonal trades* such as agriculture, building, cotton-ginning and fishing, in which demand for labour is also naturally seasonal. India being primarily agricultural, such seasonal unemployment constitutes one of its major problems. During the slack season in agriculture, especially in areas of dry farming, the cultivators and agricultural labourers have no work for about four to six months in the year. Inter-trade adjustments and a well-regulated and brisk contact between town and country life may mitigate to some extent the hardships arising from this kind of unemployment. In India the

¹ G. D. H. Cole, *The Intelligent Man's Guide through World Chaos*, p. 311.

problem is particularly acute owing to the absence of subsidiary occupations.¹

Changes of fashions and taste, which particularly affect the textile and luxury trades, and the introduction of *new processes and of labour-saving machinery* are other causes of maladjustment and unemployment. Owing to constant fluctuations of demand which cannot be controlled, a fluctuating but permanent margin of unemployment appears to be inevitable in the modern economic system. A certain percentage of 'waiters', or a reserve of labour, seems to arise which is drawn upon more or less by industry according to need. In the post-war period the rapid spread of rationalization of industry, especially in the U.S.A. and Germany, has been responsible for a good deal of unemployment.

§3. **The trade cycle in relation to unemployment.**—A more serious problem is presented by widespread unemployment of a *general* character affecting practically all industries in all countries simultaneously. There are widespread periodic movements of trade depressions which alternate with business prosperity and booms, in a definite rhythm based on the internal working of the economic system. In the pre-war period, it was observed that economic depressions or crises occurred roughly once every ten years. Latterly, this 'trade cycle' seems to have shortened, and its duration appears to be now seven rather than ten years. The present depression is not wholly due to the usual periodical turn in the tide of prosperity. Various new factors have aggravated, if not originated it, such as inflation of the main currencies of the world since the war, war debts, reparations and the dislocation of normal economic life caused by them, the collapse of industries like the engineering and steel industries which had been overstimulated during the war, the network of tariffs, and other commercial barriers.

§4. **The trade cycle.**—Trade and industry are to be imagined as perpetually revolving through a series of phases which together constitute a cycle. When one cycle is completed, another one begins, reproducing the same general features following each other in substantially the same sequence. The description of the cycle may be begun at any of its different stages. For example, let us suppose we begin at a point where trade and industry are showing signs of recovery after a period of depression. Prices and profits are rising and production is being extended, especially in

¹ See Part II, ch. iii, §15.

the case of industries producing capital goods (e.g. iron and steel). Since wages, interest and other fixed charges do not rise as fast as prices, employers, producers and business men are experiencing a boom. There is everywhere a spirit of optimism, and optimism in course of time degenerates into a spirit of gambling. Excessive risks are taken, unsound companies are floated, and the process is made all the easier because credit is made too freely available by banks for financing all kinds of ventures, the banks, like everybody else, being affected by the all-pervading spirit of excessive buoyancy and hopefulness. But eventually troubles begin to appear. Wages and other costs rise; profit margins are cut down; inefficient business units, after a brief spell of hectic existence, begin to totter; bankers get alarmed and restrict credit by raising their money rates; stocks accumulate; prices fall; business concerns are paralysed, and unemployment becomes widespread and acute. The period of depression thus begins, its advent being usually signalized by the failure of one or two large business concerns or financial houses.

This depression sooner or later supplies its own correctives. The very curtailment of business activity leads to the gradual deflation of stocks, and after a period of quiescence, characterized by low prices and low costs, business activity is resumed under the pressure of consumers' demand and renewal of business confidence. Employment expands, bank credits begin to be reissued, and the cycle begins its upward movement again.¹

§5. **Theories of the trade cycle.**—Economists are divided among themselves as regards the exact causes of the trade cycle. Various theories have been put forward from time to time, and some of these are given below :

(i) *Physical theory.*—This was suggested by W. S. Jevons and is known as the 'sun-spot theory'. According to Jevons, economic crises occur owing to the periodic appearance of spots on the surface of the sun affecting meteorological conditions and, through them, harvests and agricultural production. Agriculture being the basic industry, all other industries and economic activities are also affected. This theory stands discredited today on the ground that it exaggerates the climatic factor and ignores financial, industrial, and social causes of trade fluctuations.

(ii) *The psychological theory.*—According to this theory, trade fluctuations arise owing to the rhythmic movements of

¹ See *Encyclopædia Britannica*, vol. xii, Article on 'Unemployment'.

the human mind. In business as elsewhere the human mind is subject to waves of elation and depression. Business men like others are subject to the herd instinct. Optimism breeds further optimism, as pessimism in one quarter gives rise to pessimism in others. We thus get the upward and the downward movements of the trade cycle. Thus industrial fluctuations arise owing to errors of over-confidence and miscalculations regarding demand, and when the inevitable depression sets in it is aggravated by excessive and often unjustifiable pessimism.

This psychological explanation doubtless contains an element of truth, and it also does succeed in accounting at least partially for the manner in which the successive phases of a trade cycle appear. At the same time we must go behind these mental phenomena which are themselves influenced by certain objective factors like money and credit affecting industrial progress.

(iii) *The monetary theory.*—According to this theory it is the defective working of the monetary and banking structure that puts our industrial system out of gear from time to time. It is suggested that the banks, after allowing credit to expand to a point, suddenly contract it; thus credit stringency causes business stagnation. This theory is generally favoured by business men, who are always for a policy of easy money. It also enables them to shift the blame for depression on to other people than themselves. It is true that bankers like all men are liable to commit errors, and it is probable that sometimes they allow credit to expand unduly before crying halt. At the same time contraction of credit may be urgently needed whatever immediate inconvenience it may cause, and bankers should not be blamed uncritically and indiscriminately every time they adopt the policy of contraction. After all it must be remembered that the natural bias of banks is in favour of expansion rather than of contraction of credit, because expansion increases and contraction diminishes their volume of profitable business. If they deliberately contract credit the presumption should be that there are sound reasons for such a policy. Nor must we forget that in most countries legislation, commonly admitted to be necessary, exists by which limits are imposed on the expansion of credit by banks. Again, so long as credit systems are to any large extent based on gold, variations in the supply of gold will cause corresponding variations in the supply of money and credit, and therefore fluctuations in prices inducing trade booms and depressions. This question

however has already been discussed in Chapter X. On the whole our general conclusion is that while monetary factors, by producing disturbances in the price level, cause economic upheavals, industrial fluctuations cannot be adequately explained with sole reference to factors connected with them.

(iv) *The under-consumption (over-saving) theory.*—This theory has been ably propounded by J. A. Hobson. He argues that in our present economic organization wages lag behind prices, and therefore when trade is expanding and prices are rising, business profits increase faster than wages. This results in over-saving and over-investment, especially in the constructional (basic) trades turning out capital goods (iron and steel, engineering, etc.). The demand from the great mass of consumers lags behind and is soon outstripped by productive activity. This results in the industrial system being congested with unsold products, and business stagnation and unemployment ensue. This theory, however, does not explain why slumps end and prosperity returns.

G. D. H. Cole suggests that 'slumps end and business prosperity returns partly because economic progress is the normal condition of the modern business world, but also partly because either some fortunate event (e.g. fresh discoveries of gold, opening-up of undeveloped areas, etc.) or some policy deliberately pursued (e.g. reversal of banking policy in the direction of cheap money policy) suffices to correct the tendencies making for depression and to bring about a reversal'.¹

There is thus no single all-embracing explanation of the trade cycle and the cyclical unemployment that follows in its wake. A number of complex forces are obviously at work. We have already shown that under the capitalistic system of today, production is undertaken long in anticipation of demand, that the producer is often separated from the final consumer by a long chain of middlemen, and that the chances of committing errors of calculation are great, especially when it is remembered that business men are highly suggestible and susceptible to the herd instinct. Banking and monetary policies operating through price changes and the tendency in modern communities to over-save and over-invest play their own part in producing dislocations of the economic system.

§6. Remedies for unemployment.—(i) In the first place, there are certain palliatives like *Labour Exchanges* which,

¹ Cole, *op. cit.*, pp. 342-3.

by supplying information to prospective employers and employees, tend to promote the mobility of labour. They are also useful in securing the continuity of employment even for labour engaged in seasonal employments.

(ii) There is really no way of preventing unemployment in particular trades arising from changes of fashion and of taste, which are inevitable in a progressive dynamic society. What is possible is relief by prompt adjustment, e.g. by enabling labour affected by slackness in one industry to transfer itself quickly to another industry which may just then be entering on its busy season.

(iii) So far as unemployment is due to cyclical fluctuations, it is not easy to suggest preventive measures. Better banking and monetary policies and systems, better education of business men, increase in useful current public expenditure, conscious economic planning by the State, a better adjustment between production and consumption, or between saving and spending, should all tend to reduce the severity of unemployment. The present unemployment is to no small extent due to the sabotage of commercial relations (by tariff barriers, dumping, etc.). We may hope for a better appreciation of the economic interdependence of nations and a gradual removal of these restrictions. But it is difficult to say how long it will take for nations to shake themselves free from these self-imposed fetters.

Assuming, however, that industrial fluctuations and periodical unemployment are inevitable under the present economic system, we must proceed to consider methods of meeting them.

(iv) It is suggested that *construction of public works* such as roads, canals, railways, housing, drainage schemes and hydro-electric projects, with the help of money borrowed by the State (by the central Government and the local authorities), should be undertaken in a period of trade depression, when private employment shrinks, in order to absorb the unemployed.¹ The usual criticism of such a plan is that it merely leads to extravagant expenditure of public money and much waste due to the ineptitude of public administrators who have no personal interest in the success of the undertakings. State provision of work on a large scale has been

¹ J. M. Keynes, who is an ardent advocate of public works, has explained his scheme of attack on the present depression through loan expenditure on such works in his recent book, *Means to Prosperity*.

undertaken in the present slump in the U.S.A., Great Britain and some other countries. It is also justified on the ground that large State expenditure on public works in times of persistent trade depression is useful in stimulating private capitalists and entrepreneurs, as State expenditure creates an indirect demand for their activities. If such a policy is wisely conceived, it will, no doubt, result in the development of national resources. But actually the schemes may not be well planned or well carried out. Lastly, there is a limit to what the State can usefully spend and afford to spend in this way during a given period.

§7. **Unemployment insurance.**—Unemployment insurance has played and is playing a part of growing importance in giving relief to the unemployed, the victims of trade depression, in countries like Great Britain and Germany.

Towards the end of the last century it was realized that unemployment was an insurable risk and that it was the duty of the three main parties concerned—employers, the employees and the State (the last being interested in the economic welfare of the nation as a whole)—to bear the burden and to distribute it among themselves. Great Britain passed the Compulsory National Health Insurance Act in 1911, Part II of which for the first time provided for compulsory contributory unemployment insurance. The Act applied in the first instance to seven selected groups of trades peculiarly liable to irregular employment, such as building, mechanical engineering and ship-building. Employers and employees were required to make contributions in equal amounts, the State also adding its own contribution. Limited benefits were to be given to the insured worker who was out of employment. The new scheme proved a success and was extended in 1916 to other trades and to workpeople engaged in munition work. Owing to the severe depression which set in in 1920, the original scheme was greatly extended in that year, and the whole working class population in industries (the exceptions being agriculture and domestic service), numbering some 12,000,000, was compulsorily insured. The scheme was to be administered by the Ministry of Labour. The pre-war scheme of National Unemployment Insurance has recently been subjected to severe strain and has proved inadequate to cope with the present depression. It has had therefore to be supplemented by the assumption of the greater part of the burden by the State itself, which has thus been compelled directly to maintain the large army of the unemployed.

Certain other remedies have also been suggested as a cure for employment. They are as follows :

- (i) Provision of technical education so as to train the unskilled to take to skilled trades;
- (ii) Raising the school-leaving age, so as to keep out competition from juvenile labour;
- (iii) Working short time in a period of business stagnation;
- (iv) Compulsory retirement of aged workers (with a suitable provision of old age pensions for them).

It is thus clear that just as there is no single cause of unemployment there is also no single remedy for it.

SUMMARY

Unemployment is the shadow side of economic progress. It has assumed alarming dimensions owing to the post-war depression.

As regards *causes of unemployment*, there is unemployment in particular trades owing to the demand for labour in them being seasonal, owing to changes of fashion and taste, and to mechanization (or rationalization) of industry. Far more serious is the *cyclical* unemployment of a general character caused by the periodic movements of trade depression which alternate with business prosperity (or booms). The present slump is not simply a manifestation of the usual trade cycle, but has been aggravated by a number of evil legacies left by the war.

There are various *theories of the trade cycle*: (i) The physical theory, (ii) the psychological theory, (iii) the monetary theory, and (iv) the under-consumption (over-saving) theory, all partially explaining the phenomenon.

Various *remedies* for unemployment have been suggested, such as (i) the establishment of Labour Exchanges; (ii) relief by prompt adjustment; (iii) better banking and currency policies, and economic planning by the State to reduce trade fluctuations; (iv) construction of public works by the State; (v) unemployment insurance and (vi) other remedies such as technical education, raising of the school-leaving age, working short time, and the compulsory retirement of aged workers.

APPENDIX

TRADE AND PRODUCTS OF THE PRINCIPAL COUNTRIES OF THE WORLD

§1. **Classification of commodities.**—By examining the position of some of the principal countries of the world in international trade, the student will gain some idea as to the importance of foreign trade in the economic life of modern civilized communities.

The following classification of commodities is helpful as an indication of the variety of wants developed by the civilized world under the stimulus of international exchange.

(i) *Commodities dependent directly or indirectly on climate* : (a) *Products of the temperate zone*, such as wheat, maize, oats, barley, rye, potatoes, fruits, wine, beet, wool and woollen manufactures, silk and silk manufactures; (b) *Sub-Tropical Products*, such as cotton, cotton manufactures, tobacco, opium and tea; (c) *Tropical Products*, such as coffee, rice, millets, sugar-cane, cinchona, vegetable fibres, fruits, rubber; and (d) *Products of various climates*, such as vegetable oils, oil-seeds, oil-cake, gums and resins, spices, condiments, timber, furs, meat.

(ii) *Fisheries (Products of the sea)*.

(iii) *Mineral products*, such as coal, iron, petroleum and its products, gold and silver, lead, copper, zinc, tin, quick-silver, salt and minor minerals.

(iv) *Manufactured articles* in which various materials are used, such as leather, paper, earthenware and porcelain, glass, chemicals, minor manufactured articles, etc.¹

TRADE AND PRODUCTS OF THE PRINCIPAL COUNTRIES OF THE WORLD²

§2 (A). **Great Britain.**—We shall now proceed to consider the trade and products of the more important countries of the world : (A) Great Britain, (B) U.S.A., (C) Germany, and (D) Japan. Great Britain enjoys certain important

¹ See Chisholm and Stamp, *Handbook of Commercial Geography*, 12th edition.

² This survey is based on Chisholm and Stamp, op. cit., *Population and Resources of the World* (League of Nations, 1926) and *Statesman's Year Book* (1935).

natural advantages which have played a very significant part in shaping her economic development. These are her indented coast line and navigable rivers, her rich coal and iron fields and the close proximity in which they occur, her temperate and moist climate, the fertility of her soil, and her favourable geographical position. In Chapter II¹ we have already described the course and the main results of the Industrial Revolution in Great Britain, which has completely transformed her economic life, making her a great trading and industrial country, dependent upon other countries to a very great extent for the supplies of food-stuffs and essential raw materials of industry. With her own agricultural resources she can barely maintain a third of her population today, and her economic life is based upon an interchange of coal, manufactured articles, shipping and other services, for food-stuffs and raw materials.²

(i) *Agricultural products*.—The principal agricultural products of Great Britain are wheat, barley and oats (which are the main corn crops), beans, potatoes and turnips (grown in winter as cattle-food), mangels and hay. At present, particular attention is being paid by the Government to agricultural development (including the development of the dairy industry), and the tendency towards a decline in the wheat area and substitution of grass-farming for corn production has to some extent been checked.

(ii) *Forests*.—The old English forests were largely destroyed by the inroads made upon them by the iron industry before coal was used for the smelting of iron. Today, less than five per cent of the total area is under forests.

(iii) *Mineral wealth*.—Great Britain is very richly endowed with some of the minerals of high industrial value, notably coal and iron. Her output of coal is very large, and a good part of it is exported. She occupies the second place in the world as regards coal production, providing about one-fifth of the total production of the world (the U.S.A. holding the first rank). Great Britain has also large deposits of iron ore which are very favourably situated in close proximity to coal areas. Both as regards iron and steel she occupies the third place in the world. Her other mineral resources are salt, limestone and fire-clay.

(iv) *Manufactures*.—Great Britain has by no means yet ceased to deserve her title of the workshop of the world. Four-fifths of her people live in industrial and commercial

¹ §§11-15.

² See ch. xii, §§3-4.

towns like London, Liverpool, Manchester, Birmingham, Sheffield, Glasgow, Paisley and Dundee. The greatest British industry is cotton manufactures, with Manchester as its principal centre. The woollen industry, although no longer the first industry of the nation that it once was, is of substantial importance even today. It flourishes in the West Riding of Yorkshire. Other important manufacturing industries of Great Britain are the silk industry in Derbyshire, the hosiery industry in Nottingham, coal, steel, iron, engineering and ship-building.

(v) *The foreign trade of Great Britain.*—Before the war the foreign trade of Great Britain was much greater in value than that of any other country in the world, and greater also per head than that of most other countries. The total value of her imports was £675,847,365 in 1933 as compared with £1,220,765,300 in 1929, while the corresponding value of her exports (including re-exports) was £416,501,462 and £839,051,150 respectively. The great drop in value in 1933 in the case of Great Britain as in that of other countries as compared with 1929, is the result of the severe world economic depression that set in about the autumn of 1929, and of the increasing trade and tariff barriers which have become so common in recent years.

The following are among the noticeable features of the foreign trade of Great Britain: (a) High percentage of imports of food-stuffs (wheat, maize, rice, meat, butter, eggs, sugar, fruit and nuts) to total imports. Next to food-stuffs come raw materials such as raw cotton, wool, jute, oil-seeds, raw silk, hides and skins, wood and timber, rubber; (b) High proportion of exports of manufactures to total exports and the preponderance of cotton manufactures among exported commodities, other important exports being woollen goods, artificial silk, metal goods, coal and chemicals; (c) Normal excess of imports over exports, due to some of the imports being merely the payment received by Great Britain for her invisible exports;¹ (d) existence of a considerable amount of entrepôt (or re-export) trade, i.e. trade in articles collected from many parts of the world and widely distributed in other parts. Thus Australian and South African wool is exported by Great Britain to Germany, France and the U.S.A.; raw cotton from America, Egypt and India is redistributed on the continent of Europe. This extensive entrepôt trade is largely due to the central position of Great Britain.

¹ See ch. xii, §4.

Great Britain is experiencing increasing competition in foreign markets as also in her own market owing to the industrialization of several other countries of the world. Japan is probably the most formidable rival of Great Britain, especially in the east. The recent growth of trade barriers is adding to her difficulties in maintaining her export trade. She is therefore now trying to encourage inter-imperial trade by means of preferential tariffs adopted on a comprehensive scale as the result of the decisions reached at the Ottawa Conference of 1932.

The values of the main articles of British imports and exports (in the year 1933) are given below :

(In £1,000)

<i>Imports</i>		<i>Exports</i>	
Grain and flour ...	55,018	Coal ...	31,426
Meat ...	77,616	Iron and steel ...	29,917
Other food and drink including sugar, fruits, eggs, butter, cheese, tea and wines ...	183,208	Machinery ...	27,027
Raw cotton ...	36,783	Cotton yarn and manufactures ...	58,933
Wool ...	37,454	Woollen manufactures ...	25,582
Wood and timber ...	29,872	Vehicles ...	21,656
Oil-seeds ...	21,092	Chemicals ...	17,578
Oils and fats ...	30,166		
Hides and skins ...	14,326		

§3 (B). **The United States of America.**—A study of the trade and products of the United States is of great interest since this land, which some 300 years ago was entirely unexplored, is the richest country in the world today, with an advanced agriculture, well-developed industries, and a most efficient industrial organization. Its population, which was only a few millions in the eighteenth century, now exceeds 140 million. The main circumstance that has favoured this rapid economic development of the States is their rich and abundant natural resources, freely and energetically exploited by a virile and young nationality, which had already reached a high stage of civilization before it came to America. This development has been further helped by the prevalence of free trade within the huge area covered by the States. Pro-

tection also has helped, for without it development could scarcely have been so rapid. Among the natural resources of the U.S.A. may be included the rich plains of the central region and of the west, adequate rainfall, grand navigable rivers like the Mississippi, a vast seaboard, and varied mineral wealth. The central region moreover is in free and easy communication with other plains and the lowlands in the east and in the west.

(i) *Agricultural products.*—The U.S.A. is agriculturally a very important region in the world, and American agriculture, thanks to excellent natural resources, application of fertilizers, farm machinery and research, is in normal times the most important and prosperous national industry. The agricultural products of the States are numerous owing to the varied climatic regions into which the country is divided. The main products are : wheat, maize, barley, oats, tobacco, cotton, vegetables and fruits. The U.S.A. stands first in the world in respect of the production of wheat, maize, oats, cotton, cotton-seed and tobacco, and second (next to Russia) in respect of barley. Her main agricultural deficiencies are sugar, tea, coffee, jute and rubber, large quantities of which are imported into the country. The high price of labour also excludes or limits the production of some of these commodities, such as sugar and tea.

(ii) *Forests.*—Forestry is an important branch of the economic activity of the country. About 30% of the total area is under forests.

(iii) *Mineral products.*—These are, as already stated, rich and varied. The United States occupies the first position in the world as regards the output of coal, iron ore, copper ore, lead and zinc ore, petroleum, natural gas, sulphur and phosphates, other minerals being silver ore, manganese, potash and magnesite.

(iv) *Manufactures.*—The principal manufacturing industries are textiles, iron and steel, petroleum refining, motor vehicles, manufacture of rubber and machinery, and meat-packing.

(v) *Trade of the United States.*—In spite of her large inland trade and high tariff barriers the U.S.A. has extensive trading connexions with other countries, notably with Great Britain, Germany, Canada, Cuba, France and India. The total value of her imports in 1933 was \$1,167,881,000 as compared with \$4,291,888,000 in 1929; while the total value of the exports was \$1,440,333,000 and \$5,373,456,000 respectively at these two dates.

The values of the chief articles of import and export (in 1933) are given below :

(In 1,000 dollars)

<i>Imports</i>		<i>Exports</i>	
Coffee	128,548	Cotton (raw)	324,287
Sugar (cane)	101,840	Cotton (manufactures)	40,768
Raw hides and skins	22,986	Petroleum	180,650
Wood pulp	41,456	Oils (refined)	141,508
Rubber (crude)	24,165	Machinery	113,591
Raw silk	96,120	Electrical apparatus	36,319
Tea	10,670	Automobiles	72,158
Fish	20,694	Chemicals	43,867
Fruits and nuts	38,368	Tobacco	62,824
		Wheat and wheat-flour	25,175
		Iron and steel	44,038
		Coal and coke	39,732

§4 (C). **Germany.**—The great plain which occupies the north and the greater part of the east of Germany is generally infertile and poorly endowed with mineral wealth. The soil of the remainder of the realm, consisting mainly of hilly country and tablelands, is more fertile, and has a more favourable climate, richer mineral resources (coal and iron) and supports a dense population. Germany is particularly well served by a network of railways. In the plains and valleys, natural waterways (e.g. the Rhine) as well as artificial canals are of great value to the commerce of the country, which is further promoted by excellent facilities for communication with the seaboard.

Since her political unification in the last century and her success in the Franco-German War of 1870-1, Germany's economic development has been very rapid. Other circumstances that favoured her industrial development were a policy of protective tariffs and a highly organized educational system.

(i) *Agricultural products.*—The main products are rye, wheat, barley, oats, potatoes, sugar-beet and oats. The area under crops is cultivated with careful manuring, and in point of yield Germany can bear comparison with any other country in the world. Besides protection, cheap railway transport facilities have contributed a great deal to the development of German agriculture.

(ii) *Forestry* is of great importance to the country, and is conducted by scientific methods under the care of the State. About a quarter of the total area is under forests.

(iii) *Mineral resources*.—Among the European countries Germany ranks high in respect of mineral resources, coming next after the United Kingdom in respect of total mineral production. As in Great Britain, the chief minerals are coal and iron. The principal coal basins are those of the Ruhr and the Saar in Rhineland. Other mineral resources are lignite, potash, zinc, copper and lead ores, petroleum and salt.

(iv) *Manufactures*.—Germany occupies an honorable place among the great manufacturing and commercial countries of the world. Her principal manufacturing industries are iron and steel, chemicals, beet-sugar, electrical apparatus, textiles (cotton, wool and silk), glass, porcelain, clock-making, ship-building, marine engineering, toy-making, and the coal-tar industry.

(v) *Trade of Germany*.—Germany's pre-war commercial development was most striking and her organization of commercial intelligence and service in foreign markets was the wonder and the envy of other nations. The total value of German imports was 4,204,000 marks in 1933 as compared with 10,393,000 marks in 1930. German exports were valued at 4,871,000 and 12,036,000 respectively in the same years.

The values of the chief articles of import and export (in 1933) are given below :

(In 1,000 reichsmarks)

<i>Imports</i>		<i>Exports</i>	
Raw cotton	306,994	Steel and iron	704,813
Wool	266,191	Chemical products	357,384
Mineral oil	127,515	Dyes, etc.	202,492
Coffee	125,261	Coal	208,768
Fruit	113,261	Cotton goods	112,108
Copper	102,250	Silk and rayon	95,903
Butter	83,765	Woollen goods	95,638
Wheat	71,884	Leather	86,560
		Paper	155,464
		Glassware	119,903

§5 (D). *Japan*.—Until the sixties of the nineteenth century, Japan was a backward medieval country. Since

then she has revolutionized and modernized her social, political and economic organization so that now she ranks as the foremost industrial country of Asia, and one of the leading commercial nations of the world.

Japan is an insular empire, and the entire group of the Japanese islands constitutes a highly volcanic tract. The productive area is limited by the very irregular character of the surface. Only about 30% of the total area is productive and only one-eighth of the entire surface is devoted to agriculture; but on this small area Japan supports a very dense population. The extremely irregular surface of the soil has proved a hindrance to the construction of railways and roads. Japan has, however, shown great patience in overcoming these difficulties. She has also built up an efficient mercantile marine of her own for carrying her increasing trade with the rest of the world. Her long broken coast line is suited to harbour development and commercial activity.

(i) *Agricultural products*.—Rice is the principal food crop, Japan's production of it being second highest in the world. More than half of the total area is under rice. Other crops are wheat, barley, millets, maize, rye and soya-beans. Mulberry trees are extensively planted for the purpose of feeding silk-worms, silk being the leading export from the country.

(ii) *Forestry and fisheries*.—A little less than half the area is under forests, and wood pulp (mechanical and chemical) is an important forest product. Japan's fisheries, which are varied, offer employment to large numbers and also support a substantial proportion of the population.

(iii) *Mineral resources*.—Coal is the leading mineral in Japan, but is not sufficient for domestic use. Iron ore is found in inconsiderable quantities and much is imported, chiefly from Chinese sources which are for the most part in Japanese hands. Other minerals are petroleum, copper ore and sulphur.

(iv) *Manufactures*.—Japanese industries were, until recently, entirely of the domestic type and several of them continue to be so organized even today. Some kind of handicraft is practised in almost every Japanese household. Since the great revolution of 1868, Japan has shown great keenness to learn from the western nations. A large number of Japanese students go every year to the different countries of Europe to receive modern education. European engineers and technical experts are invited to Japan, and the lessons they have to teach are carefully learnt. The country has

been equipped with modern means of communication and transport, and up-to-date machinery has been installed for textile and other manufactures. The first steamship company in Japan was established in 1874; and Japanese vessels can now be seen in all waters (including the Chinese rivers). The principal Japanese industries are cotton-spinning and weaving, silk and artificial silk, woollen manufactures, and the match industry, electrical machinery, iron and steel, and paper manufacture. Japan specializes in artistic products made of wood, bamboo, silk, lace, silver and ivory.

(v) *Trade of Japan*.—The total value of Japanese imports was 1,932,220,000 yens in 1933 as compared with 2,216,240,000 yens in 1929. The corresponding values of exports were 1,861,046,000 yens (1933) and 2,148,618,650 yens (1929).

The values of the chief articles of import and export of Japan in 1933 are given below :

(In 1,000 yens)

<i>Imports</i>			<i>Exports</i>		
Raw cotton ...	...	604,847	Raw silk ...	...	390,899
Wool ...	...	164,191	Cotton yarn ...	...	15,713
Wrought iron ...	...	111,042	Silk tissue ...	...	140,920
Machinery ...	...	70,860	Cotton tissue ...	...	383,215
Mineral oil ...	...	34,774	Cotton undershirts	...	31,190
Wheat ...	...	44,384	Potteries ...	...	35,632
Oil-cake ...	...	41,169	Paper ...	...	17,689
Beans and peas	...	50,339	Toys ...	...	26,375
Sugar ...	...	12,794	Matches ...	...	46,049
			Glass ...	...	15,327
			Lamps ...	...	15,864

PART I

TYPICAL QUESTIONS

CHAPTER I

INTRODUCTORY

1. What is economics? Is it a science or an art or both?
2. Discuss the subject-matter and scope of economics. How far is economics useful in the solution of practical problems? Give Indian examples.
3. (i) 'Economics is the study of man in the ordinary business of life.'
(ii) 'Economics is the science of wealth.'
Which of these definitions of economics do you consider more acceptable and why?
4. Explain the conception of the 'economic man' and discuss the validity of the assumptions underlying this conception.
5. Economics has been criticized as a dismal science which deals with man engaged in the selfish pursuit of wealth. Do you agree?
6. What is meant by saying that economics 'postulates self-interest of an enlightened character'?
7. 'Wants—efforts—satisfactions constitute the essence of economics.' Discuss.
8. Explain the deductive and inductive method and show why a judicious combination of both is necessary in economics.
9. Which is the best method of pursuing economic investigations?
10. Explain the distinction between an economic law and statute law and show how all economic laws are mere statements of tendencies.
11. 'The laws of economics are to be compared with the laws of tides rather than with the simple and exact law of gravitation.' Comment.
12. Explain the usual divisions of the subject-matter of economics.
13. Discuss the interrelations between the several divisions of economics.
14. Indicate the place of economics among the social sciences.
15. Discuss the relation of economics to sociology. How far is it desirable to look upon the former as merely a subdivision of the latter?
16. Examine the relation between economics and politics and show how far it is either desirable or practicable to keep business and politics apart.
17. In what way is economics related to ethics?
18. 'There is no antithesis between economics and ethics.' Discuss.

CHAPTER II

LANDMARKS OF ECONOMIC DEVELOPMENT

1. Review the early stages of economic development. Is there any particular chronological sequence to be observed in stating them?
2. Discuss the main stages of industrial evolution and bring out the characteristic features of each one of them.

3. Compare the domestic system with the factory system. To what extent does the former system exist in India? (See also Part II, chs. ii and iv.)
4. Discuss the main features of the Guild system and compare it with the caste *panchayats* in India. (See also Part II, ch. i.)
5. What is meant by the expression 'Industrial Revolution'. Why did it first take place in England?
6. Give a brief account of (i) agriculture; (ii) industries; (iii) transport; and (iv) trade in England before the Industrial Revolution.
7. Describe the main inventions that brought about the Industrial Revolution in England and show how it is almost a universal phenomenon.
8. Review the course of the Industrial Revolution in England.
9. Compare social and economic life in England in 1850 with that prevailing before the Industrial Revolution.
10. Clearly bring out the social and economic effects of the Industrial Revolution.
11. Indicate the benefits conferred by the Industrial Revolution, as also the evils for which it is responsible.

CHAPTER III

SOME FUNDAMENTAL CONCEPTS OF ECONOMICS

1. Define utility. Give a classification of utilities and clearly bring out the distinction between free utilities and economic utilities.
2. What are the fundamental characteristics of wealth?
3. Are the following wealth or not?
 - (i) Love of a mother for her child.
 - (ii) A surgeon's skill.
 - (iii) Good health.
 - (iv) Goodwill of a business.
 - (v) Air.
 - (vi) Sunlight.
 - (vii) The Ganges.
 - (viii) Money.
 - (ix) Professional services.
 Give reasons for your answers.
4. Examine Marshall's classification of goods, and discuss each category, giving appropriate illustrations.
5. Distinguish between individual and national wealth. Give Indian examples.
6. Make as complete a list as possible of the items of the wealth of (i) a farmer; (ii) an artisan; and (iii) a millowner in India.
7. What is cosmopolitan wealth?
8. Explain the various meanings of the term 'income'. What is national income?
9. Indicate the relation between wealth and income.
10. Why is value regarded as the central concept of economics?

11. Distinguish between value-in-use, value-in-exchange and intrinsic value.
12. 'Value is the result of the social estimates of goods effected by transferring them in exchange.' Discuss.
13. Explain the distinction between (i) value and utility; (ii) value and price.

CHAPTER IV

CONSUMPTION: THE THEORY OF WANTS

1. Define consumption and show why it should be studied before production. (See also ch. i.)
2. Indicate the relation of consumption to production and distinguish between 'productive consumption' and 'final consumption'. (See also ch. i.)
3. (i) 'Consumption is the end of all economic activity'; (ii) 'The existence of human wants is the starting point of all economic activity.' Discuss.
4. How far is the multiplication of wants desirable?
5. Discuss the main characteristics of human wants and show how they are of basic importance in the study of economics.
6. State and discuss the Law of Diminishing Utility. Draw an illustrative diagram. Is the law subject to any exceptions?
7. Distinguish clearly between total utility and marginal utility.
8. Indicate the relation between marginal utility and price and explain why air or water has little or no value while gold commands a high value.
9. Apply the concept of marginal utility to the case of money and show how it has a bearing on certain problems of taxation. (See also ch. xvii.)
10. Explain the Law of Equimarginal Utility and show how it is modified in life by the influence of custom or fashion.
11. On what principle should a person regulate his expenditure in order to obtain the maximum satisfaction from it?
12. Discuss the application of the Law of Equimarginal Returns (Substitution) to production.
13. Distinguish between necessities, comforts and luxuries.
14. Make a list of necessities for efficiency required by (i) a farm labourer and (ii) an urban worker in India.
15. 'What is luxury to some is necessary to others.' Comment.
16. Analyse the concept of Standard of Living and how it varies from time to time, class to class and country to country.
17. Show how the low standard of living in India affects economic efficiency.
18. Show how both saving and spending are necessary for economic stability.
19. Enunciate and explain Engel's Law of Family Expenditure and indicate its application to India.
20. What is a family budget? What are the main items included in it? Give any typical budget you may have studied.

21. Examine the uses of a study of family budgets to (i) the householder and (ii) the economist.
22. Elucidate the doctrine of consumer's surplus. How far is it possible to measure this surplus in terms of money? What is the practical use of the doctrine?
23. What is meant by 'demand' in economics? Distinguish clearly between individual demand and market demand for a commodity.
24. Construct a Market Demand Schedule for sugar, showing separately the demand of the rich, middle and poor classes. Illustrate your answer by drawing appropriate demand curves.
25. Explain the Law of Demand and indicate its relation to the principle of diminishing utility.
26. Distinguish between elastic and inelastic demand with the help of demand curves.
27. Determine the nature of demand in the following cases: (i) necessities; (ii) luxuries; (iii) a commodity having several uses; and (iv) when an article is offered at very high or very low prices. Give appropriate illustrations.
28. Explain the mode of measuring elasticity of demand. Show how elasticity influences determination of value. (See also ch. ix.)

CHAPTER V

PRODUCTION: LAND

1. Explain the meaning of production and classify the various productive occupations.
2. 'Man produces and consumes utilities only.' Discuss.
3. Distinguish between form utilities, place utilities and time utilities.
4. What are the functions performed by middlemen? Are these sufficient to justify their inclusion in the category of productive workers?
5. Explain the distinction between productive and unproductive labour. Is there any unproductive labour at all? Give illustrations.
6. Indicate the various factors of production and show which of them should be regarded as the primary factors.
7. What is meant by 'land' in economics? Distinguish it from capital. (See also ch. vii.)
8. Examine the influence of natural resources on the economic welfare of a country. Draw your illustrations from England and India.
9. 'Nature is the very foundation of economic life.' Comment.
10. Describe the main types of land tenures, indicating their strong and weak points.
11. Examine the principal features of the peasant proprietary system. Do you agree that it is the best type of tenure?
12. State and examine the Law of Diminishing Returns and indicate the qualifications to which it is subject.
13. Explain the extensive and intensive aspects of the Law of Diminishing Returns. Draw an illustrative diagram.

14. Examine the bearing of the Law of Diminishing Returns on (i) the Malthusian theory of population and (ii) the theory of rent. (See also cha. vi and xiii.)

15. 'While the part which nature plays in production conforms to the Law of Diminishing Returns, the part which man plays conforms to the Law of Increasing Returns.' Comment.

16. Examine the operation of the Law of Diminishing Returns in the case of (i) building sites; (ii) mining; and (iii) fisheries.

17. Explain the terms (i) 'dose of labour and capital'; (ii) 'marginal land'; and (iii) 'extensive and intensive methods of cultivation'.

18. Does the Law of Diminishing Returns also apply to factors of production other than land?

CHAPTER VI

PRODUCTION: LABOUR

1. Define labour and stress its fundamental characteristics.
2. Name some activities which do not constitute labour in the economic sense. Give reasons for your answer.
3. 'The fundamental problems that arise in economics are concerned with the relation between unwelcome exertion, and the remuneration which induces that exertion.' Discuss.
4. Examine the several factors which affect the efficiency of labour.
5. Show why the Indian labourer is, as a rule, less efficient than the English or Japanese worker.
6. Examine the relation between wages and efficiency and explain the paradox 'cheap labour is dear labour'.
7. Discuss the Malthusian theory of population and indicate the modifications it needs to make it fit in with present-day conditions.
8. 'The problem of population is not one of mere size in relation to food supply but of efficient production and equitable distribution.' Discuss.
9. Do you agree that the Malthusian theory of population 'has lost its terrors for modern society'.
10. Distinguish between positive and preventive checks and indicate your choice, giving full reasons.
11. Explain the concept of 'optimum population'. To what extent is it an improvement upon the earlier population theories?
12. Examine the factors which determine the density of population, giving illustrations from England and India.
13. What inferences can you derive from the fact that England has a density of 654, U.S.A. 41, India 195, Bengal 646? (See also Part II, ch. i.)
14. What is meant by mobility of labour? Why is labour generally more immobile than capital?
15. Distinguish and explain the various forms of mobility of labour.
16. 'Of all sorts of luggage man is the most difficult to be transported.' Discuss with special reference to India. (See also Part II, ch. i.)

CHAPTER VII

PRODUCTION: CAPITAL

1. Explain the concept of capital and elucidate the part played by capital in the modern organization of production.
2. What are the functions of capital? What is meant by saying that capitalistic production involves a roundabout process?
3. Indicate the relation between capital and money. Show how far capital depends upon use and intention.
4. Classify capital and indicate the utility of each form.
5. Distinguish between fixed and circulating capital and show how the former is of great advantage in production.
6. Explain the process of the formation of capital.
7. What is meant by saying that capital is the result of saving?
8. Distinguish clearly between saving and hoarding. How far may saving be said to entail 'abstinence'?
9. Discuss the factors which influence the growth of capital in a country.
10. Account for the shyness and slow growth of capital in India.
11. Indicate the relation between the rate of interest and the volume of saving.
12. State the conditions that promote and those that hamper the accumulation of capital.
13. What is meant by mobility of capital? How far can capital be said to be mobile in India?

CHAPTER VIII

PRODUCTION: ORGANIZATION OF INDUSTRY

1. Explain the functions performed by the entrepreneur in modern business organization.
2. Why is a special class of organizers necessary? Why are they called 'captains of industry'?
3. What are the qualities essential for an ideal entrepreneur? Give a few examples of successful entrepreneurs in England, India, and the United States.
4. What are the main features of the modern industrial organization?
5. Review the principal types of business enterprises.
6. Indicate the characteristic features of a joint-stock company and compare it with a partnership.
7. What are the strong and weak points of the joint-stock organization of industry?
8. Show how a joint-stock company is organized and managed. How does it raise the capital it requires?
9. Explain cooperative production and account for its poor progress.
10. Discuss the fundamental principles underlying cooperation and show how it avoids the drawbacks of both capitalism and socialism.
11. Describe the plan of profit-sharing. Why has it failed to evoke much enthusiasm?
12. Account for the increasing scope of Government undertakings and indicate their advantages and drawbacks. (See also ch. xvii.)

13. Describe the various forms which division of labour assumes.
14. Show how division of labour is limited by the size of the market. Give Indian examples.
15. Explain how division of labour also implies cooperation.
16. What are the benefits of division of labour? Indicate its defects and show how far they are remediable.
17. Examine the contribution made by machinery to economic and social progress.
18. Discuss the effects of machinery from the point of view of the working classes.
19. Examine the factors which bring about localization of industry. Give illustrations from any two leading industries in India. (See also Part II, ch. iv.)
20. Why does an industry once started in a particular place tend to stick there?
21. Discuss the advantages and drawbacks of localization of industry.
22. Account for the recent tendency towards decentralization of industry.
23. Distinguish between the external and internal economies of a business.
24. Why are modern industries organized on a large scale? Indicate the limitations of large-scale production.
25. Discuss the principal advantages of large-scale production.
26. Account for the survival of small-scale production, with special reference to conditions in India.
27. Indicate the main advantages and drawbacks of small-scale production.
28. Examine the factors that determine the size of farms. Choose your examples from India. (See also Part II, ch. iii.)
29. Discuss the economies and limitations of large farms.
30. What are the advantages and drawbacks of small-scale farming, and how can the latter be remedied? Why are small farms better suited to India?
31. Give a clear exposition of the Law of Increasing Returns. Also present it as a Law of Diminishing Cost.
32. Enunciate the Law of Constant Returns and indicate the cases where it operates.
33. Account for the growing tendency towards large industrial combinations.
34. Distinguish between (i) horizontal and vertical combinations; (ii) trusts and cartels.
35. Examine the advantages and drawbacks of industrial combinations. How far is it possible to deal with its evils?
36. Explain the origin of rationalization and elucidate its main features.
37. What are the benefits of rationalization? Also indicate its dangers and limitations.
38. Describe the principal forms which competition assumes. How far is the present system of competition satisfactory?
39. 'In its fundamental aspect competition lies at the root of progress and when applied under proper limitations it is as beneficent as it is widespread.' Discuss this statement and stress the limitations of competition.

CHAPTER IX

EXCHANGE: VALUE AND EXCHANGE

1. Give a brief account of the evolution of exchange and indicate its benefits to society.
2. 'Exchange is the barter of the comparatively superfluous for the comparatively necessary.' Discuss.
3. Explain the conditions determining exchange and show how it takes place by means of sale and purchase under a money economy. (See also ch. x.)
4. Explain the term 'market' in economics. What are the conditions governing the extent of a market?
5. Show how in a competitive market there is a tendency for a uniform price to prevail.
6. Make remarks on the probable size of the market for the following: (i) gold; (ii) country bricks; (iii) Mangalore tiles; (iv) milk; (v) mangoes; (vi) sand; (vii) Reserve Bank shares; (viii) Suez Canal shares; (ix) ancestral watch; (x) tea; and (xi) sugar.
7. Elucidate the nature of speculation and explain the various forms which it assumes.
8. What is the economic role of speculation? What are its abuses and how would you deal with them?
9. What are the conditions of free speculative dealings in a commodity?
10. 'Speculation has its economic abuses as well as its economic function.' Discuss.
11. What are the advantages of speculation on the Stock Exchanges?
12. Show how value always depends upon the interaction of supply and demand.
13. 'We might as reasonably dispute whether it is the upper or under blade of a pair of scissors that cuts a piece of paper, as whether value is governed by utility or cost of production.' Discuss.
14. Elucidate the marginal theory of value and show why it is necessary to study the behaviour of supply and demand at the margin.
15. Clearly explain the distinction between market value and normal value and bring out the significance of the time element in the theory of value.
16. Indicate the relation of market value of a commodity to its normal value.
17. Explain how market value is determined. Draw an illustrative diagram.
18. Why do market prices fluctuate from day to day and even on the same day?
19. Show how the value of a reproducible commodity under competition tends to settle in the long run at its cost of production.
20. How is normal value determined under (i) increasing; (ii) diminishing; and (iii) constant cost? Draw diagrams to illustrate your answer.

21. Analyse the conception of cost of production, distinguishing between prime and supplementary costs.
22. Explain the meaning of 'representative firm'. Indicate the use of this concept in the theory of value.
23. What are complementary goods? Explain the terms (i) joint and (ii) composite demand.
24. What are joint products? How are their values determined? How far can railway rates be explained with the help of the principle of joint cost?
25. Define monopoly. Clearly distinguish between the various classes of monopolies.
26. Show how value is determined under monopoly. Draw a diagram to illustrate your answer.
27. Compare monopoly value with value under competition.
28. Indicate the considerations which a monopolist will bear in mind while charging a particular price to his customers.
29. Show how and why a monopolist resorts to price discrimination.
30. How far is monopoly detrimental to the consumer? Indicate the restraining influences to which a monopolist is subject.
31. Discuss the rival merits of competition and monopoly. Must we always choose one or the other? (See also ch. viii.)

CHAPTER X

EXCHANGE: MONEY

1. Explain the inconveniences attendant upon barter and show how these are removed by the introduction of money.
2. Compare exchanges under a money economy with those under a system of barter.
3. Define money, and carefully explain the distinction between money and currency. Give examples.
4. Examine and classify the functions of money and show how production and exchange are greatly facilitated by the use of money.
5. What are the qualities of a good money material?
6. Account for the universal use of precious metals as money.
7. Distinguish between standard and token coins and clearly bring out their respective characteristics.
8. Explain how token coins circulate at a value higher than their intrinsic value.
9. 'The rupee is a curious mixture of token and standard coin.' Discuss. (See also Part II, ch. vi.)
10. Explain clearly the distinction underlying the following: (i) free coinage and gratuitous coinage; (ii) seigneurage and brassage; (iii) mint price of gold and market price of gold; (iv) debasement and depreciation.
11. What is legal tender? Give illustrations from the British and Indian currency systems. (See also Part II, ch. vi.)

12. Give a clear exposition of Gresham's Law. Indicate its limitations.
13. What is meant by a monetary standard? Describe the principal types of monetary standards.
14. What are the essentials of the Gold Standard? Compare it with Bimetallism.
15. Distinguish between the various forms of the Gold Standard and bring out their merits and demerits.
16. Explain the principal features of the Gold Bullion Standard and compare it with the Gold Exchange Standard.
17. Discuss the strong and weak points of the Gold Standard and indicate its future.
18. What are the essential conditions for Bimetallism? Give a brief account of its working during the last century.
19. Examine the question of international Bimetallism.
20. Distinguish and explain the principal forms of paper money. Indicate the advantages of a good system of paper money.
21. Discuss the evils of inconvertible paper money. What are the usual signs of its overissue?
22. What are the prospects of the Managed Paper Currency Standard?
23. What are index numbers? How are they constructed? Explain their uses.
24. What is the most satisfactory method of constructing index numbers?
25. What are weighted index numbers and what purpose do they serve?
26. Explain how the Real Wages Index Number is prepared. Indicate its use in labour disputes. (See also ch. xvi.)
27. Set forth the Quantity Theory of Money and explain the qualifications to which it is subject.
28. Discuss the formula: $PT = MV + M'V'$.
29. What is meant by the value of money? Compare it with the value of ordinary commodities.
30. Why does the value of money fluctuate from time to time?
31. Discuss the effects of changes in the general price level on the different classes of the community.
32. Discuss the problem of price stability and explain some of the schemes that have been put forward to ensure a stable standard of value.
33. What are the essentials of a sound monetary system?

CHAPTER XI

EXCHANGE: CREDIT AND BANKING

1. Elucidate the nature of credit and bring out its main characteristics.
2. 'Credit is virtually a contract for the future delivery of money.'
Discuss.
3. Explain the principal instruments of credit and give specimens of each of them.
4. Explain how credit economizes the use of metallic money.

5. What are the services rendered by credit to society? Also indicate its abuses.
6. Examine the relation between credit and capital.
7. Show how banking occupies a most important position in the modern economic world.
8. Describe the various functions performed by modern banks.
9. Enumerate the different types of banks and briefly indicate the nature of the functions undertaken by them.
10. Comment on some leading features of the modern banking organization.
11. Write notes on (i) bank amalgamations, and (ii) branch banking.
12. Describe the operations of a typical commercial bank.
13. Distinguish between the various classes of deposits and explain the working of the cheque system.
14. Describe the mechanism of the clearing house organization.
15. Indicate the various kinds of loans and advances given by banks to their clients.
16. What is meant by discounting of commercial paper? Why is it considered as a safe investment for the funds of a commercial bank?
17. Show why banks should maintain adequate cash reserves. What help can legislation offer in this matter?
18. Discuss the arguments for and against a 'free' banking system.
19. Discuss the opposite points of view represented by the Currency School and Banking School and indicate their respective merits and demerits.
20. Review the principal methods of regulating note issue in the different countries of the world, including India. (See also Part II, ch. vi.)
21. Explain the proportional reserve system and its advantages.
22. What are the principal functions performed by a Central Bank? How does it control the credit operations of other banks?
23. Show how the Central Bank bank rate is the principal instrument of controlling credit.
24. Examine the effects produced by (i) the raising and (ii) the lowering of the bank rate.
25. Give a brief account of the Bank for International Settlements.

CHAPTER XII

EXCHANGE: INTERNATIONAL TRADE

1. Compare international trade with domestic trade and clearly bring out the distinguishing characteristics of the former.
2. In what respects does the trade between Bombay and Delhi differ from that between Bombay and London?
3. Give a clear exposition of the theory of comparative costs and show how international values are determined.
4. Explain how international trade arises. Would you say that in the last analysis it is a kind of barter?

5. Distinguish between the balance of trade and the balance of payments (accounts) with special reference to India.
6. Explain how Great Britain is able to import more goods than she exports.
7. Clearly explain invisible exports and imports. Prepare a list of both visible and invisible items for Great Britain and India, in the form of a balance sheet.
8. What are the advantages of international trade and its possible disadvantages?
9. Review the chief arguments in favour of free trade and show why it has been almost universally abandoned today.
10. Examine the case for protection with special reference to India. (See also Part II, ch. iv.)
11. Carefully explain and scrutinize the infant industries argument with special reference to India. (See also Part II, ch. iv.)
12. Indicate the limitations and dangers of a policy of protection. How would you prevent or minimize them?
13. What is meant by 'dumping'? Show the various forms which it takes. How far is it desirable to adopt anti-dumping measures?
14. Explain how obligations and claims arising from imports and exports of goods are settled. Give Indian examples.
15. Examine the part played by banks in liquidating international indebtedness.
16. What is the mint par of exchange? Can there be such a par between a Gold Standard country and a Silver Standard country? If not, why not?
17. Explain the gold (specie) points and show how fluctuations in exchange rates are restricted to these points so long as the Gold Standard is in effective operation.
18. Critically examine the validity of the popular expressions 'favourable' and 'unfavourable' exchange.
19. What are the various methods of remitting funds from Bombay to London? Which is the cheapest and which is the most expensive method?
20. Explain the two principal methods of exchange quotations, and show by appropriate Indian examples how a simultaneous use of both these methods causes confusion.
21. Set forth the purchasing power parity theory and bring out its limitations.
22. 'The purchasing power parity theory does not provide a ready-made measure of the "true" value of the exchanges.' Discuss.

CHAPTER XIII

DISTRIBUTION: RENT

1. State in general terms the problem of distribution. What are the main questions to be considered in connexion with the subject?
2. In Distribution we are concerned with functional and not personal distribution. Explain this.

3. 'The National dividend is at once the aggregate net product of, and the sole source of payment for, all the agents of production within the country.' Discuss.

4. Show the application of the marginal theory to distribution. Can distribution be explained entirely with reference to the general theory of value?

5. Give a brief account of the evolution of private property.

6. Show how the institution of private property underlies the whole scheme of distribution of wealth.

7. What rights are implied in private property? Use your analysis for answering the question whether land is or is not private property in India. (See also Part II, ch. iii.)

8. Distinguish between the right of inheritance and the right of bequest. Do you think that it is desirable to maintain these rights in their full strength?

9. Explain briefly the principal theories of private property and indicate their respective merits and demerits.

10. Explain the distinction between contract rent and economic rent. Give illustrations.

11. Explain as clearly as you can the Ricardian theory of rent. Indicate the qualifications to which it is subject.

12. If all lands were equal in point of 'fertility' would there be a theory of rent?

13. Indicate Carey's criticisms of the Ricardian theory of rent.

14. Show by means of a diagram how rent arises both under extensive and intensive cultivation.

15. Why is rent called an unearned increment? If it is 'unearned', are rent-receivers (landlords) social parasites? How far is the State justified in appropriating rent?

16. 'Rent is paid for the original and indestructible powers of the soil.' Explain this proposition and consider how far the rents that are actually paid conform to this description.

17. 'Rent does not enter into price.' Explain this statement, noting exceptions, if any.

18. 'Corn is not high because rent is paid but rent is paid because corn is high.' Discuss.

19. Tradesmen often say that they have to charge high prices because they have to pay high rents. Do you agree?

20. Rent is something that is (i) differential and (ii) permanent. Explain this.

21. Indicate the application of the theory of rent to urban sites.

22. Why do rents rise and fall? Clearly bring out the effects of economic progress on rents.

23. (i) Write a note on quasi-rent.

(ii) What is 'rent of ability'?

24. Examine the application of the theory of rent to (i) wages; (ii) interest; and (iii) profit.

CHAPTER XIV

DISTRIBUTION: WAGES

1. Explain the nature of wages.
2. Distinguish between time wages and piece-work wages and indicate their relative advantages.
3. What are the peculiarities which differentiate labour from an ordinary commodity and which necessitate a special theory of wages?
4. Explain fully the difference between nominal and real wages.
5. What do you mean by the 'net advantages' of an occupation? Do wages always accurately measure 'net advantages'?
6. Why do wages differ (i) from occupation to occupation and (ii) from country to country.
7. Explain why women's wages are generally lower than men's.
8. Discuss the subsistence theory of wages. Is it the same as the Iron or Brazen Law of Wages?
9. Examine the relation between the standard of living and the rate of wages.
10. Point out the fallacies and the valid points, if any, in the wages fund theory.
11. In what respects do you consider the marginal productivity theory of wages more satisfactory than the earlier theories?
12. Show how in actual experience wages may differ from their level as determined by the marginal product of labour.
13. Explain what is meant by the 'discounted marginal productivity of labour'.
14. How far is it possible by Trade Union action to raise wages permanently (i) in any given occupation; (ii) in all occupations?

CHAPTER XV

DISTRIBUTION: INTEREST AND PROFITS

1. What is the difference between gross and net interest? Show how the latter tends to equality.
2. Account for the fact that while the Government of India is able to borrow at present (1936) at $2\frac{1}{2}$ per cent, and the Bank Rate is 3 per cent, the peasant in the rural areas has to pay 12 to 18 per cent and even higher rates of interest.
3. Distinguish between interest and usury. How far would it be correct to describe the money-lender's operations in India as usury? (See Part II, ch. iii.)
4. Examine the effects of economic progress on interest. Can the rate of interest fall to zero?
5. Explain how interest is determined.
6. 'Interest is the price of time.' Explain.
7. Consider whether it would be possible to abolish interest under the present or any other form of society.

8. Discuss the socialist criticism of interest.
9. Distinguish between gross and net profit.
10. What deductions would you make from gross profits, in order to arrive at net profits?
11. Consider whether profits form part of the cost of production.
12. Show how far net profits are of the nature of rent.
13. Explain the causes of differences in normal profits.
14. 'Profits are contingent, wages are stipulated.' Discuss.
15. Is there any social or economic justification for profits? Do you consider that profits are excessive under the present capitalistic system?

CHAPTER XVI

DISTRIBUTION: SOME GENERAL PROBLEMS

1. Discuss the causes of industrial disputes which are a feature of modern society.
2. Emphasize the need for industrial peace and discuss the ill-effects of strikes and lockouts.
3. What steps would you recommend for preventing industrial disputes?
4. Explain the scheme of Whitley Councils and indicate its strong and weak points.
5. Discuss the principal methods of settling industrial disputes.
6. Examine the plan of compulsory arbitration of industrial disputes in New Zealand and Australia. How far is such procedure desirable?
7. Are Trade Unions purely obstructive? If not what are their functions and uses?
8. Review the Trade Union movement in Great Britain.
9. Form a critical estimate of the influence exercised by Trade Unions and the effects of the Trade Union movement. What are the dangers of Trade Unionism?
10. Examine the evils of modern industrialism and the factory system and show the need for the intervention of the State to safeguard the position of labour.
11. State in general terms the aims and objects of labour legislation in modern times and mention the principal items covered by it.
12. Indicate the scope of Factory and Workmen's Compensation Acts respectively.
13. Examine the scheme of national insurance against sickness and unemployment in Great Britain and Germany.
14. Examine the case for a legal minimum wage. Explain the operation of the wage-fixing machinery in Great Britain.
15. Write a brief note on a general national minimum wage.
16. Discuss the causes of inequality of incomes.
17. Is inequality of wealth-distribution wholly an evil? How would you remedy it in so far as it is an evil?
18. 'The overshadowing fact in the distribution of property and income is inequality.' Discuss. How far is this inequality inevitable?

19. Account for the rise of modern socialism and give a clear exposition of the socialistic doctrine.
20. Consider socialism as a possible solution of the present defects in economic organization.
21. Show how on the constructive side of socialism there is a great variation in the proposals for social reconstruction.
22. Examine the influence of socialism on social legislation in modern States.
23. Indicate the strong and weak points of socialism, and mention the principal socialistic schools.

CHAPTER XVII

PUBLIC FINANCE

1. In what respects does public economy differ from private economy?
2. Indicate the various sources of public revenues, giving Indian examples.
3. Give a careful definition of a tax. How does a tax differ from a fee? Must a tax always be paid in money?
4. Enumerate with brief comments Adam Smith's canons of taxation. What are the modern additions to Adam Smith's list?
5. Clearly bring out the implications of the canon of equality.
6. Set forth the equality of sacrifice theory and compare it with the faculty theory. Indicate the respective merits of the two theories.
7. What is progressive taxation? How can it be justified with reference to the canon of equality?
8. State the case for and against progressive taxation, with special reference to India.
9. Explain the benefit theory of taxation, and point out its limitations.
10. What are the main functions of taxation?
11. Consider the uses of taxation and of public expenditure in remedying social inequalities and injustices.
12. What is taxable capacity? Is it possible to measure it accurately?
13. What are the principal factors governing taxable capacity?
14. Clearly explain the distinction between direct and indirect taxation. Give illustrations from Indian conditions.
15. Discuss the comparative merits of direct and indirect taxation.
16. Distinguish between the impact and the incidence of a tax. Illustrate your answer by one or two examples.
17. Bring out the importance of the study of incidence of taxation.
18. Set forth in general outline the theory of incidence of taxation.
19. Discuss the question of incidence of taxation with reference to (i) rent; (ii) buildings; and (iii) monopolies.
20. (i) What are the principal items of public expenditure?
(ii) Suggest a suitable classification of public expenditure.
21. Under what circumstances is unproductive expenditure justifiable? Discuss the question with special reference to irrigation and famine relief in India. (See Part II, chs. iii and viii.)

22. Give a brief exposition of the theory of public expenditure, and of Governmental functions.
23. What are the dangers attendant on excessive public expenditure?
24. Set forth and explain the economic functions of the State. Give Indian examples.
25. Distinguish between public credit and private credit. How does the distinction affect the borrowing policy of the State?
26. What are the uses of public loans in peace and war? Should a war be financed by taxes or loans or both?
27. How far is it legitimate to resort to borrowing for unproductive works such as public buildings and museums, and unproductive objects like education?
28. Discuss the uses and dangers of external public loans.

CHAPTER XVIII

UNEMPLOYMENT AND THE TRADE CYCLE

1. 'Unemployment may be regarded as the shadow side of modern progress.' Discuss.
2. What are the fundamental causes of unemployment?
3. Consider separately the unemployment problem as it affects (i) particular trades and (ii) all trades.
4. Clearly indicate the relation between unemployment and the trade cycle.
5. Explain clearly the main phases of the trade cycle.
6. Explain briefly the principal trade cycle theories.
7. How far does excessive saving and underspending account for the present economic depression?
8. Indicate the methods of dealing with the evil of unemployment.
9. Discuss the policy of construction of public works as a remedy for unemployment during a period of trade depression.
10. Give a brief account of the National Unemployment Insurance organization in Great Britain and Germany. (See also ch. xvi.)

APPENDIX

TRADE AND PRODUCTS OF THE PRINCIPAL COUNTRIES OF THE WORLD

1. Mention the principal commodities necessary for the satisfaction of human wants, and indicate their distribution in the different climatic zones.
2. Mention the principal products of Great Britain and explain the part played by them in her national economy.
3. What are the chief imports and exports of Great Britain?
4. Explain the circumstances that have favoured the rapid economic development of the United States.
5. Enumerate the chief imports and exports of the U.S.A.

6. Compare the natural resources of Germany with those of Great Britain.
7. What are the principal manufacturing industries in Germany? Account for her rapid industrial development.
8. Mention the leading imports and exports of Germany.
9. Give an idea of the natural resources and physical features of Japan.
10. 'Japan now ranks as the foremost industrial country of Asia and one of the leading commercial nations of the world.' Discuss.
11. Mention the principal manufacturing industries in Japan, and explain the part played by cottage industries in her economic life.
12. Name the main items of Japan's import and export trade.

PART TWO
ELEMENTS OF INDIAN ECONOMICS

CHAPTER I

RESOURCES AND POPULATION

§1. **Meaning of 'Indian economics'.—**'Indian economics', as generally understood, may be described as a study of Indian economic problems. It presents an analysis of the existing economic situation of India and discusses means and methods of improving it. Every country must in this manner consider its own economic problems. Our object in such a study is not merely knowledge for its own sake. This is legitimate enough, but in addition we desire to find out how best to proceed in order to make the country and its people richer and happier.¹

§2. **Scope of the chapter.—**In this chapter it is proposed to deal with India's physical environment and natural resources, her population, and the economic aspects of her social and religious institutions.

PHYSICAL ENVIRONMENT AND NATURAL RESOURCES

Economic Geography of India

§3. **Area and population.—**We have already considered the importance of natural resources and the part played by them in shaping the economic life of a country.² We shall begin our inquiry into the economic position of India by a brief description of her physical environment.

British India is 1,094,300 square miles in area with a population of 271,526,933 (according to the Census of 1931), while 711,032 square miles of territory with a population of 81,310,845 is under Indian States and Agencies. The length of the country from north to south is about 2,000 miles, and about 2,500 miles from east to west. India has a land

¹ The term 'Indian economics' may suggest that we are thinking of an altogether new science of economics. But actually this is not so, and indeed we do not want—nor do we possess—any new system of economic doctrines. In India, as elsewhere, the general science of economics as we already know it is serviceable enough and in fact indispensable. Anybody wishing to study the economic conditions in India will be seriously handicapped unless he is well acquainted with the principles of economics. This is the relation between the general science of economics and 'Indian economics'.—See Jathar & Beri, *Indian Economics*, vol. I, ch. i.

² See Part I, ch. v, §6.

frontier of about 6,000 miles, and the length of her coastline is roughly 5,000 miles. She is thus a world in herself, being fifteen times as large as Great Britain and equal to the whole of Europe excepting Russia. Her total population (353 millions) is about one-fifth of the world-population.

§4. **Geographical location.**—The natural boundaries of India stand out prominently on her map. On the land side there are the mountain ranges of the Himalayas on the north and the Hindu Kush and Sulaiman mountains on the north-west. The north-eastern frontier is composed of the mountains which shut Burma off from the rest of Asia. The only gateways to India by land (i.e. the Khyber and the Bolan passes) are on the north-west frontiers, from Afghanistan and Baluchistan. The Indian coast is surrounded by the two great arms of the Indian Ocean, the Arabian Sea on the west and the Bay of Bengal on the east. India is thus readily approachable from her sea boundaries.

India occupies a highly favourable situation as regards the rest of the world for purposes of international trade, standing as she does at the centre of the eastern hemisphere; she commands trade routes running in all directions, and the sea routes are by far the most important on account of her extensive seaboard (see Map X).

India, however, suffers from a deficiency of natural harbours capable of accommodating large modern vessels. Karachi, Bombay, Goa and Cochin are the only important ports on the western coast. The east coast is surf-bound and without any natural harbours. The harbour of Madras owes its present position largely to an expensive outlay on its sea-walls. Vizagapatam on the same coast is gradually gaining importance as another artificial harbour, thanks to an ambitious project that is now being carried out by stages. Calcutta on the Bay of Bengal is naturally well-situated, but suffers from bars which form in the Hooghly and make constant dredging operations necessary. Chittagong is in a similar case. Rangoon and Moulmein, although good harbours in themselves, are distant from the sea and suffer from unsatisfactory communication with the interior. We can therefore readily realize why as much as six-sevenths of India's foreign trade is confined to five ports, namely Calcutta, Bombay, Rangoon, Madras and Karachi (see Map I). A vigorous policy aiming at the construction of new harbours and the revival of the old neglected ones is urgently called for in the interests both of her coastal and oceanic trade.

The present shipping position of India is very unsatisfac-

tory, and she has hardly any mercantile marine worth the name to maintain her old traditions of maritime activity. The need for a more forward shipping policy is discussed in Chapter V.

As regards inland communication, the principal ports of India are already connected with the inland trade centres by a network of railways and roads. Northern India enjoys good facilities for internal communication owing to navigable rivers like the Indus and the Ganges, and her vast plains lend themselves to the easy construction of roads and railways. Peninsular India is at a disadvantage in this respect owing to the rugged and mountainous nature of the country and its lack of large perennial rivers. The state of rail and road communications in the rural areas of India is backward and needs immediate attention.¹ The post and telegraph are now sufficiently familiar and widespread in India, while the telephone and wireless, which have become such important adjuncts of modern trade and economic activity, are still in a backward state of development, the use of the telephone being confined to the larger towns. On the whole, as a result of these modern facilities for inland communications, the economic isolation of the village is largely a thing of the past.

§5. **Four well-marked divisions of India.**—India falls into the following four well-marked divisions: (i) the Peninsula, (ii) the Indo-Gangetic Plain, (iii) the Himalayan Range, and (iv) Burma (see Map II).

(i) *The Peninsula.*—This is an elevated plateau (called the Deccan, or the plateau of the south) separated from the Indo-Gangetic Plain by the Vindhya and Satpura ranges. It is flanked by the coast ranges known as the Western and Eastern Ghats. It is thus triangular in shape with Cape Comorin as its apex. This tableland of the peninsula is generally uneven and rocky, with more or less forested hill peaks and ranges, and it tilts like the roof of a house from west to east. The Western Ghats, which form a gigantic and continuous sea-wall, intercept the monsoon clouds, which are compelled to deposit their moisture on the mountain barrier and the narrow strip of land between the Ghats and the sea (known as the Konkan), thus making the inland region peculiarly liable to droughts and famine.

The principal peninsular rivers are the Nerbada, the Tapti, the Mahanadi, the Godavari, the Kistna and the Cauvery (see Map VII). They depend on the rains, and are

¹ See also ch. v., §§5, 8.

not perennial like the Himalayan rivers, which receive water from the melting of the mountain snows even in summer. They not only dry up in the hot weather, but many of them cut their way through deep gorges which make navigation impossible and irrigation expensive.

The principal products of the peninsula are millets, rice, oil-seeds, sugarcane, pulses, cotton, tea, coffee and spices. The main kinds of trees are teak, sal, sandalwood and coconut.

(ii) *The Indo-Gangetic Plain.*—This lies between the peninsula and the Himalayas and is traversed by two river systems, the Indus system to the west and the Ganges system to the east. The Indo-Gangetic plain, being composed of rivers and silt, is very fertile and forms the most extensive sheet of level cultivation in the world. Its Himalayan rivers are perennial: their fertile basins have been the seats of the ancient pre-Aryan and Aryan civilizations and are the natural granaries of the country. Some of them (e.g. the Brahmaputra, Ganges and Indus) are navigable, and served as great carriers of commerce in the pre-railway days. They are also the feeders of the important productive irrigation works on which the prosperity of the Punjab, Sind and the United Provinces so largely rests. The main products of the Indo-Gangetic plain are wheat, barley, millets, sugarcane, oil-seeds, rice, cotton, jute, indigo and opium. The vegetation is varied and plentiful—sal in the north, teak in Central India and the mulberry in Bengal. The Indo-Gangetic plain is the most densely populated part of India owing to its fertile alluvial soil and assured rainfall.

(iii) *The Himalayas.*—The Himalayan mountain ranges of the north—the highest in the world—dominate the Indo-Gangetic plain. They account for 1,250 miles out of the total length of over 2,000 miles of great mountain ranges which cut India off from the rest of Asia. Apart from their political significance as an impregnable barrier, the Himalayas exercise a dominating influence on economic conditions by their effects on rain, winds, heat, cold, moisture and vegetation. They intercept the monsoon and supply the plains and rivers with rain-water. We have already referred to the economic value of the Himalayan rivers. The Himalayan watersheds present rich possibilities of hydro-electric power. Lastly, they are a rich source of vegetation and nourish valuable forests which in their turn regulate the supply of rain-water.

(iv) *Burma.*—Burma constitutes a separate unit geogra-

phically, and presents many marked contrasts with India proper.¹ The Burmese people, whose principal home lies in the fertile valley of the navigable river Irrawaddy, belong to a different race and their civilization also differs from that of the Hindus. Burma, which is essentially a mountainous country, has vast natural resources in forests and minerals (e.g. petroleum) still awaiting economic exploitation. Rice is the principal agricultural product. Other crops are sugarcane, tobacco and millets.

§6. **Climate and seasons.**—It is impossible to make any general statement about the climate of India because within its boundaries almost any type of climate that is known to the tropics or the temperate zone may be found. But on the whole the Indian climate may be described as semi-tropical. Peninsular India, being situated within the tropics, has a higher mean temperature throughout the year and shows small variations in the different seasons. Northern India, on the other hand, is characterized by extremes of temperature during summer and winter. At Jacobabad the thermometer sometimes rises to 125° in the shade during the hot weather and falls to 25° in the cold weather. Where the seasons are clearly defined in India they are three in number: (i) a cool dry season (winter) when northerly winds prevail; (ii) a wet season, sultry and oppressive with the inflowing south-west monsoon; and (iii) a hot dry season before the beginning of the rains, which usually come suddenly with heavy thunder-storms.

§7. **Rainfall.**—The rainfall like the climate shows striking variations. For example, Cherrapunji in the Assam hills registers a rainfall of 460 inches annually, while Upper Sind gets less than 3 inches. Climatically the Indian peninsula is part of the great monsoon area of Asia and exhibits the monsoonal control in a more perfect form than any other part of this area. The rainfall of India, unlike the rainfall in England, where rain may be expected at any time, has a definite periodicity due to this monsoonal control. The term 'monsoon' technically applies to the reversal of the winds which takes place throughout the monsoon area and which divides the climatic year into two distinct periods, that of the south-west monsoon, and that of the north-east monsoon. During the hot season the land

¹ Burma is shortly to be separated from British India and is to be given a separate constitution. Her trade with India will be governed by a special trade agreement.

gets hotter than the waters of the Indian ocean to the south. Moisture-laden winds therefore blow from the Indian ocean into the low-pressure land area to displace the hot, light air in it in the month of June. By July the *south-west monsoon* is fully established over India, the winds being generally south-west over the Deccan, south over the Ganges delta, and south-east up the Ganges valley. The Indus basin is the last area reached by these winds, and the first from which they retreat, so that here the yearly rainfall is very low. It is heaviest on the Western Ghats (which are first struck by the monsoon), the Himalayas, and in Burma. In September the force of the monsoon begins rapidly to decline. The south-west monsoon, which reaches every part of India, accounts for nearly 90% of the total rainfall. It strikes India in two currents: (i) the Arabian Sea branch, and (ii) the Bay of Bengal branch. The former crosses the west coast of India, giving rain to the peninsula, the Central Provinces and Rajputana. The Bengal branch gives copious rainfall to Burma, Bengal, Assam and Bihar, until it is arrested by the Himalayas. It then turns towards the west and, meeting with the Arabian Sea branch, gives a moderate rainfall to the whole tract from Bengal to the Punjab.

The *north-east monsoon*, which yields about 10% of the total annual rainfall, is really the south-west monsoon in retreat. During the winter, the land becomes cooler than the sea and moisture-bearing winds blow from the land to the sea, thus giving rise to the north-east monsoon. This winter monsoon gives rain to north and south Madras from October to December. Other parts of India, such as Hyderabad State, Berar, and some parts of the Central Provinces, Bombay and the Punjab, also benefit from the north-east monsoon.

The monsoon determines the harvesting seasons in India. One set of crops is sown in June and reaped in autumn, namely rice, cotton and bajra. This is called the season of the *kharif* crops. The second set of crops, namely wheat, barley and linseed, is sown when the monsoon ends about the middle of September, and is reaped between January and March. This is the season of the *rabi* crops. The annual rainfall is a matter of vital importance to the country. Fluctuations in quantity, distribution, and timeliness bring misery or prosperity to the millions of people who are mainly dependent on agriculture. The rainfall enters into every aspect of life in the country, for the prosperity of industry, trade and finance depend on that of agriculture, which in its turn is

largely at the mercy of the monsoon, and particularly of the south-west monsoon.

The lack of uniformity in the annual rainfall has given rise to the following classification : (i) Areas of assured rainfall such as Burma, Assam, eastern and lower Bengal and the western coast strips; (ii) Areas of precarious rainfall such as Udaipur, Ajmer, and the Bombay Deccan excluding the Western Ghats; and (iii) Areas of drought such as upper Sind, western Rajputana and western Punjab (see Map III).

§8. **Soils.**—The geological survey of a country includes the consideration of its surface and sub-soil. The soils of India belong to the following geological types :

(i) *The alluvial tracts.*—These are the most extensive and agriculturally the most important. They occupy the greater portion of Sind, Gujarat, Rajputana, the Punjab, the United Provinces, Bengal; and the Godavari, Kistna, and Tanjore districts of Madras. An alluvial strip extends along the eastern and western coasts of the peninsula. The alluvial soils, rich in chemical and organic ingredients, are very fertile, and with a moderate and well-distributed rainfall are capable of growing most of the *kharif* and *rabi* crops.

(ii) *The Deccan trap formation* covers the greater part of the Bombay Presidency, the whole of Berar, the western third of the Central Provinces and the western part of Hyderabad (Deccan). The soils in this area vary greatly in character and fertility. True *Black Cotton soil* occurs within the area of the Deccan trap below the general level of the foot-hills. It is famous as being suitable for the cultivation of cotton and jowar in the valleys of the Tapti and Narbada, in the plains of Gujarat, Kathiawar and Karnatak, and in a few districts of the Madras Presidency. It can also grow wheat, linseed and gram, and has a great capacity for absorbing and retaining moisture.

(iii) *The crystalline tract.*—The remaining soils belong to what is known as the crystalline tract, comprising almost the whole of Madras, Mysore, south-eastern Bombay, eastern Hyderabad and two-thirds of the Central Provinces. Though on the whole their fertility is of a low order, certain varieties (e.g. the red or the red-brown loams and clay loams in Mysore and Madras) are very fertile. Crystalline soils of moderate fertility yield rice as their chief crop where canal irrigation is available, and also other valuable crops with the help of tank and well irrigation.

§9. **Mineral production.**—In the opinion of the Industrial Commission (1918), the mineral deposits of India are

sufficient to maintain most of the key industries in the country. Up to the early eighties, practically nothing had been done for their development. Subsequent investigations, however, have led to the discovery and opening up of many kinds of mineral deposits which make possible the rise of a number of metallurgical industries in the country. The recent development of the transport system, the war of 1914-18, and the industrial progress of India have stimulated mineral production.

The minerals produced in India include coal, iron, manganese, gold, silver, lead, zinc, petroleum, mica, wolfram, sulphates, salt, saltpetre, building-stones, and cement-making materials (see Map I). The total values of the minerals produced in the years 1933 and 1934 were Rs. 22.16 and Rs. 23.54 crores respectively. A few words may be said here about the principal minerals.

(i) *Coal*.—With the exception of the United Kingdom, India produces more coal than any other part of the British Empire. The quantity of coal produced in 1933 was about 19.8 million tons valued at over Rs. 6 crores. Most of the Indian coal comes from Bengal, Bihar and Orissa (the Gondwana coalfields). Outside these provinces, the most important mines are in the Central Provinces, Hyderabad State, Central India, the Punjab, Rajputana, Burma, Assam and Baluchistan. Indian coal is thus very unevenly distributed, the deficiency being specially marked in the case of the peninsula. Bombay can draw hydro-electric power from the Western Ghats, but the Madras Presidency is greatly handicapped in its industrial development (e.g. in the exploitation of its iron ore deposits) by lack of coal. Indian coal is generally poorer in quality than foreign coal. Only the Bengal coal can compare with foreign coal in the production of good metallurgical coke. On the recommendation of the Indian Coal Committee, a Coal Grading Board was established in 1926 in order to improve the quality of Indian coal supplied in the market. It is also necessary to devise measures for the conservation of India's resources of good quality coal.

The coal industry in India owes its origin to the construction of railways in the country, though its subsequent progress has been stimulated by the increased demand from the expanding iron and steel and other industries.

(ii) *Iron*.—By far the most important of the iron deposits are those that occur in Singhbhum and Keonjhar, Bonai and Mayurbhunj States of Bihar and Orissa, where

recent discoveries include what appears to be a range of iron ore running almost continuously for forty miles. Other sources are Bengal, Burma, the Central Provinces, Madras and Mysore State. The Barakar Iron Works, started in 1874 (which have been transformed into the present Bengal Iron Company, Ltd.) led to the introduction of the modern iron industry into India. The remarkable development of the Tata Iron and Steel Company, inaugurated at Sakchi (Jamshedpur) in 1911, has given a great stimulus to the production of iron ore, of which the total production amounted to 1·9 million tons in 1934.

(iii) *Manganese*.—This is a very valuable industrial mineral and is mainly required for the manufacture of steel. It is also used in the heavy chemical, electrical and glass industries. India at one time (1907) displaced Russia as the first among the world's producers of this metal, but later she gave way to Russia. The record output of 1·1 million tons was reached in 1927, but owing to the economic depression of recent years, the output fell to only 218,307 tons in 1933 and the industry is still in a stagnant condition though there was a partial recovery in 1934, the output having increased to 406,000 tons. The principal manganese-producing areas are the Central Provinces, Madras, Bombay and Mysore.

(iv) *Gold*.—India contributes only about 3% of the world's production of gold, the great bulk of which is mined in the Kolar field in eastern Mysore. India produced 336,108 ounces of gold, valued at Rs. 2·76 crores, in 1933.

(v) *Petroleum*.—There are two distinct oil-bearing areas in India on either side of the Himalayan arc; one on the east, and by far the most important, includes Assam and Burma and contributes 95% of the output; the other on the west includes the Punjab and Baluchistan. The most successful oilfields are found in the Irrawaddy valley in Burma, from which nine-tenths of the indigenous petroleum is obtained. India produced 322 million gallons of petroleum in 1934 (as compared with 118 million gallons in 1904), which is the highest figure in the history of the industry. Her contribution to the world's production of petroleum was only 0·62% and she occupied the twelfth place in 1933. The internal consumption of petroleum and petrol has increased enormously in recent years, and large quantities are still imported from abroad in spite of the extension of home supplies.

(vi) *Mica*.—This mineral is principally used in the electrical industry as an insulating medium. India is the

leading producer of mica, with an output of more than three-fifths of the world's total.

(vii) *Saltpetre*.—Saltpetre is in considerable demand for industrial purposes, for the manufacture of glass, for the preservation of food and for manurial purposes. It is produced mainly in Bihar, the United Provinces and the Punjab. Nearly the whole of the output is exported, a small part being retained in the country for use as a fertilizer, especially in the Assam tea gardens. There was a time when India possessed a practical monopoly of the world's supply of nitrates required for the manufacture of explosives and chemical manure. Partly owing to the imposition of a heavy export duty and partly owing to other causes, Indian production declined. The competition of Chile nitrates and French potash salts in foreign markets has adversely affected Indian exports of saltpetre.

(viii) *Salt*.—About three-fourths of the salt consumed in the country is produced internally. The total output of salt produced in India (including Aden) was 1·71 million tons in 1933, the imports in the same year being 396,818 tons. About 60% of the Indian salt is obtained by evaporation of sea water on the coasts of Bombay, Madras and Burma. A second source is the rock salt obtained from the Salt Range and the Kohat mines in the Punjab. The other two sources are brine salt from the Sambhar lake in Rajputana and salt brine condensed on the border of the lesser Rann of Cutch. Foreign salt is largely imported for the Bengal and Burma markets. In 1929-30 the Tariff Board, which considered the question of making the country self-sufficient in respect of salt, expressed the view that the whole demand of the Bengal market (which is for fine white salt) could be met by India and Aden. The salt industry received protection in India by the imposition in 1931 of an additional import duty of $4\frac{1}{2}$ annas per maund on foreign salt, reduced to $2\frac{1}{2}$ annas in 1933.

(ix) *Cement-making materials*.—Chalk, limestone and clay are found extensively in India in the Bundi State (Rajputana) and also at Katni. Other areas are Porbandar in Kathiawar and the vicinity of Lucknow and Cawnpore in the United Provinces. The cement industry has a promising future.

(x) *Other minerals*.—Other minerals of subordinate importance are lead, tin, copper, zinc, silver, bauxite (aluminium), jade, chromite, potash, amber, diamonds, rubies and sulphur.

§10. **Vegetable resources.**—India grows a large variety of vegetable products belonging to the sub-tropical and temperate zones, as the following enumeration will show :

(i) *Food-grains.*—*Rice* in Bengal, Bihar, Orissa and Burma, and to some extent in Madras and Bombay; *wheat*, in the north-west parts of India; *millets*, such as jowar and bajra, in Bombay and Madras; *barley*, in the United Provinces and Bihar; *ragi*, in Madras, the United Provinces and Bombay; *maize*, in Bihar and Orissa, the United Provinces and the Punjab; *gram*, in the Punjab, the United Provinces, Bihar and Orissa and the Central Provinces.

(ii) *Herbs.*—*Condiments* and *spices*, in Madras, Bombay and Bengal; *sugarcane*, all over India, especially in the United Provinces; *coffee*, in Madras and Coorg; *tea*, in Assam and Bengal.

(iii) *Seeds.*—Oil-seeds such as *linseed*, *sesamum*, *rape* and *mustard*, *ground-nut*, *castor* in Madras, the United Provinces, the Central Provinces, Bombay and Burma.

(iv) *Fibres.*—*Cotton*, in Bombay, Berar, the Punjab and Madras; *jute*, in Bengal.

(v) *Miscellaneous.*—*Opium*, in the United Provinces; *tobacco*, in Bengal, Bihar, Bombay and Madras; *fodder crops*, in the Punjab and the United Provinces; *cinchona*, in southern India and Burma; *india-rubber*, in Assam, Khasi Hills and Burma; and *forest products*.¹

§11. **Forests.**—Among the most valuable natural resources of India must be reckoned her magnificent forests, whose character is largely governed by rainfall and elevation. Where the rainfall is heavy, evergreen forests of palm, ferns, bamboos and india-rubber trees are found. Under less copious rainfall, deciduous forests appear containing teak, sal, etc. Of the whole area of British India, more than one-fifth is under the control of the Forest Department, Burma and Assam being the leading major provinces in this respect.

In the economy of man and of nature, forests are of direct and indirect value. The direct utility of forests is chiefly due to their produce, such as timber and firewood and the raw materials they afford various industries, and the grazing for cattle they provide. They also offer employment to a large number of persons working in and near them and to others engaged in working up the raw products. Forest produce is divided into two main heads: (i) Major produce, i.e. timber and firewood; and (ii) Minor produce such as lac,

¹ For further particulars regarding the various crops, see ch. iii, §3.

tanning materials, essential oils, turpentine and resin. Forest research, has proved the utility of bamboo for the manufacture of paper pulp, and the Government has since 1925 granted protection to the Indian bamboo paper pulp industry on the recommendation of the Tariff Board. The indirect utility of forests is also not negligible. They make the climate more equable, prevent the soil from being washed away by heavy rains, help to regulate the water supply by rendering the flow of water in rivers more continuous, increase the fertility of the soil, afford shelter to cattle and useful birds, and produce a healthy aesthetic influence upon the people.

The conservation of forests is therefore of the utmost importance to every country. Nature's heritage must be protected against the rapacity of mankind. The process of reckless destruction of forests had gone on for centuries in India before the advent of the British rule. In the early years of the British rule, this destruction became intensified owing to increase of population, extension of cultivation, multiplication of herds of cattle and increasing demand for timber and firewood for railways. It was during Lord Dalhousie's regime that the Government realized the necessity of adopting a policy of forest conservation. The first organized steps were taken about the year 1855. In 1864 a Forest Department under an Inspector-General of Forests was established in the major provinces. Since then the Forest Department has grown and now controls, as mentioned above, more than one-fifth of the total area of British India. Indian forests are classified as (i) Reserved, (ii) Protected, and (iii) Unclassed State Forests in descending order as regards the control exercised by the Government over the rights of individual and public use. The object of forest administration is to eliminate the danger of over-working the forests and to improve their yielding capacity. The Forest Research Institute, established in 1906 at Dehra Dun, has been doing useful research work. The Agricultural Commission (1928) stressed the importance of increasing the utility of forests to the agriculturist, and at the same time of bringing him to take an enlightened view of forest administration.

§12. **Animal resources.**—The importance of animal life to an agricultural country like India cannot be exaggerated. The variety of Indian conditions has naturally developed a great variety of animal life. The most important animals are: (i) Cows and buffaloes mainly prized for milk; (ii) Bullocks which play an important part in the agricultural

economy of India both as draught animals and on the field; (iii) Goats and sheep which, apart from yielding meat and wool, supply together with cattle practically all the manure used by the Indian cultivator. Other animals are donkeys, used as pack-animals everywhere; camels, used for transport across deserts (e.g. Sind) and generally in northern India; and fish, which are of immense importance as articles of diet in Bengal, Assam and the coast strips of the peninsula. The extensive forests of India shelter a large variety of wild animals, reptiles and birds.

§13. **Sources of power.**—The principal sources of power available in India are coal, wood, fuel, oil and alcohol, wind and water. We have already referred to the uneven distribution of coal and its marked deficiency in the peninsula. The situation as regards the other sources of power, except water power, is also not very favourable. At present water is the most promising source of power in India. The Gokak Mills situated near the Gokak Falls in the Southern Maratha country (Bombay) were the pioneers in the use of hydro-electric power. In recent times considerable attention has been paid to large hydro-electric power schemes, e.g. on the Cauvery river at Sivasamudram, for supplying power to the Kolar gold fields (1903), on the river Jhelum in Kashmir, and at the Tata hydro-electric works in the Western Ghats in the Bombay Presidency (1915). The three Tata hydro-electric schemes mark a big step forward in the industrial development of India. These schemes, which have a combined normal capacity of 246,000 horse-power, provide electrical energy for the great industrial city of Bombay, Bombay suburbs, Thana, Kalyan and greater Poona, thus enabling them to overcome the handicap imposed by the absence of coal in their vicinity. Another important hydro-electric venture is the Mandi scheme in the Punjab, which area also suffers from a deficiency of coal. This scheme when completed is expected to supply power to a very large number of industrial centres, including distant places like Delhi. In accordance with the recommendations of the Industrial Commission, the Government of India undertook in 1918 a comprehensive hydro-electric survey of India which has revealed various interesting possibilities, especially in connexion with the Himālayan watersheds and rivers.

The foregoing survey reveals the rich and varied character of India's natural resources. It is a commonplace remark that while nature has showered her bounties on the country with a liberal hand, man in India has failed to profit

adequately by them, so that the contrast between the bounties of nature and the poverty of man is very striking.

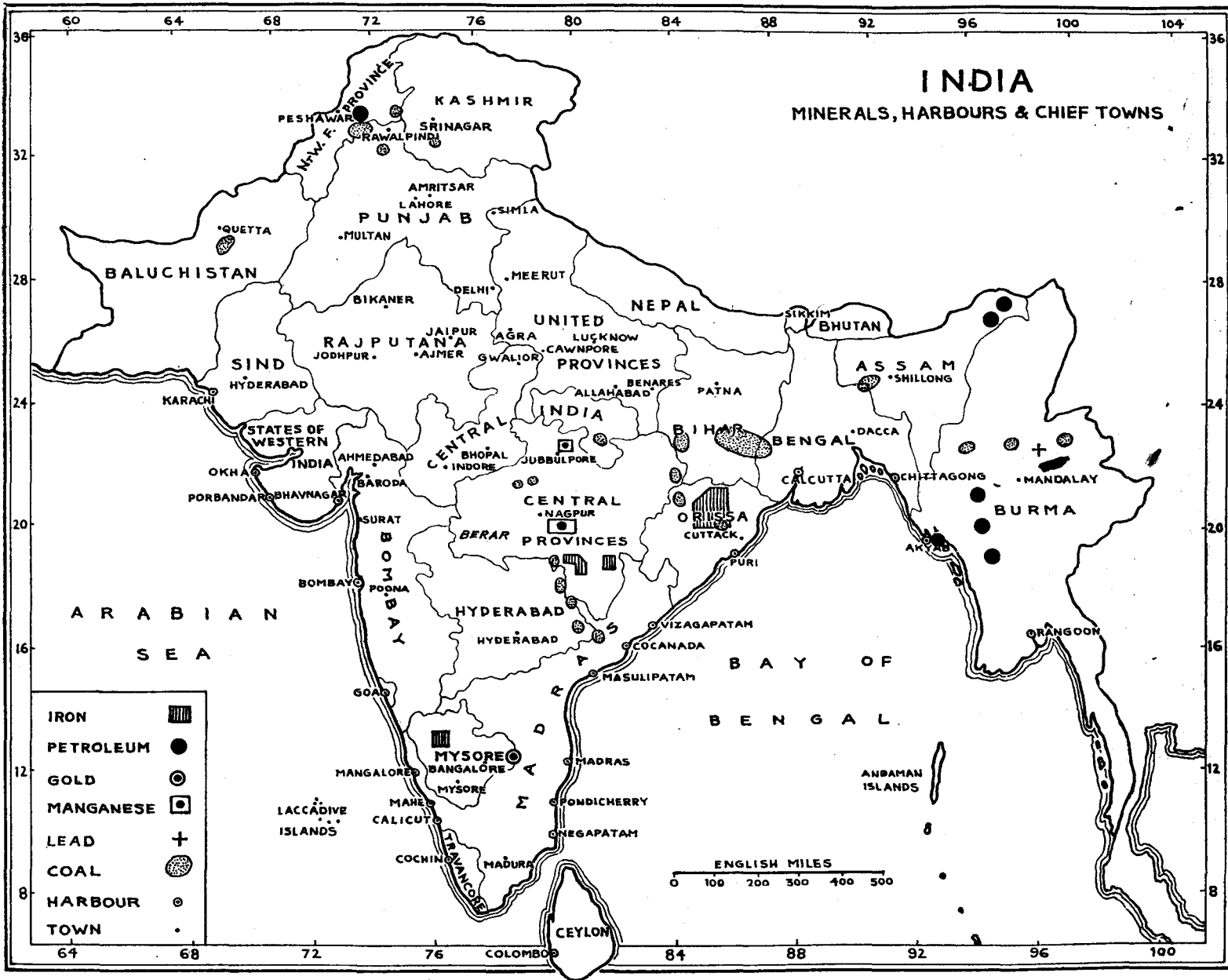
POPULATION

§14. **Total population.**—The total population of India according to the last census (1931) is 352,837,778, British-territory containing 271,526,933 and Indian States 81,310,845. With an area of about half that of the United States, India has a population almost three times as large.

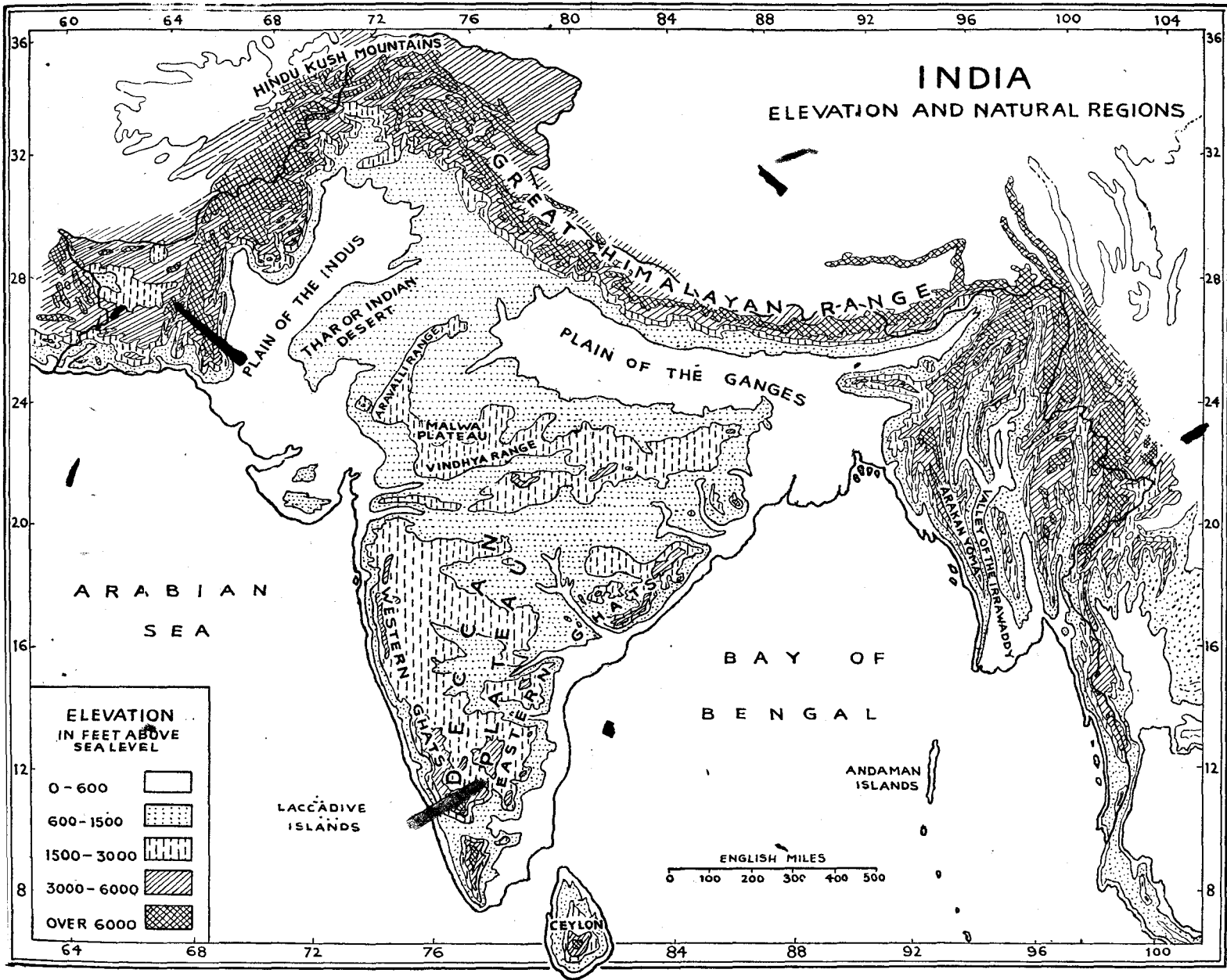
§15. **Density of population by provinces and States.**—We have already discussed the general factors which influence the density of population in a country.¹ We give below the total population and density per square mile in the various British Indian provinces and Indian States according to the census of 1931 :

Province, State or Agency	Population in 1931 (millions)	Density per sq. mile	Province, State or Agency	Population in 1931 (millions)	Density per sq. mile
India	352.8	198	(17) Baluchistan states ...	0.4	5
Provinces	271.8	248	(18) Baroda state ...	2.4	239
(1) Ajmer-Merwara ...	0.5	207	(19) Bengal states ...	0.9	179
(2) Andamans and Nicobars ...	0.02	9	(20) Bihar and Orissa states ...	4.6	162
(3) Assam	8.6	157	(21) Bombay states ...	4.5	160
(4) Baluchistan (Districts and administered territories) ...	.4	9	(22) Central India agency ...	6.6	129
(5) Bengal	50.1	646	(23) Central Provinces states ...	2.4	80
(6) Bihar and Orissa ...	37.6	454	(24) Gwalior state ...	3.5	134
(7) Bombay	21.9	177	(25) Hyderabad state ...	14.4	175
Aden ... ..	.05	643	(26) Jammu and Kashmir states ...	3.6	43
(8) Burma	14.6	63	(27) Madras states (including Cochin and Travancore) ...	6.7	631
(9) Central Provinces and Berar ...	15.5	155	(28) Mysore state ...	6.5	224
(10) Coorg	0.1	103	(29) N.-W. F. P. (Agencies and tribal areas) ...	2.2	99
(11) Delhi	0.6	1,110	(30) Punjab states ...	4.9	132
(12) Madras	46.7	328	(31) Rajputana agency ...	11.2	87
(13) N.-W. Frontier Province Districts and administered territories) ...	3.4	179	(32) Sikkim state ...	0.1	39
(14) Punjab	23.5	238	(33) United Provinces states ...	1.2	203
(15) United Provinces of Agra and Oudh ...	48.4	456	(34) Western India states agency ...	4.0	119
States and Agencies ...	81.3	114			
(16) Assam states (Manipur and Khasi states) ...	0.6	51			

¹ See Part I, ch. vi, §7.



MAP I



§16. **Factors determining density of population.**—The average density of population in India is 195 persons per square mile. The density varies from tract to tract from 6·5 (mean density) in Baluchistan to 4,000 in the rural parts of the south-west coast (see Map IV). In most parts of India the highest density of population would require about 40 inches of annual rainfall. In a few cases it has been possible to remedy deficiency in rainfall by irrigation. But taking the country as a whole irrigation plays a negligible part in determining density. A far more important factor is configuration. Where the surface of the soil is level, every inch of land may be cultivated, so that a very dense population can be maintained. If the surface is uneven, with hills and valleys, cultivation is difficult and population will be sparse. The nature of the soil is obviously another important factor. Tracts most favourably situated in respect of rainfall configuration and soil naturally develop the highest density, as in the case of Bengal and the United Provinces with their vast stretches of level and rich soil and adequate rainfall. Sometimes a particularly unfavourable climate cancels all other advantages and we get low density as in Assam.

§17. **Occupational distribution.**—About 70% of the people of India obtain their livelihood from agriculture and allied occupations. Industries support about 10% of the population, but the bulk of these are engaged in *unorganized industries* connected with the supply of personal and household necessities and the simple implements of work. *Organized industries* occupy only about 1·5% of the people. Trade and transport absorb about 8%; and administration and protection of the country about 1·5%. These figures are sufficient to illustrate the usual statement that agriculture forms almost the sole occupation of the people of India.

§18. **Towns and villages.**—The mass of the Indian people being agriculturists, it is natural that we should find a great predominance of villages over towns. A bare 11% of the Indian population are town-dwellers (a town being taken to mean a place inhabited by not less than 5,000 persons, or possessing some form of municipal self-government). There are only 2,575 towns as compared to nearly seven lakhs of villages. In England the proportion of the town-dwelling to the total population is 80%; in the United States, 56%; in France 49%; and in Germany, 46%.

The present excessively uneven distribution of the people between town and country, with only a negligible proportion living in towns, is an index of general backwardness. Civilization and progress have always originated in towns and radiated from them into the countryside. A greater development of modern industries would bring about an increase of the town population, and the country would progress more rapidly not only in an economic sense but also culturally.

§19. **Sex-distribution.**—Another characteristic of the Indian population is that males outnumber females, there being 940 females for every 1,000 males in spite of the fact that females are constitutionally stronger. The explanation is that in India the mortality among females is higher, and this is usually attributed to early marriage and excessive child-bearing combined with unskilful midwifery.

§20. **Productive or working population.**—The commonly accepted limits for the productive or the working population are between the ages of 15 and 60 in Europe. In India, as old age and incapacity for work appear earlier, the limits are 15 to 40. On this basis the *working* population in India is 40% of the total, as against 60% in England and 53% in France.

§21. **Birth-rate and death-rate.**—The Indian birth-rate and death-rate are among the highest in the world (about 36 per thousand and 26 per thousand respectively). A high and unchecked birth-rate is usually associated with a high death-rate. In European countries generally there is a striking tendency for both birth-rate and death-rate to decline. The birth-rate is declining because people marry late and regulate the size of their families. The children, being fewer, can be better looked after and therefore a large proportion grow up to manhood. In India the death-rate in general is very high owing to the poverty and the low vitality of the people, and it is particularly high among infants and females. Early marriages are an important contributing factor because they sap the vitality of the mother, and the child is consequently weak and liable easily to succumb to an ailment. Insanitary habits, ignorance of health laws, and unskilful midwifery make matters worse.

§22. **Population problem in India.**—Between 1921 and 1931 the Indian population increased from about 319 to about 353 millions, i.e. by more than 10%. The increase of 34 millions in ten years, although not great in proportion to the total population, is none the less stupendous in itself.

Can India really support a growth of population on this scale? As the Census Report of 1931 points out, thirty-four millions is a 'figure approaching equality with that of the total population of France or Italy and appreciably greater than that of such important European powers as Poland and Spain. The population now even exceeds the latest estimate of the population of China, so that India now heads the list of all the countries in the world in the number of her inhabitants.'

In Part I, Chapter VI, §6, we have explained the term 'over-population' as population in excess of the optimum, though of course nobody can pretend to be able to say exactly what the optimum would be under a given set of circumstances. If we cannot say what figure corresponds exactly to the optimum population, we also cannot pronounce a definite opinion as to whether the actual size of the population in India is or is not in excess of the optimum. But though "an exact statement is impossible we can make a reasonably sound guess on broad general grounds.

If in any country (i) there are no considerable preventive checks to the growth of population, (ii) if further there are no prospects of any sudden and extraordinary economic development, and lastly (iii) if the positive checks are unmistakably in operation (i.e. there is a very heavy death-rate, particularly infantile death-rate), we may justifiably conclude that the country in question is suffering from over-population. We shall consider the position in India along these lines.

That there are no important preventive checks in operation in this country can be easily proved. In India practically everybody marries, and marries as early as possible. Religion encourages marriage. 'Every Hindu must marry and beget children—sons if you please—to perform his funeral rites lest his spirit should wander uneasily in the vacant places of the earth.'¹ To avoid social obloquy most girls must marry before puberty. Amongst Mohammedans also early marriage is equally common. The joint-family system encourages early marriage because it is not necessary that everybody who marries should be able to earn his livelihood: wife and husband can be supported by the other members of the joint family. The very poverty of the masses makes early marriage necessary; for a wife is

¹ P. K. Wattal, *The Population Problem in India*, 2nd ed., p. 23.

necessary as a household drudge and often helps the husband in work in the fields and other outdoor occupations. Children may come, but the standard of life is so low that it does not cost much to rear them. Many die for want of care and proper nourishment, and those that survive are compelled to work and pay their way as soon as practicable. In the long run it is of course wasteful to society thus to force children to face life without any particular training. But the poor man cannot afford to take such long views. He is guided by what is immediately advantageous, however slight the advantage derived may be. The upshot of the whole matter is that the check to the growth of population due to abstention from marriage or its postponement is practically non-existent in India. It is therefore not surprising that the Indian birth-rate is one of the highest in the world.

As regards the possibilities of economic development, much no doubt can be done in the way of improvement of agriculture and industrialization. But even a superficial examination of our problems of agriculture will reveal the fact that there are many serious difficulties and obstacles to contend against, and progress must be slow. Similarly in the field of industry we have to reckon with the fact that other nations have gone far ahead of us, and it is a task of no mean difficulty to compete successfully with them. Even supposing we can shut out foreign goods by tariff barriers, our progress is not likely to be very rapid because there are other impediments besides foreign competition; our own deficiencies regarding labour and capital will take a long time to overcome. Even the most optimistic among us will agree that the country cannot hope for any such phenomenal increase of wealth as was witnessed in England as a result of the Industrial Revolution and as would suffice comfortably to absorb an unrestricted increase of population.

As regards positive checks, frequent visitations of epidemics like plague and influenza carry off large numbers of people from time to time. Even otherwise the mortality rate is one of the highest in the world and is particularly heavy among infants.¹

All the indications of a state of over-population are thus seen to be present in India, and taking into account the present conditions and the possibilities of economic advance

¹ See §21.

in the near future we may say that India would be a better country for its people to live in, if they bred at a considerably slower rate than now.

A definite movement towards artificial birth-control is taking place in the country, and enlightened public opinion is making the demand that the Government should help the movement by propaganda and by such measures as the establishment of birth-control clinics where information and advice regarding methods of birth-control can be given to the people.

Side by side with deliberate restriction of numbers, it is of the highest importance that every effort should be directed towards agricultural and industrial progress and the raising of the standard of living. Similarly the indirect bearing on the population question of public health measures and the spread of education and culture to which reference was made in Part I, Chapter VI, should not be forgotten in considering the problem of population in India.

ECONOMIC ASPECTS OF THE SOCIAL AND RELIGIOUS INSTITUTIONS

§23. **The caste system.**—The various aspects of Indian economic life have received their peculiar shape and mould from the characteristic social institutions of the people.

One of these institutions is the caste system. At one time perhaps the caste system could be defended as making for economic strength and efficiency, being based on the principle of division of labour. Also it worked well when there were only a few distinct occupations, proficiency in which mainly depended upon manual dexterity, which could most conveniently be handed down from father to son. Now with the appearance of numerous occupations and the advent of machinery, mere manual dexterity has become comparatively less important, and the caste system is more a hindrance than a help. It tends to prevent a man from following his natural bent in selecting his profession, and this is undesirable from the individual as well as the social point of view. Some castes are regarded as lower and some as higher. The occupations of the former tend to be looked down upon and this fosters an attitude of mind opposed to the principles that all honest labour is equally honourable, and that inferiority and superiority are not questions of birth but of innate ability which is not the monopoly of any particular caste. The caste system in its present form is a source of social

and political weakness, and the sooner it disappears the better it will be for the nation. Western education and culture should weaken the caste system. But there are other powerful influences—such as the scramble for political power ensuing from every forward step in political reform—which seem at present to be emphasizing the caste differences.

§24. **The joint-family system.**—The joint-family system is another characteristic of Indian society. The joint family has of course some good points. Every member of the family is looked after. Widows and orphans find a natural shelter in the family. In these circumstances the State is required to do less than in the west for those who are helpless. When a large number of people live together as they do in a joint family, there is a saving in household expenses. In many ways the joint family at its best fosters the virtues of self-discipline, sacrifice, obedience and reverence. But the great objection under modern conditions to the joint family is that it stifles individual initiative and encourages drones lacking in the sense of self-respect and responsibility. At present, owing to the fact that individuals have very often to leave the family fold in search of a livelihood and owing to the growing influence of western individualism, the joint-family system is gradually breaking up.

§25. **Indian laws of inheritance and succession.**—The Indian laws regulating inheritance and succession present a great contrast to the English law. In India landed property is distributed among a number of heirs. In England, owing to the system of primogeniture, land is concentrated in the hands of a few people. A wide diffusion of property and wealth appears to be more in consonance with ideas of social equity than its concentration. But in India the principle of equal distribution of wealth is seen to lead to such evils as the excessive subdivision and fragmentation of land. It is also commonly regarded as discouraging large-scale enterprise by preventing the accumulation of much capital in the hands of a few persons.

§26. **Religion and economics in India.**—It is often suggested that our present economic backwardness is due to our other-worldly religion and the fatalistic outlook which it engenders. We are so much engrossed with the salvation of our soul after death that we neglect to make the best of our life on this planet. It can, however, be easily proved that Christianity also is other-worldly in the sense that Hinduism and Islam are other-worldly and yet it has not prevented the progress of the Christian nations in the arts

of material civilization. We must further remember that in the past the Indian people have figured in history as great empire-builders, conquerors and colonizers. Their achievements in the sphere of the positive sciences like mathematics and astronomy have also been far from negligible, and the products of the Indian craftsman had at one time world-wide fame and circulation. All this would not have been possible if it had been true that Indian spirituality had paralysed economic and other secular activity. Turning to present-day conditions, some of the communities (like the Marwaris, Jains, Bhatias, Khojas, Memons and Bohras), which have taken the most active part in the new commercial and industrial life of the country and shown the greatest enterprise, are among the most orthodox and the least touched by modern scepticism and free-thinking.

The truth of the matter is that the economic motive is quite as powerful in India as in the west. The spirit of fatalistic resignation which is holding it in check is due to historical and political causes and has very little to do with the teachings of religion. People necessarily become fatalistic when political and other conditions are such that nobody can be certain of reaping the fruits of his labour. When conditions become more settled and satisfactory the natural impulse of man to create and enjoy the good things of life asserts itself. If religion seems to discourage this impulse it is itself changed by the process of re-interpretation—by reading new meanings into old texts. This is what has happened in Europe and this is also what is happening in India. Are not many thoughtful Hindus discovering that some of the characteristic doctrines of Hinduism, like the *karma* doctrine, do not inculcate renunciation but, on the contrary, favour energetic endeavour? Are not some Moslems similarly discovering that the *Koran* does not really forbid the taking of reasonable interest on money lent?

In short it is wrong to single out religion as a special influence in India making for apathy and indifference to material progress. Other influences such as political anarchy have played a far more important part in creating such an attitude. Calamities like famines, and diseases like malaria and hookworm, which lead to low vitality, must also be held largely responsible for the chronic apathy and pessimism of the people. Now that peace has been established and we are learning more and more how to control disasters like famines and to check the ravages of disease, a more hopeful outlook on life is becoming possible.

SUMMARY

By 'Indian economics' we mean the study of present economic conditions. If the study is to be intelligent, it must of course invoke the aid of general principles of economics.

ECONOMIC GEOGRAPHY

India is a *world in itself* with an area of 1,805,332 square miles and having a population of 353 millions. She has extensive land frontiers and a long coastline. Her natural boundaries—the mountain ranges in the north and the two great arms of the Indian ocean in the south—stand out prominently.

India enjoys a *favourable geographical location* as regards the rest of the world and commands trade routes in all directions. She suffers, however, from a deficiency of natural harbours. A vigorous policy of harbour development, including the revival of old neglected ports, is desirable.

The *shipping position* in India is very unsatisfactory and there is a great need for building up an Indian mercantile marine.

Inland means of transport are in a better condition. A network of railways and roads connects the ports with the inland trade centres, and there are navigable rivers like the Indus and Ganges in Northern India. Rural transport is however in a backward condition, and more feeder roads and railways are needed. Means of communication like the post and telegraph are fairly widespread. The telephone is restricted to large towns, and wireless has only just begun. With the spread of improved means of transport and communication the economic isolation of the rural areas is disappearing and the whole country is tending to become one economic unit, which in its turn is linked with the rest of the world.

India falls into *four well-marked divisions*:

(i) *The peninsula*, lying south of the Vindhya and flanked by the coast ranges known as the Western and Eastern Ghats, is triangular in shape with Cape Comorin as its apex. The peninsula is not so well served by rivers as Northern India. Its principal products are millets, rice, oil-seeds, cotton, sugarcane, tea, coffee and spices.

(ii) *The Indo-Gangetic plain* lying between the peninsula and the Himalayas, being traversed by the Indus and Ganges river systems is very fertile and supports a dense population. Its rivers are perennial and navigable. The Gangetic plain produces wheat, barley, millets, sugarcane, oil-seeds, jute, indigo and opium.

(iii) *The Himalayan mountain range* of the north, which dominates the Indo-Gangetic plain, constitutes an impregnable barrier and exercises a decisive influence on economic conditions in respect of climate, rainfall, vegetation and forest resources.

(iv) *Burma* stands out as a separate geographic unit. It is a mountainous country and commands excellent natural resources in forests and mineral wealth. One of its main assets is the fertile valley of the navigable river, the Irrawaddy. Rice is the staple Burmese agricultural product.

The Indian climate is semi-tropical. The variations in temperature are moderate in the peninsula. In the north however there are extremes of

heat and cold. There are three seasons in India: a cool dry season (winter), a wet sultry season and a hot dry season.

The rainfall shows striking variations from one part of the country to another and is seasonal in its character. India has two monsoons, the south-west monsoon, which gives 90% of the rainfall to the country, and the north-east monsoon, which accounts for the remaining 10%. The former, which lasts from June to September, is of greater importance to the Western Ghats area and Northern India; while the latter, which visits India from October to December, gives a good deal of rain to north and south Madras. Rainfall vitally affects economic life in India. Certain regions like the Western Ghats, Assam and Burma are assured of plentiful rain. Other parts like the Bombay Deccan and Udaipur are less fortunate, while still others like Upper Sind are almost rainless.

Indian soils fall into three classes: (i) The alluvial tracts, as in the Indo-Gangetic plain, are very fertile and grow most of the crops; (ii) The Deccan trap, as in the Bombay Presidency and parts of the Central Provinces and Berar, includes the black cotton soil suitable for cotton and jowar; and (iii) Crystalline soils, as in Madras and Mysore, are comparatively inferior, though certain varieties are very fertile.

India's mineral wealth covers a wide range, including coal, iron, manganese, gold, petroleum, saltpetre and salt. The mineral deposits are not yet fully exploited. They are sufficient to maintain most of the key industries.

Coal, iron ore and oil are perhaps the most important minerals in modern industrial life. *Indian coal* is unevenly distributed, the deficiency being specially marked in the peninsula. There are rich *iron ore* deposits in Bihar and Orissa, and the iron and steel industry has a bright future before it. The principal *oilfields* lie in Assam and Burma. The heavy increase in internal demand necessitates large imports of petroleum and petrol.

Another important mineral is *salt*, which has four main sources, sea salt, rock salt, brine salt and salt brine. Three-fourths of the salt consumed is produced in the country itself. In respect of salt, India may be expected in the future to become largely self-sufficing owing to the protection given to the Indian industry.

India's vegetable resources are rich and varied. She produces food grains (rice, wheat, millets, etc.), spices, sugarcane, tea, coffee, oil-seeds, cotton, jute, india-rubber, etc.

The forest resources are a great national asset, the forest area accounting for one-fifth of the total area. The main forest products are timber, firewood, bamboos, lac and tanning materials. Since 1864 the Forest Department has been made responsible for the conservation of forests, which fall into three classes (i) Reserved, (ii) Protected, and (iii) Unclassed. The Forest Research Institute at Dehra Dun is doing useful research work.

Animals, especially domestic animals like cows, buffaloes, bullocks, goats and sheep, play a valuable part in the economy of an agricultural country like India.

Although several *sources of power*, such as coal, wood fuel, oil and alcohol, exist, the greatest promise is held out by *hydro-electric power*

schemes, several of which are already in operation in the Western Ghats, Mysore and the Punjab.

The natural resources of India are considerable. Much, however, remains to be done before they can be said to have been properly developed.

POPULATION

The total population of India is 352,837,778 (1931). *The average density of India is 195 persons per square mile. It is more in some provinces, less in others, depending on rainfall, irrigation, configuration, soil, etc.*

About 70% of the people are directly or indirectly occupied in *agricultural pursuits* and only about 10% in industry. *Organized industries* occupy only 1.5%. As a corollary of this we find that only 11% of the people live in *towns* and the rest in *rural areas*. Such a distribution of population indicates economic backwardness and is unfavourable to general progress.

There are more males than females because of the greater mortality among females. *The productive or working part* of the population may be put at 40%.

India has a very *high birth-rate* with its usual concomitant of a very *high death-rate*. The death-rate is particularly high among women of reproductive age and among children.

Between 1921 and 1931 the population increased by 34 millions.

No preventive checks being in operation, and economic development in proportion to an unchecked growth of population being unlikely, deliberate restriction of numbers would be desirable. Strenuous efforts to expedite all-round economic progress, to raise the standard of public health and of education are equally necessary. In an indirect manner they are calculated to facilitate the solution of the problem of over-population.

SOCIAL AND RELIGIOUS INSTITUTIONS

The caste system is a prominent feature of Indian society. It may have been useful at one time, but it is now an anachronism and a source of weakness.

A similar statement can be made about the *joint-family system*, which runs contrary to the spirit of modern times and which on the whole serves to weaken the incentive for economic effort.

The Indian laws governing inheritance and succession make for a wide diffusion of wealth. On the other hand, they lead to excessive subdivision of land and prevent large accumulations of capital.

Indian spirituality and other-worldliness are often cited as causes of India's economic backwardness. This is however not altogether a correct view. If the principal religions of India are other-worldly, this is also true of Christianity as professed by advanced western peoples. But western peoples are progressive whereas the Indians are comparatively apathetic and pessimistic. This difference in attitude is more due to such factors as the troubled political past of India and the excessive susceptibility to diseases and visitations of nature, than to the influence of the dominant religions of India.

CHAPTER II

ECONOMIC TRANSITION IN INDIA

§1. **Economic transition in India.**—We have already dealt with the general stages of economic development and with the social and economic effects of the Industrial Revolution in England.¹ We shall now attempt a brief survey of the fundamental changes in the economic structure and organization which have transformed conditions of life and labour in India during the last hundred years. Although the forces in operation have been partly those implied by the phrase 'Industrial Revolution', the changes have not been so complete and revolutionary in their character as in the case of England. The old order of things has not yet altogether lost its vitality, especially in the rural areas. 'Economic Transition' is therefore a more appropriate phrase than 'Industrial Revolution' for describing the changes in the economic structure of India. We have the old and the new economic order existing side by side in India.

§2. **Characteristics of the old economic order.**—Morison divides the countries of the world into two broad categories, namely (i) those belonging to the old economic order, that have not yet passed through their Industrial Revolution (e.g. India, Egypt and some countries of eastern Europe), and (ii) those belonging to the new economic type, that have accomplished their industrial revolution (e.g. England, Germany and the U.S.A.).

(i) *The characteristics of the countries belonging to the old economic order are as follows :* (a) The predominance of custom and status over competition and contract; (b) The isolation and economic self-sufficiency of the village communities, primarily on account of defective transport and communication; (c) The predominance of agriculture over other occupations and the consequent preponderance of the rural over the urban population; (d) Simple and rudimentary division of labour owing to the narrow size of the market; (e) Small-scale industry of the handicraft and cottage industry type; (f) Absence of money economy and the prevalence of barter; (g) Undeveloped credit and the prevalence of usury.

¹ Part I, ch. ii, §§11-15.

(ii) In contrast with these are the following *characteristics of the countries belonging to the new economic order* : (a) Freedom of contract and free play of competition; (b) Close interdependence between the different parts of the industrial world, made possible by highly developed transport and communication; (c) Importance of manufactures and commerce and the predominance of the urban over the agricultural population; (d) Advanced division of labour facilitated by the growing extent of the market and use of machinery; (e) Large-scale industry requiring huge capital outlay and the concentration of labour in large factories and industrial towns; (f) Prevalence of money economy as opposed to barter; (g) Development of credit and banking and the absence of usury.

The above is not a hard and fast classification, and most of the countries in the first category are showing a tendency to pass into the second one, and in some of them, as in India, the change is already plainly visible. India is now in a state of economic transition and exhibits in varying degrees characteristics appertaining to both types of countries. The trend of development is, however, towards a growing predominance of the second type.

§3. **The old economic organization in India : the village.**

—India in the past was mainly a land of villages and she still is today. The isolated and self-sufficient village was the unit of the old Indian economy. The typical Indian village is an aggregate of cultivated holdings with or without some waste area attached, and usually it has a central site where the dwelling-houses are congregated, with the lands of the village spreading out in a series of concentric circles. The village often has a grove, and some kind of public office where the village officers keep their books and conduct their business.

There are two main types of village constitution in India : the ryotwari or severalty village, and the joint or landlord village. In the former, land is held separately by each cultivator, who pays his land revenue direct to the Government (as, e.g., in Bombay, Madras and Berar). In the second type, which prevails in the United Provinces and the Punjab, the land in the village may be owned by a single individual landlord or a body of co-sharers who are *jointly* responsible for the payment of land revenue.¹

Whatever the type, each village was in the past an

¹ See also ch. iii, §32.

entirely self-sufficing unit containing within its bounds all the labour, capital and skill necessary for its agricultural and industrial activities. The inhabitants of the village fall into three groups :

(i) *The agriculturists*—who may be divided into the land-owning and the tenant classes—form the bulk of the village population. Land holdings are usually small and are cultivated by the farmers with the help of members of their families. They undertake the risks, provide their own capital or borrow it from the village money-lender, and occasionally exchange their produce in the nearest market for salt and other small necessities and luxuries which are not available in the village itself.

(ii) *The village officers*.—Each village has its own officers, and the village was, and to this day remains, the unit of administration in India. The principal village officer is the headman—the patel or lambardar—who is a hereditary officer responsible for the peace and order of the village and the collection of revenue. He holds a plot of land called *watan* land as remuneration for his services. Then there is the village accountant or scribe—styled the kulkarni (*talati*) or patwari—who keeps the village records and accounts. There is also a watchman or chowkidar who has to report crime, arrest offenders, and help the police. Lastly, there is the village messenger. Most villages had in the old days their *panchayats*, bodies of village elders who settled disputes and generally held the village community together.¹

(iii) *The village artisans*.—Each village possesses its complement of artisans—a carpenter, a blacksmith, a potter, a cobbler, a money-lender (who is generally also a wholesale grain-dealer), a goldsmith, an oilman, etc. The artisans are the hereditary servants of the village. They are given houses in the village and are rewarded by a regular annual remuneration of service, land, or grain. Since the market for the goods produced by the artisans is limited there is an imperfect division of labour, and rural industry is of a very primitive type.

§4. *Life in the old village*.—Each village was almost *self-supporting* and *independent* excepting in the matter of salt and a few other luxuries purchased at the village fair or brought in by the *lamans* (caravans). The village was forced to be self-supporting as it was cut off from contact with the outside world, and exchanges were confined to

¹ See also Appendix.

those things which could be carried by men and pack-animals. Good roads (with the exception of the Mogul military roads) hardly existed. There were only a few natural waterways like the Indus and the Ganges, and internal trade in consequence remained undeveloped. Each village was, therefore, compelled to make its own arrangements to satisfy all its requirements. It led a smooth economic life in normal times, but in times of famine it inevitably suffered acute distress.¹

Another feature of village life was *the rare use of money*, most of the exchanges being in kind. Grain being universally desired it was the standard of value. The rate at which payments to village artisans were made was determined by a complicated but well-understood set of village customs. In fact, custom rather than competition was the principal regulator of all the economic relations. Labour was *immobile* owing to the influence exercised by the joint family, the caste system and the general conservatism of the village people. There was a *stronger sense of unity and solidarity* than now exists. For instance, village tanks, temples and roads were kept in repair by communal labour, i.e. free labour supplied by the villagers themselves. The weakening of this *corporate life* is one of the most disquieting features of village life today.

Custom and status held sway over the villagers' lives. Custom (i.e. conventions based on habit), which was opposed to change of any kind, determined rent, wages and prices under the old economic order in India. Birth in a particular caste and family determined once for all the status of the individual in society and deprived him of freedom of contract.

§5. **The village in transition.**—The organization of the village community and its economic life are undergoing a change as a result of the new forces called into existence by administrative centralization, the growth of individualism due to the impact of western civilization, and the revolution in transport and communications. Modern administrative centralization of revenue, police and justice has led to the weakening of the old village autonomy; the influence of western individualism has brought about the disintegration of the old corporate feeling in the Indian village; and the revolution in transport due to the construction of a network of railways and roads and the introduction of the motor-bus has broken down the isolation of the village.

¹ See ch. viii, §6.

The principal features of the village in transition may now be briefly indicated.

In the first place, *the old self-sufficiency of the village has broken down.* The village now buys from outside cloth, kerosene oil, aluminium ware, sugar, tea, matches, umbrellas, scissors, bangles, sewing machines, etc. In its turn the village now grows various products for the market, and exchanges with the outside world are now becoming more characteristic of the village than self-sufficiency.

The nature of the famine calamity has also been transformed with the possibility of importing food from distant places. Formerly, famines were those of food as well as of money. These have been replaced by famines of money, i.e. a famine nowadays means high prices (scarcity prices) and temporary unemployment in rural areas, and not starvation.¹ Although there may be no food in a particular village in a given year, this deficiency can ordinarily be made good by transporting it from other areas.

Barter has given way to money economy thanks to the growing frequency of exchanges with the outside world, and the remittances of those who go outside the village for employment. Land revenue and other taxes, rents, interest on loans and wages are now largely paid in cash. The old customary payments in grain for services rendered by artisans, etc. still continue to some extent, but their importance has greatly lessened.

The village people are now less stationary and often migrate to towns to supplement their incomes. The mobility is due to economic necessity and has been facilitated by improved means of transport.

Custom and status are gradually being supplanted by *competition and contract.* The institutions of caste and the joint-family system have weakened to some extent. Rents, prices and wages are coming more and more under the influence of competition. Keen competition among tenants for land has necessitated tenancy legislation to protect their interests. This change has been quickened by the spread of western civilization, the growing use of money and the development of communications.

§6. *Transition in agriculture and village crafts.*—(i) *Agriculture has been commercialized* and the village has been linked with the whole country. Even world markets are now accessible to the Indian farmer for agricultural produce

¹ See ch. viii, §6.

such as cotton, jute, oil-seeds, wheat and rice. The opening of the Suez Canal in 1869 has helped to establish world-wide markets for agricultural produce. Another tendency is for different regions to specialize in different crops, e.g. Bombay in cotton, the Punjab in wheat, and Bengal in jute. The *substitution of non-food crops like cotton and jute for food crops* has resulted from the commercialization of agriculture, and has called into existence a new *complex marketing organization* at the ports and inland trading centres, controlled by a special class of middlemen, wholesale dealers and exporters.

The pressure on land has increased and land-holdings are being increasingly divided, though the old agricultural practices still continue.

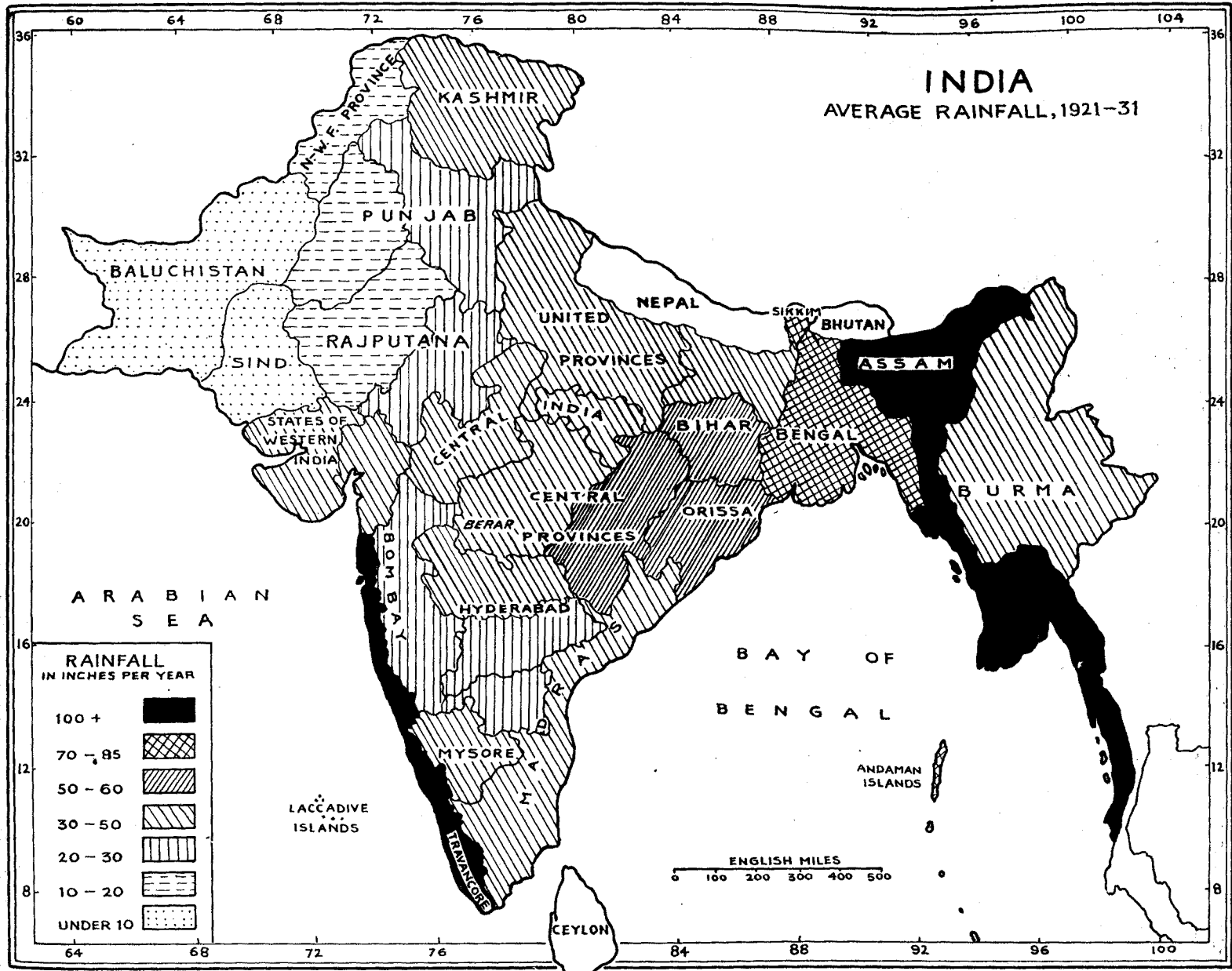
(ii) *The village crafts* are in a state of transition. Cheap imports of machine-made goods, cloth, aluminium ware and kerosene oil have adversely affected the spinner, the weaver, the potter and the oilman. All the village artisans are no longer indispensable. Some of them like the carpenter and goldsmith have improved their position by migrating to towns. Those who have been unable to do so are pursuing their old occupations under increasing difficulties. Some have given up their hereditary occupations and joined the ranks of day labourers in the village itself or have migrated to towns. Altogether rural industry is in a depressed condition, and the problem of its revival is not easy to solve.¹

§7. **Towns and industries in the old economic order.**—

Although the great majority of the Indian population lived in villages in the pre-British period, the development of towns was by no means negligible. Some of the towns, like Benares and Allahabad, were places of pilgrimage, others like Delhi, Lucknow, Poona and Tanjore were the seats of courts or the capitals of provinces. Some like Mirzapur and Bangalore were commercial centres. Town industry was more advanced and adopted a more minute division of labour than rural industry. It was also well organized into guilds of artisans. The use of money was more frequent, and credit instruments like *hundis* were in common use.

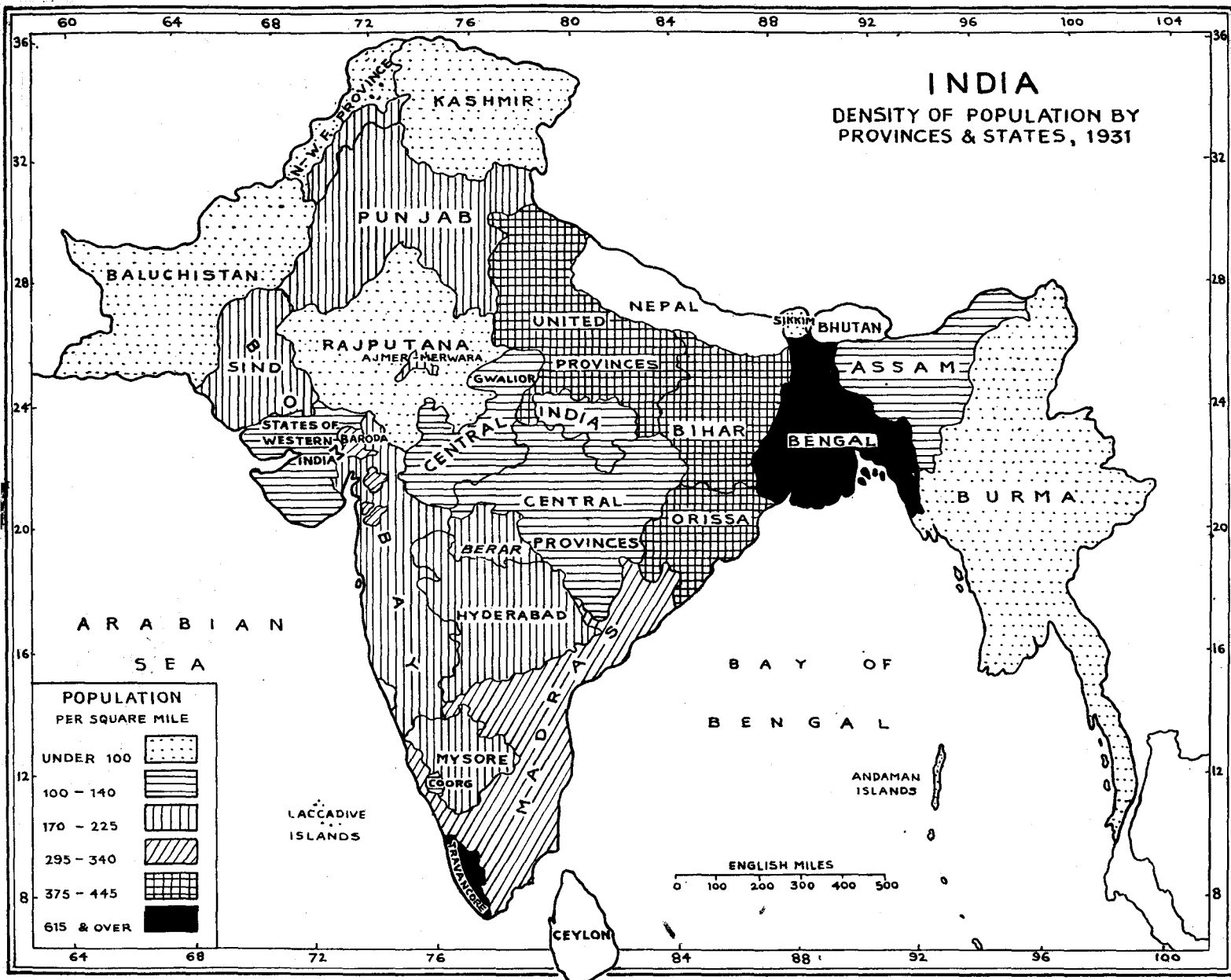
In the past, according to contemporary standards, India was a great industrial as well as a great agricultural country. From very ancient times the fame of her arts and crafts had spread far and wide. The main industry was the textile. 'Weaving was the national industry and spinning was the

¹ See ch. iii, §15; ch. iv, §§14-19



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MAP III



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MAP IV

pursuit of millions of women' (R. C. Dutt). The more important centres of the cotton industry were Dacca, Lucknow, Ahmedabad, Nagpur and Madura. There were also metal industries, the manufacture of arms, shields, enamelled ware, jewellery, and gold and silver thread, stone carving, tanning and leather works, paper-making and perfumery. Ship-building was in a flourishing condition and the iron industry had attained a high level of progress.

§8. **Causes of the decay of old Indian industries.**—The decline of the handicrafts may be attributed to the following causes :

(i) *The disappearance of the indigenous courts*, which deprived several industries of the patronage of the courts and of the nobility.

(ii) *The operation of adverse foreign influences.*—The establishment of British rule indirectly weakened the power of the old guilds and brought about a change in the tastes of the people, especially of the educated middle class, who adopted the standards of the ruling race and favoured articles of western manufacture.

(iii) *The policy of the East India Company and the British Parliament.*—Before the adoption of Free Trade by Great Britain about the middle of the nineteenth century, Indian industries were subordinated to British industries (under the old colonial policy) and were subjected to heavy tariffs in Great Britain.

(iv) *The competition of machine-made goods.*—The most important reason for the decay of the old Indian industries was the competition of machine-made goods imported from Great Britain and from other countries which had already completed their industrial revolution. The revolution in transport in India, effected by railways and roads, intensified this competition.

(v) *The laissez-faire policy of the Indian Government.*—Until recently (practically till the outbreak of the war of 1914-18), the policy of the Indian Government was that of leaving industry to its own resources. At the same time, the railways facilitated the imports of foreign manufactures on the one hand, and the exports of raw materials and food-stuffs on the other hand.

All these factors produced a far-reaching change in the economic life of the country. With the decay of the indigenous industries there was progressive ruralization, almost three out of every four persons coming to depend on land (whereas formerly perhaps 60% depended on land and

40% on industries). The foreign trade of the country expanded (the bulk of the exports being agricultural products and the bulk of the imports, manufactured goods) and thus there was a one-sided development of the national economic life.

§9. **Transition in industries.**—From the seventies of the last century, when the industrial position in India may be said to have been at its lowest, there has been a gradual and continuous progress of modern organized industries of the western type. The way was led by British business men and capitalists in the plantation industries (tea, coffee, indigo). This served as a stimulus to commercial classes in India, especially in Bombay, which had the honour of giving a lead in this matter to other parts of India and winning for itself the position of the industrial capital of India. Its principal industry, the cotton mill industry, was started about the middle of the nineteenth century. At about the same time another important textile industry, the jute mill industry, was established round about Calcutta in Bengal, the capital and enterprise being European. The Industrial Revolution later spread to the mining industry, and to various other industries such as cotton gins and presses, steel and iron, rice-husking and grinding, and oil mills. Progress was at first slow. The swadeshi movement (which began in 1905) and the war of 1914-18, gave a stimulus to industrial development. The adoption of the policy of discriminate protection in 1923 has given a further incentive, although even today barely 1·5% of the population is engaged in organized industries.¹

The economic transition described above has, to some extent, promoted the growth of towns in India. Railways and navigation, the growth of new industries (e.g. the rapid rise of Jamshedpur in Bihar due to the Tata steel and iron industry) and administrative centralization have in general made for urban development, though it has been very slow as compared with the rapid urbanization in Great Britain after her Industrial Revolution. Even today the urban population is only 11% of the total population in India. The diversion of trade routes and the decay of handicrafts have caused the decline of some towns, but on the whole the forces making for their growth are asserting themselves.

§10. **Conclusion.**—To conclude, India is passing through

¹ For a description of some of the more important organized and cottage industries, and of the work of the Tariff Board, see ch. iv, §§7-19.

a stage of economic transition. If we look at towns like Bombay and Calcutta we find that they display something approaching a full development of economic conditions as found in the most advanced countries of Europe. On the other hand, in the vast rural areas the old order, while it has been shaken, still shows great vitality. The general tendency is towards the establishment of conditions similar to those prevailing in countries that have accomplished their Industrial Revolution. Modern industrialism in India, as in other countries, has been followed by certain evils, such as overcrowding in factory towns, the decay of cottage industries, and the exploitation of the labour of women and children. But we need not conclude that these evils are unavoidable. It is quite possible to deal with them effectively by legislation and in other ways.

SUMMARY

India has been passing through a process of *economic transition* during the last hundred years. Fundamental changes in her economic structure and organization have taken place in consequence of the advent of the forces implicit in the term 'Industrial Revolution'. The pace of this revolution has, however, been slow as compared with that of the revolution in England. And India today shows the characteristics of countries that have not yet completed their industrial revolution and also of those that have completed it. Thus, the force of competition is making itself felt more and more, but custom is by no means dead. The economic isolation and self-sufficiency of the village have been weakened but they are not altogether things of the past. Large-scale industries like the cotton mill industry have come into existence, but the old village industries have not been altogether extinguished. The use of money is growing in frequency without however completely supplanting barter and payments in kind. For example, the village artisans and menials are still generally paid in kind for the services rendered by them to the village community.

The general trend of events is, however, for the newer forces increasingly to assert themselves.

The transition in the old self-sufficient and self-governing *Indian village* has been brought about by the revolution in transport (railways, roads, motor transport, telegraphs, etc.), administrative centralization, and in general by the impact of western civilization and individualism. *Agriculture* has been commercialized, and the farmer now grows largely for the market and imports from outside some necessaries like cloth and oil and a few simple luxuries. *Village industries* have on the whole been adversely affected by the competition of machine-made goods and are in a stagnant condition today.

India in the past was both a manufacturing and an agricultural country: she was famous for her skill in arts and crafts, in textiles, metal work, carving, embroidery, iron and steel manufacture and shipping. Various

adverse influences such as the disappearance of the old courts and their patronage, changes in taste, heavy tariffs in England on Indian manufactures, and the *laissez-faire* and free trade policy followed until recently by the Indian Government brought about the decay of many of the indigenous industries and led to increasing ruralization of the country, thus adding to the pressure on the land. Since the seventies of the last century, there has been some growth of modern organized large-scale industries such as cotton, jute, mining, steel and iron. For a long time this growth was slow, but owing to the stimulus of the war and the policy of discriminate protection adopted in 1923, more encouraging progress has been in evidence in recent years.

Industrial and commercial towns like Bombay, Calcutta, Cawnpore and Jamshedpur are fast getting westernized and conditions of life and labour in them are being radically transformed. The vast conservative rural areas are however changing only very gradually and still display many features of the old economy.

CHAPTER III

AGRICULTURE

§1. **The importance of agriculture in India.**—As we have previously stated, nearly three out of every four persons in India depend upon agriculture for their livelihood. Although agriculture is our principal national industry, it may be spoken of as one of our depressed industries considering the low yield per acre, the small, scattered, uneconomic land holdings, the indebtedness of the peasant, and the defective marketing organization.

AGRICULTURAL PRODUCTION

§2. **Statistics of area under different crops in British India.**—Of the total area in British India according to village papers, namely 667·73 million acres in 1933-4, the area under forest accounted for 89·07 million acres (13·4% of the total area), the area not available for cultivation for 144·65 million acres (21·6%), cultivable waste other than fallow for 153·59 million acres (22·9%), fallow land for 47·45 million acres (7·21%), and the net area sown with crops for 232·10 million acres (35·0%). The total sown area, including areas sown more than once, amounted to 267·02 million acres. Of this the area irrigated was 50·51 million acres.

The following table shows the relative importance of the principal crops in British India in 1933-4 as compared with 1901-2 :

	Acres (millions) 1901-2	Percentage of total sown area	Acres (millions) 1933-4	Percentage of total sown area
FOOD-GRAINS—				
Rice	70·07	31·8	80·29	30·1
Wheat	18·61	8·4	27·60	10·4
Barley	6·22	2·8	6·72	2·5
Jowar	21·82	9·8	21·40	8·0
Bajra	13·20	5·9	13·14	5·0
Ragi	3·75	1·7	3·73	1·4
Maize	6·20	2·8	6·05	2·3
Gram	9·78	4·4	16·54	6·2
Other grains and pulses	27·35	12·4	30·61	11·5
Total food-grains	177·00	80·0	206·06	77·5

	Acres (millions) 1901-2	Percentage of total sown area	Acres (millions) 1933-4	Percentage of total of total sown area
OTHER FOOD-CROPS (including vegetables, fruits, condiments and spices, miscellaneous food-crops) ...	8.03	3.7	8.08	3.1
SUGAR ...	2.06	1.3	3.36	1.3
Total food-crops ...	187.63	85.0	217.52	81.8
OIL-SEEDS—				
Linseed ...	2.27	1.0	2.07	0.8
Sesamum (<i>til</i>) ...	3.75	1.7	4.21	1.6
Rape and Mustard ...	2.88	1.3	3.32	1.2
Groundnut ...	—	—	5.95	2.2
Coconut ...	—	—	.64	0.2
Castor ...	—	—	.47	0.2
Other oil-seeds ...	3.07	1.4	1.13	0.4
Total oil-seeds ...	11.97	5.4	17.19	6.6
FIBRES—				
Cotton ...	10.30	4.7	14.50	5.4
Jute ...	2.28	1.0	2.50	0.9
Other fibres ...	0.56	0.2	0.63	0.2
Total fibres ...	13.14	5.9	17.63	6.5
OTHER NON-FOOD CROPS—				
Indigo ...	0.79	0.4	0.04	0.02
Opium ...	0.61	0.3	0.02	0.01
Coffee ...	0.12	0.05	0.10	0.04
Tea ...	0.49	0.3	0.78	0.30
Tobacco ...	0.95	0.45	1.08	0.40
Fodder crops ...	2.94	1.4	10.21	3.84
Miscellaneous crops ...	1.71	0.8	1.85	0.69
Total non-food crops ...	32.72	15.0	49.50	18.20
Total sown area (includes area sown more than once) ...	220.35	—	267.02	—

The above table clearly brings out the wide range of India's agricultural production, the preponderance of food over non-food crops, and a certain tendency for non-food crops

to displace food crops. Agricultural production provides practically all the food-grains consumed in the country, yields large quantities of raw materials like cotton, jute and oil-seeds for the principal manufacturing industries, and is the main source of our export trade. There is some room for extensive cultivation, but much more for intensive cultivation.

§3. **A survey of the principal crops of India** (see Map V).—(i) *Food crops*.—(a) *Rice* is the leading crop of India and the staple food of most of the people. It accounts for a little over 30% of the whole cultivated sown area. Rice is grown extensively in India, especially in the wet and moist regions. The principal rice-growing provinces are Bengal, Bihar, Orissa, Burma and Madras, other rice-growing provinces being the United Provinces, the Central Provinces, and Bombay. Burma, owing to its low density of population in relation to the area under rice, has a large exportable surplus, which accounts for the bulk of our exports of rice. Rice is a winter crop, being mainly harvested in December and January. There are different varieties of paddy grown in different parts of India, and the Imperial Council of Agricultural Research has in recent years intensified research work on rice.

(b) *Wheat*.—Next in importance to rice in acreage is wheat, which covers about 10% of the total cultivated area. It is a *rabi* crop, sown from October to December and harvested from March to May. Wheat is the staple food of the people in the Punjab, the United Provinces and the North-West Frontier Province. Elsewhere, it is grown mainly for export. The principal wheat-producing provinces in India are the Punjab, the United Provinces, the Central Provinces and Berar, Central India States, Bombay, Bihar and Orissa, the first two accounting for nearly two-thirds of the total area. Exports of Indian wheat, which were considerable in the pre-war years, have latterly been almost nominal owing to increase in the wheat-eating population in India itself. In recent years, the grower of Indian wheat has had to be protected by a high import duty, as cheap foreign wheats, especially Australian, were flooding the markets. With the development of Sukkur Barrage irrigation in Sind, and the newer Punjab canal colonies, the area under wheat is expected to expand and the export trade may revive.

(c) *Barley* is grown chiefly in the United Provinces and Bihar, and serves as food both for man and cattle.

(d) *Millets (jowar and bajra)*.—These two varieties of the Indian millets constitute an important group of food crops

for the masses in Madras, Bombay, Deccan, and the adjoining districts of Hyderabad. They also supply valuable fodder for the agricultural cattle. Both jowar and bajra are extensively grown, especially in the Deccan. Bajra is a *kharif* crop, while jowar is both a *kharif* and a *rabi* crop. Exports of millets are inconsiderable.

(e) *Pulses* are extensively grown throughout India and figure prominently in the dietary of the people. They are chiefly grown in the United Provinces, the Punjab, Bombay, the Central Provinces and Bengal. Gram is the principal pulse, and about half of it is raised in the United Provinces. The large internal demand accounts for the small exports.

(f) *Fruits and vegetables, condiments and spices, etc.*—The Indian fruit industry is not well developed, owing partly to small internal demand due to the poverty of the masses and partly to defective packing, transport and marketing methods. The Agricultural Department is now paying greater attention to these matters and notable success has been achieved in the Peshawar valley. Condiments and spices such as pepper, chillies, ginger, cardamom and betel-nut are chiefly grown in the extreme south of India, though certain varieties are cultivated everywhere.

(g) *Sugar*.—India was probably the original home of sugarcane, and has a larger area under it than any other country. But the poor yield per acre and the large internal demand, lack of protection against imports (e.g. from Java), and defective organization of the Indian refined sugar industry necessitated in the past large foreign imports. However, thanks to the grant of protection since 1931-2, and the keen interest in cane research taken by the Imperial Council of Agricultural Research, India's sugar industry is reviving rapidly and there are good prospects of the country becoming self-sufficient in the near future in respect of refined sugar. The bulk of the sugarcane is at present used for manufacturing *gur* or *gul* (unrefined country sugar). The chief cane-growing provinces are the United Provinces, the Punjab, Bihar and Orissa, Madras and Bombay.

(ii) *Non-food crops*.—(a) *Oil-seeds*.—India grows a variety of oil-seeds, such as linseed, sesamum, rape and mustard, groundnut, coconut, castor, cotton-seed, *mowra*, niger, coriander, cummin, *ajwan* and *kardi*. Oil-seeds are an important group of crops and account for nearly 7% of the total cropped area. A large quantity is exported annually, although increased competition in foreign markets has adversely affected the exports in the post-war period. It is

felt that India has not yet learnt to make the best use of her oil-seed resources, though attempts have been made to develop a local oil-crushing industry. Groundnut is the most important of the oil-seeds. The chief oil-seed-growing provinces are the United Provinces, the Central Provinces, Bihar and Orissa, Bombay, the Punjab, Madras and Burma.

(b) *Fibres*, such as cotton and jute, constitute an important group of crops.

Cotton is the leading fibre crop. There is a considerable area under cotton, grown mainly in Bombay, the Central Provinces, Berar, Hyderabad, the Punjab, Central India States and Madras. As a cotton-producing country India ranks next to the United States of America. Indian cotton is mostly short-staple, and is not suited for the manufacture of cloth of higher counts, such as that produced by Lancashire mills: Egyptian and American cotton is superior to Indian cotton in this respect. The Agricultural Department is doing a great deal to improve indigenous varieties and to encourage the cultivation of superior (i.e. American) varieties in India (e.g. in Sind). Attempts are also being made to increase the yield per acre. There is a large export trade in raw cotton, about 60% of the crop being sent out. Japan and China and, to some extent, the continental countries of Europe are the buyers of Indian cotton. Lately there has been a considerable increase in the consumption of Indian cotton in Lancashire mills, and this tendency is expected to be strengthened with the increased supply of long-staple cotton in Sind. The Indian Cotton Committee, which was appointed in 1917, made various recommendations bearing on the cultivation and marketing of cotton and the prevention of the malpractices of adulteration, mixing and dumping. The Indian Central Cotton Committee, which was established on its recommendation to ensure a closer touch between the Agricultural Department and the cotton trade, has done a great deal to carry out improvements and to promote suitable legislation. The East India Cotton Trade Association was formed in 1922 for the improvement of the cotton trade.

India is the world's sole producer of *jute*. The cultivation is restricted to the Ganges-Brahmaputra delta in Bengal, Assam, Bihar and Orissa. The soil here is enriched by alluvial deposits suited to grow this exhausting crop without any expenditure on manure. The exports both of raw jute and of jute manufactures are a leading item in our export trade, only next in importance to cotton. The jute industry is in a depressed condition today owing to the severe slump

in prices and the general trade depression, and the area under jute has diminished in recent years.

(c) *Indigo* has had a highly chequered history. Until the competition of cheap German synthetic dyes began, the Indian indigo industry was in a flourishing condition, and was responsible up to 1907-8 for more than half the value of dyeing and tanning materials exported. Since then both the exports and the area under cultivation have seriously dwindled, and the future of the industry is uncertain. Salvation lies in cheaper production, both as regards cultivation and manufacture. Indigo is cultivated in Madras, the United Provinces, Bihar, Orissa and Bengal. Bihar is the most important province from the point of view of foreign trade.

(d) *Opium*.—The area under opium has declined progressively as a result of the policy of the Government of India. By international agreements all exports have been stopped except for medicinal purposes. The internal consumption of opium is also strictly controlled. The cultivation of the poppy is carried on under a system of Government licenses in the United Provinces.

(e) *Coffee* is an exotic plant in India, and is mainly grown in Mysore State, Madras, Coorg, Cochin and Travancore. The competition of cheap Brazilian coffee in European markets has adversely affected the cultivation of coffee in India.

(f) *Tea*.—With the exception of China, India is the largest tea-producer in the world. The tea industry, which is the leading plantation industry in the country, has enjoyed a long spell of prosperity with growing internal consumption and foreign exports. The principal tea-growing areas are Assam, Bengal, Madras, Punjab (Kangra), the United Provinces and Travancore. There is a very large export of tea, especially to the United Kingdom, which takes about 90% of the Indian exports. The world economic depression, over-production, and competition from Java and Sumatra have adversely affected the industry in recent years. This country has found it necessary to cooperate with other tea-producing countries of the world and adopt a scheme of restriction of output and of exports.

(g) *Tobacco*.—There are three principal centres of the tobacco industry, eastern and northern Bengal, Southern India and Lower Burma. The leading tobacco-growing provinces are Madras, Bengal, Bihar and Orissa. Bombay, Burma, the United Provinces, and the Punjab. The bulk of the tobacco is consumed locally, though Madras and Rangoon

have a considerable export trade. Increased consumption of cigarettes has encouraged the opening of a number of factories for the manufacture of cigarettes in India. The Agricultural Research Institute at Pusa is devoting its attention to the question of improving the quality of Indian tobaccos. The heavy import duties on foreign tobacco and cigarettes, which are still imported in large quantities, are expected to stimulate the cultivation and consumption of Indian tobacco.

(h) *Fodder crops*.—The area devoted to these crops is inadequate in view of the large number of agricultural cattle needed in India. The principal areas are the Punjab, Bombay and the United Provinces. The Agricultural Department is giving much attention to the question of growing and storing fodders.

(i) *Rubber*, which is an important raw material in the industrial economy of today, is grown mainly in Southern India and Burma. Most of it is exported. India's share in world production is very small, being only about 3%.

§4. **Low yield of land and its causes**.—The yield per acre of land in the case of almost all crops is much lower in India than in countries where agriculture is better organized. For instance, the yield of cotton per acre in India varies between 75 and 100 lb. of lint cotton as compared with 180 lb. in the U.S.A. and 300 to 400 lb. in Egypt. India's outturn of sugar is stated to be less than one-third that of Cuba, one-sixth of Java, and one-seventh of Hawaii. The causes of low productivity are the uncertain character of the rainfall, floods, hailstorms, frosts and other vagaries of the climate, damage caused by wild animals, rats, locusts and other pests, inefficient methods of cultivation, small and scattered holdings, and the under-equipment of the agriculturist. Increased irrigation and the efforts of the Agricultural Department to deal with pests and to improve methods of cultivation may be expected to improve the yield.

LAND AND ITS PROBLEMS

§5. **Subdivision and fragmentation of holdings**.—We shall now discuss our two main problems relating to land, namely subdivision and fragmentation of holdings, and irrigation.

One of the greatest handicaps of Indian agriculture is the endless subdivision and fragmentation of land. Not only is the total size of the average holding too small, but it is also scattered in a number of tiny plots situated at inconvenient

distances from one another (see Map VI a). For instance, Ramalal Bhalla found that in the village of Bairampur in the Punjab 34·5% of the cultivators had more than twenty-five fragments each. A special inquiry into 2,397 villages in the Punjab disclosed that 17·9% of the 'owner' holdings were under 1 acre; a further 25·5% were between 1 and 3 acres, 14·9% between 4 and 5 acres, and 18% between 5 and 10 acres. In the village of Pimpla Sondagar in the Poona District, Dr Mann found that 81% of the holdings were under 10 acres, while no less than 60% were less than 5 acres.

The causes of subdivision and fragmentation are mainly the growing pressure of increasing population on the land due to the absence of a corresponding expansion of industries, the growth of a spirit of individualism responsible for the break-up of the joint-family system, and the operation of the Hindu and Mohammedan laws of inheritance and succession and the customs associated with them. It is easy to see how the size of the family holding would diminish with every division of the ancestral property among all the sons, or in general among a large number of heirs. Subdivision is also usually accompanied by fragmentation, because every sharer usually insists on obtaining a fraction in every lot of the family land, instead of being satisfied with one compact block. The aim in such a system is to ensure perfect equality of shares, but it is carried to an extreme as the result of jealousy and suspicion. It is clear that these laws and customs are more frequently invoked today than in the past owing to the growth of population and the failure of industry to expand sufficiently to absorb the increased population. The break-up of the joint-family system and the growing spirit of individualism have also aggravated the situation.

The evils of subdivision and especially of fragmentation are very serious. The cultivation of small holdings entails waste in a variety of ways. Even such poor equipment as the ordinary cultivator possesses, namely a pair of bullocks and a plough, is not always fully utilized, and the cost of cultivation increases unduly. Sometimes the plots are so small that they cannot be properly ploughed and cultivated. Fencing, sinking of wells and other improvements cannot be economically introduced. There is also a great waste of area due to the many hedges, baulks, *pattis*, etc. The employment of labour-saving devices becomes impossible. Great waste of labour and time in going from one field to another is entailed by fragmentation, which also gives rise to

numerous boundary disputes. Subdivision and fragmentation in general destroy enterprise and impede thorough and intensive cultivation of the land. The cultivation of such holdings is not compatible with progressive agriculture and a high yield of land. The great majority of the land holdings in India thus tend to be uneconomic, i.e. unprofitable to cultivate.

Remedies.—Attempts have been made in recent times to tackle the problem on a voluntary basis as well as by the method of legal compulsion. The object of such attempts is to secure to the peasant an economic holding, which is usually regarded as one 'which allows a man a chance of producing enough to support himself and his family in reasonable comfort after paying his necessary expenses' (Keatinge). Perhaps the best thing is to say that the end to be achieved is to arrange the relation between land, labour and capital so that it will lead to the greatest possible advantage to the producer. The object is to put the ryot in possession of a reasonably-sized holding, and to help him to improve his economic condition in so far as this can be done through such holdings.

Among the attempts on a voluntary basis, the most interesting is the experiment in consolidation of scattered holdings by the formation of Co-operative Societies for this purpose under the auspices of the Co-operative Department in the Punjab since 1920-1. The effect of consolidation of holdings, in so far as it has been achieved, has been beneficial (see Maps VI, *a* and *b*). Land has become more productive and valuable, litigation and quarrels have decreased, and there is a keener desire for improvement. The pace of the movement is, however, slow and there is no guarantee that in future the work of consolidation will not be undone. Permissive legislation, enabling a certain proportion of landholders in a village to consolidate scattered holdings, has been tried; for instance, in Baroda, but without success. Better results have been shown by the Consolidation of Holdings Act (1928) in the Central Provinces, which has been applied to begin with to the Chhattisgarh Division only. In the Bombay Presidency, an unsuccessful attempt was made in 1927. Owing to bitter and not very enlightened opposition, the Bombay Small Holdings Bill introduced in the Legislative Council by Sir Chunilal Mehta had to be withdrawn. In this connexion, we may note the Agricultural Commission's warning that in tackling the problem of subdivision and fragmentation, great caution and the utmost possible consideration of the opinions

and prejudices of the people affected are necessary. An element of compulsion may be inevitable. It should, however, only be applied in the last resort to overcome the obstacles created by an obstinate minority of landholders or tenants.

§6. **Importance of irrigation.**—Indian agriculture cannot be other than a risky occupation so long as it must depend exclusively on an uncertain rainfall, and it is therefore necessary to provide irrigation wherever possible. In certain parts of India, such as Sind, Rajputana and the south-west Punjab, which are practically rainless, cultivation is impossible except with the help of artificial irrigation. In other parts like the Deccan uplands, where the rainfall is precarious and ill-distributed, irrigation is necessary to overcome chronic drought. Some crops like rice and sugarcane require a large and regular water-supply. Second or winter crops, which are necessary to feed a growing population, require artificial irrigation in the absence of winter rains. The well-being of the large masses dependent on agriculture is affected by the adequacy of water-supply and it is for this reason that irrigation, especially in the form of wells and tanks, has been practised in this country from times immemorial. The distinctively British contribution consists in the large irrigation works constructed for the purpose of utilizing the surplus water of large rivers.

The *advantages of irrigation* are obvious, namely, increase in the yield of crops, introduction of stable agriculture in dry and precarious tracts, protection and insurance against famines and scarcity, larger railway profits in the agricultural provinces like the Punjab, and direct financial gain to the Government. The export trade (for instance, in wheat and cotton) has benefited from irrigation, which has also brought some relief to densely populated areas. On the other hand, water-logging and salt effervescence are dangers particularly associated with canal irrigation. These dangers have not always been effectively guarded against in the past, so that soils have sometimes deteriorated as a result of irrigation. The provision of adequate drainage in canal tracts and economical use of water are the remedies.

§7. **Main kinds of irrigation works.**—The three main kinds of irrigation works in India are : (i) Wells, (ii) Tanks, and (iii) Canals. The canals are of three types (a) inundation canals, (b) perennial canals, and (c) storage works.

(i) *Wells.*—Well-irrigation is a vital factor in Indian irrigation. There are 2,500,000 wells in the country, which

water about 25% of the irrigated area. Wells are privately owned, although their construction is encouraged by the Government, which advances *takkavi* loans and assists in the installation of small power-pumps and tube-wells.

(ii) *Tanks*, which are a characteristic feature of Indian agricultural economy, are highly developed in Madras, where there are over 35,000 of these petty irrigation works. On the other hand, they are hardly known in the Punjab and Sind. They need to be further encouraged by the Government, especially where canal irrigation is impossible.

(iii) *Canals* are now the most important form of irrigation in India, and are specially encouraged by the Government. Different types of canals have been introduced in the various parts of the country. (a) *The inundation canals* are drawn directly from a river without the use of any barrage. They are seasonal in their character, obtaining water only when the river is flooded and reaches a certain level. Lands in Sind and the Punjab used to be, and to some extent still are irrigated by such canals drawn from the Indus and the Sutlej respectively. (b) *Perennial canals* are constructed by putting some form of barrage across a river which flows throughout the year and diverting its water by means of canals to the land to be irrigated. They are to be found in the United Provinces, the Punjab and Madras. The Sukkur Barrage, which was opened in 1932, has converted inundation canals into perennial canals flowing all the year round as a result of the barrage constructed across the Indus. (c) *Storage works canals* are constructed by building a dam across a valley to store the monsoon rain-water. The water so held is distributed by means of canals. Such works have been constructed in the Deccan, the Central Provinces, and Bundelkhand, where the rivers are not perennial, and therefore necessitate artificial storage of water.

§8. **Classification of Government irrigation works.**— Until 1921 Government irrigation works were classified as follows: (i) Productive, (ii) Protective, and (iii) Minor.

(i) *Productive works* were expected to yield, within ten years of their completion, net revenue sufficient to cover the annual interest charges on the capital investment. Such works are mostly found in Northern India and Madras. In 1930-1, 22.45 million acres were irrigated by such productive works, the capital invested in them being Rs. 92 crores. This was the only type of irrigation works for which the Government raised loans.

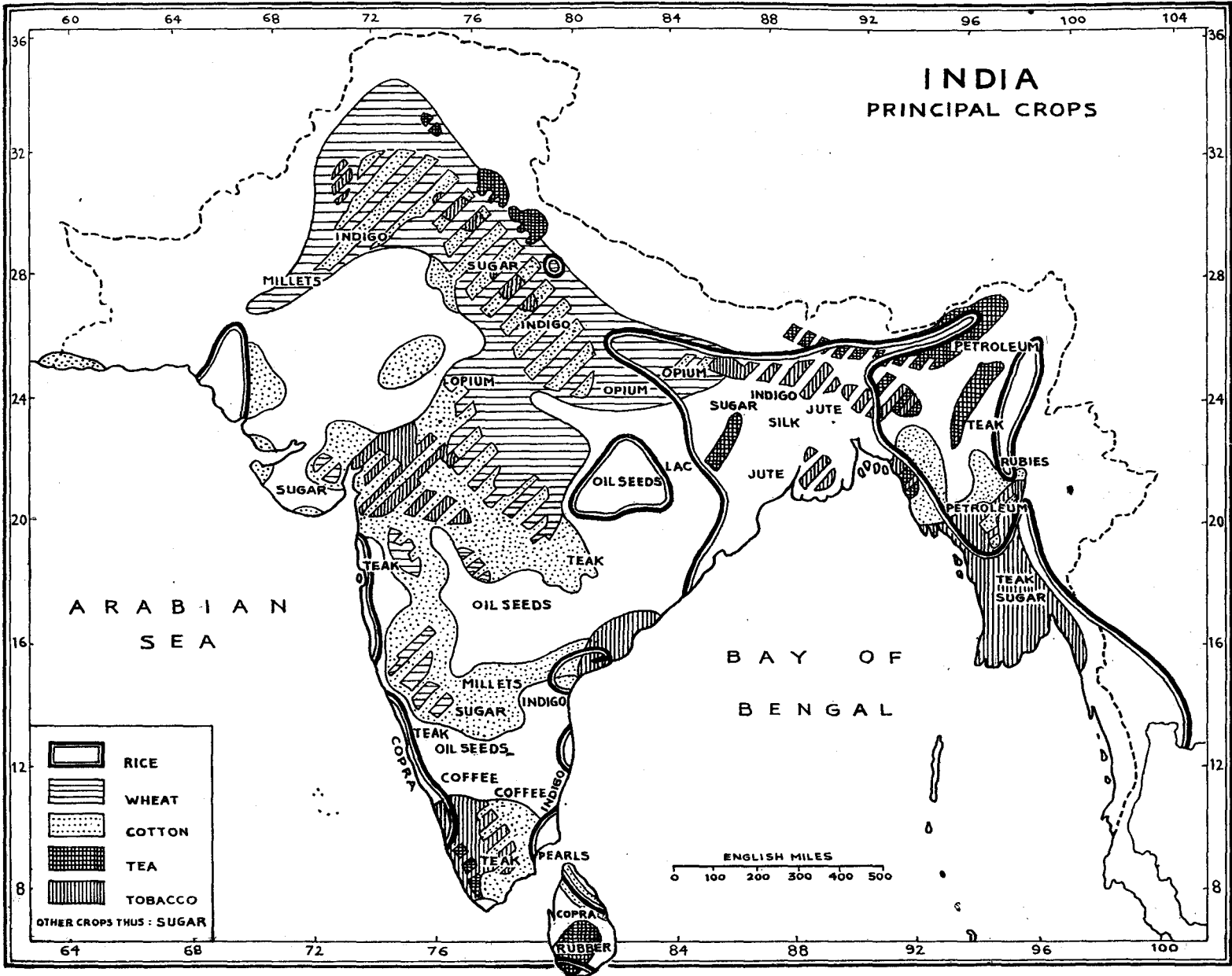
(ii) *Protective works* were not expected to be directly remunerative, but rather intended to ensure protection against famines in precarious tracts like the Deccan. The cost of such works was met from the annual grants for famine relief and insurance. These works are economical indirectly and in the long run. The area irrigated by them amounted to 4.19 million acres in 1930-1, the capital outlay on them being about Rs. 45 crores.

(iii) *Minor works*.—This was a miscellaneous class, including mainly old tanks taken over by the British Government. They were all financed from revenues.

Since 1921, this old classification, for the purpose of determining the source from which funds were to be provided, has been altered, and it is now possible to finance any work of public utility from loan funds. The classes of protective and minor works have been abolished, and all irrigation works, whether major or minor, for which capital accounts are kept, have been reclassified under two heads: (i) *Productive*, and (ii) *Unproductive*, with (iii) a third class embracing areas irrigated by *non-capital* works.

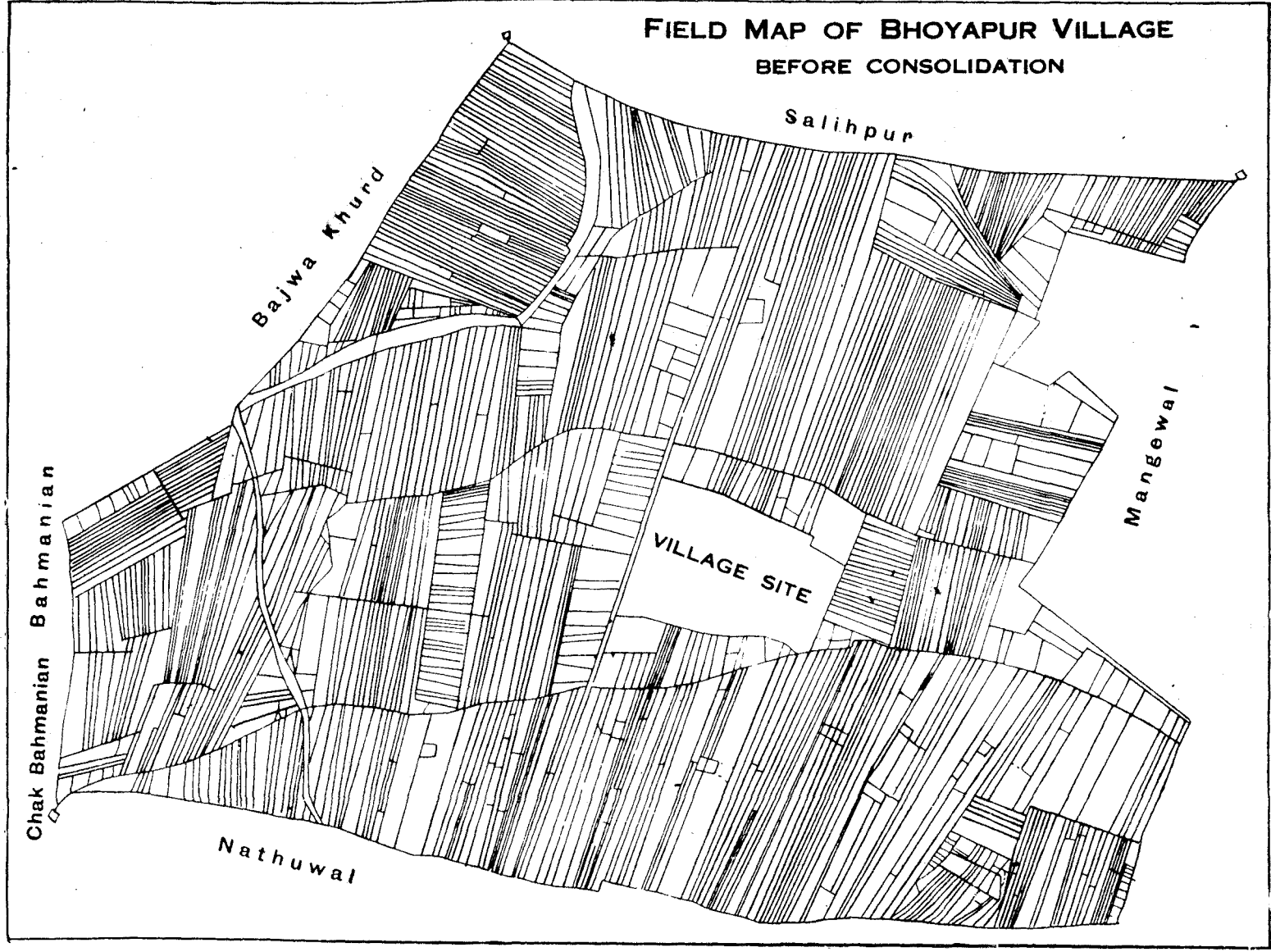
§9. **Growth of irrigation.**—The total capital outlay on irrigation and navigation works amounted to Rs. 146 crores at the end of the year 1932-3 as compared with Rs. 42.4 crores in 1901-2. The gross revenue for the year 1932-3 was Rs. 12.5 crores, working expenses Rs. 4.7 crores and the net return on capital 5.35%. The area irrigated by Government irrigation works has steadily increased from 10.5 million acres in 1878-9 to 29.75 million acres in 1932-3, the estimated value of the crops so raised being Rs. 87 crores (excluding non-capital works). The irrigation rates charged vary with the crop grown and are different in each province, as well as on the several canals in any given province. Thus in the Punjab they vary from Rs. 7-8 to Rs. 12 per acre for sugarcane, from Rs. 3-4 to Rs. 5-4 per acre for wheat, and so on.

The area irrigated (see Map VII) is the largest in the Punjab (10.5 million acres out of a total 29.75 million acres in 1932-3). The percentage of the area irrigated by Government irrigation works to the total cropped area was 12.7% in 1930-1. Madras, the United Provinces and Sind are other provinces advanced in respect of irrigation facilities. Bombay Presidency and the Central Provinces, both of which are in need of irrigation facilities, are poorly developed, the percentage of area irrigated by Government irrigation works being only 1.5 and 2.1 respectively in 1930-1. Bengal, Burma and



MAP V

**FIELD MAP OF BHOYAPUR VILLAGE
BEFORE CONSOLIDATION**



Taken from M. L. Darling's *The Punjab Peasant in Prosperity and Debt*, by kind permission of the author and of the Registrar, Cooperative Societies, Punjab, N.-W. F. Province and Delhi

Assam also show poor development, but their need is not so great thanks to more favourable rainfall. The total area irrigated in British India from all sources amounted to 50·5 million acres in 1933-4—26·9 million by canals, 6·5 million by tanks, 11·4 million by wells and 5·7 million by other sources.

§10. **Irrigation policy of the Government.**—The British Government inherited from its predecessors some of the present irrigation works such as a few inundation canals (i.e. the Ganges and Jumna canals) in Upper India, and storage works and tanks, especially in the Madras Presidency. In the time of the East India Company these were neglected, but from the middle of the nineteenth century the Government began to repair and revive the old works. Subsequently, the Government adopted a new policy of constructing and maintaining productive irrigation works, by raising loans for the purpose. The Famine Commission of 1880 recommended the construction of protective irrigation works as a measure of famine protection (e.g. in the Deccan), but progress was very slow on account of their heavy cost. A new chapter in the irrigation policy of the Government was opened in 1901, when the Irrigation Commission of that year made a series of recommendations with a view to extending as fast as possible the scope of productive and especially of protective irrigation works for the Deccan. They also recommended the Kistna and Tungabhadra projects. Following their recommendations, the Government's earlier policy of concentrating on railway construction was modified in favour of irrigation, and a large number of new works were undertaken, with the result of more than doubling the capital outlay. Under the Reforms of 1919, irrigation became a provincial subject, and since 1922 remarkable activity in regard to irrigation works has been displayed by the various Provincial Governments. As many as 19 important new works have been either completed or are under construction. The new major works of exceptional importance are: (i) the Sutlej Valley project in the Punjab (completed in 1933) estimated to cost Rs. 23·86 crores and to irrigate over five million acres, (ii) the Sukkur Barrage in Sind (completed in 1932) estimated to cost about Rs. 20·04 crores and to irrigate over five million acres, (iii) the Cauvery Reservoir and Mettur project (completed in 1934) estimated to cost about Rs. 7·37 crores and to command a new area of three million acres, and (iv) the Nizamsagar project (completed in 1933) estimated to cost Rs. 4·27 crores and to

irrigate 2,75,000 acres. In Bombay the Lloyd Dam, which is the largest mass of masonry in the world, was completed in 1926. In the United Provinces considerable progress has been made with the Sarda-Oudh canals.

§11. **Canal colonies in the Punjab.**—These have played a striking part in the irrigational history of the Punjab. Before the advent of irrigation in the eighties of the last century, the whole vast stretch of the country now irrigated by the Lower Chenab, Jhelum and Bari-Doab Canals, was a desert owing to meagre and precarious rainfall. It was therefore necessary to transport bodily whole communities into the new areas opened up by canal irrigation. Colony tracts and villages were systematically planned, the land in each colony being divided into large and small squares and rectangles; roads were marked out; village boundaries were settled and so on. The colonists, who had to build their own houses, were judiciously selected by the Revenue officers in the congested districts from among the classes of hereditary landlords or occupancy tenants to hold the so-called 'peasant grants', under which the bulk of the land is allotted. The terms of the grant vary in the different colonies. The average area allotted to each individual is from one and a half to two squares, or about forty to fifty acres, larger grants being made to hereditary landholders of substance and status, and to enterprising men of means. Grants were also made in recognition of special civil and military services to the Government. What was once a treeless waste land has thus been converted into flourishing canal colonies. The peasant-proprietor, who holds nearly 80% of the land, is the backbone of these colonies, of which the three principal ones are Lyallpur, Shahpur and Montgomery (other colonies being the Sidhanai, Sohaj Para Jhang, Chunian, Upper Chenab and Upper Jhelum). The aggregate area of land covered by them amounts to five million acres (see Map VIII). It may be added that the Government of the Punjab derives a substantial net revenue from those colonies which, in the words of Mr M. L. Darling, 'have, in fact, opened for the Punjab an era of prosperity undreamed-of in the past'.

LABOUR, EQUIPMENT AND ORGANIZATION

§12. **The Indian agriculturist.**—Having considered land, we may proceed to deal with other factors of the agricultural or rural economy of India, namely, labour or the agriculturist himself, his equipment, and the organization of his business.

It is clear that efficient agriculture depends largely upon

the qualities of the farmer. As things stand at present the Indian cultivator or ryot must be acknowledged to be inferior in point of intelligence, enterprise and capacity for labour to the European or American farmer. His inefficiency is not, however, rooted in the nature of things, and is largely to be attributed to adverse factors such as chronic drought, pressure on land, lack of education and sanitary amenities in the rural areas, the load of indebtedness he has to carry, and the caste system. Glowing tributes to the careful husbandry combined with hard labour, perseverance and fertility of resource of the Indian agriculturist have been paid by foreign observers like Dr Voelcker.¹ At the same time we must admit that, generally speaking, he is lacking in originality and initiative and is too closely wedded to routine and traditional methods and practices. His conservatism is often an obstacle to reform and progress. It is necessary to improve both the farmer and his environment so that each may help the other. A comprehensive scheme of rural education suited to the rural environment and needs, providing for the education not only of children but also of adults of both sexes, is the first reform needed. The radio, the cinema, the magic lantern, exhibitions and demonstrations must all be pressed into the service of rural education. In the second place, sanitary conditions in villages must be improved by the provision of good drinking water, medical aid and improved housing. To overcome the farmer's conservatism it is necessary to aim at closer contact between village and town by means of better roads and communications and an efficient postal system. It is also necessary that absentee landlordism should be discouraged, and the landlord induced to take a more active and personal interest in the village agricultural improvement.

§13. **Agricultural technique: methods of cultivation.**—The Indian agriculturist for the most part follows methods of extensive cultivation which are unsuitable in view of the smallness of the average holding. In this respect, Japan and China present a marked contrast, agriculture in these countries being carried on very intensively and thoroughly, almost like gardening. The salvation of the Indian peasant lies similarly in adopting intensive methods of cultivation. This involves more expenditure on permanent improvements and irrigation, more efficient cultivation, careful selection of seed, a better system of rotation of crops, and adequate manuring.

The value of pure seed of good quality is great. A certain number of seed societies and seed farms exist, but they need to be multiplied in all parts of the country.

The application of manure and fertilizers is essential for increasing the yield of land. The question of proper manurial treatment of the soil and of the careful conservation of the manure is much neglected in India, one of the wasteful practices being the use of cow-dung as fuel. Alternative forms of fuel through afforestation should be provided in order to ensure the fuller use of farmyard manure. Manure pits in villages should also prove useful. In canal and other irrigated areas, fertilizers like ammonium sulphate, bone-meal, fish manures, and oil-cakes are being used in gradually increasing quantities thanks to the propaganda work of the Agricultural Department.

§14. **Equipment.**—(i) *Implements.*—The Indian agriculturist still largely uses his old and simple implements, which are cheap, light and portable, easy to make and to repair. Improved implements are, however, necessary to increase the productivity of the soil. Iron ploughs, improved harrows, hoes, seed-drills and fodder-cutters, sugarcane crushers, small-pumping machinery and water-lifts have been introduced to some extent, but much still remains to be done in this direction. It is clear that American methods based on an extensive use of agricultural machinery are ill-suited to a country of small peasants. Cooperative and joint-farming, however, would make possible to a limited extent the use of such machinery. The Agricultural Department (through its engineering section) is trying to popularize the use of improved implements.

(ii) *Live-stock.*—Cattle are the most important part of the live-stock possessed by the Indian cultivator. They supply practically all the motive power for ploughing and lift irrigation, and are a principal source of the manure commonly used and the chief means of rural transport. The importance of milch-cattle for a mainly vegetarian country is also obvious. It must, however, be admitted that the quality of Indian cattle leaves much to be desired. The country is maintaining an excessive number of cattle, but they are usually so poor and ill-fed that there is a serious deficiency of *cattle-power*. There are large numbers of useless cattle, but religious prejudices come in the way of their reduction. Moreover, over the greater part of India there is a shortage of fodder from December to July. Increasing attention must be paid to the growing of fodder crops and to the efficient

storage and economical use of fodder supply. Cattle-breeding, which is at present neglected, must be practised more carefully and extensively. The big landlords must give a lead. The Veterinary Department is doing useful work in cattle-breeding as well as in the prevention and treatment of cattle diseases like rinderpest, which take a heavy toll and inflict great losses on the farmer. The provision of veterinary aid in India is, however, most inadequate and needs to be substantially extended.

§15. **Rural Industries.**—Agriculture needs organization as much as any other business, but in India it is at present in a very bad way both as regards internal organization (i.e. as regards holdings, permanent improvements and subsidiary industries) and external organization (i.e. as regards marketing).

The absence of subsidiary industries which would enable the farmer to employ his labour-power more effectively and distribute it more evenly throughout the year, is a source of great economic weakness to the small landholder in India. At present there is a large waste of rural labour on account of the seasonal character of agricultural occupation. In the slack season, which lasts from 150 days to 270 days in a year in different parts of the country, the agriculturist is practically unemployed. As Mr Darling points out, 'the only way in which a small farmer can keep himself out of debt is by being frugal and industrious and by having a second string to his bow' as in Japan, France, Germany and Italy. Dairy-farming and cattle-breeding are promising as side-occupations. The following rural industries may also be mentioned: poultry-keeping, fruit-growing, market-gardening, hand-hulling, sericulture, bee-keeping, tanning, mat-making, bamboo and cane work, rope-making, making *bidis*, pottery, etc. It is clear that not all of these are suitable for every part of India, and that careful selection based on intensive regional surveys would be necessary.

Hand-spinning as a possible rural industry has received a good deal of attention because of the controversy which has centred in recent years round the *charka* and its association with Mr M. K. Gandhi, the great preacher of the gospel of the *charka*. It is argued that hand-spinning is simple, easily learnt, and is capable of being taken up and put aside any time so as not to interfere with agriculture, the main occupation of the people. On the other hand, *khaddar* cannot always compete successfully with the cheaper mill-made cloth, which is also cooler and more attractive.

However, so long as the farmer is not and cannot be supplied with any other more remunerative supplementary industry, hand-spinning offers some chance of balancing his budget at the end of the year.

A more hopeful solution of the problem lies in promoting the establishment, in rural areas, of industries connected with the preparation of the agricultural produce for consumption and export, such as cotton-ginning, decortication of ground-nuts, rice-milling and -husking, and oil-pressing.

§16. Marketing of agricultural produce.—The main problem of the external organization of agriculture is the marketing of agricultural produce to the best advantage of the farmer. It is unfortunately true that from this point of view the existing marketing system suffers from several deficiencies. The Indian cultivator is normally dependent on the money-lender, to whom his crops are often mortgaged in advance. There are also several professional dealers and middlemen who are highly organized, and profit at the expense of the cultivator. Other handicaps of the cultivator are : low standard of literacy, absence of properly regulated markets and of combination among farmers, chaotic condition of weights and measures, inadequate storage facilities and defective communications in rural areas. Owing to his chronic shortage of capital and his inescapable cash liabilities like land revenue and rent, the farmer has to sell in a falling market and thus fails to get the best price. The system of sales in the larger markets through *dalals* (commission agents) is also defective. Apart from high brokerage, there are several unauthorized deductions to which the necessitous seller has to submit.

It is obvious that an efficient system of rural marketing is indispensable to secure rural prosperity and betterment. The two most hopeful measures of reform are : (i) *Cooperative sale* and (ii) *Regulated markets*.

(i) *Cooperative Sale Societies* have made some progress, notably in respect of the sale of cotton in Gujarat and Karnataka. There are also *Cooperative Commission shops* for the sale of wheat in the Punjab, and societies for the sale of jute in Bengal. The *Cooperative Sale Society* offers many advantages, such as elimination of some of the middlemen with their high commission charges, use of correct weights and measures, proper grading of produce, competitive and fair prices, and advance of money against produce. The sale movement has, however, made only a limited progress, its main handicaps being inefficiency of management, the fact

that the society has no hold on its members, and inadequate finance.

(ii) *Regulated markets*, such as those established in some districts in the Bombay Presidency under the Bombay Cotton Markets Act (1927), are calculated greatly to improve existing marketing organization. Here trading takes place under proper rules and by-laws administered by a Market Committee on which growers as well as producers are represented.

Increasing attention is also being paid to the standardization of weights and measures. Reform in this matter is necessarily slow since it has to encounter strong obstacles set up by conservatism and custom.

The Government of India is now devoting considerable care and attention to the problems of agricultural marketing of India. It recently (April 1934) appointed Mr A. M. Livingstone as the Marketing Expert on the staff of the Imperial Council of Agricultural Research. A central marketing staff and provincial marketing officers have also been appointed, as suggested by the Royal Commission on Agriculture (1928). This new organization is at present engaged in conducting marketing surveys of the principal crops in the different provinces to provide a common basis for future progress.

RURAL INDEBTEDNESS

§17. **Estimates of rural indebtedness.**—One of the most serious problems of the rural economy in India is the heavy burden of rural indebtedness. The Central Banking Enquiry Committee (whose report was published in 1931) estimated that the total agricultural indebtedness of the British Indian provinces was in the neighbourhood of Rs. 900 crores. The figures by provinces are as follows :

Bombay	...	Rs. 81	crores	Bihar and Orissa	Rs. 155	crores
Madras	...	150	"	Assam	...	22
Bengal	...	100	"	Burma	...	60
United Provinces	...	124	"	Central Areas	...	18
Punjab	...	135	"	Coorg	...	55 lakhs
Central Provinces and Berar	...	36½	"			

While it is true that the small peasant in India as in all other countries will, and has to, borrow and that he was indebted even in pre-British days, rural debt has shown an alarming increase, especially in recent years. It is not

however so much the volume of indebtedness which gives cause for anxiety, as the fact that the greater part of the debt is unproductive and carries very high rates of interest. The burden on the peasantry has been made almost unbearable owing to the present fall in the prices of agricultural products.

§18. **Causes of indebtedness.**—The following are the main causes of rural indebtedness, apart from the extreme poverty of the masses :

(i) *Excessive pressure of the population on the land and subdivision and fragmentation of holdings.*—The growth of the population and the ruralization of occupations has increased the pressure on land. Far more people have to depend on land than are required for its thorough and profitable cultivation. Land holdings, moreover, are for the most part uneconomic and yield only a small income even in the best of years. The decline of cottage industries and the lack of subsidiary occupations have further worsened the economic position of the farmer.

(ii) *The insecurity of harvest.*—Indian agriculture in precarious tracts like the Bombay Deccan is a gamble in the monsoon. It may be said in general that an agricultural cycle of five years gives one good year, one bad and three that are neither bad nor good. It is only in good years that the peasant can keep himself out of debt.

(iii) *Loss of cattle due to famine and diseases* like rinderpest adds to the economic embarrassment of the cultivator and often compels him to borrow for purchasing cattle.

(iv) *Excessive love of litigation, and improvidence and extravagance* have been suggested as causes of indebtedness. While the Indian peasant is ordinarily frugal to a fault, on certain occasions like death and marriage ceremonies he spends beyond his means, owing largely to the tyranny of social custom and lack of education. It is, however, clear that the indebtedness due to causes (i) to (iii) is far more serious than that caused by the occasional extravagance of the peasant.

(v) *Ancestral debt*, which is inherited from father to son, may be regarded as one of the important causes of existing indebtedness. 'Innumerable people are thus born in debt, live in debt and die in debt passing on the burden to those who follow.'

(vi) *The modern change in the cultivator's position.*—As Mr Darling aptly remarks, 'prosperity is as much a cause of debt as insecurity of harvest'. The establishment of peace and order in India, the growth of towns, and the opening

of world markets to Indian agriculture have made land a valuable security for borrowing from the money-lender, and the illiterate and uneducated peasant has not been able to resist the temptation to borrow.

(vii) *The money-lender and the system of usury.*—With the establishment of British Civil Courts for enforcing contracts, and the disintegration of the village community, which removed all restraint on the money-lender, the peasant's position was weakened. High rates of interest and the system of compound interest led to the exploitation of the ryots, many of whom came to be deprived of their lands. In fairness to the money-lender it may be said that the high rates he often charges are largely to be regarded as insurance against the great risk he runs of losing his capital.

(viii) *Land revenue policy.*—The heaviness of land revenue and the rigidity of its collection, as suggested by R. C. Dutt, have operated to increase the burden of indebtedness in both these respects since Mr Dutt's time, though their effects have been largely nullified by the present depression. The land revenue system requires to be made more elastic so that adequate and prompt suspension or remission of land revenue could be granted in times of rural distress, whether due to scarcity or fall in prices.

§19. **State policy regarding indebtedness.**—The gravity of the problem of rural indebtedness was forced on public attention by the Deccan Riots Commission (1875). From time to time the Government has adopted various measures to tackle the problem. In the first place, it tried to improve the Civil Law and procedure regarding agricultural debtors, whose tools, implements and cattle were exempted from attachment. The Deccan Agriculturist's Relief Act of 1879 gave power to the courts to go behind the contract between the agriculturist debtor and the money-lender, and to modify it in favour of the former by reducing the rate of interest and, if necessary, by restoring his land. The Act has not proved effective, and to some extent the facilities given by it have been abused. The Usurious Loans Act, consolidated and amended in 1918, seeks to determine the legal maximum amount of interest recoverable. Regulation of money-lending has been recommended by the Agricultural Commission, and the licensing of money-lenders by some of the Provincial Banking Enquiry Committees. The Punjab Regulation of Accounts Act (1930) requires money-lenders to use regular account books and to furnish to each debtor a statement of his account.

A more hopeful solution is *debt conciliation* on a voluntary basis as suggested by the Central Banking Enquiry Committee. This is all the more necessary today because the burden of past debts has greatly increased owing to fall in prices. The money-lenders also are more willing than they used to be to accept conciliation of debt by arbitrators. This plan is being tried in the Central Provinces, the Punjab, and in some of the Indian States like Bhavnagar.

Land Alienation Acts have been promoted in some provinces in order to restrict the transfer of land. For instance, under the Punjab Land Alienation Act (1901), non-agricultural classes are not allowed to buy land from a member of an agricultural tribe nor take it on mortgage for more than twenty years. This has, however, produced adverse reactions on rural credit and has led to an increase in the number of money-lenders exploiting the agriculturists.

Under the Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884, the Government advances *takkavi* loans to agriculturists. This system of State loans has never been very popular, owing to red tape and strictness in recovery.

Probably the most promising among the measures adopted by the State to deal with rural indebtedness is the supply of credit on a cooperative basis through Cooperative Credit Societies and Land Mortgage Banks.

THE COOPERATIVE MOVEMENT IN INDIA

§20. **The Cooperative Acts of 1904 and 1912.**—The idea of using cooperation as a means of fighting rural indebtedness in India and supplying cheap credit to the farmer was first suggested by Frederick Nicholson, a Madras civilian, who had made a special study of agricultural and other land banks in Europe. In his Report (1895-7) he pleaded powerfully for the introduction of cooperative credit societies on the lines of the well-known Raiffeisen societies in Germany. Mainly as a result of this, the Cooperative Credit Societies Act was passed by the Imperial Legislative Council in 1904. It provided for the formation of credit societies (rural and urban) only, and postponed all forms of non-credit cooperation. Any ten or more persons could apply for registration and form themselves into a credit society, if all of them were from the same village, or the same caste or tribe, or from the same town. In the case of rural societies unlimited liability was the rule; in the case of urban societies the matter was

left to the option of the society. All profits had to be carried in the case of the rural societies to the reserve fund, urban societies being required to carry only one-fourth of the profits in this way. The societies were to raise the required working capital by entrance fees paid by members, shares (there being limitations on the value of an individual member's shares), deposits from members and loans from outside, and were to distribute the funds so raised among members only. Registrars were appointed in all provinces to exercise supervision over the organization and to control the movement. The Government reserved certain powers for itself such as (i) compulsory inspection and audit, (ii) compulsory dissolution of a society, if necessary, by the Registrar, subject to an appeal to the Provincial Government, and (iii) wide rule-making power. To encourage the movement the Government offered certain concessions and privileges to the societies registered under the Act, such as exemption from income-tax, stamp duties and registration fees, priority over the ordinary creditors of a member and the grant to a new society of limited loans free of interest for the first three years.

In every province, the movement showed remarkable progress. In 1911-12 the number of societies was 8,177, the number of members 403,318, and the amount of working capital Rs. 3.35 crores. In 1912, fresh legislation was passed. The new Cooperative Societies Act of that year recognized non-credit forms of cooperation affecting purchase, sale, production, insurance, housing, etc. It also recognized central societies such as (i) Unions, consisting of primary societies for mutual control and credit, (ii) Central Banks, consisting partly of societies, and partly of individuals formed for financing primary credit societies, and (iii) Provincial Banks, consisting of individuals (societies were later admitted) to supply finance to the whole movement in the province, ordinarily through the agency of Central Banks. The Act of 1912 gave a fresh impetus to the cooperative movement, and a number of societies for the sale of produce, cattle insurance, milk supply, yarn, silk and manure purchase, retailing of farm implements and common necessities (consumers' stores) were started and prospered. The Maclagan Committee, appointed by the Government in 1914 (October) to review especially the financial aspects of the movement, made several useful recommendations which have largely determined the organization of cooperative finance in the various provinces. Since the Reforms of 1919, cooperation has become a provincial transferred subject under the care

of a minister. Some of the provinces like Bombay (1925) have passed separate Cooperative Societies Acts, mainly based upon the framework of the All-India Act of 1912. In recent years, owing to the fall of agricultural prices and economic depression the movement has been passing through a critical stage, and this has focussed public attention on its major defects, such as ignorance on the part of members of true cooperative principles, inefficient management, laxity of internal control, unpunctual payments and large overdues. The Government should make a determined effort to remove these defects, enlisting all possible help from the non-official leaders of the movement.

§21. **Statistics relating to the cooperative movement.**—The latest available statistics (for the year 1933-4) relating to the cooperative movement in India are as follows: The total number of Cooperative Societies was 105,083. Of these 92,467 were Agricultural Societies, 11,124 non-Agricultural Societies, 613 Central and Provincial Banks (including Banking Unions) and 879 Supervising and Guaranteeing Unions. In the same year, Madras had 13,581 societies; Bombay 5,816; Bengal 23,538; Bihar and Orissa 8,901; the United Provinces 6,051; the Punjab 21,395; Burma 2,167; the Central Provinces and Berar 3,794; Assam 1,400; the North-West Frontier Province 451; Delhi 288; and Ajmer-Merwara 707. The movement has made a fair amount of progress in some of the Indian States as well. The number of members of primary societies in the year 1933-4 was 4,316,222, and the total working capital amounted to Rs. 95.73 crores. While these figures indicate substantial progress, there is still much scope for further extension in view of the large size and population of the country. Not more than 10% of the credit needs in rural areas even in advanced provinces like Bombay are being met at present through the cooperative agency.

§22. **The constitution and working of a primary agricultural credit society.**—Since the primary agricultural credit societies represent about 90% of the total number of societies, we may further examine their organization, management and working.

We have already pointed out that any ten persons from the same village can form themselves into such a society. The membership must not exceed one hundred in number. This is to ensure close supervision and mutual control. Liability is unlimited. This exercises an educative influence on the members by stimulating mutual control.

and improves the credit of the society by inspiring confidence amongst its outside creditors. The management is democratic and honorary. It is entrusted to (i) a General Committee consisting of all members, which elects members of the Managing Committee and adopts the annual balance sheet; and (ii) a Managing Committee, which conducts the routine and executive business of the society and admits new members. There is also a paid Secretary. The working capital is drawn from two sources: (i) internal, comprising entrance fees, deposits by members, share capital (if any), and the reserve fund of the society; (ii) external, comprising loans and deposits from other societies, from the Government, and, most important of all, from the central financing agencies like the central and provincial cooperative banks. Since the internal sources, especially deposits by members, are not well developed, external sources of capital hold a dominant position in cooperative finance today. Loans are advanced usually for productive objects, i.e. for buying seed, cattle, manure and meeting other needs of the agriculturist, such as payment of rent or land revenue. Long-term loans for permanent improvements and redemption of past debts are rarely given by such societies. Special Land Mortgage Banks are being established in the various provinces for this purpose. Loans for unproductive purposes, such as ceremonial expenses, are theoretically not permissible, but they are necessary for preventing the ryots from falling into the clutches of the money-lenders. The time of repayment is fixed so as to enable the members to return their loans after the crops are harvested. Punctual payment is essential, postponement being granted only in exceptional circumstances.

The main cooperative security is that offered by the honesty and character of the borrowing member. Material security in the shape of land is also accepted as collateral security. The borrowing member has to furnish sureties, usually from among the members.

Profits after meeting all expenditure are carried to the Reserve Fund, but the Act of 1912 permits distribution of dividends on share capital, if any, and a certain amount of expenditure on charity and education. Disputes between the society and its members are settled by arbitration. The Registrar can dissolve a badly managed society after an inquiry into its affairs.

§23. Benefits and limitations of the cooperative movement.—The cooperative movement in India has conferred

substantial benefits on the country. It has, for instance, made cheaper credit available to the agricultural and artisan classes, and much saving in respect of the interest paid by them has thus been effected. The money-lender's monopoly has been broken in many a village. With the progress of cooperative banking, the hoarding habit has received a welcome check. Agriculture has benefited in a variety of ways. The movement has promoted the organization of agriculture on a cooperative basis (as in Denmark), supplying the various needs of the peasant. It has also helped the Agricultural Departments in popularizing improved seed, cattle and implements. It thus bids fair to assist the farmer to realize the ideal of 'better farming, better business and better living'.

Societies started for special *non-agricultural purposes*, such as Urban Banks (organized on the lines of the Schulze-Delitzsch Banks in Germany), weavers' and artisans' societies, factory workers' and salaried employees' societies, housing societies and consumers' stores, are also doing useful work, though as yet on a small scale, in their respective fields. Cooperation is proving most helpful to cottage industries such as the hand-loom weaving industry.

Apart from economic or material benefits, cooperation has also conferred certain intellectual and moral advantages. As Mr Darling says: 'Litigation and extravagance, drunkenness and gambling are all at a discount in a good cooperative society and in their place will be found industry, self-reliance, and straight dealing, education and arbitration societies, thrift, self-help and mutual help.' The cooperative society may be regarded as a nursery for training in self-government and the duties of citizenship.

We must, however, realize that all these advantages—moral and educational as well as purely economic—have been secured only on a very small scale. We have already referred to certain defects in the working of the cooperative societies, such as unpunctuality of payments, inefficient control, and dilatoriness. There is in many cases very little true cooperation, and often a mercenary view of the society is taken by its members. The ignorance and illiteracy of the rural population are the greatest obstacles to the success of cooperation in India. The movement is at present passing through a healthy phase of self-criticism, and there is a keen desire both in official and non-official quarters to remedy the various defects and strengthen it, even if the progress is slow. It has been well said by the Agricultural Commission that

'if cooperation fails there will fail the best hope of rural India'.

§24. **Land Mortgage Banks.**—The experience gained since the introduction of the cooperative movement in 1904 has shown that the credit societies, as well as the Central and Provincial Banks, can supply only short-term credit. But long-term credit is essential for the redemption of old debts (which carry a heavy burden of high interest rates), for effecting permanent improvement of the land and generally for introducing better agricultural methods. It is now fully realized that these needs can be met only by a special type of banking institution, namely the Land Mortgage Bank, organized largely on cooperative lines to suit the requirements of small farmers and actively helped by the State. Such Land Mortgage Banks already exist in several provinces such as the Punjab, Bengal, Bombay and Madras. The increase in the burden of rural debts owing to the fall of agricultural prices in recent years and the cheap rates at which money can be raised today by the issue of long-term debentures (bonds) against the security of land by the Central Land Mortgage Banks have given a further stimulus to the starting of such banks. For instance, the Bombay Government is at present (1935) carrying out its scheme of establishing fifteen such banks in the various parts of the Presidency. A Central Land Mortgage Bank has also been established at Bombay, as in the Madras Presidency, to facilitate the issue of land-mortgage debentures. Apart from debentures, Land Mortgage Banks raise funds by the issue of share capital and by inviting long-term deposits. Loans are given against the security of land for long periods varying from 10 to 30 years for the redemption of old debts, purchase of costly agricultural implements, and purchase and improvement of land.

The State (i.e. the Provincial Government) helps these banks in various ways. In most provinces the Government guarantees the principal of and interest on land-mortgage debentures. It also agrees to buy a certain amount of such debentures, and lends free the services of its revenue officers for the correct valuation of land, which is necessary before advancing loans to the members of the Land Mortgage Banks. Land-mortgage debentures have been declared as trustee securities for the investment of trust funds.

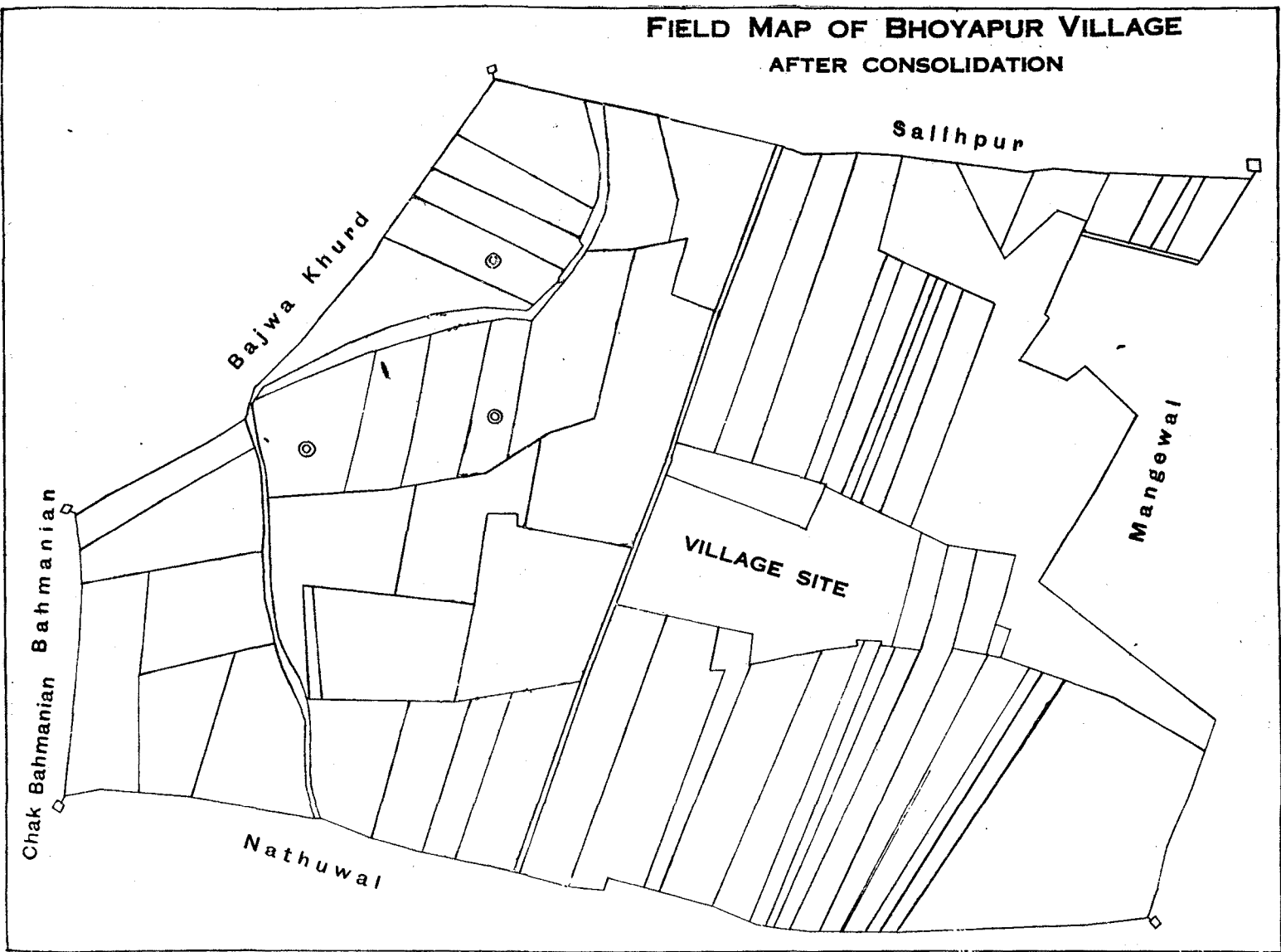
For big zamindars, as in Bengal and the United Provinces, commercial Land Mortgage Banks, organized on

joint-stock lines, might be started, as recommended by the Central Banking Enquiry Committee.

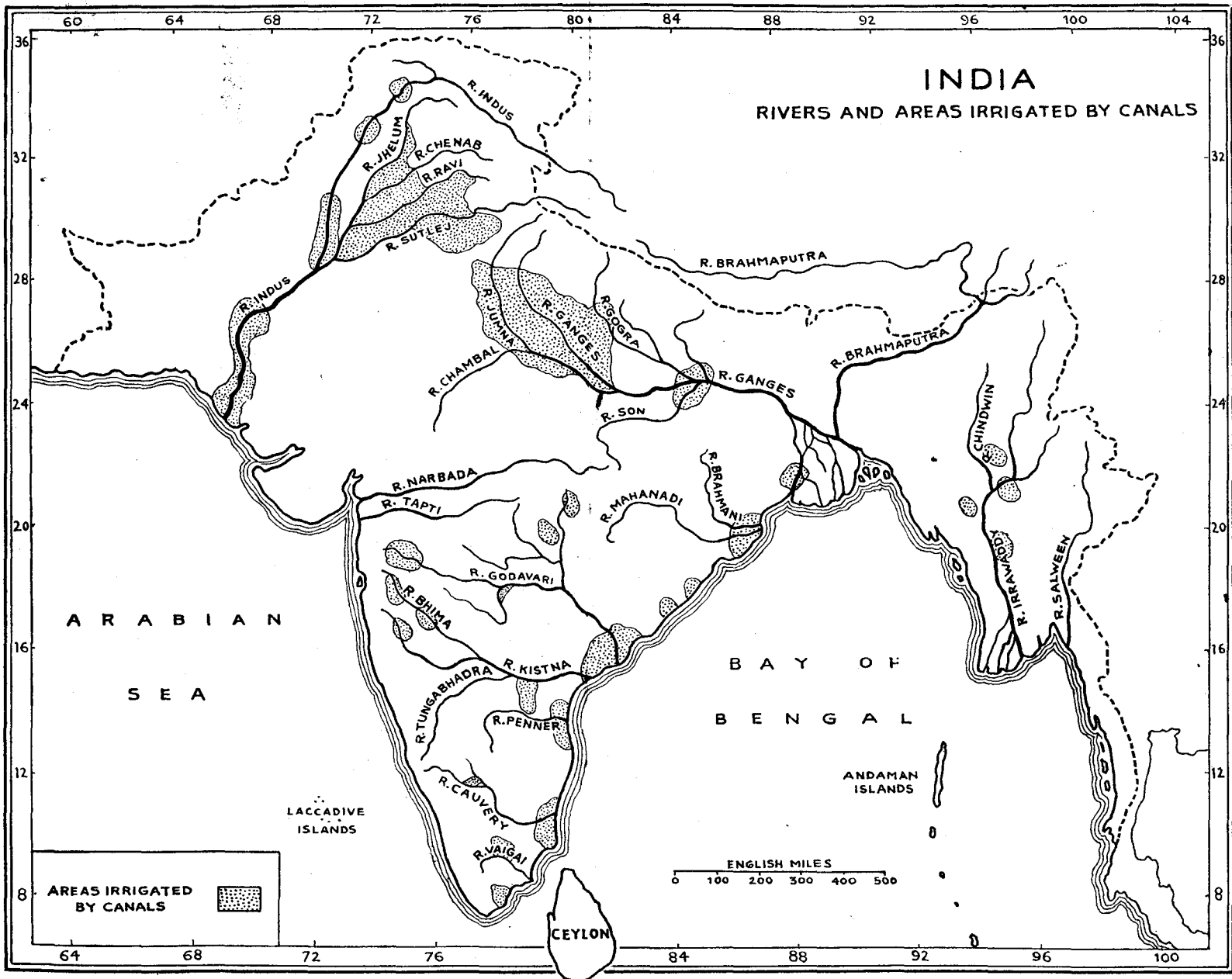
STATE AID TO AGRICULTURE

§25. **The evolution of the Agricultural Departments.**— We have already referred to the efforts of the Agricultural Departments to improve agriculture. We shall now give a further account of the relation of the Government to agriculture. The necessity of improving the cultivator's position and the agricultural system has been definitely recognized by the State for a long time. The idea of starting a special Agricultural Department in order to achieve this purpose was first contemplated in connexion with the Orissa famine of 1866. It was later taken up by Lord Mayo's Government (1869), but materialized only in 1884 as a result of the recommendations of the Famine Commission of 1880. Agricultural Departments were established in the various provinces under Directors, Deputy-Directors, Superintendents and Overseers. A stimulus was given to the work of these newly started departments by the visit of Dr Voelcker, Consulting Chemist to the Royal Agricultural Society, who was sent to India in 1889 by the Secretary of State to report and advise on our agricultural practice from the modern scientific point of view. In his Report, Dr Voelcker emphasized the value of agricultural education and improvement. In 1901, an Inspector-General of Agriculture was appointed to advise the Imperial and Provincial Governments. The post was abolished in 1912 and its duties were entrusted to the Director of the Agricultural Research Institute, Pusa, who was until 1929 the Agricultural Adviser to the Government of India. The Pusa Institute was established in 1903, together with a college for more advanced training and special short practical courses. The princely donations of Mr H. Phipps, an American visitor, and Sir David Sassoon, were utilized by Lord Curzon for the new Research Institute. In 1905 certain improvements were introduced in the organization of the Departments and larger funds were provided for agricultural experiments, research, demonstrations and instruction. The Agricultural College at Poona was started in 1903, and in subsequent years similar colleges were established at Cawnpore, Nagpur, Lyallpur, Coimbatore and Mandalay. The Agricultural Departments were strengthened by the appointment of agricultural engineers who were to give the necessary advice to the cultivators as regards agricultural machinery and its installation. An All-India Board of

**FIELD MAP OF BHOYAPUR VILLAGE
AFTER CONSOLIDATION**



Taken from M. L. Darling's *The Punjab Peasant in Prosperity and Debt*, by kind permission of the author and of the Registrar, Cooperative Societies, Punjab, N.-W. F. Province and Delhi.



Agriculture was founded in 1905 in order to bring the provincial departments more into touch with one another and to discuss questions of common interest at their annual meetings, and make recommendations to the Government of India. The latter's control over Provincial Governments has been considerably relaxed since 1921, when Agriculture became a transferred subject under a minister. On the recommendation of the Royal Commission on Agriculture (1928) a big step forward was taken in 1929 (July) when the Imperial Council of Agricultural Research was established. At the same time the advisory functions of the Agricultural Adviser to the Government of India were transferred to the newly created Council. The Agricultural Departments are assisted and their work supplemented by the Cooperative Department and by certain bodies like the District Agricultural Associations and Divisional and Taluka Development Boards, as in the Bombay Presidency.

§26. **Work of the Agricultural Department.**—The provincial Departments of Agriculture carry on (i) experiment and research on agricultural farms and laboratories; (ii) organize propaganda work to demonstrate and secure the adoption of new methods and improved implements, the introduction of new manures, production and distribution of pure seeds and improved varieties of crops (e.g. cotton, wheat, rice, sugarcane, etc.); and (iii) control agricultural education imparted in agricultural colleges and schools. Useful work is also being done on certain fundamental problems of agricultural chemistry, soil improvement and control of agricultural pests. The demonstrations given by the department are conducted on Government farms or the fields of cultivators. Agricultural and cattle shows and exhibitions are also arranged from time to time. We have already referred to the work of the Veterinary Department. Lack of adequate funds, the vast areas over which the work has to be carried on, the red-tapism inseparable from all Government activities, and the conservatism and illiteracy of the rural masses are some of the obstacles in the way of rapid improvement. These are, however, being gradually overcome.

In this connexion, we may refer to the work being done by the Imperial Council of Agricultural Research whose main duty is to promote, guide and co-ordinate agricultural research work throughout India and thus extend help to the provincial Departments of Agriculture in agricultural and veterinary matters. The Council consists of a Governing Body and an Advisory Board. The Agricultural Commission

recommended an initial endowment of Rs. 50 lakhs for the Agricultural Research Council. It has already spent more than a crore of rupees during the past six years on research in agriculture and has promoted various useful schemes of agricultural development. Those concerning the sugar industry and the improvement of the agricultural marketing organization deserve special mention.

§27. **Provincial Boards of Economic Enquiry.**—We may here invite attention to the recommendation of the Central Banking Enquiry Committee (1931) that in order to provide the Government with the information it requires to pursue a progressive and constructive agricultural policy, a Provincial Board of Economic Enquiry should be established in each province. The Committee in this connexion specially refer to the Punjab Board of Economic Enquiry consisting of both officials and non-officials, which was established in 1919. The Board, which practically depends on a Government grant for funds, has carried out a large number of village surveys and collected information in subjects such as the size and distribution of agricultural holdings, the rates of food consumed, farm accounts, family budgets, and other useful information regarding the economic position of the agriculturist.

§28. **Village uplift.**—As the Agricultural Commission truly remark, 'no substantial improvement in agriculture can be effected unless the cultivator has the will to achieve a better standard of living and capacity in terms of mental equipment and physical health, to take advantage of the opportunities which science, wise laws and good administration may place at his disposal'. The demand for better life can be stimulated only by a deliberate and concerted effort to improve the general conditions of the countryside where the great majority of the people live. The responsibility for initiative in this matter rests with the Government. What is required is an organized and sustained effort by all those departments (e.g. the Revenue, Forest, Agricultural, Co-operative, Educational, Public Health, Industries and Public Works Departments) whose activities touch the lives of the rural population. The sympathy, interest and active support of the general public are also essential. Mere isolated efforts by a few enthusiastic and high-minded officials like Mr F. L. Brayne, I.C.S. (whose name is associated with the famous experiment in rural uplift in the Gurgaon District of the Punjab) cannot achieve any permanent results. A widespread campaign for rural uplift has recently been started in many

provinces in India. Special mention may be made of the scheme of village uplift initiated in Bombay three years back by Sir Frederick Sykes as Governor of Bombay. The scheme is based on the cooperation between officials and non-officials working through a series of Village, Taluka and District Committees, the Collector of the District being the President of the District Committee. Agricultural improvement, rural industries, rural sanitation, education, housing and rural amenities are the main objectives of the scheme. The Government of India has also interested itself in the countrywide movement for rural reconstruction, as may be seen from the recent (1935-6) grants to the provinces of over two crores of rupees for village uplift. We may here point out that although the efforts now being made for village uplift deserve nothing but praise, the rural problem cannot be solved by itself. A simultaneous effort to promote the industrial and general economic development is also necessary.

LAND REVENUE IN BRITISH INDIA

§29. **Land revenue history.**—(i) *Hindu Period.*—From very ancient times the State in India has claimed a share of the produce of the soil from the cultivators. According to the *Laws of Manu* the king was entitled to receive one-sixth of the gross produce, i.e. of the grain heap on the threshing-floor, and a higher proportion (one-fourth) in times of war and emergencies. Land revenue was paid in kind, but payments in money were gradually introduced, especially after the establishment of Mohammedan kingdoms.

(ii) *Mogul period.*—The Moguls did not introduce any fundamental changes in the ancient revenue system of the Hindus, but merely reduced the Hindu customs to a coherent system and introduced regular records and revenue accounts. In this connexion special mention may be made of the famous Settlement made under Akbar by his able finance minister, Todar Mal. Land was carefully measured and divided into four classes, the Government's share being fixed at one-third of the gross produce. The term of the Settlement was fixed at nine years. Similar developments took place in the Deccan, under Malik Amber of Ahmednagar. The Maratha system of land revenue administration was mainly based on this settlement.

An important and unfortunate change in the land revenue system and tenure was introduced by the appearance of *revenue farming* in the declining days of the Mogul Empire. Under this system, the task of collecting revenues

was assigned or farmed to certain contractors (revenue farmers) who paid to the Government nine-tenths of the whole collections and kept the rest as their remuneration. Gradually these contractors consolidated their position and acquired superior hereditary rights to land. The actual cultivators were much oppressed under this system, and the net result was seen in the increasing complexity of land tenures and rights, and departure from the former revenue practices, more particularly in Bengal, where the revenue farmers assumed zamindari rights.

(iii) *British period*.—The task of the British administrators was thus made difficult, and at first mistakes were made. Many years had to pass before a tolerable system was evolved for the various provinces. The early confusion was worse confounded after the grant of Diwani in 1765 to the East India Company owing to Clive's Dual Government system. This was abolished in 1772, and after several experiments the famous Permanent Settlement of Bengal was introduced in 1793 by Lord Cornwallis. The zamindars were recognized as landlords and the State demand on them was fixed in perpetuity. The results of the new Settlement were not very happy. At first the zamindars were unable to pay the heavy State demand of revenue, and the tenants were greatly oppressed. Laws had to be passed in 1859 and 1885 protecting the rights of the tenants and preventing their being rack-rented and evicted arbitrarily from their holdings. The early policy of Permanent Settlement, which was extended to Benares in 1795 and to certain parts of North Madras, was soon afterwards (1820) abandoned. Subsequent land settlements in the various provinces in India were thus effected on a temporary basis (Temporary Settlements) for periods varying from twenty to thirty years. Thus the settlements with the talukdars in Oudh, the malguzars in the Central Provinces, the village communities (mahals) in the Punjab and in the North-Western Provinces (United Provinces) as also with the ryots in Madras, Bombay and Berar were effected on a temporary basis.

§30. **What is a settlement?**—What is called a 'Settlement' of land revenue consists of the determination of (i) the share of the produce or the rental to which the State is entitled; (ii) the person or persons liable to pay it; and (iii) the record of all the private rights and interests in the land. In order to determine the assessment of revenue there is a valuation of the land, the ascertainment of revenue rates according to the various classes of land, and the totalling up

and adjustment of them in the various circles and groups of villages. This gives the sum payable by the estate or holding. Land revenue is collected in instalments, and suspension and remission are granted in case of partial or total failure of crops and agricultural distress in general. The different bases for assessing land revenue adopted in the various provinces are considered below.

§31. **Permanent versus Temporary settlements.**—Land revenue settlements, as pointed out above, fall into two classes according to their duration: (i) Permanent Settlements where the share of the State is fixed in perpetuity, as in Bengal, North Madras and Benares; and (ii) Temporary Settlements where the revenue demand is fixed temporarily for a certain period. This period is thirty years in Bombay, Madras and the United Provinces, twenty years in the Central Provinces, and forty years in the Punjab (under the Punjab Land Revenue Amendment Act of 1929).

At one time there was much controversy regarding Permanent *versus* Temporary Settlement in India. The late R. C. Dutt (1900) advocated its extension all over India and Lord Curzon, on behalf of the Government of India, opposed it. In favour of the Permanent Settlement it is argued that it ensures a stable revenue to the State at a moderate cost of collection and promotes agricultural improvement and prosperity. It is also free from the evils associated with Temporary Settlements, such as harassment of the cultivator at the time of revision, the expensive machinery required for re-settlement, impediments to industry and improvements, and concentration of power in the hands of revenue officials.

On the other hand, the most serious drawback of Permanent Settlement is the State's sacrifice of all prospective increase of revenue from land. This has been one of the important causes of the financial embarrassment of Bengal. It has also been argued that the Permanent Settlement has created evils of absentee landlordism, and the State has had to undertake special legislation to protect the tenants. It has further been pointed out that the machinery of Temporary Settlements has now been greatly improved and much of the work connected with them, such as classification of land, is permanent. Moreover, private improvements are protected against enhancement of assessment, and suspension and revision are granted when necessary. It is claimed in short that the present-day Temporary Settlements achieve a happy compromise between the legitimate claims

of the State and the rights and convenience of the agriculturists. Non-official opinion today is reconciled to them and seeks to further improve them by securing a longer period of settlement (as in the Punjab Land Revenue Amendment Act) and a moderate assessment and by providing for legislative control of land revenue administration.

§32. **Three main kinds of settlements.**—Settlements may also be classified according to the system of tenure (i.e. the way in which land is held). There are three main kinds of land tenure in India : (i) *Zamindari*, where one person or a few joint owners own a large estate and are responsible for the payment of land revenue in a lump sum on the whole estate, as in Bengal; (ii) *Mahalwari* tenure, where the village estates are held by co-sharing bodies whose members are jointly and severally liable for the land revenue, as in Agra and partially in the Punjab; (iii) *Ryotwari* tenure, where land is held in single independent holdings owned severally, though aggregated locally in villages, the individual holders being severally responsible for the payment of the land revenue, as in Bombay, Madras and Berar.¹

Corresponding to the three main kinds of land tenures and influenced by them, there are three main kinds of settlements (Baden-Powell), namely :

(i) *Zamindari Settlements* for single estates under one landlord, either on a permanent basis as in Bengal, North Madras and Benares, or on a temporary basis as in the case of the talukdars of Oudh (and a few zamindars in Bengal). The cultivation of land is done by tenants who pay rent to the landlord.

(ii) *Mahalwari Settlements* for estates of proprietary bodies, usually village communities as in the United Provinces and the Punjab. The settlements with malguzars in the Central Provinces are officially included in the above class. In the Punjab there is no considerable body of tenants, and about half the land (including land in the new Canal Colonies) is held and cultivated by peasant proprietors. Though theoretically revenue is collected here not from individual cultivators but from joint holders of village estates who are jointly and severally responsible for it, in practice the share of revenue due from each is distributed and can be recovered separately. The Punjab peasants are, there-

¹ We have already referred to the two main types of villages in India, the Joint or Landlord village and the Ryotwari or Severalty village—see ch. ii, §3.

fore, generally in the same position as peasant proprietors in Bombay and Madras.

(iii) *Ryotwari Settlements* for individual occupancies or holdings, e.g. in Madras, Bombay and Berar. The settlements in Burma, Assam and Coorg are in principle ryotwari though not officially so called.

§33. **Basis of assessment.**—In all mahalwari systems (including the Punjab), land revenue is technically said to consist of a fraction of the net assets of the estate as annually received. These assets mainly consist of the total rents actually received, calculated rental value in the case of lands held by the proprietors themselves, and certain miscellaneous profits from waste lands, fruits and wild produce. The fraction claimed by the Government has varied from time to time. It was very high in the beginning; it was reduced to 66% in 1833; under the Saharanpur Rules of 1855 it was further reduced to about 50%; and according to official claims the actual fraction realized in most cases is well below the theoretical maximum of 50%. In the Punjab, the fraction has recently (1929) been reduced to 25% of the net assets. In Madras, and also in Burma, the theoretical basis of assessment is the value of the net produce of land (i.e. gross produce minus expenses of cultivation). About half of this is fixed as the maximum land revenue. In Bombay, and also in Berar, there is no definite basis of assessment. The system is of an empirical character, and revenue rates depend upon certain general economic considerations, etc. In recent years, however, the rental value, as ascertained by records of leases and sales, is in practice being adopted as a basis of assessment. In Sind assessment rates depend upon irrigation and not upon rainfall, which is negligible. The period of settlement is also shorter than in Bombay Presidency.

§34. **State landlordism.**—Two of the most controversial questions relating to land revenue in India are: (i) whether there is State ownership or individual ownership, and (ii) whether land revenue is a tax or rent. As regards the question of State ownership of land, the opinion generally held is that the State never claimed exclusive proprietary right over land in the pre-British period, and therefore the British cannot be said to have succeeded to any such claim. In fact the existence of private property was definitely recognized under both Hindu and Mohammedan rule. In the eighteenth century, when the Mogul Empire broke up, the various usurping Governments did, however, claim to be the

owners of the soil. The British Indian Government has everywhere recognized or conferred a private right in land, and in large areas of the country (e.g. Bengal, Oudh and the whole of Northern India) it has expressly declared the proprietary rights of the landlords and village owners. Even in the ryotwari provinces like Bombay the position of the ryot or 'occupant' is not essentially different from that of the zamindar, and he exercises all the rights of a proprietor so long as he pays the revenue assessment. We may also refer here to another view, namely, that the Indian conception of land tenure is a compromise between the English theory of absolute property in land and the other extreme of State ownership.

§35. **Land revenue: Tax or Rent?**—If private ownership of land is granted it follows logically that the land revenue is a tax and not a rent. The whole question is highly complicated and does not admit of a definite answer one way or the other. The controversy is, however, a profitless war of words since no question of actual practical policy at present in debate seems to depend upon how it is settled. It is sometimes said that if we admitted State landlordism we should also have to admit the right of the State to exact the full economic rent. But this is a consequence which we cannot escape in any case because it is a universally accepted maxim of taxation that theoretically the whole of the economic rent may be absorbed in taxation without hurting the taxpayer, provided that the economic rent can be separated from wages, profits and interest. So also the case for exemption of uneconomic holdings from land revenue can be argued quite as well on the assumption of Government landlordship as otherwise. It is also generally agreed that in considering the incidence of taxation, land revenue should be regarded as a tax. It would however be an act of political wisdom if the Government were to declare in unmistakable terms that it fully recognizes private property in land and abandons all pretensions to universal landlordism.

§36. **Ricardian theory in relation to the land revenue in India.**—As we have seen, the principles governing assessment vary from province to province so far as their formal statement is concerned. The general claim of the Government, however, is that in the net result, the land revenue forms everywhere in British India a certain moderate proportion of the economic rent. This is clearly not the case if we take into account the large number of uneconomic holdings in

India. Here the land tax is an appropriation of the bare minimum of subsistence left to the cultivator. Elsewhere also, pure or true rental value cannot be accurately determined, since owing to the pressure on land and the lack of alternative occupations the actual rents paid by competing tenants are likely to be higher than the true economic rent of land. Economic necessity is further strengthened by the traditional sentiment in favour of investment in land. The economic rent in the Ricardian sense therefore bears no definite relation to the assessment, though we cannot at the same time say that in every case land revenue falls on the income earned.

§37. **Need for reform.**—There is, however, a strong case for lowering the standard revenue rates, say to 25% of the annual value of land as suggested by the Indian Taxation Enquiry Committee of 1924-5. By annual value they mean the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family, and the return for enterprise. It is also desirable to bring under legislative control the process of revising the land revenue assessment, as in the Punjab where legislation was passed in 1928-9 extending the term of assessment to forty years, and fixing the share of the Government at 25% of the net assets. Legislation similar in principle has also been passed in the United and Central Provinces.

SUMMARY

AGRICULTURAL PRODUCTION

Agriculture holds a dominant position in our economic life, nearly 70% of the population being dependent on the land for their livelihood. It is, however, in a depressed condition and needs much improvement in order to promote rural prosperity.

Agricultural production in India covers a wide range of crops. Food crops like rice, wheat, barley, millets, pulses, and sugarcane are the leading crops. There has, however, been a certain tendency for non-food crops like oil-seeds, cotton and jute to encroach on the food crops owing to the high prices and ready sale they have commanded until recently in the world markets. Different provinces and tracts specialize in the different crops according to their climatic and soil conditions. Thus Bengal, Bihar, Burma and Madras specialize in rice; the Punjab and the United Provinces in wheat; Madras, Bombay and Berar in millets (jowar and rajra); the United Provinces, the Punjab and Bihar in sugarcane; the United and Central Provinces, Bihar and Burma in oil-seeds; Bombay, the Central Provinces and the Punjab in cotton; Bengal in jute; Southern India in tea, coffee, spices and condiments; Assam in tea.

The yield of the land per acre in India is very low in comparison with other countries. It is, however, capable of being increased by the adoption of intensive methods of cultivation.

LAND AND ITS PROBLEMS

One of the serious handicaps of the Indian agriculturist is the *endless subdivision and fragmentation of holdings*, many of which are uneconomic. Their cultivation entails great waste. They hinder agricultural reforms and give rise to boundary disputes. The evil has been attributed to the Hindu and Mohammedan laws of inheritance and succession, but is in the last resort traceable to the increasing pressure on land due to the growth of population and lack of alternative occupations. Attempts are being made to deal with this problem on a voluntary basis, as also by the method of legal compulsion. A certain amount of success has attended the interesting experiment in the Punjab of consolidation of scattered holdings on a cooperative basis. Legal compulsion does not appear to be a suitable method in the peculiar conditions of India.

Irrigation is an imperative need of Indian agriculture especially in rainless deserts like Sind and precarious tracts like the Deccan, and has in various forms been practised from time immemorial.

Wells, tanks and canals are the principal kinds of irrigation works in India. Canals are of three types: inundation canals, as in the Punjab; perennial canals, as in the United Provinces and, recently, in Sind and the Punjab; and storage works as in the Deccan. Government irrigation works (mainly canals and to some extent tanks, especially in the Madras Presidency) are either productive (i.e. which pay their way within 10 years of their completion) or unproductive, i.e. not directly remunerative but urgently needed to protect precarious tracts like the Deccan from famines and drought.

The Government in the past largely concentrated on the former, but is now devoting greater attention to the latter. Irrigation activity has greatly increased in the various provinces since the subject of irrigation was transferred to the provinces under the Reforms of 1919. Big schemes like the Sukkur Barrage, the Sutlej Valley project, and the Cauvery Reservoir and Mettur project, have been launched and are well under way.

The Canal Colonies in the Punjab are an arresting feature of irrigation in that province and have largely contributed to its prosperity. The principal colonies are Lyallpur, Shahpur and Montgomery.

LABOUR, EQUIPMENT AND ORGANIZATION

The Indian cultivator shows a curious combination of conservatism and prejudice with patience and hard work on the one hand, and on the other, of improvidence with frugality. An improvement of his environment through rural education, better sanitation and communications in rural areas, and a keener interest in land by zamindars is needed to make him a more progressive and efficient farmer.

The Indian agriculturist for the most part follows *extensive methods of cultivation*. His salvation lies in adopting intensive methods of cultivation as in China and Japan. For this purpose irrigation, rotation of

crops, increased application of manure, supply of pure seed, improved implements and cattle are essential. The present position in all these respects is not satisfactory though, thanks to the efforts of the Agricultural Department, a certain amount of improvement is taking place.

The two most important problems of agricultural organization relate to (i) subsidiary rural industries, and (ii) marketing of agricultural produce.

(i) *Subsidiary industries*.—In the absence of subsidiary industries to fill up his spare time during the slack agricultural season and to supplement his small income from land, the cultivator's economic position is very weak. The provision of supplementary industries suitable to the various rural areas—such as dairy-keeping, poultry-farming, fruit-growing, sericulture, rope-making—is urgently needed. Hand-spinning is useful but not sufficiently remunerative.

(ii) The present system of *agricultural marketing* is very defective and does not operate to the best advantage of the cultivator, who is handicapped by his indebtedness, illiteracy, defective rural communications, lack of uniformity of weights and measures, lack of storage facilities, and the many unauthorized deductions from the price he receives in the unregulated markets.

Marketing of agricultural produce through cooperative sale societies and the establishment of regulated markets, which provide for the safeguarding of the cultivator's interest through market committees on which he is represented, are proving very useful.

The Central and Provincial Governments are evincing keen interest in this matter and have recently arranged for marketing surveys through a special agency of marketing experts and officers.

RURAL INDEBTEDNESS

Agricultural indebtedness, which amounts to nearly Rs. 900 crores in British India alone, is a serious problem of the rural economy of India. The main causes of the indebtedness of the peasant are: excessive pressure on land, uneconomic holdings, insecurity of harvests, loss of cattle due to famine and disease, loss through litigation, improvidence and ancestral debt. The system of money-lending in the changed social and economic conditions of today has also contributed to the growth of rural indebtedness.

The Government has since the seventies of the last century adopted various measures to tackle the problem of rural indebtedness, such as improvement of the Civil Law regarding rural debts, anti-usury laws, regulation of money-lending, restrictions on the transfer of land, grant of State loans (*takkari*), and provision of credit through Cooperative Societies and Land Mortgage Banks.

THE COOPERATIVE MOVEMENT IN INDIA

The first Cooperative Credit Societies Act was passed in 1904. Rural and urban societies were started on the lines of the well-known Raiffeisen and Schulze-Delitzsch Societies in Germany. Registrars of cooperative societies were appointed in the several provinces, and the new movement soon struck root in the country. Its scope was widened by the Amending

Act of 1912, which recognized non-credit societies, central financing societies and unions. The progress of the movement has been remarkable, especially since 1921 when cooperation became a transferred subject under the control of ministers in the provinces. In recent years, however, the movement has been passing through a crisis partly owing to the adverse effects of economic depression and partly owing to certain defects in the movement itself such as laxity of internal control and management, and lack of cooperative spirit and training.

Cooperation is, however, the only salvation of the Indian peasant and artisan. The rural cooperative society with its honorary services, democratic management and joint responsibility is very well suited to supply the small farmer with controlled credit on reasonable terms and also generally to make him a better citizen. The good work done by the credit society must be supplemented by a general organization of agriculture on a cooperative basis, as in Denmark, so as to secure fuller advantages of cooperative sale and purchase, cooperative farming, etc. In cooperation also lies the hope of artisans like the weavers, factory workers and depressed classes. The middle classes have also found cooperation very useful in dealing with their own problems of housing, the supply of household requisites and of credit.

Cooperative credit societies which are financed by Central and Provincial Banks cannot, however, solve the problem of the supply of long-term credit for redemption of old rural debts, land improvement, etc. Land Mortgage Banks, organized mainly on cooperative lines, are necessary to meet this need. They have already been started in some provinces. The State has offered them help by guaranteeing the interest on, and to some extent also the principal of the debentures issued by them, and by direct purchase of such debentures.

STATE AID TO AGRICULTURE

The Government in India has for a long time recognized the need for improving agriculture and of bettering the lot of the Indian peasant. To this end Departments of Agriculture were started in 1884 in the various provinces under Directors of Agriculture assisted by Deputy-Directors and Inspectors. Agricultural Colleges were also started at Poona, Cawnpore, Nagpur, Lyallpur, Coimbatore and Mandalay. The biggest step forward was recently taken on the recommendation of the Agricultural Commission by establishing in 1929 the Imperial Council of Agricultural Research, which has so far spent a crore of rupees in promoting useful research in agriculture and in the solution of the veterinary problems connected with the improvement of Indian agriculture.

The Agricultural Departments carry on experiments on agricultural farms, organize propaganda work to demonstrate the value of new methods and implements, and control agricultural education.

A *Provincial Board of Economic Enquiry* should be started in each province on the lines of the Punjab Board of Economic Enquiry.

Lastly, a comprehensive and well-sustained effort is necessary to bring about *village uplift*, which means better educational and sanitary facilities, improved communications and, in general, a higher standard of amenities

and civic life in rural areas. At present, various Provincial Governments have set on foot schemes of village uplift, and the Central Government has given a grant of a crore of rupees for this purpose.

LAND REVENUE IN BRITISH INDIA

From times immemorial, the State in India has claimed a share of the produce of the soil from the cultivators. Land revenue was at first paid in kind but came gradually to be paid in money, especially under the Moguls, who also introduced systematic Land Revenue Settlements. This system however fell into disorder after the break-up of the Mogul Empire, when revenue-farming was introduced. This resulted in the subordination of peasant rights to those of the new usurpers who became zamindars, as in Bengal. After several experiments and mistakes, the British administration in India evolved a workable land revenue system. The early policy of Permanent Settlement, which was introduced in Bengal, Benares and North Madras, was supplanted by Temporary Settlements elsewhere. *The Permanent Settlement* has serious drawbacks, such as a rigidly fixed land revenue involving loss to the Government. Its main advantage, namely that it acts as a stimulus to agricultural improvements, can very well be secured by long-term settlements.

There are three main kinds of settlement in India: (i) *The Zamindari Settlement* with landlords, (ii) the *Mahalwari Settlement* with village communities, and (iii) *Ryotwari Settlement* with individual occupants or holders of land. In (i) and (ii), where the land revenue is not fixed in perpetuity (as in Bengal), the basis of assessment is rental value, the theoretical maximum claimed by the Government being one half of the rental value. In the Punjab, it is now one-fourth. In the ryotwari system of Madras the basis of assessment is the net produce, while in Bombay general economic considerations take the place of a theoretical basis, although in recent years greater reliance is being placed on rental value.

There are certain controversial questions relating to land revenue in India. One of them is whether the *land belongs to the State* or is the *private property* of the zamindar or ryot. The case for the latter view is pretty strong, and the Government would be well advised frankly to recognize private property in land. The second controversial question is whether land revenue is a *tax* or *rent*? As the Taxation Enquiry Committee points out, it should be regarded as a tax. In this connexion, a third question has been raised, namely, how far the land revenue taken in India conforms to the Ricardian theory of economic rent. It will be found on examination that land revenue in India cannot be identified with economic rent.

There is a strong case for lowering the land revenue and fixing it at about one-fourth of the annual value of the land. It is also very desirable to place the process of revising the assessment under legislative control.

CHAPTER IV

INDUSTRIAL DEVELOPMENT

GENERAL SURVEY

§1. **Benefits of industrial development.**—In these days we are all very keen that our country should become an important industrial nation because we expect to realize great benefits from such a development :

(i) An adequate development of industries will make for a more even distribution of population among a variety of occupations and make the economic system more stable. For example, frequent failure of rains and famines, to which we are subject, will not directly affect practically the whole population as they do at present, but only that part of it which is engaged in agriculture.

(ii) Industrialization, if properly directed, will enrich the nation.

(iii) The State will benefit because of the increased taxable capacity of the people. State finance will also be more elastic because industrialization will make possible a number of productive taxes on other kinds of income than landed income.

(iv) Industry will give scope to a diversity of aptitude and talent and will make the people more intelligent, alert and progressive. A predominantly agricultural country tends to be too conservative and intellectually inert.

(v) Industrialization will open a number of new sources of employment and should to a large extent solve the problem of middle-class unemployment.

(vi) It will also create a habit of productive investment and discourage hoarding.

(vii) It is now widely recognized that industrialization has an important bearing on military efficiency.

§2. **Principal landmarks of recent industrial history of India.**—Till about the beginning of the nineteenth century. India could be described as both an agricultural and a manufacturing country. As in Europe before the Industrial Revolution, the industries in India were of course not of the modern large-scale type but were cottage industries. However, a very much larger proportion of the population than at present was engaged in industry, and India could stand

comparison with any European country as regards industrial development and skill. In fact she could legitimately claim superiority in this respect over many European countries. We have already indicated the reasons why India fell from this high estate and came to be an almost exclusively agricultural country.¹ From many points of view this was a deplorable development, and the Famine Commissions of 1880 and 1901 emphasized forcibly the necessity of industrializing India as one of the important means of meeting the problem of recurring famines in the country. The swadeshi movement which began in 1905 served to drive home the lesson that for modern industry a more solid foundation was necessary than short-lived political enthusiasm, and that vigorous and consistent State help was essential to provide this foundation.

§3. Industrial policy of the State.—Till the end of the nineteenth century Government policy had been unhelpful and indifferent. The first sign of a change was noticed when, at the instance of Lord Curzon, a separate Imperial Department of Commerce and Industries was created in 1905. This welcome development, however, received a sudden check when in 1910 Lord Morley, the then Secretary of State for India, sent his famous Dispatch deprecating any direct attempts on the part of the Government to foster industrial development. The Indian authorities followed Lord Morley's dictates too literally and too conscientiously and failed to turn to any practical account the enthusiasm for industrial regeneration which characterized the swadeshi movement.

The experience of the war made the Government realize, more vividly than before, not only the economic but also the military importance of industrialization. As the Montagu-Chelmsford Report puts it: 'Nowadays, the products of an industrially-developed community coincide so nearly in kind, though not in quantity, with the catalogue of munitions of war that the development of India's natural resources becomes a matter of almost military necessity.' The Industrial Commission appointed in 1916 stressed the importance of active Government assistance in furthering the industrial development of the country and making it more self-sufficient.

The Indian Munitions Board established in 1917, although its main business was to control and develop Indian resources

¹ See ch. ii, §8.

so as to assist in the successful prosecution of the war, incidentally stimulated the development of Indian industries by placing large orders with Indian firms, supplying information and expert advice, and in other ways.

PROTECTION AND OTHER MEASURES OF STATE AID

§4. **Protection in India.**—A large part of the stimulus received by Indian industries during the war was necessarily temporary in character. After the war, foreign competition began again and the question of protection assumed serious practical importance. The Fiscal Commission appointed in 1921 recommended the adoption of a policy of *discriminate protection* to be interpreted by an expert Tariff Board. The Government accepted this recommendation in 1923, and since 1924 a Tariff Board has been instituted. Under instructions from the Government it has examined the claims of a number of industries for receiving protection. Protection has in this manner been extended to the iron and steel, cotton, paper, sugar, salt, match and other industries.

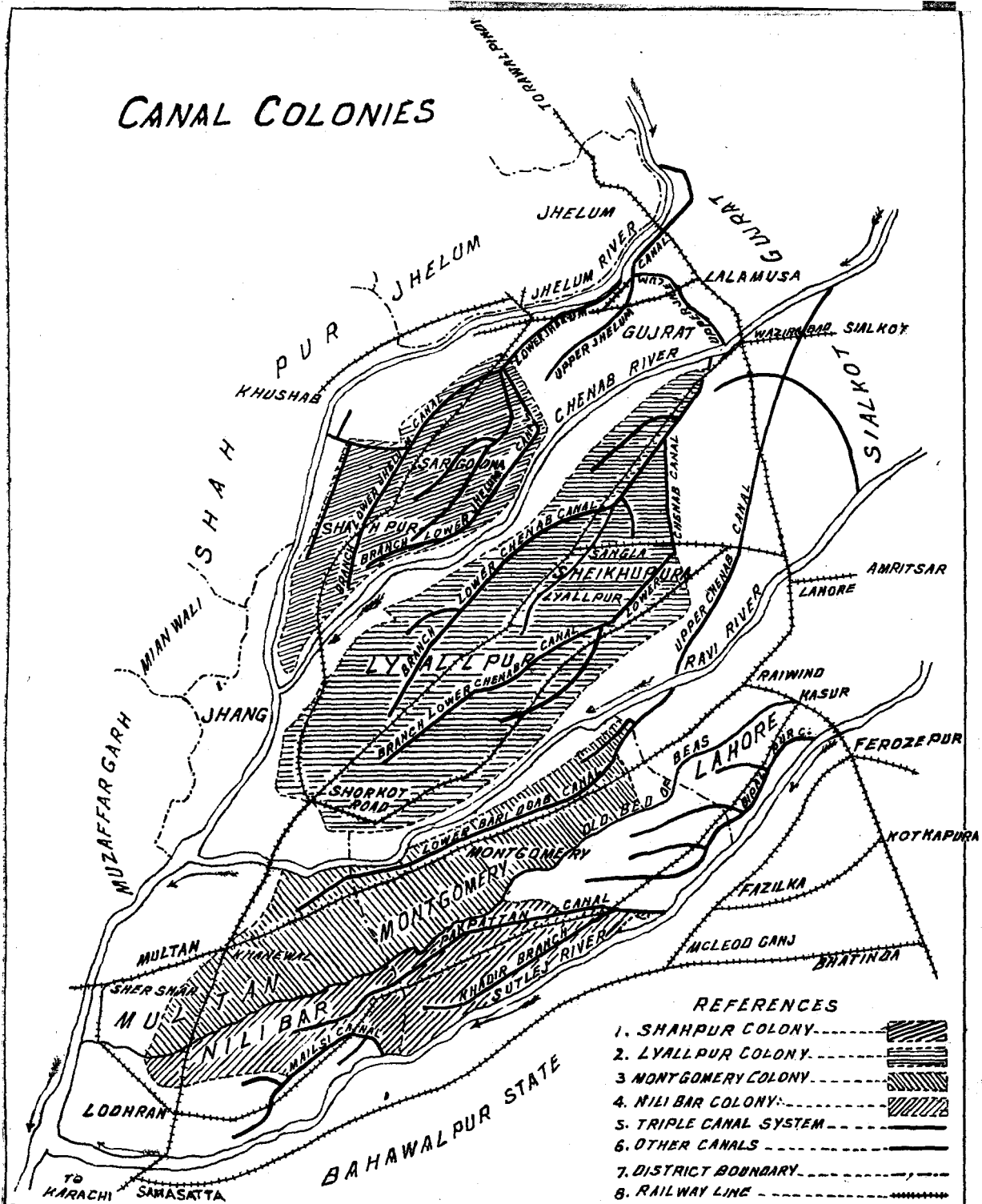
The term 'discriminate protection' suggests that we must discriminate between those industries which with some initial assistance (in the form of protection from foreign competition), are likely to develop sufficient strength to be able ultimately to stand on their own legs, and industries incapable of such development. We have already explained in what circumstances and subject to what safeguards the policy of protection can be pursued in the interests of a nation.¹ Discriminate protection in India is merely an application of these principles to Indian conditions.

§5. **Essentials other than protection.**—Protection alone is not enough to bring into existence flourishing and efficient industries. There must also be an adequate development of certain indispensable adjuncts of modern economic life like a sound banking organization, a well-developed system of transport, a sympathetic railway and shipping policy, an effective marketing organization, an efficient system of commercial and industrial intelligence, etc. These matters will be dealt with separately in Chapters V and VI.

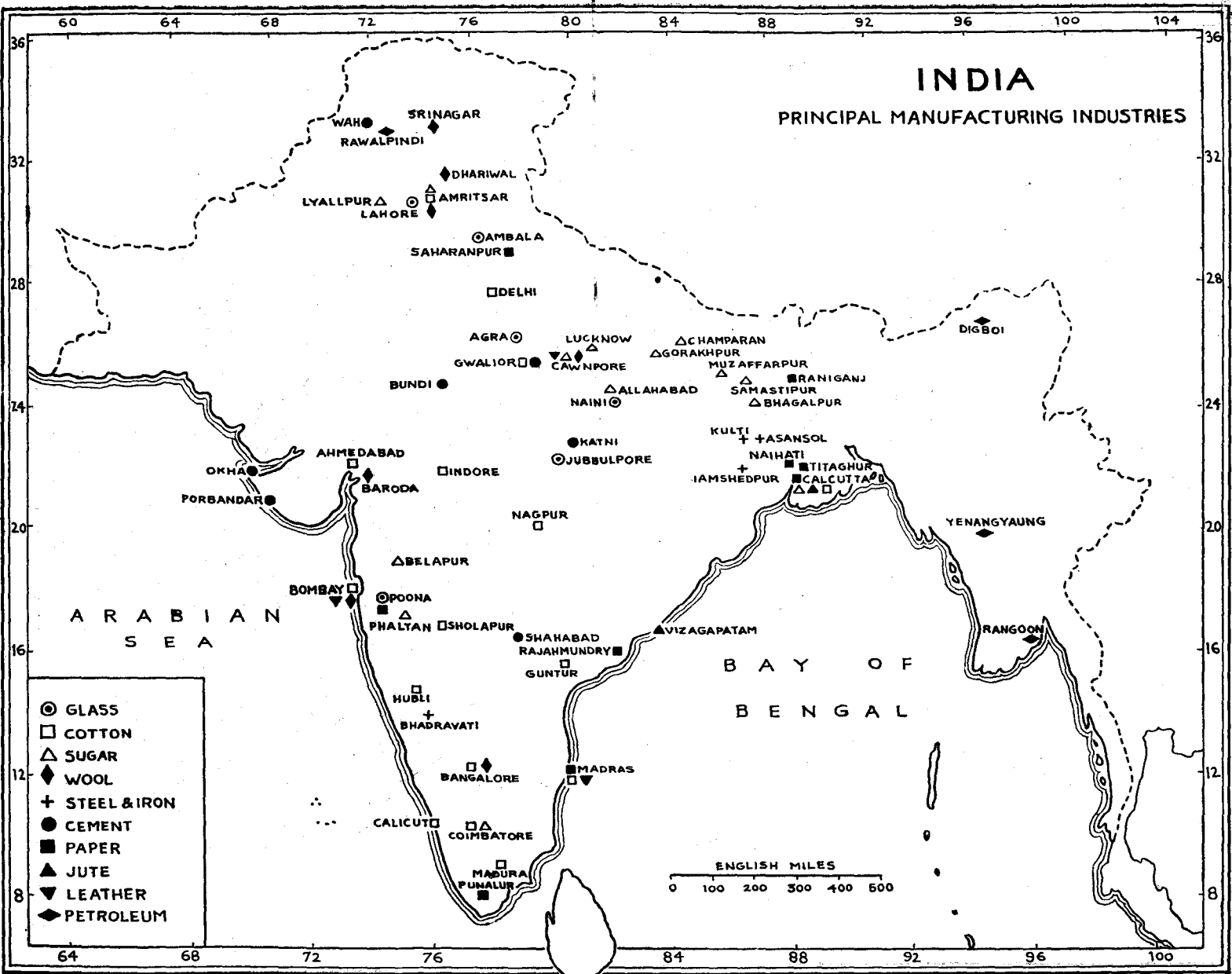
Quite as essential as anything else for industrial development is that the *people must really and truly desire it*, and show the genuineness of their desire by taking the necessary pains to achieve it. There must be less apathy and more

¹ See Part I, ch. xii, §§9-10.

CANAL COLONIES



Taken from M. L. Darling's *The Punjab Peasant in Prosperity and Debt*, by kind permission of the author.



MAP IX

self-confidence and enterprise. The lack of these qualities at present is largely due to our defective system of education, which is much too academic and out of touch with reality. We must train our own skilled labourers and supervisors and foremen instead of incurring excessive expenditure over men imported from abroad. *Technical and commercial institutes and colleges* must be started in large numbers to afford the necessary facilities for training managers and to enable capable business men to discover and develop their special talents. The organization of research is another important matter to be attended to. The present position in all these respects is most unsatisfactory.

The extension of *Government patronage* to the products of Indian industries is a useful stimulus to their development, and this is now forthcoming in a steadily increasing measure. A special department called the Indian Stores Department has been instituted for the purpose of encouraging Indian industries through purchases of stores, on behalf of the Government, valued at more than Rs. 3 crores every year.

The provincial *Departments of Industries*, which have been created in accordance with the recommendations of the Industrial Commission, aim at the promotion of technical and industrial education, the supply of industrial information and financial and other assistance to industries. Special State Aid to Industries Acts, such as the *Industrial Loans Act* of the Punjab, have been passed by certain provinces in order that suitable private enterprises might be financed. In practice, however, it is the cottage industries that have received more help from these Acts than large-scale industries.

INDIAN INDUSTRIES

§6. **Industrial progress in India.**—Indian industries may be divided into two classes: (i) Cottage industries carried on in the home of the worker, and (ii) Organized industries of the new type carried on in workshops and factories, with which we will deal first, beginning with a short account of the principal modern industries developed in India. (See Map IX.)

The following statistics give some idea of the advance in industrialization made by India. According to the returns of Indian factories subject to the Indian Factories Act, the total number of factories during 1933 was 8,452 and the total number of persons employed 1,403,212. The total

number of joint-stock companies registered in India was 7,998 with a paid-up capital of Rs. 287 crores in 1931-2, as compared with 2,545 companies with a paid-up capital of Rs. 81 crores in 1914-15. The total number of companies registered elsewhere than in India but working in India was 911 with a paid-up capital of £756 million in 1931-2, as compared with 517 companies with a paid-up capital of £298 million in 1914-15. Although the above figures show some progress in industrialization in India, organized industries as yet play too small a part in the national economy. There are only a few types of large-scale organized industry in the country, such as the cotton and jute mill industries and the steel and iron industry, and the population engaged in modern industry is only about 1.5% of the total population of the country.

§7. **The cotton mill industry.**—Among the large-scale industries owned and managed by Indians the cotton mill industry leads easily. It was started at first in Bombay about the middle of the last century, and even today Bombay continues to be its leading centre. In later years, and especially in recent years, up-country centres like Ahmedabad, Sholapur, Hubli and Nagpur have rapidly developed owing to their situation in the heart of the cotton-producing tracts and their access to extensive up-country markets and plentiful labour supplies. Until the beginning of the present century the industry was mainly a spinning industry, but owing to the loss of the Chinese market for India's mill-made yarn, the weaving branch has greatly advanced, and at present there is a tendency to increase the manufacture of finer counts, a certain amount of long staple cotton being imported from the U.S.A. and elsewhere for this purpose. In spite of occasional setbacks due to famine, plague, foreign competition, fluctuations in foreign exchange and high prices of cotton, the industry has continued to expand. The late world war gave it a considerable stimulus owing to decreased foreign imports and Government patronage in respect of military requirements in cotton goods. The swadeshi movement has also been helpful to its growth. On the other hand, in recent years the industry has suffered from trade depression and excessive competition from Japan in Indian markets. Not only has Japan displaced Indian exports to China and Japan, but has latterly seriously invaded the Indian market itself with cheap yarn and piece-goods. The Indian industry has however been able largely to overcome these difficulties with the help of the protection it has enjoyed since 1927.

Japanese competition has further been recently regulated by the Indo-Japanese Trade Agreement of 1933-4, which restricts the maximum quantity of imports of Japanese cotton piece-goods into India to 400 million yards a year, the basic allotment being 325 million yards a year provided Japan buys annually one million bales of raw cotton from India. The agreement is now (June 1936) due for revision.

The total number of cotton mills in India was 352 and the number of persons employed 3·85 lakhs in 1934, as compared with 271 mills and 2·60 lakhs of employed in 1914, and 193 mills and 1·61 lakhs of employed in 1900. The number of mills in 1877 was only 51. The total mill production of cotton piece-goods was 3,397 million yards, and imports 944 million yards in 1934-5, as compared with a total mill production of 678 million yards and imports of 2,288 million yards in 1904-5. Foreign imports have thus been substantially reduced. Allowing for hand-loom production, which contributes nearly 25% of the total cloth consumed in India, home production is now able to meet the greater part of the total demand for cloth in India. The Tariff Board recently (1935) conducted an inquiry into the question of protection against imports from Lancashire. However, besides protection, internal reform is necessary to place the cotton mill industry on a sound footing. In the first place, the Managing Agency system requires to be regulated by law,¹ and in the second place, the industry must intensify its efforts to explore export markets for its products.

§8. **The jute mill industry.**—Another well-developed large-scale industry in India is the jute mill industry, which came into existence in Bengal in 1855, when the first mill was started near Serampore. The progress of the industry was slow during the first thirty years, and the export trade in jute manufactures was negligible. The war led to a considerable expansion and to the prosperity of the industry, which was called upon to meet the demand in the various theatres of war for sand-bags for trenches, etc. For many years Dundee (in Scotland) was the principal centre of jute manufacture. Calcutta, however, now holds a commanding position in the manufacture and trade of jute manufactures. In 1931-2 there were 103 jute mills at work, the number

¹ A recent official Bill (1936) to amend the Indian Companies Act (1913) seeks to remove many of the evils of the managing agency system.

of persons employed being 276,800 as compared with the average of 1879-80 to 1883-4, when the number of mills was 21 and the persons employed 38,800.

The jute industry enjoys certain advantages over the cotton mill industry. In the first place, India enjoys a monopoly in jute. The organization of the industry also is more efficient. Unlike the cotton mill industry, the jute industry is highly centralized, there being as many as 90 mills within a radius of 40 miles from Calcutta. It is, however, largely financed and managed by European capitalists.

The jute industry has not escaped the adverse effects of the trade depression, to meet which the Jute Mills Association has taken steps to restrict output. A certain recovery in the exports of jute manufactures, which consist mainly of gunny bags and hessian cloth, has been in evidence in recent years. The total value of jute manufactures exported in 1934-5 was Rs. 21.47 crores.

§9. **Iron and steel industry.**—This is a basic or key industry, and its national importance is great. Its development is of recent date. The Barakar Iron Works, started in 1874 on the Jharia coalfields in Bengal and acquired in 1889 by the Bengal Steel and Iron Company, was the successful pioneer in this new field of India's industrial development. The next important stage in the history of the industry was ushered in by the formation of the Tata Steel and Iron Company, which was established at Sakchi in 1907 and began work in 1911. The war-time requirements of the Government stimulated further progress, and a large scheme of extension was completed in 1924. In the same year protection against foreign competition was granted to the steel and iron industry as recommended by the Tariff Board. It was renewed in 1927 and 1934. Under this new stimulus, the industry has made striking progress. India is now self-sufficient regarding pig iron, of which the production has advanced from 35,000 tons at the beginning of the present century to 1,343,075 tons in 1934-5. The production of steel also has made considerable headway, the total quantity produced being 627,000 tons in 1934-5 as compared with 139,433 tons in 1916-17. Foreign imports of iron and steel manufactures are still considerable. Sakchi (renamed Jamshedpur) has become a veritable beehive of allied industries, such as the tin-plate, wire and nails, railway wagons, heavy chemicals and other industries. The future of the industry is bright in view of the great natural advan-

tages of rich and abundant iron ore deposits¹ near coalfields and adequate supplies of other raw materials, and a large home market.

§10. **Tanning and leather industries.**—The indigenous tanning industry is an old industry in the country, which produces a large supply of hides and skins (cow-hides, goat-skins, buffalo-hides and sheepskins, which may be regarded as the by-products of agriculture). These were largely exported to Germany, Austria and the U.S.A. in the past, and even today are not fully utilized at home. European methods of tanning were first introduced by the military authorities for harness and other military requirements. A Government (harness and saddles) factory was set up at Cawnpore in 1860. Private factories followed, and Cawnpore has thus become the main centre of the leather trade in India. Since then other centres like Bombay and Madras have also shown considerable progress. The tanning and leather industry experienced great prosperity during the war owing to the patronage extended to it by the Indian Munitions Board, which required large quantities of army boots and shoes. The limited protection which the industry enjoyed in the shape of a 5% export duty on raw hides and skins after 1919 (the duty was 15% with a rebate of 10% in favour of Empire countries during the years 1919-23) has ceased to operate owing to the abolition of the export duties on raw hides and skins in 1934 and 1935 respectively. The industry is deserving of encouragement by protection. There is also considerable scope yet for internal improvement.

§11. **Chemical industries.**—The development of chemical industries, especially the heavy chemicals like sulphuric and hydrochloric acids, is essential for the general economic development of a modern country. These industries are as yet poorly developed in India and large foreign imports are necessary. The war gave a stimulus to many chemical industries. India's sources of raw materials for heavy chemicals should not be deficient if only the various mineral ores were properly treated. Striking success has already been achieved in the manufacture of sulphuric acid—a key industry for all chemical industries. Protection, as recommended by the Tariff Board, was granted to the industry in 1931 until 31 March 1933. Since then it has been continued only in the case of magnesium chloride.

¹ See ch. i, §9(ii).

§12. **Paper-making.**—The modern paper industry of India dates from 1870, when the Bally Mills were established on the Hooghly, whose neighbourhood is still the principal centre of the industry. The Titaghur Paper Mills were established in 1882. In 1934-5 there were altogether 10 paper mills in India, namely four in Bengal, three in Bombay, and one each in the United Provinces, Madras and Travancore. *Sabai* grass, which grows abundantly in northern India, is the principal raw material used, although the Indian Paper Pulp Company makes paper from bamboo pulp. This new development is full of promise. Under the Bamboo Paper Industry (Protection) Act of 1925 renewed in 1932 up to 31 March 1939, the industry has had the benefit of protection. The Indian production of paper amounted to 892,000 cwt. in 1934-5 as compared with imports of paper and pasteboard aggregating 2,564,000 cwt. in the same year.

§13. **Other industries.**—Mention may be made of two industries, namely the sugar and match industries, which have rapidly expanded in recent years under the stimulus given by protection. The cement industry has also shown remarkable expansion since the war. The total production of Portland cement, which is comparable as regards quality with the British product, increased from 945 tons in 1914 to 236,746 tons in 1924 and to 764,000 tons in 1934-5. Imports in the last-mentioned year amounted only to 67,000 tons. Other industries which have made some progress and give promise of further development are the oil-milling industry, glass manufacture, printing ink and silk industries. Reference has already been made to the coal, the petroleum oil, and tea industries. A number of flour mills, rice mills, cotton gins and presses, railway workshops, and tile and brick factories are scattered throughout the country.

§14. **Survival of cottage industries.**—Competition of machine-made goods has already been fatal to some of our old cottage industries. Where new methods constitute a definite advance on the old methods, they must be introduced. But some kind of planned orderly retreat should be made possible for those engaged in the old type of cottage industry—even if this retards industrialization to some extent. In this part of our subject we shall however be concerned not with old industries which must sooner or later succumb, but with those which have it in them to survive and prosper even under modern conditions. Those industries which require simple tools and which are closely

connected with agriculture have generally nothing to fear from factory goods. There are also cases where the artisans have successfully adapted themselves to the new conditions and have learnt to use superior raw materials and better tools. 'The weaver has taken to the mill yarn, the dyer to synthetic dyes, the brass- and copper-smith to sheet metal, the blacksmith to iron rolled in convenient sections, in each case with advantage to himself from lessened cost of production which has greatly extended his market. In some districts in Lower Bengal, the weavers use the fly-shuttle slay extensively, and it is gradually coming into use elsewhere also. The tailors invariably employ sewing machines, and town artisans readily take to improved tools of European and American manufacture.'¹ In some cases the goods produced are such that they do not admit of the employment of machinery and large-scale production. Proximity to the market and a more intimate knowledge of the consumers' wants may further turn the scale in favour of the cottage worker. 'Thus some kinds of head-wear, *dhotis* and *saris* made by the hand-loom weavers have not been displaced by modern factories. The weavers of Dacca, Murshidabad, Madura and Benares, those engaged in making embroideries in Lucknow and Delhi and lace in Surat supply commodities for which the demand in the country has not been seriously affected by competition with similar machine-made articles. The metal worker, the shoe-maker, the goldsmith, the tailor, the confectioner, and other craftsmen fall into the same category and are similarly protected.'² Workers in the various cottage industries are still vastly more numerous than those engaged in organized industries.

We shall now examine the position of some of the most important cottage industries.

§15. **The cotton hand-loom industry.**—Hand-weaving still provides subsistence for about six million people. The position of the hand-weaver is strong in the case of goods which are either very coarse or refined and artistic, because here he can hold his own against machinery. The hand-loom supplies nearly 25% of the total demand for cloth in India. Since about 1922, the weaver has suffered severely from foreign (especially Japanese) competition as well as the competition of Indian mills.

¹ *Industrial Commission Report*, §255.

² *India in 1926-7*, p. 330.

§16. **Woollen industry.**—Under the Moguls, the manufacture of woollen carpets had reached a high pitch of excellence. Carpet-weaving at the present time depends almost entirely on foreign demand, which absorbs about 90% of the total production. The industry is in a languishing condition on account of the ignorance and poverty of the weavers and the absence of organization.

Another woollen manufacture that is widely prevalent in the country is that of the coarse rough blanket (*kambli*). Many shepherds and agriculturists pursue it as a by-occupation. Having regard to the facility with which the raw materials can be obtained in every part of the country and the big size of the home market, the industry has possibilities, which deserve to be carefully examined.

§17. **Sericulture and silk manufactures.**—Sericulture is practised more or less successfully in Bengal, Kashmir and Mysore, and wild silk is produced in the Central Provinces, Bihar and Orissa and Assam. The East India Company's efforts to encourage silk manufactures in India as a profitable form of export met with opposition from English weavers and had to be abandoned. The policy thereafter pursued of discouraging silk manufactures in India had an adverse influence on the indigenous weaving industry. Other adverse influences have been the change in the nature of the European and also the home demand, the progress of silk-weaving in Europe, and later the competition from Japan, China and the United States. Both sericulture and silk-weaving are at present in a bad way in India. Most of the silk now exported is in the form of waste or cocoons, because reeling is done so badly in India. The Indian weavers themselves prefer the more even re-reeled Chinese or Japanese silk to the home-made product. Efforts are being made, especially in Bengal, to improve the quality of Indian silk. The Agricultural Department in that province runs two sericultural schools. A large number of seed farms have also been started. The students trained at the Government schools are given awards and are provided with 'seed stocks' from Government nurseries. Attempts are also being made in Assam, Mysore, Burma and Kashmir to encourage sericulture. Grants amounting to Rs. 93,000 have recently been allotted to various provinces to enable them to set up schemes for the benefit of sericulture. The manufacture of silk goods would seem to enjoy certain special advantages in India and ought to succeed. Large-scale

production is more difficult than in the case of cotton, and has hardly yet made a beginning in India. Again, silk manufactures being of the nature of luxury goods admit of a great diversity in workmanship, which makes them eminently suitable for cottage industry. There is also a heavy import duty on foreign manufactures.

§18. Other cottage industries.—The present position of some of our village industries has already been discussed in Chapter II. We have also discussed the question of industries subsidiary to agriculture. There are numerous other cottage industries such as embroidery work, furniture, metal and cutlery, gold and silver thread, pottery, soap-making and bead-manufacture. The policy to be followed with regard to each of them must depend upon the results of a detailed investigation.

§19. Methods of aid to cottage industries.—The first step is to decide which of the old cottage industries have a chance of prospering under present conditions and to consider whether any new industries could with advantage be started. The next step is to consider means to help the small artisan to establish himself firmly and securely. Suitable provision for manual training and instruction in crafts is an obvious necessity. Special industrial schools like the weaving schools in the Bombay Presidency should be established. The question of making available cheap raw material of good quality and introducing more efficient tools and implements by practical demonstrations and otherwise should receive proper attention. Assistance could also be rendered in the form of technical advice and by giving the artisans new patterns and designs likely to be popular. An attempt must be made to provide the handicraftsmen with the requisite capital through cooperative credit societies and perhaps also through industrial banks. Quite as important as anything else is an effective marketing organization. The Arts and Crafts Emporia at Lucknow and Lahore have been moderately useful. The establishment of Provincial Marketing Boards, licensed warehouses, and cooperative wholesale depots should also help. Several of the provinces have passed State Aid to Industries Acts to enable the Government to encourage suitable cottage and other industries. A sum of Rs. 5,75,000 was allotted by the Government of India to the Provincial Governments from November 1934 to March 1936. With the assistance of these funds various schemes for the development of the hand-loom weaving industry have been started.

INDUSTRIAL LABOUR

§20. **Migratory character of Indian labour.**—We must now discuss certain important questions relating to industrial labour in India. The factory labourers in India do not constitute a wage-earning class exactly corresponding to the factory labourers in western countries. In those countries, the labourers form a permanent class of purely industrial workers, with no agricultural interests or attachments. The Indian factory operative on the other hand generally comes from a village and he always maintains his connexion with the village where he has his home and his bit of land and his family looking after it. From time to time he visits his village, and even if he is not able to go as often as he would like to, almost invariably he returns to his village after his superannuation. He goes to the city because he must. He finds it more and more difficult to make a living in the village. 'The city, as such, has no attraction for him. . . Few industrial workers would remain in industry if they could secure sufficient food and clothing in the village; they are pushed, not pulled, to the city.'¹ The fact that the labourer does not develop any permanent interest in his employment in the city is a source of weakness in many ways. All the same, the Labour Commission has expressed the view that in the present circumstances the link with the village must be regarded as a distinct asset and that the aim should be not to weaken it but rather to strengthen and regularize it.

§21. **Scarcity of labour.**—Complaints are sometimes heard that there is scarcity of labour in India. This is true so far as the supply of skilled labour is concerned, and we have already indicated the remedies to be adopted in this connexion. For the rest, owing to increasing pressure on agricultural land in the village combined with the growing facilities for travel and communication, more and more people from the countryside are showing a willingness to migrate to cities to avail themselves of whatever opportunities may be there for securing employment.

The position in this respect would be further improved if labour were recruited directly by the mill managers instead of through middlemen or jobbers. The jobber, because he is instrumental in securing employment, comes to acquire great power over the ignorant and often helpless worker, and generally abuses it. More and more factory owners are

¹ *Labour (Whitley) Commission Report*, p. 4.

now giving their attention to the question of direct recruitment.

§22. **Labour legislation in India.**—In order to attract workers and make them contented and efficient, conditions of life and labour in the cities must be made more tolerable. This is a matter which can only be dealt with satisfactorily by legislation, and now the law tries in various ways to make things easier for the workman. The *Factories Act*, 1911, as amended by the Acts of 1922, 1923, 1926 and 1934 prescribes a daily as well as a weekly limit to the hours of work in factories—the daily limit being 10 hours and the weekly limit 54 hours in all 'perennial' factories. Children are not to work for more than 5 hours per day. The Act also provides for rest intervals and a weekly holiday. The law also insists on certain conditions with regard to ventilation, light and temperature being observed to secure operatives against danger to health or serious discomfort.

In the interests of women workers some provinces like Bombay have passed *Maternity Benefit Acts* by which leave of absence is given for a certain period before and after confinement, with a suitable wage allowance during the period of absence.

Each province has appointed Factory Inspectors whose duty is to secure the observance of the Factories Act. The Inspectors can compel the factory managers to take suitable steps for the prevention of accident or injury to the workers from unfenced machinery, etc. Some of the Local Governments have made rules requiring the provision of first-aid appliances, sterilized dressings, etc., for the benefit of workers who may get hurt in spite of all precautions. The *Workmen's Compensation Act* was passed in 1923 and it has subsequently been improved by several Amending Acts (of 1929, 1931 and 1933). By this means the worker or his family is compensated for certain kinds of injury, or death, according to a fixed scale.

§23. **Housing.**—One of the biggest problems in industrial centres is connected with the housing of labour. The present condition of housing is most deplorable and there is terrible overcrowding and congestion in factory towns like Bombay. The labourer is not so much housed as 'warehoused'. The vast majority of the working classes live in single rooms in filthy, insanitary surroundings. It is impossible for the labourer to live a normal healthy family life in these conditions, and in fact many workers are forced to leave their families in their villages. Improvement Trusts, Municipalities,

as well as individual employers have made some efforts to remedy this serious defect. But much more will have to be done before we could be said to be anywhere near a satisfactory solution of the problem.

§24. **Welfare work.**—There are other activities than those noticed above which have for their object the improvement of the health, safety and general well-being, and the industrial efficiency, of the worker, which are grouped together under the name of 'welfare work'. Some of the more enlightened employers have voluntarily instituted welfare schemes for the benefit of their operatives. Sometimes institutions like the Y.M.C.A., the local Social Service Leagues, and the Depressed Classes Mission Society have rendered valuable assistance to employers in organizing welfare work or have independently organized it themselves. Welfare work is concerned with education, medical and maternity benefits, recreation (in the form of games, cinemas, lantern slide lectures as counter-attractions to the liquor-shop and the bucket-shop), housing, grain and cloth shops, workers' cooperative societies, tea-shops and canteens.

§25. **Trade Union movement.**—All these activities should, strictly speaking, be initiated and controlled by the workers themselves. Labour can best help itself by standing on its own legs instead of depending on outsiders. In the western countries, labourers possess powerful and efficient associations of their own in the form of Trade Unions, which take care of their members' interests in every possible way. It is a good sign that in India also a similar movement has been started. Its progress here however is not comparable with its progress in the west. The leadership of the Indian Trade Unions is still largely in the hands of middle-class people who, although they may be well-intentioned, do not always understand the needs and the difficulties of the working classes. Sometimes it may happen that they have political and other motives besides the good of the workers. Another weakness of the Trade Union movement in India is due to the fact that the labour force in most of our industrial centres is heterogeneous in character and the workers may come from different places, speak different languages, profess different religions, and so on. Effective combination in such circumstances is a matter of great difficulty. Widespread illiteracy among the workmen is another serious handicap. And lastly we must refer to the floating character of Indian labour. Even when the labourer stays for years in a city after leaving his village, he does

not necessarily work at the same establishment but may change his employer any number of times. A man who is thus constantly on the move from factory to factory cannot be a very useful member of a Trade Union or any other association. Gradually, however, matters may be expected to improve in all these respects. The Trade Union Act of 1926 seeks to encourage Trade Unions calculated to promote the obvious interests of the workers. Trade Unions which get themselves registered under this Act are subjected to certain restrictions intended to secure proper management of their funds and to direct their activities into proper channels. As against the restrictions, the Act grants certain privileges and concessions not available to the unregistered bodies. For example, the Act grants immunity from civil and criminal liability to officials of the registered Unions acting in furtherance of all legitimate objects of the Union. The formation of strong Trade Unions is essential not only to safeguard the interests of the wage-earners but also to promote the orderly progress of industry.

§26. **Present inefficiency of Indian labour.**—We have indicated above the main directions in which improvement of labour conditions is to be sought. Such improvement is calculated to create a more contented labour force. It will also increase the efficiency of Indian labour which, by comparison with western labour, must be pronounced to be inefficient. The European worker no doubt gets higher wages, but his outturn of work more than justifies the high wages. In this sense European and American labour is really cheaper than Indian labour. At the same time it should be borne in mind that the difference in efficiency is more a matter of environment than of race. There is no reason to despair of making Indian labour quite as efficient as European labour provided the necessary conditions for progress are provided in the shape of educational facilities, vigorous public health measures, decent housing, etc. The possibilities of increasing efficiency through an *increase of wages* should also be carefully explored.

§27. **Industrial harmony.**—In recent years the frequency of industrial disputes has been growing in India, and the important question of maintaining harmonious relations between workers and employers has been receiving the serious attention of the Government. The Trade Disputes Act was passed in 1929, and it was put on a permanent basis in 1934. The Act provides for the setting up of Courts of Inquiry (consisting of independent outsiders) and Boards of

Conciliation (consisting of representatives of each of the parties to the dispute) with the intention of having the issues clearly framed so that the public may be in a position to judge fairly the rights and the wrongs of a dispute. Disputes are not settled compulsorily, but reliance is placed on the force of public opinion to bring about peace. Various provinces have also appointed special officers whose duty is to do all that is possible to prevent industrial strife.

SUMMARY

GENERAL SURVEY

Industrialization is highly desirable for India. It will increase the wealth of the country, give it greater economic stability, make its people more alert and progressive and offer scope for diversity of talent. It will also decrease middle-class unemployment, benefit the public treasury through increased taxable capacity, and discourage hoarding by creating profitable avenues for the employment of savings. It will even add to our military efficiency.

The Government in this country was for a long time indifferent to industrialization. A new era seemed to have begun with the creation of the Imperial Department of Commerce and Industries in 1905. But *Government's policy* on the whole continued to be on the old *laissez-faire* lines until the war unexpectedly forced it to adopt a more helpful attitude. The Indian Munitions Board, established in 1917, gave a great stimulus to industrial enterprise in India.

PROTECTION AND OTHER MEASURES OF STATE AID

After the war, according to the recommendations of the Fiscal Commission of 1921, India entered upon the period of *discriminate protection*, and a number of modern industries have sprung up in consequence. But besides protection, we must have other things for securing real progress in industrial development, such as a sound and helpful banking and transport system, and effective organization of marketing and commercial intelligence. Education must be such as to make the general outlook of people more practical. Technical and commercial schools must be started, and an adequate supply of skilled labour of supervisors and managers must be ensured. The Government must be prepared to help Indian industries by patronage, finance and by suitable legislation.

INDIAN INDUSTRIES

Indian industries fall into two classes: (i) Cottage industries, and (ii) Organized industries. Although industrialization has been advancing in India, especially since the war, organized industries as yet play a small part in the country's economic life. Cotton, jute, iron and steel are among the few large-scale organized industries.

The cotton mill industry is the leading industry—its principal centres being Bombay, Ahmedabad, Sholapur, Hubli and Nagpur. In spite of various adverse factors it has steadily expanded, especially in consequence of the stimulus it received during the war of 1914-18. Increased competition during the post-war period, especially from Japan, has made the grant of protection to the industry necessary since 1927. In 1934, the total number of cotton mills in India was 352. The industry is mainly financed by Indian capital and its management is largely in Indian hands.

The jute industry is to Bengal what the cotton mill industry is to Bombay. Both have progressed side by side since the middle of the last century. There were 103 jute mills in 1931-2, as many as 90 being situated round about Calcutta. India's monopoly of jute gives the jute mill industry a great natural advantage. Its expansion was greatly favoured by the war, and India today occupies a leading position in the manufacture and trade of jute. The jute industry has also suffered owing to economic depression and has had to adopt a policy of restricting output.

Iron and steel, a basic or key industry, has shown remarkable progress since 1907 with the establishment of the Tata Steel and Iron Company at Sakchi (Jamshedpur). It received a stimulus owing to the purchase of various requirements by the Government during the war; and has enjoyed the benefit of protection since 1924. It has a great future before it having regard to the very substantial natural advantages it possesses.

The tanning and leather industry has the advantage of a large supply of raw hides and skins, much of which is still exported to Germany, the U.S.A., and other countries. Apart from the old indigenous tanning industry, a modern tanning and leather industry has come into existence at Cawnpore, Bombay and Madras. The war-time purchases of army boots and shoes, etc. by the Government contributed substantially to the progress of the industry. There is however still considerable scope for internal improvement.

The chemical industry like other industries was favoured by the war; but even today it is in a condition of infancy, though one branch of it, namely the sulphuric acid industry, has made considerable progress. Its further development is essential for the industrial development of the country.

The paper industry, started in 1870, now claims 10 mills, with Calcutta as its principal centre. The bamboo paper pulp industry, which has received protection since 1925, shows great promise. *Other industries* are the sugar, the match, cement, oil-milling, glass, printing ink, coal, petroleum, and tea industries.

Progress in modern industries need not necessarily be fatal to all our *old cottage industries*. With proper assistance and guidance there is no reason why quite a number of these should not continue to exist and flourish. A systematic exploration of the cottage industries is necessary in order that we may shape their future and help the artisans without sacrificing national interests. One of the most important and the most widespread of our industries is the hand-loom weaving industry which still occupies several million people and which has been singled out by the Government for special attention. The woollen industry in some of its branches would also

seem to have considerable survival value even under present conditions. Sericulture and silk manufactures, embroidery work, furniture, metal and cutlery, pottery and soap-making are among the other small-scale industries of India calling for careful investigation.

Industries which are found to deserve encouragement might receive it in various forms, e.g. manual training and instruction to artisans in schools specially started for the purpose, provision of cheap and reliable raw material, of new patterns and designs, practical demonstrations, arts and crafts exhibitions and emporia, marketing boards, licensed warehouses, co-operative depots, and financial subventions.

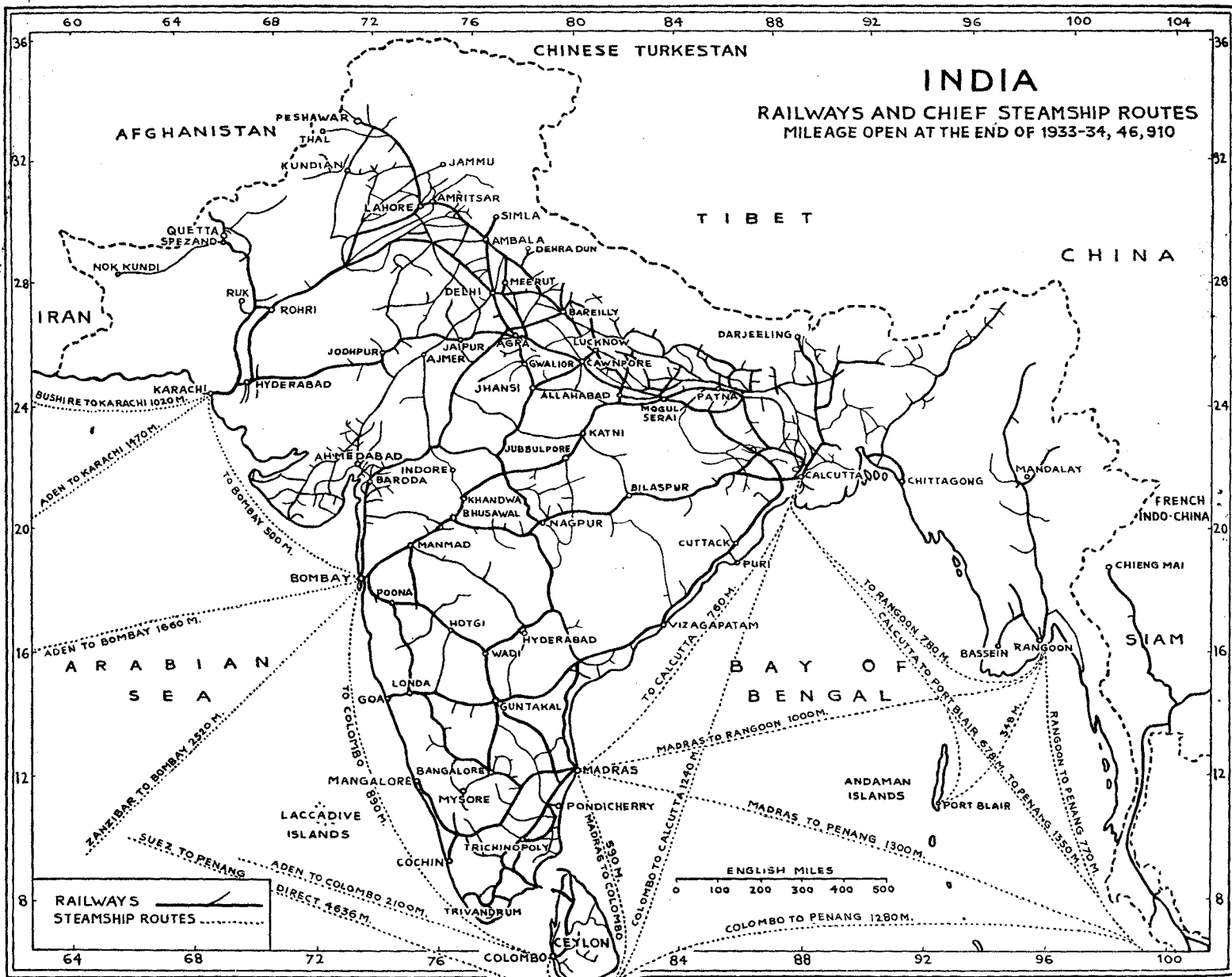
INDUSTRIAL LABOUR

One of the peculiarities of our industrial labour is its *migratory character*. Most of the labourers have been born and brought up in rural surroundings and they have no idea of making the industrial towns their permanent homes. They come to the cities unwillingly, driven by economic necessity.

The feeling of labour *scarcity* should grow less as the supply of *skilled* labour increases and as housing and other conditions in the cities become more attractive. *Factory legislation* (based on western models) has already made considerable progress in India and aims at regulating hours of work, protecting labourers from injury to health or serious discomfort while at work, and giving special attention to the interests of female and child labour. Various official and non-official efforts are being made to improve the housing conditions, which at present are terrible, and welfare work of different kinds is being done for ameliorating the condition of factory workers. Workers have also begun to organize themselves into *Trade Unions*. The progress of the Trade Union Movement is, however, hampered by illiteracy among workers, absence of working-class leadership, the heterogeneous character of Indian labour and its agricultural interests. The Trade Union Act of 1926 has been passed to help legitimate Trade Union activity.

As compared with European labour, Indian labour is undoubtedly *inefficient*. This inferiority is not due to inherent defects but to the absence of a suitable environment under which efficiency is developed.

Industrial disputes have of late been growing in frequency in India, and the Trade Disputes Act of 1929, with its provision for Courts of Inquiry and Boards of Conciliation, is intended to prevent industrial disputes from arising or from lasting too long.



MAP X

CHAPTER V

TRANSPORT AND TRADE

TRANSPORT

§1. **Importance of transport.**—A good system of communication by land, water, and, we must now add, by air, is one of the most important of all the conditions for the prosperity of a nation. It breaks down the isolation of the different parts of a country and increases the contact between town and village to the mutual advantage of both. It is the very life and soul of trade and acts as a stimulus to both agriculture and industry. Improved means of communication and conveyance are essential for the free movement of men and goods, raw materials and finished products and for the proper utilization of the resources of a country. Difficulties of communication have been largely removed in modern times by railways, the telegraph, motor and other forms of transport.

India is a sub-continent and the natural obstacles in passing from one region to another are formidable. Communication often breaks down in the rainy season. Natural waterways are less important in India than in England. Till the middle of the nineteenth century the means of communication were very defective in India. There were only very few trunk roads constructed by Indian rulers, chiefly by the Moguls. Many of the so-called roads were mere tracks and were impassable during the rainy season. They were also far from being safe. Pack animals were the only means of access to many parts of the interior. The state of communication was even more unsatisfactory in peninsular India with its rugged mountainous territory and the poor facilities for water transport except on the two coasts. We have already explained how the self-sufficiency of the Indian village was mainly the result of the imperfect means of communication.¹ A veritable social and economic revolution has been effected by the construction of a network of railways and roads from the time of Lord Dalhousie, who initiated a vigorous public works policy.

The transport situation may be considered under three main heads: Railways, Roads, and Water Transport.

¹ Ch. ii, §§3-4.

Railways

§2. **Periods of Indian railway history.**—The following six periods in the history of Indian railways may be distinguished.

(i) *The old Guarantee System (1844-69).*—The first proposals for the construction of railways were made in 1844, and contracts were made for the construction of two small railway lines near Calcutta and Bombay with the East India Company and the Great Indian Peninsula Railway Company respectively. It was, however, Lord Dalhousie's famous Minute on the subject in 1853 that gave a decisive turn to the Government's policy of construction of lines by railway companies incorporated in England and enjoying a guarantee given by the Government of a specified minimum return, or rate of interest on the capital invested. Lord Dalhousie urged the creation of a system of trunk lines and emphasized the great social, political and commercial advantages which the country would thereby derive. Private capital was not then available in India for railway construction. That is why the guarantee system was adopted. Accordingly, between 1854 and 1860 contracts were entered into with eight companies for constructing and managing railways in different parts of India, the rate of interest guaranteed ranging from $4\frac{1}{2}$ to 5%. The Government also made a free grant of land and reserved to itself certain powers of supervision and control and the option to purchase the lines after twenty-five years or fifty years, on certain fixed terms. Any surplus profits, after the guaranteed interest had been met, were to be shared by the companies with the Government. The early results of this system were disappointing, and it proved to be a great drain on the resources of the State. Since the Government undertook to see that the railway companies made a certain minimum profit, the companies had no incentive for careful and economic management. Also, it was a pioneer venture and could not be expected to show profits immediately. The companies failed to earn the minimum rate of interest from year to year and the deficiency had to be made good out of the public revenues.

(ii) *State construction and management (1869-79).*—The Government therefore decided that so far as capital for new lines was concerned, the State should secure for itself the full benefits of its own credit and cheaper methods of construction. This policy, under which the Sind and Punjab

lines were constructed, had however to be soon abandoned owing to the financial difficulties of the Government caused by the falling rupee, famines between 1874 and 1879, and the Frontier War.

(iii) *The new Guarantee System (1879-1900).*—Accordingly the Government decided again to utilize the agency of guaranteed companies. Contracts were made with new guaranteed companies such as the Bengal-Nagpur and the Madras and Southern Mahratta railway companies. Under this system, the lines constructed by the companies were declared to be the property of the State, which was entitled to terminate the contracts at the end of twenty-five years after repaying the capital provided by the companies. Interest at $3\frac{1}{2}\%$ was guaranteed during the period of the contract. The Government retained a larger share (three-fifths) of the surplus profit, and charged interest on the portion of capital advanced by it to the companies. Under this new guarantee system, the terms were in every respect more favourable for the Government than before. The companies were allowed to manage the lines when completed. In subsequent years, when the old and new contracts expired, the Government purchased the lines and either transferred them to State management as in the case of the Eastern Bengal or Sind-Punjab railways, or handed them over again for management to the same companies, as in the case of the East Indian and G.I.P. railways. In this way the State came to be the owner of the bulk of the trunk lines. Until recently, however, the management was left to the companies subject to Government control, exercised through the Railway Board which was created in 1905. The last of the contracts (i.e. with the Bengal-Nagpur railway) will expire in 1950.

In the meanwhile, branch line companies were formed, and Indian States were also invited to undertake railway construction in their territories. In recent years (1925 onwards), the Government has decided to find the necessary capital itself.

(iv) *Rapid extension of railways and commencement of railway profits (1900-14)* were the features of the pre-war period of 14 years. In 1908 the programme system was adopted, under which the Government laid down for the future the standard of $\pounds 12\frac{1}{2}$ million a year for capital expenditure on railways. Loans were raised in England for this purpose. The commencement of railway profits was due partly to the general economic development of the country

and partly to the expansion of irrigation works in the Punjab and Sind.

(v) *Breakdown of the railway system (1914-21).*—During this period there was a serious breakdown and deterioration of the railways, partly owing to the war-time pressure on them and partly owing to the curtailment of the annual programme of capital expenditure.

§3. **The Acworth Committee and after.**—An overhauling of railway policy was effected on the recommendations of a special Railway Committee (1920-21) presided over by the late Sir William Acworth. The Committee favoured State management of the railways, and also advocated construction of new lines by State agency. It may be added that Indian public opinion has always strongly opposed company management. Apart from profits taken out of India by the companies, the charge against them was that their policy was unsympathetic towards Indian national interests. Far from helping Indian manufacturers and commerce, it seemed actually to discriminate against them. Also, scant attention was paid to the comfort of the third class passengers from whom the main part of the railway revenue was derived. Under the new policy, the Great Indian Peninsula, the East Indian, Burma and Southern Punjab railways have been transferred to State management. The Railway Board was also reorganized. As now constituted, it consists of a Chief Commissioner, a Financial Commissioner and three members. It is the agency through which the Government of India exercises effective supervision over the whole railway system in the country. Larger funds were also made available for capital expenditure on railways.

Another change in administration was the separation of the Railway from General finance in 1925, as recommended by the Acworth Committee in order to insure the railways being run as a commercial concern. Under the new arrangement the railways are required to make a special contribution to the general revenues. Owing to railway deficits in the recent years of trade depression, the railways have been unable to make this contribution.

At the close of the year 1933-4 the total railway mileage open was 46,910 miles, and the capital outlay stood at Rs. 884 crores.

Under the new political constitution of India the actual administration of railways will be placed in the hands of a *Federal Statutory Railway Authority*, which is to be the executive authority of the Federation in respect of

the regulation, construction, maintenance and operation of railways.

§4. **Economic effects of railways.**—The railways have conferred substantial advantages on the country. They have promoted the efficiency of general administration and of military defence, and have contributed to the cultural progress of the country. Their economic effects have been equally striking. Famine relief in a country like India depends on an efficient railway system for the quick conveyance of food-stuffs to the affected areas.¹ The railways promote economic advance, tend to equalize prices throughout the country, create new employment and make possible a more even distribution of the population. The economic isolation and self-sufficiency of the village have been broken down by railway development. Agriculture has been commercialized, i.e. the agriculturist grows not only for subsistence, but for profit by the sale of his produce, for which he now commands a wider market owing to the extension of railways. Not only national trade but also trade with other countries has been stimulated by the facilities for rapid conveyance of goods to the ports for shipment abroad and from the ports for distribution in the interior. On the other hand, the railways have led to certain undesirable results, such as the rapid decay of indigenous industries, due to the intense competition of machine-made goods which the railways could carry to the remotest parts of the country.

§5. **Need for further railway development.**—On the whole, however, the benefits conferred by railways outweigh their drawbacks, and speaking of the future there is more and not less need for railway development, especially in the rural areas which are inadequately served. India's backwardness in railway development when compared with other countries is shown by the fact that, while there are 8·2 miles of line per 100 sq. miles in the U.S.A., there are only 2·2 miles of line per 100 sq. miles in India. Along with railway construction it is also necessary to develop and encourage industries connected with railways. The railway rates policy should aim at furthering the general industrial development of the country. There exists at present a Railway Rates Advisory Committee to investigate complaints of undue preference, high rates, lack of reasonable facilities to

¹ See ch. viii, §§6, 7.

trade, etc., and to make recommendations to the Government on these matters.

Roads

§6. **Road history.**—As already pointed out, good roads were few till the middle of the last century. Lord William Bentinck revived the idea of a highway connecting the north of India with Bengal. The result was the construction of the Grand Trunk Road linking Peshawar with Delhi and Calcutta.

A new chapter in the history of roads was opened by Lord Dalhousie, who initiated a more vigorous road policy. A Central Public Works Department was created, and similar departments were established in each of the provinces in 1855 replacing the old Military Boards which till then had been in charge of the roads. As railway construction proceeded apace, it became necessary to build roads to feed the railways rather than to compete with them. Trunk roads, however, came to be neglected, the Government being more interested financially in the profitable working of railways. The progressive policy of Lord Mayo and Lord Ripon with regard to local self-government, under which local control over local affairs was provided, gave some stimulus to road development. The total road mileage steadily increased and it stood at 264,512 in 1931-2.

§7. **Main features of India's road system.**—The main features of India's road system may be briefly described. There exist four trunk roads stretching across the country, with which most of the important subsidiary roads are linked. (i) The most famous of the trunk roads is the ancient marching route for armies, known as the Grand Trunk Road, which stretches right across the northern part of the country from Khyber to Calcutta; the other three connect (ii) Calcutta with Madras, (iii) Madras with Bombay, and (iv) Bombay with Delhi. These four main roads account for about 5,000 out of the 74,541 miles of metalled roads (in 1931-2) in British India. Southern India is most favoured both as regards the number and the satisfactory character of its subsidiary roads. The worst-served regions are Rajputana, Sind, parts of the Punjab, Orissa and Bengal. Aridity, sparseness of population, unbridged and unbridgeable waterways, difficulties of the ground (as in the lower Himalayan reaches), lack of suitable road-building materials, etc. are some of the obstacles that have prevented more rapid progress. Besides metalled roads there is a large mileage of

kachha (unmetalled) roads (1,89,971 miles in 1931-2), some of which provide quite good going for motor traffic during the dry weather.

§8. **Need for more roads.**—Considering her size India is extremely poorly equipped with roads. The deficiency is all the more keenly felt now that motor transport is advancing by leaps and bounds and creating a new range of problems of road construction and maintenance. As against 2,500 miles of road per 1,00,000 of population in the U.S.A., India has only 84 miles. While the countryside is crying for more and better roads, much difficulty is being experienced in maintaining even the existing roads in a tolerable condition. Roads controlled by the local bodies are in a particularly bad state because of the poor resources of these bodies. The country needs a perfect network of arterial and feeder roads for the smooth conduct of her extensive internal and external trade, for the development of industries connected with the preparation of agricultural produce and for the proper exploitation of her valuable forest resources. The development of roads need not adversely affect the railways. In fact the railways will derive considerable benefit from such feeder roads. While road motor traffic has an advantage over the railways so far as lighter traffic and short journeys are concerned, the railways will be a more convenient and economical form of transport for heavy loads and longer distances. On the whole, roads and railways are complementary to each other rather than competitive. In recent years increasing attention is being paid to the need for coordination of rail-road transport and the question was recently (1933) discussed by a specially convened Road-Rail Conference at Simla.

§9. **New road policy.**—A special Road Development Committee was appointed in 1927 to consider India's road problems. The Committee emphasized the necessity of a comprehensive road policy and of coordination of local programmes. It pointed out that road development was passing beyond the financial capacity of Provincial Governments and local bodies, and was becoming a national interest which should therefore to an increasing extent be a charge on central revenues. It also recommended that local bodies should receive more liberal financial assistance from provincial funds.

In accordance with the Road Committee's recommendations, the import and excise duties on motor spirit were increased from 4 to 6 annas per gallon in March 1929. The

proceeds of the additional duty were allotted for expenditure on road development, being credited to a separate Road Development Account. The annual grant, after allotting 15% to the Government of India (till 1934 only 10%), is apportioned among the provinces on the basis of their respective petrol consumption. These grants are made for expenditure on such schemes as are approved by the Governor-General-in-Council with the advice of the Standing Committee on Roads of the Central Legislature. In order to secure coordination in road matters, periodic Road Conferences of provincial representatives with the Standing Committee on Roads are held. This policy has recently (1934) been placed on a more or less permanent basis.

§10. Organization of the Public Works Department.—

Public works in India fall into the following four divisions: Military works, Railways, Irrigation¹ and General Civil Works, especially roads and buildings.

We have already stated that before Lord Dalhousie created a Central Public Works Department together with subordinate Provincial Departments, all the four divisions of public works were looked after by separate Military Boards for each province. The railways on account of their increasing importance were put under the charge of a separate Railway Board created in 1905 and were represented in the Viceroy's Executive Council by the Member for Commerce and Industry. At the same time the Central Public Works Department was made a joint charge with the Department of Revenue and Agriculture. This department has powers of supervision over Provincial Departments, but as a rule since the Reforms of 1919 interferes only in the more important and costly projects. Reference has already been made to the Standing Committee of the Indian Legislature on Roads, and to the All-India Road Conference. At the head of the Provincial Public Works Department are two Chief Engineers who also act as Secretaries for public works matters to the Provincial Government, one for the Irrigation Branch under the Revenue Member and the other for Building and Roads under the Minister for Local Self-Government.² The other minor provincial branches are

¹ We have already reviewed the progress made by irrigation works. See ch. iii, §§6-11.

² Under the Government of India Act of 1935 all the Provincial Departments will be placed under the charge of Ministers who will be collectively responsible to the Provincial Legislature.

Sanitary, Electrical and Architectural. Under the Chief Engineers are the Superintending Engineers in charge of a division or circle, and Executive Engineers in charge of a District. Below them are the Assistant Engineers and a subordinate staff. Road Boards have been established in some provinces in view of the growing importance of road transport. Local bodies like the Municipalities, Local Boards and Port Trusts maintain and manage their own public works which are local in character, and have their own staff for the purpose.

Water Transport

§11. **Inland waterways.**—Water transport played an important part in the carriage of bulky commodities before the era of railways, and even today it continues to play by no means a negligible part in inland trade. On the whole, however, in spite of the relative cheapness and certain advantages in the carrying of large cargoes, water transport has failed to hold its own in inland trade since the advent of the railways.

Water transport falls under two divisions: (i) Inland waterways and (ii) Marine transport. Inland water transport is supplied by the great river systems of Northern India.¹ The Indus, the Ganges, the Brahmaputra and the Irrawaddy are navigable by steamers all the year round for hundreds of miles above their mouths or above the heads of navigable canals traversing their deltas. The tributaries of the Indus, the Chenab and Sutlej, are open to small craft all the year round. The rivers in the peninsula generally do not, however, lend themselves to navigation, as they are not perennial and pass through rocky beds. But the Mahanadi, the Godavari and the Kistna are navigable in their upper reaches. Inland navigation, which was largely resorted to in the old days (e.g. the Ganges was a great natural highway of commerce) has received a setback since the appearance of railways. The Industrial Commission (1918) urged the co-ordination of railway and waterway administrations with a view to relieving the existing congestion in the railway system and meeting the needs of small-scale transport in the country.

§12. **Marine transport.**—We have already referred to the extensive coast line of India. She appears by nature to be meant to be a sea-faring country and may well aspire to be one of the principal carriers of the world.² Till about

¹ See ch. i, §4.

² See §19, and ch. i, §4.

the beginning of the nineteenth century she could be spoken of as a considerable maritime country. She had a flourishing shipbuilding industry, and the bulk of the commerce in the Indian seas was then carried in ships built in India. The introduction of iron-built ships, improvement of naval architecture, and the jealousy of the English shipping interests brought about the decay of Indian shipping. India's share in the coasting trade amounts only to 13% and in the oceanic trade, only to about 2%. This highly remunerative branch of business is at present controlled by foreign shipping companies, whose competition prevents the rapid development of an Indian Mercantile Marine. The adoption of devices of unfair or cut-throat competition such as deferred rebates, (i.e. the grant of rebates or refunds of a certain part of the freight paid at the end of a specified period, provided the shipper or merchant does not send his goods by any other line) and rate-cutting have hampered the development of Indian navigation companies in the coastal trade of India. The Indian shipbuilding industry is in no better position.

§13. **An Indian mercantile marine.**—The need for the development of an Indian mercantile marine was stressed by the Mercantile Marine Committee (1923), which recommended the reservation of the coastal trade for ships controlled by Indians. An unsuccessful attempt was made in 1928 by Mr S. N. Haji to promote a Bill in the Central Legislature for the reserving of coastal traffic for Indian shipping. On the recommendation of the Indian Mercantile Marine Committee the Government has, however, provided a training ship (I.M.M.T.S. *Dufferin*) for Indian cadets.

TRADE

External Trade

§14. **History of India's foreign trade.**—As long ago as 300 B.C., India had established trading connexions with Babylon, Egypt, Rome, Greece, China, Iran and Arabia. This early trade was in rare and costly commodities, the principal articles of export being fine textile manufactures, metal ware, ivory, perfumes, dye-stuffs, spices, etc., while the imports consisted of brass, tin, lead, wines, horses, etc., and of a large quantity of gold. The last item suggests an excess of exports over imports, which has always been a feature of India's foreign trade. During the Mohammedan period, communications established with India through the North-West Frontier encouraged the overland trade of India

with Iran and countries to the north. Towards the end of the fifteenth century an all-sea route to India via the Cape of Good Hope was discovered by Vasco da Gama, and thus was established the fateful contact between the east and west. Four western European powers struggled for the monopoly of trade with India. These were Portugal, Holland, England and France. England was destined ultimately to triumph over the other nations, and the East India Company, which was formed in 1600, succeeded in capturing the trade of India and incidentally became the first territorial power there. We have already referred to the decay of the indigenous industries of the country since the beginning of the nineteenth century owing to certain political and economic causes, and to the progress of ruralization during the last century. The net result was a change as to the nature and the direction of India's foreign trade. India thus came to export large quantities of food-stuffs and raw materials, and to import, mainly, manufactured goods.

§15. **Growth of India's foreign trade.**—India's foreign trade began to expand rapidly after 1869, when the Suez Canal was thrown open for navigation. The construction of railways and roads in the country also promoted the development of external as well as internal trade. Exports increased from an average annual value of Rs. 55·86 crores for five years of trade during 1864-5 to 1868-9 to an average of Rs. 354 crores per year for the period 1924-5 to 1928-9. During the same period imports rose in value from Rs. 31·7 crores to Rs. 251 crores. The main causes of this growth were the establishment of peace and order, improved means of communication (including the laying of the submarine cables between Bombay and Suez), the great improvements in naval architecture and rapid growth of mercantile marines in other countries, removal of internal customs barriers and transit duties in India, and the adoption of the policy of free trade. For a long time Great Britain naturally occupied a predominant position in the Indian market. Since the close of the last century, however, Germany, Japan, the U.S.A., and other countries have come in as serious competitors of Great Britain. During the war, Japan and the U.S.A. greatly increased their share in India's foreign trade, and today Japanese goods are ousting not only British but even Indian goods in our own markets. The war gave a temporary setback to India's foreign trade, especially to the import trade. The export trade did not suffer to the same extent as there was still considerable demand for India's staple

exports. The termination of the war was followed in India as in other countries by a trade boom, which in turn was succeeded by a trade depression. After a temporary phase of recovery, the world has since 1929 been passing through an economic depression of unprecedented severity which has seriously affected India's foreign trade. The export trade has suffered more than the import trade owing to a relatively much bigger drop in the prices of raw materials and food-stuffs as compared to manufactures and owing to diminished world demand for India's staple exports. The export trade declined in value to Rs. 136 crores in 1932-3. The lowest value of import trade, namely Rs. 117 crores, was reached in 1933-4. Since then there has been partial recovery. The value of the export trade during 1934-5 was Rs. 155 crores and of the import trade Rs. 135 crores. The balance of trade in merchandise, which used to be greatly in favour of India in former years, shrank to Rs. 3 crores in 1932-3 and it is still very poor as compared with former years.

§16. **Main characteristics of India's foreign trade.**—The following two tables (I and II) show the comparative importance of the principal articles imported into and exported from British India in 1934-5 and the five preceding years. These figures also serve to bring out the disastrous effects of the economic depression on our foreign trade, especially on the export trade. The figures for 1934-5 show a small improvement. The recovery is also much slower in the export than in the import trade.

The most outstanding characteristic of India's trade is that the bulk of the exports from India consist of food-stuffs and raw materials, while the bulk of the imports consist of manufactured articles. Owing to the industrial development since the war the percentage of exports of manufactures to the total exports has recently shown a tendency to increase gradually. That this tendency, however, is slight is shown by the fact that during 1934-5, 74.6% of our imports consisted of wholly or partly manufactured articles as compared with 76.6% in the pre-war period; and about 75% of the exports were raw materials and food-stuffs as compared with 76.9% in the pre-war period.

Another characteristic of India's foreign trade is that while the import trade consists of a wide range of articles, the export trade is restricted to a comparatively few great staples like raw cotton, jute, tea, oil-seeds, and food grains.

The third noteworthy feature is that Great Britain holds a predominant position in our foreign trade, especially on the import side. On the export side, while she is the most important single customer, the aggregate of that trade is more evenly divided than the import trade between a number of countries.¹ Lastly, India's foreign trade normally shows an excess of exports (in merchandise) over imports. This usual 'favourable' balance has, as already observed, considerably decreased in recent years.²

§17. **Principal articles of imports and exports.**—We shall now discuss the relative importance of commodities (i) on the import side, and (ii) on the export side.

On the *import side*, *cotton manufactures* still hold the place of honour, though the percentage proportion of total imports has recently fallen owing to increased production of cloth in the country itself and the disturbed political situation in recent years. The imports of cotton piece-goods mainly came from Lancashire, but latterly Japan has appreciably increased her share in the Indian market and is a serious rival of Lancashire as well as of the Indian mills. The imports of raw cotton are also increasing owing to the growing use of superior long-staple cotton in our mills.

Next in importance are *machinery* and *mill work, metals and ores* (which include iron and steel manufactures, railway locomotive engines, aluminium, brass and copper, German silver, etc.). Imports of *sugar* (mostly from Java), which not long ago occupied the second place, have rapidly declined in recent years owing to increased home production due to protection since 1931-2. They now occupy quite a subordinate place. Other articles of considerable importance are oils, vehicles (especially motor vehicles), instruments, woollen and silk manufactures, dyes, hardware, chemicals, paper, glass, etc.

On the *export side*, *cotton* and *jute* are the most important commodities. The exports of raw cotton contributed as much as 23·15% of the total value of all merchandise in 1934-5. Japan is the principal buyer of our raw cotton. Other smaller buyers are the United Kingdom, Italy, Germany and China. The Lancashire mills have in recent years been making special efforts to use Indian cotton. Exports of raw cotton to Japan are at present regulated by the Indo-Japanese Trade Agreement of 1933. Exports of

¹ See also §18.

² See Part I, ch. xii, §4.

TABLE I—Imports¹

(In lakhs of rupees)

	1929-30	1930-1	1931-2	1932-3	1933-4	1934-5	Percentage on total imports of merchandise in 1934-5
Cotton and cotton goods	62.90	31.64	26.19	34.08	21.30	27.04	20.44
Machinery and mill work	18.22	14.35	10.92	10.54	12.77	12.64	9.55
Metals and ores	23.62	15.92	9.78	9.73	9.50	11.38	8.60
Oils	11.68	10.92	9.72	8.00	6.75	6.97	5.27
Vehicles	10.85	7.31	4.48	3.82	4.77	6.60	4.99
Instruments, apparatus and appliances	5.38	4.77	3.69	3.85	4.02	4.73	3.57
Wool, raw and manufactures	4.28	2.31	1.62	2.96	2.55	3.86	2.92
Artificial silk ... ..	...	3.03	3.44	4.16	2.74	3.59	2.72
Silk, raw and manufactures	4.58	3.00	2.73	4.33	3.59	3.37	2.55
Dyes	2.43	2.59	2.68	2.50	2.46	3.08	2.32
Hardware	5.07	3.60	2.61	2.99	2.88	3.05	2.31
Chemicals	2.79	2.61	2.57	2.71	2.70	2.92	2.21
Provisions and oilman's stores	5.64	4.88	3.41	2.93	2.72	2.89	2.18
Paper and pasteboard	3.72	2.87	2.50	2.86	2.63	2.73	2.06
Grain, pulse and flour	5.42	2.82	1.18	71	84	2.66	2.01
Liquors	3.77	3.32	2.27	2.26	2.27	2.35	1.78
Sugar	15.77	10.96	6.16	4.23	2.71	2.11	1.59
Rubber manufactures	3.33	2.58	2.22	1.98	1.88	2.06	1.56
Drugs and medicines	2.26	1.94	1.91	1.86	1.93	1.92	1.45
Spices	3.26	2.55	2.08	1.72	1.56	1.55	1.18
Glass and glassware	2.52	1.65	1.22	1.42	1.22	1.33	1.00
Fruits and vegetables	1.83	1.49	1.34	1.17	1.00	1.30	.98
Paints and painters' materials	1.47	1.12	88	92	92	97	.73
Apparel	1.71	1.11	82	84	81	82	.62
Stationery	1.05	81	69	79	66	69	.52
Haberdashery and millinery	1.04	73	54	68	55	67	.51
Manures	90	67	36	53	52	67	.51
Toilet requisites	73	54	48	58	57	64	.48
Soap	1.67	1.12	89	83	78	63	.48
Tobacco	2.70	1.51	94	97	72	62	.47
All other articles	30.13	20.07	16.06	15.70	14.94	17.05	12.44
Total value of imports	240.80	164.79	126.37	132.58	115.36	132.29	100

TABLE II—Exports¹

(In lakhs of rupees)

	1929-30	1930-1	1931-2	1932-3	1933-4	1934-5	Percentage on total exports of merchandise in 1934-5
Cotton, raw and waste	65.60	46.73	23.78	20.70	26.98	34.99	23.15
Cotton manufactures	7.19	5.22	4.82	3.29	2.73	2.65	1.75
Jute, raw	27.17	12.88	11.19	9.73	10.93	10.87	7.19
Jute manufactures	51.93	31.89	21.92	21.71	21.37	21.47	14.20
Tea	26.00	23.56	19.44	17.15	19.84	20.13	13.33
Grain, pulse and flour	34.70	29.88	20.37	16.08	11.75	11.84	7.83
Seeds	26.47	17.86	14.59	11.31	13.66	10.54	6.97
Metals and ores	10.34	7.94	5.47	4.68	5.49	5.91	3.91
Leather	8.16	6.39	5.35	4.76	5.83	5.48	3.63
Lac	6.97	3.14	1.84	1.24	2.46	3.30	2.18
Hides and skins, raw	7.98	5.47	3.66	2.77	4.25	3.13	2.07
Wool, raw and manufactures	5.33	3.23	3.37	1.78	2.72	2.19	1.45
Oil-cakes	3.12	2.08	2.01	1.97	1.65	1.97	1.30
Paraffin wax	3.18	2.82	2.32	2.02	2.29	1.92	1.27
Wood and timber	1.80	1.40	78	56	84	1.10	.73
Fruits and vegetables	91	80	90	70	99	1.08	.71
Tobacco	1.06	1.04	85	77	94	82	.54
Coir	1.05	89	76	60	77	80	.53
Spices	1.96	1.27	87	72	72	77	.51
Fodder, bran and pollards	1.19	77	75	70	47	77	.51
Coffee	1.45	1.92	94	1.10	1.02	73	.48
Dyeing and tanning substances	1.12	1.08	87	75	79	72	.47
Mica	1.03	68	39	31	45	69	.46
Rubber, raw	1.79	1.30	45	9	31	65	.43
Oils	72	47	57	54	57	55	.37
All others	12.50	9.78	7.63	6.23	6.49	6.14	4.04
Total value of exports	310.81	220.49	155.89	132.27	146.31	151.21	100

¹ Review of the Trade of India in 1929-30 and 1934-5.

Indian cotton piece-goods to the Straits Settlements, Iran, Iraq, Ceylon, etc., are not very important (only 1·7% of the total production in India in 1934-5). *Jute*—raw and manufactured—constitutes the next important item of our export trade. It accounted for over 21% of the total exports in 1934-5.

Tea ranks next to jute in our export list. 81% of the total quantity of tea produced in India is exported, mostly to the United Kingdom, which purchased over 90% of our total exports in 1934-5.

The export of *food grains*—pulses and flour—occupied the fourth place among Indian exports in 1934-5. Rice is the principal item under this head, accounting for 91% of the total quantity of food grains and flour exported. *Oil-seeds* come next. The principal seeds—linseed, groundnut, copra—are exported mostly to the continental countries. The exports of linseed to the United Kingdom have increased largely owing to the 10% Ottawa preference in that market in favour of Indian linseed. The total exports of oil-seeds have diminished in recent years owing to regulation or restriction of imports into European countries like Germany, France and Italy.

Exports of *metals and ores* come next in order of importance. Manganese ore represents about 90% of the total value of ores exported.

Hides and skins are sent to the United Kingdom, the United States, Germany, France, Italy, Japan, etc. There is not now the same demand for Indian hides and skins in European markets as in former years. Raw wool, lac, oil-cakes, tobacco, spices, coffee and mica are other export articles of some importance.

§18. **Direction of India's trade.**—The percentage shares of foreign countries in India's total *import trade* may first be considered. The United Kingdom's share was 40·6% in 1934-5 as compared with 64% in 1913-14. The decrease is due partly to the adverse effects of the war and partly to increasing competition in the Indian market of rivals like Japan, the U.S.A. and Germany. Latterly there has been some recovery in the share of the United Kingdom, and the Ottawa preferences to imports from the United Kingdom were intended to help this process of recovery. Japan contributed as much as 15·7% to our imports, as compared with only 2·6% in 1913-14. In 1934-5 Germany's share was 7·6%. The United States supplied 6·4% of our imports (as compared with 2·6% in 1913-14);

Belgium's share was 6·4%; Java's 1·4%; France's 1·2%; and Ceylon's 1%.

On the *export side*, the United Kingdom, as previously mentioned, is our biggest single customer and took 31·6% of our total exports in 1934-5 as compared with 23·4% before the war. Japan took 15·7% of our total exports, the most substantial of her purchases being raw cotton. The United States of America followed with 8·5%. The shares of these countries before the war were 9·1% and 8·7% respectively. Our trade with Japan has thus considerably increased in imports as well as exports. Germany took only 4·6% in 1934-5 as compared with 10·6% in 1913-14. Ceylon's share in 1934-5 was 4·2%, Italy's 3·9%, France's 3·5%, Belgium's 2·8%, Austria and Hungary's 2·8%, and Australia's 1·8%.

§19. **Re-exports.**—India has a certain amount of re-export (*entrepôt*) trade. Being situated in the centre of the eastern hemisphere, she is fitted to act as a distributing centre, particularly for those Asiatic countries which have no seaboard of their own. The re-export trade is mainly in manufactured articles, especially textiles, imported from the western countries, which are taken by Iran, Muscat and East Africa. The principal article re-exported to western countries is raw wool, which is imported across the land frontier of India. The bulk of it goes to the United Kingdom. The total value of the re-export trade was Rs. 3·55 crores in 1934-5 as compared with Rs. 4·62 crores in 1913-14.

§20. **India's balance of trade.**—A large surplus of exports over imports of merchandise is, as already mentioned, a feature of India's foreign trade. India's average favourable (visible) balance of trade in merchandise was Rs. 78 crores in the five pre-war years, Rs. 76 crores during the five war years and Rs. 53 crores during the five post-war years ending 1923-4. After rising during the next five years to Rs. 113 crores it dropped to the low figure of Rs. 43 crores during the five years ending 1933-4. In the year 1932-3, it was only Rs. 3 crores, the smallest on record. Since then it has partially recovered, as noticed above. During these last five years, large exports of gold (over Rs. 265 crores from September 1931 to March 1936) have helped to maintain the visible balance in merchandise and treasure and enabled India to meet her large overseas obligations. One of the most pressing economic problems of today is how to revive our export trade in merchandise and

thus restore the favourable trade balance so essential for enabling us to meet our obligations abroad.¹

§21. **The 'drain' theory.**—India's habitual excess of exports over imports has given rise to the 'drain' theory, which at one time loomed large in economic discussions in the country. This excess has been looked upon by some people as a measure of the tribute paid by India to England owing to her political connexion. It is clear that for her various outgoings (*invisible imports* such as interest on capital borrowed abroad, salaries and pensions of officers payable abroad, profits of bankers, and shipping and insurance companies) India receives some kind of return; but the question is whether the return is in every way adequate. In an elementary book like this it is not possible to deal with the pros and cons of this controversy, and the interested reader must be referred to our larger work.² Apart from the question of adequate return, it is clearly desirable to lessen the amount of the Home charges and other debit items of India, say by reducing our borrowings abroad, by Indianizing the civil and military services, and generally by encouraging the economic development of the country, and equipping it with its own banking, shipping and insurance organization.

§22. **Land-frontier trade.**—In spite of her extensive land frontier of 6,000 miles, India's land-frontier trade is very limited owing to the existence of only a few openings or passes like the Bolan Pass on the North-West Frontier. There has from very ancient times existed a certain trans-frontier trade with countries like Afghanistan, Central Asia, Iran, Nepal, Tibet, the Shan States, western China and Siam. The principal imports are fruits, vegetables, nuts, raw wool, raw silk and living animals. The main exports are cotton goods, sugar, raw cotton, tea and leather manufactures.

Internal Trade

§23. **Coasting trade.**—The internal trade of India falls into two sections: (i) the coastal trade, and (ii) inland trade. The total coasting trade of India amounted to Rs. 175.64 crores in 1931-2. The coasting trade between Burma and India is of special interest. Burma's imports are coal,

¹ See Part I, ch. xii, §4; and also §21 below.

² *Indian Economics*, vol. II, ch. vi.

cotton piece-goods, jute bags, pulse and betel-nut, while its exports are rice, kerosene oil, petroleum, candles, teakwood and timber. In the foreign as in the coast-wise trade of India, the principal ports are Bombay, Calcutta, Rangoon, Karachi, Madras, Cochin, Tuticorin and Chittagong, the first five being more important than the others.

§24. **Inland trade.**—India, unlike the United Kingdom, is more vitally interested in her internal trade than in her external trade, having regard to her big size, large population, vast and varied resources and the diversity of her physical and climatic conditions. The improved means of communication and transport have also greatly added to the volume of this trade. According to the official publication *Inland Trade of India* for 1920-1, the total trade was nearly Rs. 1,500 crores. This according to some critics is an underestimate. The importance of the inland trade is not always duly recognized, and disproportionate attention is paid to the external trade. There is a great need for a vigorous policy of fostering internal trade, especially since our external trade has latterly diminished considerably and is at the mercy of arbitrary forces which we cannot control.

The principal trade centres of India, apart from the five principal ports of Calcutta, Bombay, Karachi, Rangoon and Madras, are: Cawnpore, Delhi, Amritsar, Agra, Lahore, Benares, Lucknow, Nagpur, Jubbulpore, Mirzapur, Madura, Gwalior, Dacca, Mandalay, Srinagar, Sholapur, Amraoti, Hyderabad (Deccan), Allahabad, Jaipur, Baroda, Bangalore and Mysore.

§25. **Commercial intelligence.**—As compared with more advanced countries like Germany, Japan and the United States, India's commercial intelligence system and trade organization are poorly developed. Increasing attention is, however, now being paid to this matter. There is the official organization consisting of the Department of Commercial Intelligence and Statistics, also the Indian Trade Commissioners in London and Hamburg. Besides these there are non-official bodies like the various European and Indian Chambers of Commerce which interest themselves in the industrial and commercial development of the country. It is needless to add that accurate and full information regarding foreign and inland markets and publicity regarding trade and production are essential for the proper expansion of our commerce and industry.

SUMMARY

TRANSPORT

The prosperity of a nation depends greatly on a good system of communication, which breaks down economic isolation and is the very life of trade. It is essential for the proper utilization of a country's resources. The means of communication in India were very defective until the middle of the nineteenth century. There were only a few roads and natural waterways, and pack animals had to be largely used. A veritable economic revolution has been wrought since then by the construction of a network of railways and roads.

Railways.—Indian railway history has passed through various phases. Between 1844 and 1869 railways were constructed and managed by British companies enjoying guaranteed interest. This old guarantee system being found expensive was abandoned for a short period (1869-79) in favour of State construction and management, which proved ineffective. The guarantee system was re-adopted in 1879. It was, however, considerably modified in favour of the Government, which gradually acquired the ownership of most of the trunk railway lines, although management was largely left in the companies' hands. Railways, which were a losing concern until 1900, began to yield steady profits, and in 1908 the programme system, under which every year the State provided for a large capital expenditure on railways, was adopted. During the war the railways suffered serious deterioration owing to the pressure of work and drastic reduction in the capital expenditure.

On the recommendation of the Acworth Committee on Indian Railways, railway policy was overhauled. Provision was made for larger capital expenditure. Under the policy of management of railways by the State recommended by the Committee, the management of two trunk lines (the G.I.P. and E.I. railways) was transferred to the State. The railway budget was separated from the general budget. Owing to the severe trade depression of recent years, the railways are facing continual deficits and have been unable to make their fixed contribution to the general revenues.

There is a great need for further railway development in the country as many areas are still leading an isolated existence.

Roads.—Lord Dalhousie was responsible for a vigorous road policy as he was also mainly responsible for the railways. A Central Public Works Department and Provincial Public Works Departments were established, and trunk roads were constructed. Four such great roads exist, and also subsidiary roads, the total mileage of metalled roads being 74,541. The mileage of *kachha* roads is 189,971.

The advent of motor transport and its remarkable development in recent years have emphasized the need for more and better roads, especially in rural areas where their deficiency is keenly felt. Railways and roads are largely complementary. A new road policy was adopted (1929-30) on the recommendation of the Road Development Committee, which is characterized by a coordination of local road programmes and grants by the Central Government for this purpose to the provinces out of a Road Development Account, to which the proceeds of an additional duty on petrol are credited.

The organization of the Central and Provincial Public Works Departments is described.

Water transport.—Water transport falls into two divisions: Inland waterways and Marine transport. Northern India is better served by natural waterways like the Indus and Ganges than peninsular India. Railways are a serious rival today to river transport.

In spite of her extensive coastline, a large volume of coasting and oceanic trade, and her reputation as a sea-faring country in the past, the present position of India's shipping and shipbuilding industries is very unsatisfactory. There is an urgent necessity to develop an Indian mercantile marine. The establishment of I.M.M.T.S. *Dufferin* on which marine training is given to Indian cadets is a step in this direction.

TRADE

India's foreign trade is very ancient in origin. Early trade was in rare and costly commodities. A large quantity of gold was even then imported. During the Mohammedan period the overland trade of India received a stimulus. Internal communication was also improved. The discovery of an all-sea route to India brought the western European nations into touch with India, and in the struggle for the Indian trade which followed, England came out as the victor. The nature of India's trade underwent a change and she came to export raw materials and food-stuffs and to import finished goods. From 1850 onwards, the progress of railway and road construction in India and the opening of the Suez Canal gave a fillip to India's foreign trade. Towards the end of the last century India's trade with countries other than the United Kingdom (i.e. Germany, the U.S.A. and Japan) began to increase rapidly. The war adversely affected India's foreign trade. After a temporary recovery, that trade received an even more serious setback as the result of the world economic depression. Since 1933-4 a partial recovery seems to have occurred.

The main characteristics of India's foreign trade are preponderance of manufactured goods on the import side and of raw materials and food-stuffs on the export side; wide range of imports as compared with a restricted list of staple exports; predominant position of the United Kingdom, especially on the import side; and excess of exports over imports of merchandise.

The principal imports in the order of their importance are cotton manufactures, machinery and mill work, metals and ores, oils, vehicles (motor) and instruments. Sugar now occupies a secondary position.

The chief exports are cotton and jute (raw and manufactured), tea, grain, pulse and flour, oil-seeds, metals and ores, lac, hides and skins, wool, oil-cakes, etc.

Great Britain's dominant position is indicated by the fact that her share in imports was 40.6% and in exports 31.6% in 1934-5. She is however meeting with increasing competition from Japan, the U.S.A., Germany, etc. Having lost ground during and since the war she is now showing some recovery. The distribution of the export trade is more even than that of our import trade. Here again Japan ranks only next to the United Kingdom.

The volume of India's re-export trade and land-frontier trade is at present very small.

Before the trade depression of the last six years, India used to have a large trade balance in her favour, but owing to the serious reduction in her export trade in merchandise, in recent years this trade balance has appreciably decreased. The total balance has been maintained by large exports of gold.

The usual excess of exports over imports of goods has given rise to the 'drain' theory.

The *internal trade* of India includes the coasting and inland trade. The coasting trade with Burma is of great importance.

The internal trade of a country of India's size and varied resources is much greater than the external trade. It needs to be still further developed.

The commercial intelligence system and trade organization in India are poor when compared with those of other countries.

CHAPTER VI

INDIAN CURRENCY, PRICES AND BANKING

THE INDIAN CURRENCY SYSTEM

§1. **A brief history of the rupee.**—Before the introduction, in 1835, of a uniform rupee as the sole legal tender in India, both gold and silver coins were in use in India. India was thus for a long time virtually on a bimetallic standard. Silver rupees were largely in circulation in Northern India under the Mohammedans, while gold coins had an important circulation in Southern India, for instance, the gold pagoda in the Madras Presidency. The gold mohur had a limited circulation in Northern India. At the beginning of the nineteenth century there were numerous gold and silver coins in circulation owing to the absence of a single central power in India. Gradually, as the result of currency reform effected by the East India Company, a uniform rupee weighing 180 grains (a tola) $\frac{1}{16}$ ths fine (i.e. 165 grains of pure silver and 15 grains of alloy) came to be established by 1835. Gold coins were at the same time demonetized, and the mints opened to the free coinage of silver. The Indian system thus came to be one of silver monometallism (silver standard), instead of the bimetallic system which had formerly prevailed.

This arrangement lasted till 1893, when the mints were closed to the free coinage of silver on private account on the recommendations of the Herschell Committee. This step was taken to meet the grave financial embarrassment of the Government of India arising from the fall in the gold price of silver and consequently in the gold exchange-value of the rupee since 1871. This increased their rupee liabilities in respect of the Home charges payable in sterling or gold in England. The gold value of the rupee, which was about 2s. in 1871, fell to about 1s. 2d. in 1892. The falling rupee also affected adversely our foreign trade and the investment of foreign capital in India. As free coinage was stopped from 1893 the rupee gradually rose to 1s. 4d. by 1898 and was fixed at that level on the recommendation of the Fowler Committee. In 1899 the British sovereign was made legal tender in India side by side with the rupee at the rate of £1 = Rs. 15 or Re. 1 = 1s. 4d.

§2. **The Gold Exchange Standard.**—The Fowler Committee had recommended a Gold Currency Standard for India, and a gold mint. But for various reasons what the authorities had ultimately come to adopt was the Gold Exchange Standard as explained in Chapter X (§15) of Part I. The value of the Indian rupee was kept at 1s. 4d. through the sale in London of rupee drafts (Council Bills) on the Government of India by the Secretary of State on the one hand, and on the other, through the sale of sterling drafts (called Reverse Councils), drawn on the Secretary of State and payable in sterling or gold in London against tender of rupees to the Government of India. The sale of both kinds of drafts was effected at rates approximating to 1s. 4d., allowing for the cost of importing gold into and exporting gold from India respectively.¹

There were two different currency reserves maintained by the Government. One was the Gold Standard Reserve (established in 1900), consisting of the profits on fresh coinage of rupees issued to the public by the Government of India. The bulk of it was held in London and was mostly invested there in sterling securities. Sterling drafts (Reverse Councils) were sold in India against this reserve during the exchange crisis of 1907-8 in order to support the rupee. The other reserve was the Paper Currency Reserve, partly held in India, and partly in London, as more fully explained below.² Council Bills were sold partly against the Paper Currency Reserve in India and partly against the cash balances of the Government of India. The Chamberlain Commission of 1913-14 recommended the continuation of this system (the Gold Exchange Standard) although public opinion in India strongly desired a Gold Currency Standard.

The Indian currency system suffered considerable disturbance during the years of the war (1914-18). The price of silver in sterling rose so high that it became profitable to melt the rupee coins. The Government, therefore, raised the exchange-value of the rupee by successive steps and carried it to 2s. 4d. (in December 1919). It should be noted in this connexion that since 1893 the rupee had come to be a token coin, its bullion or intrinsic value being less than its legal value of 1s. 4d. Thus before the war its intrinsic value was about 10d., while its legal value was 16d. Silver having further fallen in value, the intrinsic value of the rupee today is only about 8d.

¹ See Part I, ch. xii, §16.

² See §8.

The Babington Smith Committee, appointed in 1919, recommended a 2s. gold rupee. They thought that the rise in the value of silver had come to stay and that, in order to maintain the token character of the rupee, the high rate they recommended was essential. The Government's attempt (in 1920) to keep the rupee stable at this rate by the sale of Reverse Councils failed, and the rupee was left to itself for some time.

§3. **Gold Bullion Standard.**—In 1925, the Hilton-Young Commission was appointed. It recommended the Gold Bullion Standard for India instead of the Gold Currency Standard which was favoured by the Finance Department of the Government of India and by several Indian witnesses who gave evidence. The Commission also recommended a gold value (8.47 grains) for the rupee corresponding to 1s. 6d. (gold), although there was a strong opinion in the country in favour of the pre-war ratio of 1s. 4d. (i.e. 7.53 grains of gold). This gold value was to be maintained by the proposed Reserve Bank of India as the new currency authority, which was, like the Bank of England, to buy and sell gold bullion in quantities of not less than 400 ounces or 1,065 tolas. Thus anyone who took 22,629 rupees to the Reserve Bank was to obtain 400 ounces of gold in the form of bars (the rate being approximately Rs. 21-7-9 for a tola of gold allowing for the cost of transporting gold to London).

In March 1927, accordingly, a new Currency Act was passed which provided for the 1s. 6d. ratio as recommended by the Hilton-Young Commission. Until the establishment of the Reserve Bank the Government of India was to be in charge of the currency system and was to sell gold, or, at its option, sterling exchange (i.e. drafts payable in sterling in London) in quantities of not less than 400 ounces of gold at the rate of Rs. 21-3-10 for a tola of gold, the sterling rate being 1s. 5 $\frac{9}{16}$ d., allowing for the cost of transport of gold from Bombay to London. It was also to issue rupees and notes against gold in the form of bars containing not less than 40 tolas (or 15 oz.) of fine gold, at the rate of Rs. 21-3-10 (1s. 6d. per rupee). The sovereign ceased to be legal tender, although the Government undertook to give Rs. 13-5-4 for every sovereign received. Some approaches towards the Gold Bullion Standard were thus made, its introduction in a full-fledged form being postponed till after the establishment of the Reserve Bank. Till then the Government could sell sterling exchange (as it did in practice) on London, instead of

delivering gold itself in India. To that extent it was still a Gold Exchange Standard.

§4. **The rupee linked to sterling.**—This system remained in operation until 20 September 1931, when England went off the Gold Standard and India followed suit. As announced at the same time by the Secretary of State, the rupee was linked to sterling at 1s. 6d., which remains the current official rate today. The Reserve Bank of India Act of 1934 has legalized this rate and made the Bank responsible for maintaining the rupee at 1s. 6d. For this purpose, the Bank has to buy sterling in India at a rate not higher than 1s. 6 $\frac{3}{4}$ d. for a rupee and sell sterling for immediate delivery in London at a rate not below 1s. 5 $\frac{1}{8}$ d. for a rupee, provided the amount of sterling in both cases is not less than £10,000. India's present monetary standard is thus the Sterling Exchange Standard. The Reserve Bank Act, however, provides for the submission of a report by the Reserve Bank on the future monetary standard best suited to India when the international monetary position becomes sufficiently clear and stable.¹

§5. **The ratio controversy.**—Recent Indian currency history has been characterized by a prolonged controversy regarding the proper rate or ratio to be adopted for the rupee in terms of sterling. The Hilton-Young Commission argued that at the ratio of 1s. 6d., which they recommended, prices in India had already attained a substantial measure of adjustment with world prices, so that any change in the ratio would mean widespread economic disturbance. The criterion suggested by the Commission is universally accepted: the difference of opinion was not on point of principle but on point of fact. A strong body of opinion held that the 'substantial adjustment' assumed by the Commission had not in fact occurred, and if 'widespread economic disturbance' was to be avoided a lower ratio, preferably the old ratio of 1s. 4d., should be adopted. The question is a most controversial one on which it is impossible to achieve unanimous agreement. One of the things, however, that we must bear in mind is that if a certain ratio has been maintained for a fairly long time, the presumption is that wages, prices, etc. have become adjusted to it and that it would be unwise to disturb it unless conditions have obviously changed again, necessitating the adoption of some other ratio. Another thing to be borne in mind is that the reactions, good or bad, of a given change

¹ See also §6.

in the ratio are of a temporary character, though people often argue as if the advantages and disadvantages would continue to accrue indefinitely.¹

§6. **The sterling link and exports of gold.**—There are two other currency controversies in India today. One is regarding the *linking of the rupee to sterling* mentioned in §4 above. It is argued against the sterling link (which means the Sterling Exchange Standard again) that India should not tie its currency to that of any *one* country, since in that case she has to share in the economic fluctuations to which that country may be subjected. It is further contended that the sterling link (1s. 6d.) gives British goods a preference in Indian markets and deprives India of the freedom to devalue (reduce the ratio of) her rupee (in terms of sterling and other currencies) so as to raise the rupee prices for the benefit of her agriculturist population. In defence of the sterling link it is maintained that India, being a debtor country with large sterling liabilities (Home and other charges) to be met annually, cannot with advantage sever the link between the rupee and sterling and leave the rupee to itself. It is also held that fixity of sterling is very convenient to our foreign trade, the bulk of which is with sterling-using countries. In any case, as already pointed out, the Sterling Exchange Standard is regarded as a temporary arrangement to last only so long as world monetary conditions continue to be unstable.

The other controversial question relates to the large *exports of gold* from India, which, since Great Britain went off the Gold Standard in September 1931, had exceeded Rs. 274 crores by June 1936. As pointed out in the previous chapter they have, to some extent, taken the place of the exports of goods and have served to maintain the favourable balance which is essential if India is to meet her liabilities abroad. The price of gold in rupees (as in sterling) has greatly increased, being now (June 1936) Rs. 34-8 per tola as compared with Rs. 22 before the exports commenced; this has tempted those who hoarded gold to sell it, and the high world price has led to its export. Also, owing to economic depression, many persons have been compelled to part with their gold. This is called 'distress gold'. How much of the gold exported is 'distress gold' is a matter for argument. Some critics have taken an alarmist view of these exports of gold and have advocated the levy of a tax on

¹ See Part I, ch. xii, §17.

exports of gold or their complete prohibition, with a view to keeping the gold in the country and strengthening the gold reserves of the Reserve Bank of India. The objection to this is that it would be very costly to buy gold at the present high rate and that such purchases would further lead to a great deal of speculation. The Government has so far not acted on any of these suggestions.

§7. **The paper currency system.**—We shall now give a brief account of the paper currency system in India. The Paper Currency Act of 1861 established Government monopoly of issuing currency notes payable to the bearer on demand. The three Presidency Banks¹ had the privilege of issuing their own notes payable to bearer on demand. These, however, had only a very limited circulation. Government Currency Notes were issued in denominations of Rs. 5, 10, 50, 100, 500, 1,000, and 10,000. The country was divided into seven circles (Calcutta, Bombay, Madras, Cawnpore, Lahore, Karachi and Rangoon). Notes were legal tender only in their respective circles of issue and convertible into rupees at the Currency Offices. In order to popularize them, they were gradually made universal, i.e. legal tender throughout India: now all except the highest (Rs. 10,000) are universal notes. Facilities for converting the notes into rupees at the various Government Treasuries and branches of the Imperial Bank of India were also extended to the holders of notes.

§8. **The paper currency reserve.**—Until 1920, the paper currency reserve held against the currency notes was regulated on the British model of 1844, i.e. the fixed fiduciary reserve system.² Thus before the war the maximum reserve which could be invested in securities was Rs. 14 crores (10 crores being rupee securities of the Government of India and 4 crores, sterling securities in England). The remainder was held partly in silver coins (including bullion), and partly in gold (coin and bullion). A portion of the gold was held in London, all the coined rupees being held in India. Before the war the total gross circulation of notes issued was Rs. 66.12 crores. During the war it was greatly increased and stood at Rs. 180 crores at the end of 1919. Much of this increase was effected against sterling securities (British Treasury Bills) which were transferred to the Secretary of State for India in London in payment of war expenditure incurred by the Government of India on behalf of the British

¹ See §19.

² See Part I, ch. xi, §17 (i).

War Office. The maximum permissible invested Reserve stood at Rs. 120 crores in September 1919. Rs. 100 crores of this was in British Treasury Bills.

In 1920, on the recommendation of the Babington-Smith Committee, the proportional reserve system was adopted, the Paper Currency Act of that year providing for a 50% metallic reserve against notes. The same Act authorized the issue of 'emergency' currency during the busy season (when owing to the harvesting and marketing of crops there is a large seasonal demand for currency) up to Rs. 5 crores,¹ as a loan to the Imperial Bank against the security of inland trade bills (*hundis*) accepted by the Bank.

§9. **Transfer of note issue to the Reserve Bank.**—As recommended by the Hilton-Young Commission, the issue and management of paper currency were transferred to the Reserve Bank of India on its inauguration in April 1935. The existing Government Currency Notes will be replaced by those issued by the Reserve Bank. These new notes will be guaranteed by the Government of India and, like the old Government notes, will be convertible into rupees on demand. The old separate Gold Standard and Paper Currency Reserves have been amalgamated into one Currency Reserve which has been transferred to the Reserve Bank's Issue Department (which, as in the Bank of England, is to be kept separate from the Banking Department). In the Reserve Bank of India Act of 1934, it is provided that not less than 40% of the assets of the Reserve held against notes, shall consist of gold coin, gold bullion, or sterling securities, the amount of gold coin and bullion being not less than Rs. 40 crores in value. The amount of rupee securities of the Government of India shall not exceed 25% or Rs. 50 crores, whichever amount is greater. The remaining assets may be held in rupee coin and commercial bills of exchange and promissory notes payable in India. Not less than $\frac{1}{7}$ ths of the gold shall be held in India. The Bank is authorized to reduce the Gold Reserve below 40% under certain circumstances, and must in that case pay a tax on the deficiency.

§10. **Subsidiary coinage.**—Apart from full legal tender standard coins (the silver rupee and half-rupee) and notes, there are in India certain subsidiary coins, which are all legal tender up to one rupee, namely, the four-anna and two-anna silver and nickel pieces, the one-anna nickel piece, and the

¹ The limit was raised to Rs. 12 crores in 1923.

various bronze coins—the pice ($\frac{1}{4}$ anna), the two-pice ($\frac{1}{2}$ anna) and the pie ($\frac{1}{12}$ anna).

PRICES IN INDIA

§11. **Movements of Indian prices.**—The table below indicates the general course of prices in India since 1861, the year 1873 being taken as the basic year. The general index number is based on the wholesale prices of 39 articles (28 exported and 11 imported articles).

INDEX NUMBERS OF PRICES IN INDIA

(Price in 1873 = 100)

Year	General Index Number for 39 articles	Year	General Index Number for 39 articles
1861	90	1918	225
1865	107	1919	276
1870	102	1920	281
1875	94	1921	236
1880	104	1922	232
1885	87	1923	215
1890	100	1924	221
1895	104	1925	227
1900	116	1926	216
1905	110	1927	202
1910	122	1928	201
1913	143	1929	203
1914	147	1930	171
1915	152	1931	127
1916	184	1932	126
1917	196	1933	121

We indicate below the general character of the price movements between 1861 and 1893.

(i) *Rising prices* (1861-7).—The American Civil War led to a scarcity of cotton for the Lancashire mills. The resulting high price caused a great influx of precious metals into India and extensive coinage of silver rupees, which was followed by a considerable rise of prices in accordance with the quantity theory of money.¹

(ii) *Falling prices* (1866-83).—Except for a sudden jump in the prices of food-stuffs between 1876 and 1879 owing to a great famine, prices were falling between 1866 and 1883.

¹ See Part I, ch. x, §30.

The general fall in earlier years may be regarded as a reaction against the previous high prices, and in later years as a counterpart of the general downward movement of prices in western countries. This was attributed to the slackening of gold production at a time when there was increased demand for it, and to the growing volume of trade under the stimulus of improvements in the arts of production.

(iii) *Rising prices (1883-93).*—The fall in prices was arrested in India owing to the fall in the price of silver, causing heavy rupee coinage before the mints were closed in 1893 and the consequential depreciation of the rupee. The output of silver outpaced the production of commodities and ushered in an era of rising prices, which may be regarded as continuing right up to 1920 (except for the brief interval 1893-9 when prices went down somewhat because of the contraction of currency due to the closing of the mints).

§12. *Rising prices from 1890 to 1912.*—In 1912 the Government of India appointed Mr K. L. Datta to inquire into the causes of the rise in prices. The period covered by the inquiry was 1890-1912, during which time there had been a general and continuous rise in prices throughout India, particularly since 1905. The Index Number of Prices (taking 1890-4 as the base period=100) rose to 116 in 1905, and to 141 in 1912. During this period prices indeed rose all over the world, but the rise was higher in India than anywhere else.

(i) *Causes peculiar to India.*—According to the Prices Enquiry Committee the causes of this rise which were peculiar to India were (a) shortage in the supply of agricultural products and raw materials; (b) increase in the demand for these commodities; (c) development of railways and other communications in India, in consequence of which the rise in prices in one part of the country was felt in other parts; (d) improvement in the general monetary and banking facilities and increase of credit; and (e) increase in the volume of the circulating medium. Currency inflation (under the Gold Exchange Standard) on account of the excessive coinage of rupees on occasions (e.g. in 1905-7) to pay off the Council Bills sold by the Secretary of State was one of the important causes of the rise in prices in India.

(ii) *World factors.*—Prices in India also rose during this period owing to the operation of the following world factors: (a) shortage in the supply of, and increase in the demand for, staple commodities in the world's markets; (b) the increased supply of gold from the world's mines;

(c) development of credit; (d) destructive wars and larger standing armies and navies.

§13. **Prices during the war.**—The pre-war tendency of prices to rise was greatly accentuated during the years 1914-20 by the conditions created by the war. Prices rose all over the world, largely on account of the general inflation of currency.¹ In India itself there were large issues of new rupees and currency notes to liquidate the trade balances in favour of India and to meet the war expenditure incurred by the Government. Taking prices in 1914 as 100, the Index Number of Calcutta wholesale prices rose to 201 in 1920. This rise, while it was unprecedented for India, was smaller than in Germany, France or even England. One reason for this was that the inflation of currency was far less in India. The prices of food grains and raw materials rose sharply because of the increased demand for them from the Allies, and partly also because of agricultural scarcity in India in 1918 and 1920. The prices of imported goods like cloth and glass rose because of the serious shortage of imported manufactured articles.

§14. **Slump in prices.**—Having reached their maximum in 1920, prices began to decline from 1921 in India as in the rest of the world, following the contraction of currency, increased production and revival of trade.

The downward movement of prices has been greatly accelerated since the Wall Street collapse in America (October 1929), which is usually regarded as the beginning of the prolonged world economic depression of the last six years. The great drop in prices all over the world during these years has been attributed partly to the shortage and maldistribution of gold, which has led to contraction of currency and credit, and partly to overproduction in comparison with the normal rate of consumption, of raw materials as well as of manufactured articles, especially of raw materials. The fall has been greater in agricultural countries like India than in industrial countries like England. As compared with 1914 (100), the Calcutta wholesale price Index Number for September 1929 was 143. In September 1931, when Britain went off the Gold Standard, the Index Number had come down to 91, i.e. actually below the pre-war level. Owing to the rupee being linked to sterling, prices rose for a time and the Index Number stood at 98 in December (1931). This advantage was not maintained, and the Index Number fell

¹ See Part I, ch. x, §24 (iv).

to 88 in the following December (1932). Since then prices have fluctuated within a narrow margin (the Index Numbers for April and May 1935 being 88 and 91 respectively) and continue to be appreciably lower than in the pre-war period.

§15. **Effects of rising and falling prices in India.**—We have already discussed the effects of rising and falling prices¹ and the conclusions reached are of course applicable to Indian conditions. We may, however, make a few supplementary remarks. It is sometimes argued that India, being a debtor country, benefits from high prices and stands to lose by low prices, especially of the articles she exports. The cultivators, who form the bulk of the population, benefit from high prices and suffer when prices are low as today. There are, however, one or two considerations which must be borne in mind in this connexion. In the first place, there is no guarantee that, when prices rise, the cultivator will be able to realize in practice all the possible advantages. His profits, it is well known, are liable to be intercepted by a variety of middlemen. Then again, to the extent that the cultivator consumes the produce he raises, he is not affected either by high or low prices. There is no doubt, however, that the cultivator has immensely suffered during the last six years owing to the big drop of prices. His fixed charges (namely, land revenue, rent, interest, etc.) have become more burdensome, and his purchasing power has been greatly reduced. The middle-class persons living on fixed incomes in India suffered during and after the war owing to high prices. Today the low prices have offered them a welcome relief, but on the whole they have by no means escaped the adverse effects of the depression, owing to the difficulty of finding employment. Falling prices have also prejudicially affected the manufacturing and commercial classes by reducing their profit margins. Similarly, in the case of the wage-earners, although real wages may have gone up owing to falling prices, the employment available has become smaller in volume and more irregular in character.

The falling prices during the last six years have produced other serious effects on the economic life of the country. The reduction in the purchasing power of the agriculturist has had injurious reactions on industrial enterprises, professional classes, internal and external trade, and on public finances. The great need of the hour is to raise the price level so as to make production remunerative, relieve the

agriculturist and restore the economic prosperity of the country so largely dependent on the revival of the agriculturist's purchasing power.

INDIAN BANKING

§16. **The main constituents of the Indian money market.**—The money market¹ and the banking system of India are made up of the following principal constituents: (i) the Reserve Bank of India, (ii) the Imperial Bank of India, (iii) the Foreign Exchange Banks, (iv) the Indian Joint-Stock Banks on European lines and (v) the indigenous bankers called by different names in different parts of the country (e.g. Shroffs, Multanis, Chettis, Baniyas, Marwaris, Mahajans, Sahukars). The first four constitute the central part or the European money market; the last is the bazaar part or indigenous money market. Cooperative Banks occupy a middle position. Other smaller constituents of the money market are Postal Savings Banks, Land Mortgage Banks, Industrial Banks, and indigenous credit agencies like Loan Offices in Bengal and *Nidhis* and *Chit* Funds in the Madras Presidency. We shall now consider the more important constituents of the Indian money market, but before we do so it is necessary to give a brief history of banking of India.

§17. **Indigenous banking.**—Indian banking is as ancient as Indian commerce. From times immemorial the country has been served by its indigenous bankers, and the *hundi*,² which is their principal credit instrument and which is analogous to the western bill of exchange, has been in use in this country for several centuries. India possessed a system of indigenous banking many centuries before the science of banking was developed in Europe. Although the early Mohammedan invasions of India initiated a period of disturbance, indigenous banking continued to flourish during the Mogul period. The indigenous bankers performed numerous functions. They accepted deposits, gave loans, acted as State financiers and mint officials, changed money, dealt in *hundis*, and financed the trade of the country. The

¹ The money market of a country is that 'special organization by which the work of supplying credit and capital is carried out and which consists of a nucleus of specialized institutions, including the banks, stock exchanges, discount houses, bill brokers, investment banks, etc.'—P. A. Wadia and G. N. Joshi, *Money and the Money Market in India*, p. 304.

² See Fig. 18.

East India Company for a time patronized them. Towards the end of the eighteenth century several circumstances appeared which were adverse to their continued prosperity,

SPECIMEN OF A *Hundi* (translated)

To Bhai Haji Sharif Ahmad at the port of Bombay the writer, Bhai Uman Daud, sends salutations. I have taken from the General Book Depot here Rupees Two Hundred, in figures Rs 200/-, half of rupees four hundred, in cash for the full amount. At the time when this *hundi* is presented (to you) pay the amount *shahjog** after ascertaining his respectability, title and address.

Hundi written at Bijapur on Samvat 1992 Chaitra vad 8 day, Wednesday 15 April 1936.

Written by Bhai Uman Daud, who sends salutations.

On the reverse:

Rs 200/-

In writing, two hundred rupees,
double of one hundred rupees.

FIG. 18.

* A *shahjog hundi* is payable only to a *shah*, i.e. a respectable person known in the bazaar: it does not correspond to a 'bearer' cheque, and in point of safety is comparable to a crossed cheque.

such as the political disorder in the country; the competition of the European Agency Houses in Calcutta and Bombay, which also did banking business and received the patronage of the East India Company; the establishment of European types of banks such as the Presidency Banks; and the introduction of a uniform currency which hit one important part of their business, namely money-changing. The indigenous bankers, however, have managed to survive in spite of these difficulties. They continue to be indispensable to the rural community and satisfy the banking needs of about 90% of the people. The Indian banker is to be found in almost every village, town and city in the country. He finances the agriculturist, the petty artisan and small trader, assists in the movements of the crops to the consuming areas or to the ports, and helps in the distribution of all kinds of goods in the interior of the country. He accepts deposits, although unlike the modern bank he does not usually allow them to be operated by means of the cheque. He issues, buys, and sells *hundis*, either for remitting funds from one centre to another, or for financing trade. His contact with European or the joint-stock banks in the country is very slight. Ordinarily, he operates in the money market with his own funds independently of them, and indeed often competes with them. But during the busy season, when he has laid out all his funds, he borrows additional funds from the Imperial Bank or other banks in the commercial towns and gets the necessary accommodation either by having his *hundis* discounted by these banks or by borrowing against the security of promissory notes or goods. The Imperial Bank and other joint-stock banks extend these facilities only to well-known shroffs who are on their list of approved borrowers. During the busy season, therefore, the bazaar *hundi* rates charged by one shroff to another follow the bank rate or money rates charged by banks, being higher than the latter. During the slack season, however, the situation may be the reverse.

Since the Reserve Bank is now established as the central currency- and credit-controlling authority for the whole country, it is thought necessary that the Bank should have a more intimate contact with the indigenous bankers, so as to be able both to help them and to control their banking or credit operations more or less as in the case of the Scheduled Banks.¹ The Reserve Bank of India Act (1934) accordingly

¹ See §19.

requires the Bank to submit suitable proposals in this behalf within three years after its establishment.

§18. **The European system of banking.**—The European system of banking was first introduced in India by the Agency Houses of Calcutta which had a banking side as an aid to the conduct of their main business of commerce. The Bank of Hindustan, promoted by Messrs. Alexander & Co., is believed to be the first purely banking institution on European lines.¹ The Agency Houses came to grief in the commercial crisis of 1829-32. On their ruins arose the Union Bank, which in turn disappeared in 1848. Until 1860, when the principle of limited liability was recognized for the first time, the progress of banking was slow. The financial crisis in Bombay caused by the cotton boom of 1865, and the fall in the exchange value of the rupee, prevented substantial progress from being achieved. After 1905, the rate of progress was quicker owing to the enthusiasm created by the swadeshi movement. Unfortunately many of the newly started banks fell into inexperienced hands and disappeared in the banking crisis of 1913-14. Then came the war which greatly strengthened our banking system and reinforced the valuable lesson taught by the earlier bank failures, namely the need for maintaining an adequate cash reserve against liabilities. The post-war boom gave a stimulus to the establishment of new banks, but the inevitable depression adversely affected them and again quite a number of banks failed in 1923. In 1929-31, a comprehensive banking inquiry was carried out through the agency of a number of Provincial Banking Enquiry Committees whose work was coordinated by a Central Banking Enquiry Committee. After long delays, the Reserve Bank of India, which had been recommended as early as 1926 by the Hilton-Young Commission, was established in April 1935, and it is hoped that it will reorganize our money market and make it more unified and stronger than it has been in the past.²

§19. **The Reserve Bank of India.**—The idea of starting a Central Bank for India is nearly a century old.³ The East

¹ The establishment of the Presidency Banks from 1806 onwards and of the Exchange Banks from about the middle of the nineteenth century is referred to in the following sections.

² Reference has already been made to the starting of the Cooperative Banks and Land Mortgage Banks in ch. iii, §§23 and 24.

³ We have already discussed the functions of Central Banks and their credit policy in Part I, ch. xi, §§19-20.

India Company promoted the establishment of what were known as Presidency Banks at the three Presidency towns— at Calcutta in 1806, at Bombay in 1840 and at Madras in 1847—partly for meeting the banking needs of India's growing trade and partly for supplying its own banking requirements. The project of starting a great all-India bank, mooted in London in 1836, proved abortive. The proposal to amalgamate the three Presidency Banks was first made in 1867, but largely owing to mutual jealousies among the Banks it could not be carried through. The question was discussed from time to time, until at last the bank failures of 1913-14 and the war of 1914-18 brought home the urgent necessity of expediting the establishment of a Central Bank. Accordingly, by the Imperial Bank Act of 1920, the three Presidency Banks were amalgamated into the Imperial Bank of India in 1921, which was also invested with limited central banking functions. The Bank established a hundred new branches in fulfilment of its agreement with the Government of India, and in fact the stipulated minimum has been exceeded, and the Bank now controls 161 branches. It was the principal authority for controlling credit by the machinery of the Bank Rate (i.e. the rate charged by the Bank on demand loans against Government securities). The Hilton-Young Commission, however, recommended the establishment of an altogether new bank on the ground that the Imperial Bank was largely a commercial bank with numerous branches and that it should be left free to pursue its career as the supplier of modern banking facilities throughout the country. Accordingly, Sir Basil Blackett introduced his first Reserve Bank of India Bill in 1927. Owing, however, to acute differences of opinion regarding the ownership of the Bank and the constitution of the Central and Local Boards, the first Bill as well as the second Bill (1928) had to be abandoned.¹ Finally, as recommended by the Round Table Conference, the Reserve Bank of India Act was placed on the Statute Book in 1934 and the Bank was formally inaugurated on 1 April 1935.

The Reserve Bank of India is a *shareholders' bank*. Its capital, fully paid-up, is Rs. 5 crores divided into shares of

¹ The controversy raged round two issues: (i) whether the Reserve Bank should be a State bank (owned by the State) or a shareholders' bank, and (ii) whether members of Central and Provincial Legislatures should be allowed to be on the Central and Local Boards of the Reserve Bank. The official bills proposed a shareholders' bank free from political influence as recommended by the Hilton-Young Commission.

Rs. 100 each. It has at present five Local Head Offices at Bombay, Calcutta, Madras, Delhi and Rangoon, and five separate share registers are maintained. The Bank is required to establish a London branch, and steps have been taken to that end. The general management of the Bank is entrusted to a Central Board of Directors which consists of 16 members as follows: the Governor and two Deputy-Governors appointed by the Governor-General-in-Council after considering the recommendations of the Central Board; four Directors nominated by the same authority (to represent the general taxpayer and important economic interests in the country); eight Directors elected on behalf of the shareholders on the various registers; and one Government official. There are also Local Boards to advise the Central Board. No Director of the Central Board or member of a Local Board can also be a member of the Central or of a Provincial Legislature—a clause that had been responsible for the bitter controversies and delays over the earlier Reserve Bank Bills.

Turning now to *the functions of the Reserve Bank*, it may accept deposits without interest, and purchase (rediscount) and sell bills of exchange and promissory notes endorsed (signed) by the Scheduled Banks,¹ or by Provincial Co-operative Banks. In the case of commercial transactions, these bills and promissory notes must be such as will fall due for payment within 90 days after the date of purchase, but in the case of seasonal agricultural operations or marketing of crops, a longer interval of nine months is allowed. The Reserve Bank has to buy sterling from and sell sterling to the Scheduled Banks. It may also advance short-term loans to them, as also to the Central and Provincial Governments, Indian States, and local authorities. It can purchase and sell Government securities, or silver and gold bullion on account of the Government. It can borrow money for short periods of a month or less from the Scheduled Banks. It is authorized to issue Bank Notes payable to the bearer on demand. It is also empowered to carry out open-market operations² by directly purchasing or selling, in the open market, eligible paper (bills of exchange and promissory notes) or sterling, or by making direct loans and advances to the public. This power is intended to enable the Bank to

¹ These are banks (some 50 in number), each with a paid-up capital and reserve of Rs. 5 lakhs and over, and are shown in a separate schedule to the Reserve Bank Act.

² See Part I, ch. xi, §20 (ii).

control the volume of credit and make its credit or Bank Rate policy effective.¹

The Reserve Bank of India is not permitted to transact certain types of business. It is, for instance, prevented from engaging in trade or having a direct interest in a commercial or industrial undertaking, or from advancing money on immoveable property, or from allowing interest on deposits. The last prohibition is intended to prevent the Reserve Bank from competing with the ordinary commercial banks.

The Central Banking functions of the Reserve Bank may now be briefly noticed. It has to transact Government business (to receive moneys and make payments for the Government), and to carry out its exchange, remittance and other banking operations including the management of the public debt. The Bank has the sole right of issuing notes. As already stated, as the currency authority, it is required to buy and sell sterling with a view to maintaining the exchange value of the rupee provisionally at 1s. 6d. sterling. Every Scheduled Bank is required to maintain with the Reserve Bank balances amounting to not less than 5% of its demand liabilities and not less than 2% of its time liabilities. This is intended to enable the Reserve Bank to centralize the banking reserves of the country and thus to control the issues of credit by the Scheduled Banks. The latter have also to submit weekly returns of their business to the Reserve Bank.

The Imperial Bank has been appointed the sole agent of the Reserve Bank for a period of fifteen years, and has to manage the Government's Treasury business at its up-country branches.

The Reserve Bank itself is required to make a weekly return to the Governor-General-in-Council of the accounts of its Issue and Banking Departments.

The Reserve Bank Act also makes provision for the early establishment of a special Agricultural Credit Department whose main function will be to study all questions of agricultural credit, give expert advice to the Government and Provincial Cooperative Banks, and to coordinate the operations of the Bank in connexion with agricultural credit and its relations with Provincial Cooperative Banks and any other bank engaged in the business of agricultural credit. The

¹ The Bank Rate is now the standard rate at which the Reserve Bank is prepared to buy or discount bills of exchange or other commercial paper eligible for purchase. It is thus a discount rate.

necessary preliminary inquiry has already been completed by Mr M. L. Darling, I.C.S., who was specially appointed for this purpose.

Now that the Reserve Bank has been established, it is hoped that India's money market will be properly reorganized and unified and will be free from its old defects, such as lack of close connexion between its various parts, dual control of currency and credit by the Government and the Imperial Bank, seasonal monetary stringency and high money rates, and the very poor use of bills or *hundis* (i.e. the lack of a bill market for India). It will also generally strengthen the Indian banking system, especially when further steps are taken to establish a more intimate contact between the Reserve Bank and the indigenous bankers.

§20. **The Imperial Bank of India.**—Since the establishment of the Reserve Bank, the Imperial Bank of India has become the premier commercial bank of the country. Owing to its appointment as the sole agent of the Reserve Bank (which in practice means that it is in charge of Government balances) it still remains subject to the special Act by which certain restrictions are placed on its activities. For instance, it cannot make loans for a period longer than six months, or against the primary security of immoveable property such as land. It is, however, now free from certain old restrictions on its business, such as the prohibition to receive deposits or raise loans in England and to deal in foreign exchange business. The Bank can receive deposits, and advance and lend money and open cash credits against Government securities, State Railway Bonds, debentures of a Municipality or Local Board, or against goods and promissory notes signed by two independent persons or firms. It can draw, accept and discount and sell bills of exchange and other negotiable securities, grant letters of credit and administer estates as executor.

The Imperial Bank has more branches than any other bank in India, namely 161. It has three Local Head Offices, one at each of the Presidency towns, which are managed by Local Boards. There is also a Central Board of Directors for the general superintendence of its affairs and business. This Board consists of the President, and Vice-Presidents of the Local Boards, one person elected from among themselves by the latter, a Managing Director and a Deputy Managing Director appointed by the Central Board, two persons nominated by the Governor-General-in-Council, and Secretaries of the Local Boards.

The capital and reserve of the Bank is Rs. 15 crores. The fully paid-up capital is Rs. 5.62 crores, the Reserve Fund is Rs. 5.14 crores, and total deposits amount to about Rs. 70 crores. It is required to publish a weekly statement of its assets and liabilities.

§21. **Exchange Banks.**—There are eighteen Exchange Banks operating in India today. All of them have their head offices abroad and operate in India through branches. The most important (as many as eight) are British banks. Other countries who have trading relations with us and have Exchange Banks in India are the U.S.A., Japan, Holland

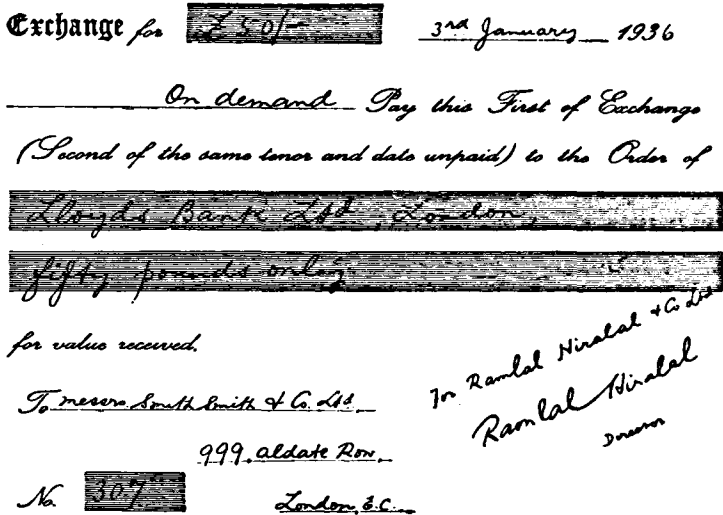


FIG. 19.—FOREIGN BILL OF EXCHANGE

For greater safety, foreign bills are usually sent in duplicate, called the First and Second of Exchange.

and Portugal. The Exchange Banks are officially classified as: (i) those doing considerable business in India (having 25% or more of their deposits in India), such as the National Bank of India or the Chartered Bank of India; (ii) those which are merely agencies of large banks doing business all over Asia (i.e. having less than 25% of their deposits in India), such as the Yokohama Specie Bank or the International Banking Corporation. Indian Joint-Stock Banks have at present a negligible share in the foreign

exchange business, owing to lack of adequate capital, absence of branches in foreign centres, and above all the strong competition of old-established and powerful foreign Exchange Banks. The Central Bank of India has recently (1936) decided to start the first Indian Exchange Bank in London.

The main business of the Exchange Banks is financing the foreign trade of India by the purchase and discount of foreign bills of exchange. These are mainly export bills¹ which are bought (or discounted) by these banks from exporters in India. They are afterwards sent to London and are there rediscounted with the London banks. Against their London sterling balances, which are increased by purchases of export bills in India, the Exchange Banks sell sterling to the Reserve Bank of India, which has to remit in sterling large sums on Government account to enable the Secretary of State to meet the Home charges. Other persons, like the importers, or guardians of students studying abroad, also buy sterling drafts on London from the Exchange Banks. These Banks import gold or export gold according as the balance of trade in merchandise is in favour of or against India.

In the financing of the import trade of India the more active part is played by the branches of the Exchange Banks outside India. The share of the Indian branches in this business consists primarily in collecting the import bills (drawn on Indian importers) at maturity and in furnishing their head offices and branches abroad with information as to the means and standing of the Indian importers on whom bills are drawn by their creditors abroad.

Over and above foreign exchange business, the Exchange Banks are also doing a growing volume of ordinary banking business and are thus competing with Indian Joint-Stock Banks. Some of them have for this purpose branches in the interior, as for instance at Cawnpore or Delhi, and are thus taking part in the financing of the inland trade of India also. They have succeeded in attracting large deposits in India (Rs. 68.11 crores in 1933) and the Indian Joint-Stock Banks have to face these new formidable rivals even in their own field of ordinary banking and inland trade finance.

In order to increase the share of Indians in the financing of the foreign trade of the country, the Central Banking Enquiry Committee has proposed firstly, that Foreign Exchange Banks should be required to take out licenses with a

¹ See Fig. 19.

view to subjecting them to some control, and secondly, that a private Indian Exchange Bank enjoying State aid should be started, should the Imperial Bank fail to expand the foreign exchange business in which it is now free to engage.

§22. **Joint-Stock Banks.**—We have already referred to the recent growth of Joint-Stock Banks in India.¹ As in England, these are mainly commercial banks and give short-term credit only. They receive deposits, discount local bills, open cash credit accounts, advance loans against stock exchange securities, grain or cotton, buy and sell shares and transact miscellaneous banking business. On 31 December 1933 there were in all 34 Joint-Stock Banks with capital and reserve of Rs. 5 lakhs and over. Their paid-up capital was Rs. 7.78 crores, reserve and rest, Rs. 4.55 crores, deposits Rs. 71.67 crores, and cash balances Rs. 10.92 crores. The total number of banks with capital and reserve between Rs. 1 lakh and 5 lakhs was on the same date 50, their paid-up capital Rs. 0.82 crores, reserve and rest Rs. 0.40 crores, deposits Rs. 4.64 crores, and cash balances Rs. 79 crores. The most important Joint-Stock Banks in India (India's Big Five as they may be called) are the Bank of India, the Central Bank of India (which is a remarkable example of a successful bank owned and managed by Indians), the Punjab National Bank, the Bank of Baroda and the Allahabad Bank.

Since the bank failures of 1913-14 the question of regulating the Joint-Stock Banks in India has engaged a good deal of attention. These failures were due to low cash balances, small paid-up capital, lack of experienced and trained managers, unsound advances, and in a few cases to fraud. The Central Banking Enquiry Committee has recommended the enactment of a special Bank Act, since the existing Indian Companies Act which applies to all types of joint-stock companies is thoroughly inadequate for regulating banks. The proposed (1936) amendment to the Indian Companies Act includes some additional provisions for regulating banking companies.

§23. **Other types of banks.**—We have already dealt with *Cooperative and Land Mortgage Banks*.² There are hardly any special banking organizations in the country for providing long-term loans to industries for purchasing machinery, erecting factory buildings, etc. There is a great need for this

¹ See §18.

² See ch. iii, §§20-2 and 24.

type of bank; as pointed out both by the Industrial Commission and the Central Banking Enquiry Committee. The latter recommends the establishment of Provincial Industrial Corporations assisted by the Provincial Governments and of an all-India Industrial Corporation. Under the State Aid to Industries Acts (as in Madras, the Punjab and Bengal), loans are given by the Government to industries, but these are mainly restricted to small cottage industries, and the need for Industrial Banks for meeting the long-term capital requirements of large-scale industries remains unsatisfied.

Reference may be made here to *Postal Savings Banks* which were opened in all parts of India in 1882 and 1883. These banks provide the lower middle classes with a secure means of depositing their small savings for which the general balances of the Government constitute a sufficient security. In 1932-3 there were 12,690 Postal Savings Banks, the number of depositors was 2,736,645, and the total deposit balances with the Government totalled Rs. 43.45 crores. Interest at 2% is allowed on these deposits, which can be withdrawn at any time subject to certain restrictions.¹ The maximum amount of deposits per year is limited to Rs. 750 and the total deposit to the credit of an individual account is limited to Rs. 5,000. Amounts of As. 4 and above can be deposited and money can be withdrawn once a week.

Since 1917 the Post Office has come into contact with the savings of the people in another way through the five-year *Postal Cash Certificates* which are issued in various denominations ranging from Rs. 10 to Rs. 1,000. The total amount of Postal Cash Certificates outstanding on 31 March 1935 was Rs. 65.96 crores. These certificates have greatly increased in their popularity in spite of the successive reductions in the rate of interest allowed on them. A part of the proceeds of sales of gold exported in recent years has been invested in these certificates. No one person can hold certificates of face value exceeding Rs. 10,000.

§24. **The hoarding habit.**—The habit of hoarding to which the Indian people are supposed to be addicted has given rise to a good deal of controversy. India has been described as a bottomless sink for the precious metals, gold and silver. These hoards have been estimated at £1,000

¹ The interest was 2½% until 1936 and 3½% until 1933.

million. It is clear that the use of gold for industrial and domestic purposes is not confined to India and is found even in European countries. Further, the total amount is not large considering the vast population of India. The recent large exports of gold from India go to show that when necessary Indians do bring out their hoards, which are therefore not lost to the world for all time. The hoards are held in scattered, individually insignificant amounts. The use of gold and silver is enforced by custom and plays an important part in social ceremonies sanctioned by religion and tradition. The habit of hoarding, although its extent is exaggerated, must nevertheless be admitted to exist. Its principal cause is found in the sense of insecurity of life and property engendered by the numerous invasions to which India was subjected in the past. Formed in times of insecurity, the habit has to some extent continued to survive in times of well-established peace and security. The illiteracy of the population and the absence of adequate banking facilities are other obstacles in the path of reform.

For inducing people to put their hoards to productive uses it is very necessary to devise suitable measures such as extension of the Postal Savings Banks; multiplication of Co-operative Societies; issue of gold certificates (i.e. repayable in gold); a more extended use of the cooperative and other cheques; general extension of banking facilities; and the establishment of National Savings Associations (as in England) which aim at promoting thrift and at familiarizing the small saver with safe and profitable modes of investment. The removal of illiteracy, the reform of social and religious customs through education, and the progress of general enlightenment should also help.

§25. **Need for more banks.**—Compared with other countries, banking facilities in India are most inadequate. On 31 December 1933 there were only 219 banking head offices and 848 branches, including agencies, throughout the whole of India. Less than 400 towns out of a total of 2,755 are served either by a bank or branch or agency of a bank. It is, therefore, very necessary to follow a vigorous policy of establishing joint-stock and cooperative banks and multiplying their branches under the supervision and guidance of the Reserve Bank of India. The services of indigenous bankers should also be fully utilized. They should be appointed as agents by the joint-stock banks and their methods of business should be revised and modernized.

SUMMARY

THE INDIAN CURRENCY SYSTEM

The *present rupee*, containing 180 grains (one tola) of silver $\frac{1}{11}$ ths fine, was made sole legal tender throughout British India in 1835, and gold was demonetized. The Silver Standard thus established remained in operation until 1893, when the mints were closed to the free coinage of silver owing to the fall in its price and the consequential fall in the gold exchange value of the rupee. In 1899 the British gold sovereign was made legal tender at the rate of £1 = Rs. 15. Before the war the Gold Exchange Standard was in operation in India, the rupee being kept fixed at 1s. 4d. sterling (which in practice meant 1s. 4d. gold). The method adopted was to sell Council Bills or Reverse Councils as required. During the war the price of silver rose, and the exchange value of the rupee was raised by successive steps to 2s. 4d. The attempt to stabilize it at 2s. gold failed. Thereafter the rupee was left to itself. The Hilton-Young Commission recommended the adoption of the Gold Bullion Standard. It also proposed that the rupee be given a gold value of 8.47 grains, equivalent to 1s. 6d. gold. The latter rate was accordingly made legal by the Currency Act of 1927, which also gave the option to the Government provisionally to sell sterling exchange instead of gold bullion in lieu of rupees. In September 1931, when Great Britain gave up the Gold Standard, India followed suit. The rupee was then linked to 1s. 6d. sterling and thus once again the Sterling Exchange Standard was introduced. This standard has been made legal by the Reserve Bank of India Act (of 1934) which also requires the Bank to make a report on the permanent monetary standard suited to India when world monetary conditions become more normal. The Reserve Bank is the new currency authority in the country. The previous two separate currency reserves, namely the Paper Currency Reserve, and the Gold Standard Reserve (created in 1900 out of profits on rupee coinage), have been amalgamated and entrusted to the Reserve Bank, which is to issue and regulate paper currency (Bank Notes) and maintain the exchange value of the rupee at 1s. 6d. There has been during the last ten years much controversy regarding the ratio, and there is still a considerable volume of opinion adverse to 1s. 6d. and in favour of 1s. 4d., or a still lower rate. The linking of the rupee to sterling as also the large gold exports during the last few years have also been subjects of keen controversy.

The *Indian Paper Currency system* was established by the Paper Currency Act of 1861. Until its recent (April 1935) transfer to the Reserve Bank, it was a monopoly of the Government, which alone could issue notes and was responsible for maintaining their convertibility into rupees. For this purpose a separate Paper Currency Reserve was maintained on the fixed fiduciary issue plan. Except for a maximum amount of fiduciary (invested) reserve, the remainder had to be held in metal (i.e. silver and gold coin and bullion). Part of the reserve was invested in sterling securities. During the war there was a considerable expansion of paper currency and of the sterling securities held in the reserve. In 1920, on the recommendation of the Smith Committee, the Proportional Reserve System was adopted,

and the Paper Currency Act of that year provided for a 50% metallic reserve. It also permitted the issue of emergency currency to the Imperial Bank during the busy season against the security of inland trade bills. As recommended by the Hilton-Young Commission, the function of note issue has recently been transferred to the Reserve Bank, which must hold under the Reserve Bank Act a 40% Gold Reserve (gold bullion and sterling securities) which may, however, be lowered temporarily on payment of a tax.

The notes are of the following denominations: Rs. 5, 10, 50, 100, 500, 1,000 and 10,000. All except the last are universal notes, i.e. legal tender throughout British India, the last being legal tender in its respective circle of issue only (there are seven such circles of issue).

In addition to rupees and notes, there are subsidiary silver, bronze and copper coins which are legal tender only for small amounts not exceeding a rupee.

PRICES IN INDIA

Rupee prices in India have varied from time to time, as shown by the General Index Number of prices with 1873 as the basic year and by the Calcutta Index Number of wholesale prices. The rise of prices, which had already been evident in the pre-war period and had formed the subject of a special inquiry in 1912, became particularly marked during the war period. Before as well as during the war, it was mainly the result of currency inflation. Before the war, apart from certain world factors which made for a rise in prices, there was extensive rupee coinage. During the war, besides a large addition to the rupee coinage, there was a considerable issue of notes. The cost of living increased, and this adversely affected the position of the middle-class people and wage-earners. On the other hand, the business community benefited by the rise in prices. Under Indian conditions, however, the possible benefit to the agriculturist is intercepted to a considerable extent by middlemen and moneylenders.

Since 1929 *the big drop of prices*, which is such a marked feature of the world depression, has been particularly disastrous to agricultural countries like India. There is in consequence much hardship in rural areas today, and anything likely to bring about a reasonable rise in prices would be welcome in the interests of the agriculturist.

INDIAN BANKING

The main constituents of the Indian money market are: (i) the Reserve Bank of India; (ii) the Imperial Bank of India; (iii) the foreign Exchange Banks; (iv) the Indian Joint-Stock Banks; and (v) the indigenous bankers.

Banking has been practised in India from very ancient times, and even today indigenous banking satisfies the needs of about 90% of the people, especially those living in the rural areas. It is necessary, however, to modernize the methods of indigenous bankers and to link them with the Reserve Bank of India.

Organized banking of the western type was introduced in India by the *Agency Houses* during the latter half of the eighteenth century. The

Presidency Banks were established between 1806 and 1843 at the three Presidency towns. *Joint-stock banking* received a stimulus in 1860 when the principle of limited liability was recognized. Progress, however, was slow until 1905 when, owing to the enthusiasm created by the swadeshi movement, quite a large number of new banks were established. Several of these, however, disappeared in the banking crisis of 1913-14 which proved the necessity of subjecting the banks to special legal restrictions.

The *Reserve Bank* has at last been established (in April 1935) under the Reserve Bank of India Act of 1934. It is a private shareholders' bank, although some of the most important appointments on the Central Board are made by the Governor-General-in-Council. The Reserve Bank has to transact banking business for the Government and has for that purpose appointed the Imperial Bank of India as its agent. It is also the currency- and note-issuing authority. The more important banks (Scheduled Banks) are required to maintain certain cash balances with the Reserve Bank, which in turn offers them certain privileges, such as rediscounting of bills and promissory notes endorsed by them, grant of loans, etc. It can in turn borrow money from them for short periods. It is prohibited from allowing interest on deposits, engaging in trade, etc. It has to publish from time to time its Bank Rate, i.e. the rate at which it is prepared to discount approved bills and commercial paper. It is empowered to carry out open-market operations. Provision has also been made for the establishment of a special Agricultural Credit Department by the Bank. It is hoped that the Reserve Bank will be able to reorganize and unify our money market, reduce money rates, relieve monetary stringency during the busy season, help agriculture and generally strengthen our banking system.

The *Imperial Bank of India* was established in 1921, being the result of an amalgamation of the old Presidency Banks. Until the establishment of the Reserve Bank of India it performed certain banking business on Government account. It is now the sole agent of the Reserve Bank of India and continues to be subject to a special Act, which, while now allowing it to deal in foreign exchange, prohibits it from lending for a period longer than six months or against immoveable property. The Imperial Bank is now the premier commercial bank in the country and has a large number of branches (exceeding 160) throughout the country.

There are 18 *Exchange Banks* in India, all of them being branches of foreign banks. Their main business is to finance the export and import trade of India. They buy export bills and get them discounted in London. They also collect import bills drawn on importing houses in India. They export and import gold, and buy and sell sterling from and to the Reserve Bank. Latterly they have been entering into competition with the Indian Joint-Stock Banks by attracting large deposits in India and by financing even the internal trade of the country. The Central Banking Committee has recommended the issue of licenses subject to certain conditions to these Banks so as to bring them under control.

The most important *Indian Joint-Stock Banks* are the Central Bank of India, the Bank of India, the Punjab National Bank, the Bank of Baroda and the Allahabad Bank. As in England, the Indian Joint-Stock Banks are mainly commercial banks. They accept deposits and advance

loans for short periods, finance the inland trade and transact general banking business.

Other types of banks are (i) Land Mortgage Banks, (ii) Cooperative Banks, and (iii) Postal Savings Banks.

The *hoarding habit* in India has been the subject of a long controversy and has received a good deal of attention. It is largely the result of conditions of insecurity in the past and certain social customs. In order to wean the people from this habit and induce them to make a productive use of their hoarded wealth, further extension of banking facilities throughout the country is urgently called for.

CHAPTER VII

FINANCE

§1. **Introductory remarks.**—Indian finance has undergone a great change in recent years. Before the war there used to be only one budget for the whole of India, and the Central Government was the only taxing authority. Since the war there has been a practically complete separation of provincial from central finance. About fifty years ago land revenue was far and away the most important source of revenue. Other sources of revenue like customs and income-tax are now coming more into the picture, and some sources like opium, which used to be of great importance, have dwindled into insignificance. Also in normal years the railways are now expected to contribute something towards general revenues instead of being a drain on them.

§2. **The Central Budget.**—We give below the Budget (general) of the Government of India for the year 1935-6

CENTRAL BUDGET (1935-6)

(In lakhs of rupees)

Revenue		Expenditure	
<i>Principal heads of revenue—</i>	Rs.	Direct Demands on the	Rs.
Customs	51.84	Revenue	4.19
Taxes on Income	16.40	Forest and Other Capital	
Salt	8.73	Outlay charged to Revenue	1
Opium	61	Railways: Interest and Mis-	
Other heads	1.91	cellaneous Charges (as per	
Total: Principal heads	79.49	Railway Budget)	32.25
Railways: Net receipts (as		Irrigation	6
per Railway Budget)	32.25	Posts and Telegraphs	86
Irrigation: Net receipts ¹ ... ..	...	Debt Services	13.39
Posts and Telegraphs: Net		Civil Administration	10.17
receipts	70	Currency and Mint	33
Interest receipts	83	Civil Works	2.25
Civil Administration	93	Miscellaneous	4.46
Currency and Mint	1.07	Defence Services	49.91
Civil Works	23	Miscellaneous adjustments	
Miscellaneous	57	between the Central and	
Defence Services	4.93	Provincial Governments	3.05
Provincial Contributions and		Extraordinary items	1
miscellaneous adjustments			
between the Central and			
Provincial Governments ... ..	...	
Extraordinary items ... ..	...	Total expenditure charged to	
Total Revenue	1,21.00	Revenue	1,20.94
Deficit ... ..	...	Surplus	6
Total	1,21.00	Total	1,21.00

¹ Rs. 14,000 not shown.

as a preface to the study of the principal heads of revenue and expenditure of the Central Government. As previously pointed out, since 1925 the Railway Budget has been separated from the General Budget, which is credited with a fixed annual contribution due to it from the railways.¹ The Railway Budget is presented to the Central Legislature by the Railway Member of the Governor-General's Executive Council one week before the General Budget. The latter is introduced in the Assembly by the Finance Member on the last day of February.

We shall now proceed to discuss the principal *central heads of revenue*.

§3. (i) **Customs (import) tariff.**—Until recently, the Indian tariff was on a free trade basis. Between 1882 and 1894 there were practically no import duties. In 1894, however, a general 5% *ad valorem* duty (from which a few things like cotton yarn and piece-goods were exempted) was imposed on all imported goods. The object of this duty was revenue and not protection of any indigenous industry. At the end of 1894, the duty was made applicable to cotton yarn and piece-goods also. In 1896 the duty on cotton piece-goods was lowered to 3½% and an equivalent excise duty was levied on mill-woven cloth produced in India. The excise duty was bitterly resented in India but it was not taken off till 1926.

Extensive changes in the customs tariffs have been introduced since the war, and a large number of imports have been subjected to duties of varying size. At first the duties were imposed primarily for revenue purposes in order to enable the Government to meet the great increase of public expenditure during the last twenty years. In 1924 the policy of discriminate protection was accepted, and accordingly some of the import duties (and their number is steadily growing) have been levied mainly for the purpose of granting protection to certain selected industries.² Latterly the idea of Imperial Preference has been superimposed on our tariff arrangements. On 20 August 1932 a general trade agreement was signed at Ottawa between India and the United Kingdom followed by a supplementary agreement regarding iron and steel on 22 September 1932. The professed object of these agreements was to safeguard India's existing export trade from dangers which might be apprehended, to stimulate its recovery from the prevalent depression and to open out new lines of development to the utmost extent possible. In return for concessions

¹ See ch. v, §3.

² See ch. iv, §4.

granted to certain Indian goods in the United Kingdom, corresponding concessions were granted to British goods in the Indian market. The Indian tariff, which had so far been a single-decker one, thus became a two-decker one. That is to say, whereas previously it did not differentiate between imports from different countries (except in a few cases), it now adopted two sets of import duties—one higher, on goods coming from countries other than the United Kingdom, and the other lower, on goods of British origin.

In one way or another, therefore, the list of imported articles subjected to fairly heavy duties (amounting to 75% *ad valorem* in some cases) has been considerably enlarged in recent years. Among the dutiable articles mention may be made of the following: cotton piece-goods, railway materials, sugar, matches, motor-cars, cinema films, watches, silk piece-goods, tobacco, cigars, cigarettes, kerosene, petroleum, silver, fermented liquors, wines and spirits.

(ii) *Customs (Export) duties*.—Until 1860, there was a 3% duty on practically all exports, but the duties on most articles were abolished between 1860 and 1880. At present the only important export duties are those on jute and jute manufactures, and on rice. The jute-growing provinces (i.e. Bengal, Assam and Bihar) are granted a share of the proceeds from the jute export duty.

The customs revenue has made rapid strides since the war. Its yield increased from Rs. 11·13 crores in 1913-14 to Rs. 51·84 crores in 1935-6. There is a marked tendency to rely increasingly on customs duties for revenue.

§4. **The income-tax.**—The adoption of income-tax in India on a permanent basis dates from 1886. Before the war the annual yield from the income-tax was only about Rs. 3 crores. Owing to successive increases in the rates, the yield is now about Rs. 17 crores (including the levy of surcharges but exclusive of the small share of the tax which is given to the Provinces).

Since 1916 a scale of progression has been introduced, so that the rate of the tax varies in accordance with the size of the income, being higher for the bigger incomes and lower for the smaller incomes. In addition to the ordinary income-tax, a super-tax has to be paid on incomes above Rs. 30,000 a year. Incomes below Rs. 2,000 a year are exempted from the tax (1936). The rate of the tax, which is 6 pies in the rupee on incomes between Rs. 2,000 and Rs. 4,999, increases by gradations to 2 annas 2 pies in the rupee on incomes of Rs. 1,00,000 or upwards.

§5. **Salt.**—The salt revenue was inherited by the British Government from its predecessors along with a number of transit dues. These latter were abolished in 1843, and the salt duty was at the same time consolidated and raised. It was very high in the beginning, being Rs. 2 per maund in 1882 and Rs. 2-8-0 per maund in 1888. Since 1903 the rate has on the whole been on the downward grade. It now stands at Re. 1-4-0 per maund or Re. 1-9-0 inclusive of the surcharge levied in 1931. Imported salt (except from Aden) pays an additional protective import duty. The salt duty is a tax on a necessary of life and is therefore unpopular. Public opinion is strongly in favour of abolishing it altogether. It is not possible to do so at once because that would mean sacrificing a revenue of over Rs. 8 crores every year. However, the aim should be steadily kept in view and the tax should be reduced as opportunity offers.

§6. **Opium.**—Opium was at one time a considerable source of revenue yielding about Rs. 8 crores per year. But in order to assist China in suppressing the opium habit, the Government of India entered into an agreement with China in 1907 and again in 1911 undertaking a progressive reduction in the exports of Indian opium to that country. In 1926 an announcement was made to the effect that in future all exports of opium would be abolished except for strictly medicinal purposes. This is now an accomplished fact. Internal consumption of the drug is also strictly regulated. The opium revenue has thus declined to less than one crore of rupees.

§7. **Provincial revenue and expenditure.**—We have so far discussed the main sources of revenue enjoyed by the Central Government. We shall now pass on to consider provincial heads. The tables on pp. 540-1 will be found useful for obtaining a general idea of the principal heads of revenue and expenditure and their relative importance in the several provinces.

§8. **Principal provincial heads of revenue.**—(i) *Land revenue.*—Land revenue has already been discussed in Chapter III (§§29-37). The total amount collected in 1933-4 was Rs. 29·99 crores in the whole of British India.

(ii) *Excise.*—The excise revenue in British India is derived from the sale and manufacture of intoxicating liquors, hemp, drugs, opium, etc. It is levied in the form of a duty on manufacture and fees for sale licenses. The major portion of the revenue is obtained from country liquors; the right of wholesale supply for a district is

granted by contract; and the right of retail sale is auctioned.

The main object of the excise policy ought to be the suppression of the evil of drink. The Government has so far relied largely on the method of raising the price of liquor, but not so much as to stimulate illicit production. Other methods are rationing, reduction in the number of shops, lowering the limits of possession, reducing the strength of the drinks supplied, curtailing the hours of sale, etc. Non-official opinion is inclined towards the restriction of quantity, strict regulation of the number of shops, and in general towards a stricter policy of control, if not complete prohibition. Extreme methods, however, are likely to defeat their own object by encouraging smuggling and illicit distillation or to result in people resorting to some other habit that may be even more obnoxious. The practical statesman will bear in mind all these dangers and difficulties and will aim at a happy mixture of daring and circumspection in dealing with the problem. He must endeavour to emphasize the moral aspect of excise policy and avoid the temptation of shirking important practical reforms because they may mean some immediate financial loss to the Government. The total yield of the excise revenue was Rs. 14.99 crores in 1933-4.

(iii) Other sources of revenue are judicial and commercial stamps (Rs. 12.24 crores in 1933-4), fees for registration of documents (Rs. 1.13 crores), forests (Rs. 3.53 crores, derived from the sale of timber, grazing fees, etc.) and the 'scheduled taxes' (Rs. 0.4 crores), i.e. certain specified taxes such as the Entertainment Tax, which the provinces can impose at their discretion under the Reforms of 1919.

We shall now turn to the expenditure side and consider the main items of central and provincial expenditure.

§9. Public expenditure (Central and Provincial).—Since the beginning of the present century, and especially during the last twenty-five years, there has been a striking increase in public expenditure in India. For example, the total amount of central and provincial expenditure increased from Rs. 124 crores in 1913-14 to Rs. 226 crores in 1929-30. This is the experience of all civilized countries because the scope of governmental activity has immensely increased in recent years. But as G. K. Gokhale pointed out, 'while increased expenditure in other countries under popular control has helped to bring increased strength and security to the nations and increased enlightenment and prosperity to the people, our continually increasing expenditure has, under autocratic

TABLE I
REVENUE OF THE SEVERAL PROVINCIAL GOVERNMENTS FOR THE YEAR ENDED 31 MARCH 1934
(In lakhs of rupees)

Heads of Revenue	Madras	Bombay	Bengal	United Provinces	Punjab	Burma	Bihar and Orissa	Central Provinces and Berar	North-West Frontier Province	Assam	Total Provincial Governments ²
<i>Principal Heads of Revenue—</i>											
Taxes on Income ...	...	...	...	...	...	...	1-32	...	...	1-72	3-04
Salt ¹ ...	...	...	2-12	...	...	2-05	1-12	...	...	...	5-65
Land Revenue ...	4,50-78	3,85-10	3,21-14	5,58-23	2,50-40	4,77-14	1,77-03	2,24-16	21-30	1,10-70	29,82-00
Excise ...	4,28-83	3,64-38	1,34-06	1,30-93	94-36	80-20	1,23-79	57-04	8-09	34-61	14,59-37
Stamps ...	2,28-11	1,56-35	2,87-14	1,74-97	1,08-15	46-12	1,06-48	58-03	9-53	17-26	11,93-01
Forest ...	41-58	54-30	15-03	45-19	19-48	79-99	6-85	44-06	4-35	14-57	3,38-11
Registration ...	31-15	16-21	19-67	11-86	8-89	3-94	12-58	5-04	7-0	1-55	1,11-65
Scheduled Taxes ...	...	19-05	11-22	...	...	10-03	...	...	...	...	40-66
Total ...	11,80-45	9,95-46	7,90-38	9,21-21	4,81-28	6,99-47	4,29-17	3,88-33	43-97	1,80-66	61,33-49
Irrigation (Net) ...	2,03-90	67-76	-1-32	1,20-75	4,42-21	31-58	20-70	1-34	11-39	...	8,98-31
Debt Service ...	33-42	1,38-77	5-42	12-21	9-49	7-84	4-65	4-00	8-88	...	2,17-36
Civil Administration ...	1,01-27	1,01-07	84-07	44-02	65-78	50-76	25-72	22-33	7-32	11-41	5,18-50
Civil Works ...	15-60	60-81	12-48	5-29	19-45	12-98	9-16	7-78	5-80	6-63	1,57-32
Miscellaneous ...	15-63	93-87	14-71	20-15	54-42	22-98	7-16	6-44	1,02-97	1-46	3,59-91
Total Revenue ...	15,50-27	14,60-74	9,05-74	11,23-63	10,72-63	8,25-61	4,96-56	4,30-22	1,72-33	2,00-83	82,84-89

¹ Provincial Government's share of additional import duty on foreign salt.

² Includes totals of Shan States Federation (Burma) and Coorg.

TABLE II
EXPENDITURE OF THE SEVERAL PROVINCIAL GOVERNMENTS FOR THE YEAR ENDED 31 MARCH 1934
(In lakhs of rupees)

Heads of Expenditure	Madras	Bombay	Bengal	United Provinces	Punjab	Burma	Bihar and Orissa	Central Provinces and Berar	North-West Frontier Province	Assam	Total Provincial Governments ¹
Direct demands on the revenue	1,24.61	1,51.75	90.92	1,19.69	66.51	1,88.38	45.99	64.72	8.40	36.44	9,03.75
Forest and other capital outlay charged to revenue ...	2.54	.64	.23	-.07	3.43	.10	.17	-.03	-.04	-.33	7.59
Irrigation (Revenue account) ...	1,25.27	1,40.03	81.05	1,06.56	1,40.97	28.14	23.67	32.40	13.99	-.56	6,42.69
Irrigation, capital outlay (charged to revenue) ...	3.97	...	-.02	-.56	...	-12.97	...	-.25	...	...	-8.18
Debt Services ...	8.26	2,29.67	10.22	50.54	-5.13	51.99	2.00	21.55	1.59	6.23	3,77.52
<i>Civil Administration—</i>											
General Administration ...	2,65.78	1,09.12	1,21.54	1,28.46	98.71	91.53	64.87	62.43	19.05	24.81	9,92.57
Administration of Justice ...	93.89	66.62	96.56	68.86	50.34	56.44	36.15	25.69	7.50	8.68	5,11.39
Police ...	1,61.93	1,76.15	2,22.72	1,60.91	1,19.03	1,69.18	81.40	57.28	31.08	27.17	12,09.39
Education ...	2,48.47	1,79.82	1,26.50	1,90.26	1,53.27	80.96	80.69	48.92	19.50	30.91	11,65.01
Medical ...	85.79	45.70	48.79	31.34	42.08	37.69	24.90	12.30	5.44	11.71	3,48.91
Public health ...	22.68	23.88	37.36	19.18	12.04	9.68	10.11	3.45	1.21	6.32	1,46.42
Agriculture ...	87.38	26.04	23.75	28.51	44.71	16.12	12.98	14.50	3.10	6.47	2,14.02
Industries ...	14.83	3.54	11.67	10.82	11.45	2.32	7.61	2.11	...	1.62	65.98
Other Departments ...	73.53	28.49	50.41	31.82	31.66	35.97	18.74	9.76	9.47	5.31	2,95.76
Total ...	10,04.28	6,59.36	7,39.30	6,70.16	5,63.29	4,99.89	3,37.45	2,36.44	96.35	1,23.00	49,49.45
Civil Works ...	1,46.11	92.63	76.20	47.28	1,20.33	85.95	37.63	52.86	31.56	38.76	7,43.28
Miscellaneous ...	1,28.98	1,69.65	1,33.73	1,31.89	1,20.10	1,21.04	57.90	60.67	15.31	30.55	9,73.75
Total expenditure ...	15,44.02	14,43.73	10,81.67	11,26.75	10,09.50	9,62.62	5,04.81	4,68.92	1,67.24	2,35.87	85,89.85
Total Revenue ...	15,50.27	14,60.74	9,05.74	11,23.63	10,72.63	8,25.61	4,96.56	4,30.22	1,72.33	2,00.83	82,84.80
Surplus (+) deficit (-) of each Government	+6.25	+17.01	-1,75.93	-3.12	+63.13	-1,36.91	-8.25	-38.70	+5.09	-35.04	-8,04.96

¹ Includes totals of Shan States Federation (Burma) and Coorg.

management, defective constitutional control and inherent defects of alien domination, only helped to bring about constantly increasing exploitation of our resources, has retarded our national progress and burdened us with undefined and indefinite financial liabilities. Compelled to meet the demands of a forward imperial frontier policy . . . and constant borrowing for commercial enterprises, often undertaken in consequence of the pressure of English commercial classes, our Indian Government has little money to spare, with all its increase of taxation, for purposes of national education.' Gokhale attributed a large part of the increase in public expenditure to the distrust and suspicion created by the Mutiny, which led to the wider employment of costly British services. The most serious growth in public expenditure was caused during the war and post-war period. The military expenditure, which was already high, namely Rs. 29·84 crores in 1913-14, rose by leaps and bounds and stood at Rs. 67·38 crores in 1920-1. Since then by successive reductions the figure has been brought down to about Rs. 45 crores. The belief, however, is widely held that there is still further scope for substantial economies. National safety is of course a matter of paramount concern and we must be reasonably well prepared to meet all likely contingencies. At the same time we must never allow ourselves to forget that India is a very poor country and we must be chary of piling up unproductive expenditure that is not obviously necessary.

The enormous increase in the expenditure on civil administration has been another popular grievance against the Government, the complaint being that the Indian administration is one of the costliest in the world. The constitutional reforms have always been attended with additional heavy additions to administrative expenditure.

In both the military and the civil branches of administration there is need for a rigorous pursuit of economy by reduction of establishments, progressive Indianization, etc. It is, however, equally necessary to spend as freely as possible on the 'nation-building' departments—on education, agriculture, industries, irrigation, etc. in order to achieve the economic uplift of the people. The present scale of expenditure on these departments is very meagre, as shown by Table II on page 541.

§10. **Burden of taxation.**—The percentage of national income taken as taxation is low in India as compared with some other countries like the United Kingdom (about 6% as

against over 22% in the United Kingdom).¹ But considering the poverty of the people, the burden of taxation cannot be considered to be light. Besides, the question cannot be considered apart from the direction of public expenditure. If the expenditure is really beneficial to the nation, this would be properly regarded as a compensation and justification for the taxation, but, as we have already seen, the position in this respect is far from satisfactory.

Before the war, taxation was very unevenly distributed between the different classes of the community. The poorer sections bore the brunt of the burden in connexion with the land revenue, salt tax, excise duties, stamps, etc. The war- and post-war changes in taxation have made the system somewhat more equitable by the introduction of a graduated income-tax and super-tax, and the levy of special import duties on luxury articles, which naturally affect only the richer classes. Even so, a considerable degree of inequality still persists, and it needs to be rectified by the removal or reduction of taxes which press disproportionately on the poorer sections, and by relying increasingly on taxes likely to be borne mostly by the richer sections.

§11. Recent Indian finance.—As was to be expected, the war seriously dislocated trade and industry, and therefore public finance also. In contrast with the budget surpluses which characterized the pre-war period, there came a succession of deficit budgets in both central and provincial finance. Various economies were carried out on the lines recommended by the Retrenchment Committee of 1922-3, and surplus budgets became again a feature of Indian finance for some years beginning from 1923-4. After 1927-8, however, budget equilibrium was disturbed. The world economic depression caused a very serious deterioration of many important revenue heads like customs and income-tax and adversely affected the earnings of commercial departments like Railways and Posts and Telegraphs. The deficits had to be covered by heavy additional taxation—about Rs. 45 crores in the three years 1930-3. By this means, however, the Central Budget was able to show a small surplus, which has considerably increased during the last three years, 1934-5 to 1936-7, making some relief in taxation (e.g. income-tax) possible. The prospects of further

¹ The burden of taxation (central and provincial, including land revenue) per head in British India was Rs. 5-0-6 in 1932-3. According to Sir Purshottamdas Thakurdas, the burden of taxation per head was Re. 1-13-9 in 1871, Rs. 2-6-6 in 1901, Rs. 2-14-5 in 1913, and Rs. 6-1-8 in 1922.

relief from taxation in the near future for the benefit of the lower middle classes and for assisting the revival of trade and industry is held out by the Government, which should be able to fulfil its undertaking in the absence of any extraordinary contingency, now that there are some signs of economic recovery.

§12. Public debt in India.—The origin of our public debt is to be traced to the wars of the East India Company. The debt inherited from the East India Company by the Government of India was purely unproductive. Since 1867, however, the productive debt incurred for the construction of railways, irrigation works, etc., has gone on increasing. By far the greater portion of the public debt of India during the pre-war period was raised in England. The unexpected success which attended the Government's attempts to raise loans in India during the period of the war made the Government realize the strength of the Indian money market, and now most of the public borrowing is done in the country itself. The major portion of our debt, however, is external in the sense that it is held by non-Indians. It is desirable that the volume of the external debt should be reduced as far as possible, for it is apt to create political difficulties and to complicate the Indian exchange problem. It is, however, gratifying that the bulk of the public debt is productive in its character, being contracted chiefly for the construction of railways and irrigation works.

The total public debt (i.e. the interest-bearing obligations) of the Government of India on 31 March 1935 was Rs. 1,235·74 crores; Rs. 513·36 crores being sterling debt in England and Rs. 722·38 crores being rupee debt in India. Rs. 981·03 crores represented interest-yielding assets, such as capital expenditure on railways, capital advanced to provinces for irrigation works, etc.; Rs. 51·52 crores represented cash, bullion and securities held on Treasury account, and only Rs. 203·19 crores represented unproductive debt, not covered by interest-yielding assets.

§13. Financial relations between the Central and Provincial Governments.—From 1833 to 1871 all financial powers were in the hands of the Government of India, which controlled the smallest details of provincial expenditure. Lord Mayo was impressed with the necessity of some decentralization in order to enlist greater interest and more animated cooperation on the part of the provincial governments in developing the public revenues and managing them with all possible economy. He initiated the system of 'Provincial

Settlements' in 1871, under which certain heads of expenditure, local in character, were handed over to the provinces. For the management of these, the provinces were given, in addition to the departmental receipts, annual fixed lump-sum grants, the deficiency being made good by local taxation if necessary. The system of decentralization thus initiated was successively improved and extended in 1877, 1882, 1904 and 1912. The position before 1919 was as follows :

On the revenue side the Central Government retained for its use all the revenues which could not be allocated or traced to any province, these being called the Imperial Heads of Revenue (such as Opium, Railways, Customs, Salt, Posts and Telegraphs). Of the remainder, some were wholly provincial, like Forests, Excise (in Bombay and Bengal), Registration, the departmental receipts from such provincial departments as Education, and Law and Justice. Lastly, there was an important class of divided heads of revenue, such as Land Revenue, Income-Tax, Excise, Irrigation and Stamps.

On the expenditure side a somewhat similar arrangement prevailed, and there was a special arrangement for the sharing of expenditure on famines.

Since the Reforms of 1919, of which the keynote was financial autonomy, the divided heads were abolished and the new allocation of revenue and expenditure was as follows : (i) *Imperial Heads of Revenue* : Opium, Salt, Customs, Income-Tax, Railways, Posts and Telegraphs, Military receipts. (ii) *Provincial Heads of Revenue* : Land Revenue (including Irrigation), Stamps (judicial and commercial), Registration, Excise, Forests.

Provincial contributions.—The abolition of divided heads of revenue and the provincialization of some heads like Land Revenue and Stamps resulted in a large central deficit. A Committee (Meston Committee) appointed in 1920 to consider the question of meeting this deficit proposed a scheme of provincial contributions to the central exchequer. Initial contributions were fixed accordingly on the basis of what the various provinces were immediately in a position to pay without having to face a deficit or being compelled to resort to new taxation. The initial contributions were to be gradually replaced by standard contributions based on the capacity to pay of each province. The Meston Settlement failed to please anybody, and there was an unceasing clamour for the abolition of the contributions. The gradual improvement in the finances of the Central Government enabled it to

grant substantial remissions in 1925-6 and the succeeding years, and with effect from 1928-9 the system of provincial contributions was completely abandoned. In spite of this, however, the main grievance of the provinces, especially of the industrial provinces like Bombay and Bengal, still remained, namely, that with *stationary needs* the Central Government had *elastic sources of revenue*, e.g. income-tax and customs, while the provinces, whose needs were rapidly expanding, had been given sources of revenue like land revenue and excise from which it was difficult to obtain correspondingly larger incomes. In these circumstances the provinces agitated strongly to secure a substantial share in the income-tax, the demand for which was particularly insistent on the part of the comparatively industrialized provinces of Bengal and Bombay. A small share in the income-tax was granted to the provinces.

§14. **Indian finance under the new Federal Constitution.**—The important question of distribution of revenues between the Central Government and the provinces (or units of the coming Federation) has been recently considered by various committees and commissions, such as the Simon Commission (Layton Report), Federal Finance Sub-Committee of the Round Table Conference (Peel Sub-Committee of the Federal Structure Committee), and the Percy Committee.

The Government of India Act of 1935 which ushers in the new federal constitution contains the following provisions based on the findings of all these bodies.

The following duties and taxes are to be levied and collected by the Federal Government :

(i) Duties in respect of succession to property other than agricultural land.

(ii) Stamp duties in respect of bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, proxies and receipts.

(iii) Terminal taxes on goods or passengers carried by railway and air.

(iv) Taxes on railway fares and freights.

The net proceeds of the above duties and taxes are not to form part of the revenues of the Federal Government but are to be distributed according to certain principles among the provinces and federated States within which the said duties and taxes have been levied. It is open to the Federal Legislature, however, to levy a surcharge on these duties and taxes and to appropriate the proceeds for Federal purposes.

*Taxes on Income (excluding corporation taxes).*¹—Taxes on income, other than agricultural income, are also to be levied and collected by the Federal Government. A percentage of the net proceeds prescribed by Orders-in-Council are to be assigned to the provinces and the federated States within which such tax is leviable in a given year in such manner as may be prescribed by Orders-in-Council.

The Federal Legislature may at any time increase such taxes by a surcharge for Federal purposes.

Salt excise and export duties.—Duties on salt, federal duties of excise, and export duties are to be levied and collected by the Federal Government. But the Federal Legislature may pass an Act providing for the payment to the provinces of sums equivalent to the whole or part of the net proceeds from such duties, out of the federal revenues.

In the case of any export duty on jute or jute products, at least one-half of the net proceeds is to be assigned to the provinces in which jute is grown, the distribution being in proportion to the respective amounts of jute grown in them.

No Bill or amendment is to be introduced or moved in the Federal Legislature (except with the previous sanction of the Governor-General) which (i) imposes or varies any tax or duty the whole or part of the net proceeds whereof are assigned to any province; or (ii) varies the meaning of the expression 'agricultural income' as defined for the purposes of the enactments relating to Indian income-tax; or (iii) affects the principles on which moneys are or may be distributable to provinces or States; or (iv) imposes any such federal surcharge as is mentioned above. Before giving his sanction in this case, the Governor-General is required to satisfy himself that all practicable economies and all practicable measures for otherwise increasing the proceeds of taxation retainable by the Federation would not result in balancing federal receipts and expenditure in that year.

§15. *The Niemeyer award.*—The Secretary of State recently appointed Sir Otto Niemeyer, one of the ablest officials of the British Treasury, to conduct the financial inquiry contemplated by the Government of India Act (1935). His report, setting forth the terms for the financial settlement between the Central and Provincial Governments with special reference to the division of the income-tax under the new Constitution, has been accepted, and 1 April 1937 has been

¹ A corporation tax means a tax on the profits of companies.

announced, by Orders-in-Council, as the date for the inauguration of provincial autonomy.

The Niemeyer report proposes to give financial assistance to the provinces in three ways, partly by cash subventions, partly by cancellation of the net debt incurred previous to 1 April 1936, and partly by distribution of a further 12½% of the jute tax to the jute-growing provinces (Bengal, Assam and Bihar).

The annual cash subventions will be as follows: To the United Provinces Rs. 25 lakhs, for five years only; to Assam Rs. 30 lakhs; to Orissa Rs. 40 lakhs; to the North-West Frontier Province Rs. 100 lakhs (subject to reconsideration after five years); and to Sind Rs. 105 lakhs to be reduced by stages after ten years. The total approximate annual relief aimed at is as follows: Bengal Rs. 75 lakhs, Bihar Rs. 25 lakhs, the Central Provinces Rs. 15 lakhs, Assam Rs. 45 lakhs, the North-West Frontier Province Rs. 110 lakhs, Orissa Rs. 50 lakhs, Sind Rs. 105 lakhs, and the United Provinces Rs. 25 lakhs. The extra recurrent cost to the Centre will be Rs. 192 lakhs. Orissa is to get a further non-recurrent grant of Rs. 19 lakhs and Sind of Rs. 5 lakhs by six equal steps beginning from the sixth year from the introduction of provincial autonomy, subject to certain conditions.

Assignment of income-tax to the provinces.—This was one of the major subjects of the Niemeyer enquiry. The Report calculates the income-tax to yield Rs. 12 crores a year. Half of this (Rs. 6 crores) is assignable to the provinces, but for the first five years it will be retained by the Centre in order to consolidate its financial position. In the course of the next five years the revenue will gradually be made available to the provinces, so that after ten years the provinces will receive their full share of the income-tax. So long, however, as the portion of the distributable sum remaining with the Centre together with any contribution from the railways, aggregates to less than Rs. 13 crores, the proceeds of the income-tax will not be distributed among the provinces. The percentage division of the distributable portion of the income-tax between the provinces is as follows:

Madras, 15%	Punjab, 8%	Assam, 2%
Bombay, 20%	Bihar, 10%	Orissa, 2%
Bengal, 20%	Central Provinces, 5%	Sind, 2%
North-West Frontier Province, 1%.		

It will thus be noticed that a considerable interval must elapse before the provinces will begin to receive even a partial benefit, and a still longer interval before they receive

the full benefit from their share of the income-tax. During the first five years after the inauguration of provincial autonomy there is no hope of the provinces getting anything. It is doubtful whether even at the end of ten years the provinces will receive their full share, since this is dependent, firstly, upon the railways paying their way and making their contribution to the general revenues and, secondly, upon the military expenditure not increasing. Also, it is assumed that general economic conditions during the next decade will not deteriorate and that there will be a steady recovery in India.

Sir Otto Niemeyer's recommendations represent a compromise between a number of conflicting aims and viewpoints, and it must be admitted that they are characterized by a spirit of realism and practicalness rather than a doctrinaire adherence to any theory of federal finance. The dissatisfaction with the Niemeyer Report is indeed almost universal. This, however, by no means proves that the scheme is unsound. It is hardly possible to change it in favour of one province without prejudicing another. At the same time the provinces must be given expanding sources of revenue to enable them to finance schemes of expansion in the nation-building departments.

It is unfortunate that the diversion of the yield of the income-tax to the provinces is likely to be a slow process. The success of Sir Otto's scheme is largely dependent on the satisfactory working of the railways, and Provincial Governments will in their own interests have to cooperate with the Government of India in restoring the prosperity of the railways to make them substantial contributors to the general revenues. This involves the regulation of provincial road policy so that roads will assist the railways instead of competing against them. It also involves a thoroughgoing overhaul of railway expenditure on the part of the Central Government and a proper coordination of the different forms of transport.¹

SUMMARY

Recent years have witnessed considerable changes in the financial system of India. The provinces have achieved greater financial independence, and new sources of revenue (other than Land Revenue), like Income-Tax and Customs, have come into prominence. The regime of customs duties may be said to have started from the year 1894. The customs duties were until recently for revenue purposes and were sometimes balanced by excise duties as in the case of the cotton excise (abolished in 1926).

¹ Local Finance is discussed in the Appendix.

The period since the war has been marked by a great increase in the revenue from *customs duties*. Since 1924 some of them have been imposed in furtherance of the policy of discriminate protection, and latterly, as a result of the Ottawa Agreement of 1932, our tariff system has also come under the influence of the policy of Imperial Preference and has become a two-decker one in consequence.

The only important *export duties* are those on jute and jute manufactures, and on rice.

The *income-tax* was first levied on a permanent basis in 1886. Its history since that date has been characterized by increases in the rate, introduction of progression, and imposition of a super-tax. Its yield is in the neighbourhood of Rs. 17 crores per year.

The *salt tax* yields about Rs. 8 crores per year. Being a tax on a necessary of life, it is unpopular. It should therefore be reduced, if not altogether abolished.

Opium is now quite negligible as a source of revenue. As a result of an agreement with China exports to that country as indeed to other countries have now been stopped. Internal consumption is also strictly regulated.

The principal *provincial heads* of revenue are Land Revenue, Excise, Stamps, Registration fees, and the Scheduled Taxes.

The revenue from *excise* must diminish with the success of Government policy in putting down the evil of drink. For ensuring genuine and lasting success, however, the Government must proceed with courage and determination tempered with caution.

Since the beginning of the present century there has been a great increase of *public expenditure* in India, much of which is characterized by the criticism of Government as wasteful and not in the interests of the nation. Criticism is directed particularly against the excessive growth of *military expenditure* during and since the war. The military budget has recently been substantially reduced. But further reductions are demanded on the ground that the burden still presses much too heavily on the poverty-stricken people of India.

On the *civil side* the complaint is that administration is needlessly expensive and it is suggested that it is possible and desirable to cheapen it, e.g. by substituting Indian for European agency. It is essential to spend more money on the nation-building departments like education, agriculture and industries.

The *burden of taxation* in India is high considering the poverty of the people and the unproductive nature of a great deal of the public expenditure. Taxation is also unevenly distributed, and its incidence is unduly heavy on the poorer sections of the population. Since the war the injustice has been rectified to some extent by imposing additional taxation which falls largely on the richer sections.

Recent Indian finance has been characterized by heavy and recurrent deficits necessitating much additional taxation. We seem, however, to be gradually entering upon an era of balanced budgets, budget surpluses and lighter taxes.

Our *public debt* was in the beginning for unproductive purposes like war.

Since 1867, however, the proportion of the productive debt has rapidly increased. Also internal borrowing is being favoured more and more in preference to loans raised abroad.

Financial relations.—Before 1871 all financial power was centralized in the hands of the Central Government. Since then there has been a gradual process of devolution in favour of the provinces. The latest step in this development is that contemplated in the *Government of India Act of 1935*. The arrangement as decided upon in the Act is composite. There are certain taxes which only the *Federal Government* can levy, others which only the *units* can levy. In some cases the jurisdiction is concurrent. Certain taxes are controlled by one authority though the yield may be shared by both. In some cases the yield of a given tax may be allocated exclusively to one authority subject to a surcharge leviable for its own benefit by the other authority. In short there is absence of any single uniform principle, the main object kept in view being adequacy of revenues for both the Federal Government and the units.

The Government of India Act (1935) left certain important details for subsequent investigation and decision. Accordingly the Secretary of State appointed a special expert, Sir Otto Niemeyer, to settle the terms of the financial settlement between the Central and Provincial Governments. His Report has been accepted. Its main recommendations are as follows:

- (i) Provincial autonomy to be introduced on 1 April 1937.
- (ii) Cash subventions to be given to certain provinces, e.g. Orissa, North-West Frontier Province and Sind, so that all the provinces should have adequate resources at the inauguration of the new constitution.
- (iii) Relief to be granted to certain provinces in the form of the cancellation of the net debt incurred prior to 1 April 1936.
- (iv) Distribution of a further 12½% of the jute tax to the jute-growing provinces.
- (v) Assignment to the provinces of half of the income-tax (subject to certain conditions) beginning from five years after the inauguration of provincial autonomy. The process of transfer is expected to be complete at the end of another five years.

The Niemeyer Award may fairly claim to represent as equitable an arrangement as could be devised in the circumstances. It is necessary, however, to expedite the process of assignment of income-tax to the provinces by enabling the railways to pay their way and make a substantial contribution to the central revenues.

CHAPTER VIII

THE NATIONAL INCOME AND UNEMPLOYMENT

THE NATIONAL INCOME

§1. **Estimates of the national income.**—Estimates have been made from time to time of the national income of India. We might set out the chief among them showing the income per head in a tabular form as follows :

Estimates by	Relating to year	Income per head
		Rs. a. p.
Dadabhai Naoroji ...	1870	20 0 0
Lord Curzon ...	1900	30 0 0
Wadia and Joshi ...	1913-4	44 5 6
Shah and Khambata ...	1921-2	67 0 0
Findlay Shirras ...	1922	116 0 0
Visvesvaraya ¹ ...	1922-3	82 0 0

The differences in the estimates are due to a number of causes. First of all they relate to different periods, so that the difference in prices must be taken into account. Thus between 1913-14 and 1921-2 prices had risen by about 80%, so that Rs. 44-5-6 in 1913-14 would be equivalent to about Rs. 80 in 1921-2. Secondly, the area covered by the estimates is not always precisely the same. Thirdly, the methods of calculation are not uniform. Practice has varied with regard to items to be included and deductions to be made. We must further allow for the bias—pro-Government or anti-Government—of the inquirer. Besides the estimates on a national scale quoted above, there have been a number of intensive inquiries into the economic condition of certain selected regions, e.g. those carried out by Dr Mann in Bombay and by Dr Slater in Madras and the investigations

¹ In the present slump, as Sir M. Visvesvaraya suggests, it would be correct to take the average income at about two-thirds of the normal, or Rs. 55 per head.—*Planned Economy for India*, p. 27.

in the Punjab conducted under the auspices of the Board of Economic Inquiry.

§2. **The poverty of India.**—Even the most optimistic of these inquiries—whether national or regional—only serve to emphasize the fact that the inhabitants of this country are beset with a poverty for which there is no parallel in modern times in the countries of western Europe. Comparison of India with some of the advanced nations of the modern world conveys the same dismal lesson. The *per capita* income in Japan is about Rs. 271; in Germany, Rs. 634; in France, Rs. 636; in the United Kingdom, Rs. 1,092; in Canada, Rs. 1,268; in the U.S.A., Rs. 2,053.¹ However, while everybody must admit that there is appalling poverty in India, there is a silver lining to the cloud and there are on the whole good grounds for supposing that real if very slow amelioration in the condition of the people has been in progress in recent times and should be maintained when the country recovers from the serious set-back due to the present world depression. The villager consumes more salt, more sugar, and more tobacco, and imports more luxuries and conveniences than he did a generation ago. He eats more food and has a better house to live in than his father. To a considerable extent brass and other metal vessels have taken the place of coarse earthenware. The *per capita* consumption of food and of cloth is increasing. The impression of gradual economic betterment which one obtains from facts like these and from the various estimates of the national dividend is strengthened by such admitted tendencies as the growing independence of spirit displayed by agricultural and industrial labour. However, although it is true that some advance has taken place, it is insignificant as compared with the progress achieved by some of the foremost western nations and reflected in decline of pauperism, decrease of death-rate, shortening of hours of labour, spread of education, increase in means of recreation, improvement in housing and sanitation, etc.

§3. **Causes of Indian poverty.**—The poverty of India is a highly complex phenomenon and the factors accounting for it are many and varied. A more vigorous development of the economic resources of the country and a more rapid spread of education and general enlightenment are plainly needed. The problem of Indian poverty is, as we have seen, implicit in the treatment of almost every topic of Indian

¹ Visvesvaraya, *op. cit.*, p. 27.

economics and it is impossible to deal with it without opening up the whole field of economic and not a little of the political argument concerning present-day India.

§4. **Defects of distribution and consumption.**—Not only is the aggregate of national wealth deplorably small in relation to the size of the population in India, but it is also very unevenly distributed. According to Shah and Khambata, about a third of the wealth of the country is enjoyed by about 5% of the population; about 35% is absorbed by about one-third of the population; while the remaining 30% or less is distributed among more than 60% of the population. It is a well-known economic maxim that uneven distribution makes for diminution of welfare and aggravation of poverty. This evil, however, is not so glaring in India as in the capitalistic countries of the west, and as between inadequate production and inequitable distribution, the former is by far the more serious drawback of Indian economy. Besides the size of income and the manner of its distribution, another important element in national welfare is the proper ordering of expenditure or consumption. All classes of people in India, as elsewhere, can be proved to be more or less guilty of ill-regulated expenditure due to the tyranny of custom and religious prejudice (e.g. expenses on marriages, funerals and the like) and the influence of ignorance. An outstanding example of defective consumption is furnished by the ill-balanced dietaries adopted by many of the people in India. The prevalent dietaries in most of the provinces in India have been largely controlled by local circumstances and determined by the kind of food raised on the spot, with the result that the staple food of large sections of people is lacking in important nutrient substances. For example rice, the staple food of people in Madras and Bengal, is fundamentally a poor diet, deficient in important organic salts and vitamins. The wheat- and meat-eating Sikhs, Pathans and Gurkhas have a much better physique than the rice-eating Bengalis and Madrasis. The addition of wheat, milk, butter and meat improves the rice-eater's diet, as in the case of the Maratha. The problem of malnutrition is distinct from the problem of poverty. An excessively low income is of course a fundamental difficulty. But another difficulty is the failure to make the best possible use of a given income. 'A dietary conducing to malnutrition may cost more than a well-balanced dietary which promotes health.'¹

¹ *Agricultural Commission Report*, pp. 494-5.

The present facilities of transport should help in remedying the deficiencies of diet in any particular province by the import of the needed food-stuffs from other provinces. But extensive propaganda based on authoritative investigations is necessary in order to make people desirous of changing unsatisfactory food habits. The subject of nutrition in relation to public health should find its rightful place in the curriculum of medical and other studies. Advisory committees on nutrition manned by competent people are also likely to be helpful in disseminating reliable information on dietetic matters. The subject of consumption and expenditure in general is deserving of all the attention which the educationist and the moralist can devote to it.

UNEMPLOYMENT

§5. **Different kinds of unemployment.**—The discussion of the poverty problem leads by a process of easy transition to that of unemployment, since the great poverty of the people is after all the fundamental cause of all unemployment.

We shall now proceed to consider the various forms which unemployment takes in India.

(i) The vast majority of the population of India is engaged in agriculture and we have already seen¹ that in agriculture, as at present organized in India, there is *seasonal unemployment* of greater or less duration in the year in most parts of the country, and the question of finding suitable supplementary industries for keeping the cultivator occupied during this period of enforced leisure has been discussed.

(ii) There is another species of unemployment to which India is subject from time to time. The partial or total failure of the monsoon may be regarded as a sort of lock-out declared by nature, and it may result in throwing thousands of people out of their normal employment on the land. This creates the problem of *famine relief*.

(iii) *Industrial unemployment* of the type now familiar in the west, of course also occurs in India for the same reasons as elsewhere. But since only a small proportion of the people is engaged in modern industries, this kind of unemployment does not loom so large in this country. Qualitatively the problem is much the same here as in the western countries. But quantitatively it is far less formidable. It will assume larger proportions and attract more

¹ See ch. iii, §15.

attention with the growth of industrialization. So far as we have any modern industries at all, they have been caught up in the present world depression, and consequently the volume of employment offered by them is considerably smaller at present than normally. However, industrial unemployment in India differs from the parallel phenomenon in the west not only in scale but also in the nature of the problem it creates for the State. When for any reason work cannot be obtained in the cities, most of the labourers return to their villages and remain there until industrial conditions improve and there is again a demand for their labour. To a large extent, the people concerned themselves solve their problem and no call is made on the Government for assistance.

(iv) The rise and progress of modern industry in India and particularly the competition of machine-made goods from abroad have been often attended with *loss of occupation to cottage workers*, and in an earlier chapter we have indicated some methods of dealing with the situation which has thus arisen.¹

(v) Latterly the question of *middle-class unemployment* has come into prominence and is exciting much alarm and anxiety.

In this chapter we propose to concentrate attention on (i) rural unemployment due to failure of rains, i.e. famines; and (ii) middle-class unemployment.

§6. **History of famine relief.**—India has always been subject to famines and there is no evidence for supposing that they are more frequent now than they were before. In fact, owing to undeveloped communications and the consequent impossibility of bringing relief to the distressed areas, famines were far more calamitous in the pre-British period than at present. Historical evidence on this point is ample and convincing. The present view as to the responsibility of the State in the matter of famine prevention and famine relief is itself a recent growth, dating roughly from 1865, the year of the Orissa famine. The loss of life during this famine was needlessly great because of dilatory Government action in launching relief measures. As a result of an inquiry presided over by Sir John Campbell, the Government declared that its definite policy was to save life at any cost. This, however, led in subsequent years to indiscriminate charity and excessive expenditure. In 1878 was introduced

¹ See ch. iv, §19.

the scheme of the *Famine Insurance Grant*, by which a sum of Rs. 1½ crores was provided in the annual budget of the Government of India to be spent on direct relief if there was a famine, and on the construction of public works of a protective nature,¹ if the year was normal. The recommendations of the Famine Commission of 1880, presided over by Sir Richard Strachey, supplied the foundation on which the present system of famine relief is based. Communications were extended by renewed activity in building railways under the new guarantee system.² The *principles of famine relief* (based on the recommendations of the Famine Commission, 1880) were clearly defined as (i) provision of work to the able-bodied at a wage sufficient to secure health but not ordinary comforts; (ii) gratuitous relief to the infirm in their own villages or in poor-houses; (iii) assistance to the land-owning classes in the form of *takkavi* loans; and (iv) suspension and remission of land revenue.

Famine codes embodying these principles were prepared for every province, and were suitably amended in the light of later experience. The amendments, influenced by the recommendations of the Famine Commission of 1901 (presided over by Sir Antony Macdonnell), were of fundamental importance. The Commission emphasized the need for 'moral strategy' or 'putting heart into the people', i.e. assisting the people by loans and other means as soon as danger is scented, by prompt and liberal grants of *takkavi*, early suspension of land revenue, and a policy of 'prudent boldness' with large and elastic plans of relief, constant watchfulness for signs of approaching calamity, and full enlistment of non-official help. The Commission further drew attention to the necessity of devising measures for tackling fodder famines and saving cattle, starting cooperative credit societies and extending State irrigation works of a protective character.³ The amended Famine Codes embodying these principles have been found to work satisfactorily, so that famines may now be said to have been brought more effectively under administrative control than ever before in the history of India. One main cause why this has been possible is the great progress that has been made since Lord Dalhousie's time in the development of communications and transport. We have now no such thing as food famines, i.e. it is rarely that food is not available somewhere in the country. The problem

¹ See ch. iii, §8 (ii).

² See ch. v, §2 (ii).

³ See ch. iii, §10.

is to transport it quickly to the affected areas, and this is now possible owing to the development of transport. But because of relative scarcity and the expenses of transport the prices of food-stuffs are higher than in normal years, while the people in the famine-stricken areas, having temporarily lost their employment on the land, have no money with which to buy the food. Modern famines, in other words, are *not food famines but money famines*. Famine relief therefore now consists mainly in providing work and paying wages for it, in order to enable those who seek relief to buy sufficient food.

Under the financial decentralization which followed the Reforms of 1919, each province was required to provide annually for its own famine insurance out of its revenues, and to pay the amount into the *Famine Insurance Fund*. As need arose, it was open to each of the provinces to spend the amount to its credit in the Famine Insurance Fund for (i) relief of famine; (ii) construction of protective works; or (iii) grant of loans to cultivators.

The constitution of the Insurance Fund was radically changed in the year 1928-9. Under the new regulations the fund has ceased to be an insurance fund. It is now called the Famine Relief Fund, and its primary object is to provide for expenditure on famine relief proper, the word 'famine' being held to cover famine due to drought or other natural calamities (e.g. an earthquake). Accordingly, the annual assignment from revenues as well as the balances in the Fund, till they exceed a certain prescribed amount, are not expended save upon the relief of famine. The balances at the credit of the old Insurance Fund have been transferred to the new fund. In Burma and Assam, where no Famine Relief Fund has been created, the balances were transferred to the general balances of the provinces. The total additions to the Fund during the year 1934-5 were Rs. 28·91 lakhs, inclusive of interest on the balance. The total withdrawals (inclusive of Rs. 21·95 lakhs of expenditure on the clearance of sand in the areas affected by earthquake in Bihar and Orissa) during the same year were Rs. 40·42 lakhs. The closing balance in the Fund on 31 March 1935 stood at Rs. 2,85·71 lakhs.

§7. **Famine relief organization.**—We may here give a brief description of the relief organization built up by the Government in the course of the last seventy-five years.¹

¹ See *Imperial Gazetteer of India*, vol. III, pp. 477-81.

(i) *Standing preparations* are made on a large scale. Valuable information is gathered about climatic conditions, crops and prices, births and deaths, etc.; programmes of suitable relief works are kept ready and brought up to date; the country is mapped out into relief circles, and reserves of tools and other equipment are kept ready.

(ii) When rains fail, a *careful look-out* is kept for *danger signals* indicating the approach of distress, such as rise of prices, restlessness of people, and their aimless wandering, and increase in crime, especially of petty thefts.

(iii) The Government then declares its *general policy* as based on *moral strategy*. Meetings are called for explaining this policy to the people, non-officials are invited to help the Government; suspension of revenue is announced and loans for digging wells, etc., are made. Village inspection begins, and preliminary lists of helpless persons are prepared.

(iv) Then follows the *first stage* of actual relief. *Test works* are opened and, if considerable labour is attracted to them, they are converted into relief works.

(v) The *next stage* commences from December. *Central relief camps* are organized and gratuitous relief is given to the infirm in the villages. Poor-houses are opened in towns; and village kitchens are run for the benefit of children. The distress reaches its climax in May, when there is fear of an outbreak of cholera.

(vi) The *last stage* begins with the advent of the rains. The large relief works are closed down and people are moved in batches to *smaller relief works* near their villages. Local gratuitous relief is extended, and liberal advances are made to cultivators for the purchase of cattle, ploughs and seed. When the principal autumn crop is ripe, the few remaining works are gradually closed down and gratuitous relief ceases. The famine is ordinarily at an end by the middle of October. All this time the medical staff is kept ready to deal with cholera and malaria—diseases which generally appear when the rains break out.

§8. **Middle-class unemployment.**—Middle-class unemployment has in recent years assumed alarming dimensions and attracted widespread public attention. Investigations through specially appointed committees were carried out between 1924 and 1928 in several provinces, like Bengal, Madras, Bombay and the Punjab, and in some of the Indian States like Travancore. The most recent committee appointed by the U. P. Government under the chairmanship of Sir Tej Bahadur Sapru signed its unanimous report in

December 1935. The reports of all these committees show that middle-class unemployment is an all-India problem. The evil is a very serious one, whether one considers the sufferings of the unemployed young men themselves or the social and economic effects of 'the existence and steady increase of a sort of intellectual proletariat not without reasonable grievances. . . . So long as the great mass of the nation's intelligent manhood is driven, in ever-increasing numbers, along the same, often unfruitful course of study, which creates expectations that cannot be fulfilled and actually unfits those who pursue it from undertaking many useful operations necessary for the welfare of the country, any Government however it may be constituted, whether it be bureaucratic or popular, must find its work hampered by an unceasing stream of criticism and a natural demand for relief which cannot possibly be met.' Again the gospel of revolutionary socialism or communism finds willing adherents in young men who nurse a strong sense of personal injury against a scheme of things in which apparently they have no place.

§9. **Causes and remedies.**—India, like the rest of the world, has been severely hit by the unprecedented severity of the present economic depression. Employment offered by the Government or by private agencies has consequently shrunk very greatly, while the supply of men seeking it has grown rapidly. Another cause of unemployment among the educated classes is inherent in our present system of education, which qualifies people almost exclusively for clerical occupations, and those who undergo education generally do so with a view to Government service or to admission to a few very much over-stocked professions such as law and medicine. The education that is imparted also fails to emphasize the idea of the dignity of labour. One result of this is that boys belonging to the agricultural and the artisan classes, instead of becoming more efficient in their ancestral occupations because of their education, come to look down upon it and prefer starving as fifth-rate clerks to earning a decent livelihood in their family occupations. This merely accentuates the prevailing unemployment among the educated classes. It must, however, be added that, while parents fail to display the necessary vision and foresight in choosing occupations for their boys, this is to some extent due to the absence of facilities for practical training—agricultural, technical, industrial or commercial.

The most important cause of middle-class unemployment

is the very poor industrial development of the country and consequently the small number of careers open to our young men. The under-development of the economic resources of the country is at the basis of the poverty of the masses and, in the last analysis, dominates all species of unemployment. Everything that leads to the economic betterment of the country will therefore obviously be a remedy for unemployment. The rise in the general level of prosperity will for example increase the demand for the services of clerks, teachers, lawyers, doctors, salesmen, managers, insurance agents, etc. Any further extension of Government activity for the sake of bringing about an all-round betterment of the country will also mean more employment for the educated classes in the various departments of administration.

§10. **The Sapru (Unemployment) Committee.**—We may here refer to some of the more important recommendations of the Sapru Committee and classify them as follows: (i) those which aim at increasing the demand for educated men; (ii) those which aim at avoiding excess of supply; and (iii) those which aim at a proper adjustment of supply to demand (actual or potential).

(i) Municipalities and District Boards should be compelled to employ qualified engineers and supervisors for the purpose of maintaining roads and buildings in an efficient condition.

The Government might with benefit provide more employment for qualified medical men by extending the scope of public medical relief, by attaching more private practitioners to public hospitals, by starting investigations conducted through qualified medical men into the efficacy of indigenous drugs, etc.

Municipalities and District Local Boards should be compelled to employ properly qualified medical officers for carrying out their duties in connexion with public health and sanitation.

The over-crowding of the legal profession may be remedied to some extent by the introduction of greater specialization of functions, e.g. some should specialize in drafting documents, others in arguing cases, etc.

The Government should consider the question of restoring, as finances permit, useful posts which have recently been retrenched on grounds of economy.

The rules regarding retirement of public servants at the age of 55 should be strictly enforced so as to give a chance of employment to new young recruits.

Large-scale and small-scale industries should be stimulated so that they might absorb an increasing number of our young men.

Vigorous steps should be taken to introduce compulsory primary education, without which no substantial economic progress is possible. This would also mean an increased demand for teachers, and would so far remedy the existing unemployment.

(ii) The High School examination should have two kinds of certificates—one certifying completion of the course of secondary education and qualifying for the subordinate branches of Government service and also for admission to industrial, commercial and agricultural schools, and the other qualifying for admission to Arts and Science colleges. In this manner many students who are really unfit for a university career in Arts and Science will be diverted at the close of their secondary education, and this will reduce the number of unemployable graduates.

(iii) The facilities for practical training in the various technical educational institutions should be extended, and education in general should receive a more pronouncedly practical and, in the case of primary schools, a definitely rural, bias.

Medical practitioners should be encouraged, if necessary with the help of generous subsidies, to settle down in rural areas instead of congregating in the few big towns.

Steps should be taken to develop new professions like pharmacy, dentistry, accountancy, architecture, librarianship, insurance work, and journalism, and suitable training should be provided for qualifying for these careers.

An attempt should be made to induce agricultural graduates and diploma holders to make scientific farming a means of livelihood. The development of dairy farming would afford another possible avenue of employment for them.

Steps should be taken to bring qualified educated men into touch with commercial houses for employment. Regional vocational guidance authorities should be created for this purpose.

The Government should spread broadcast information regarding possible careers and bring into existence suitable machinery for giving sound advice to parents regarding the aptitudes of their boys and the choice of a suitable career for them.

Secondary schools should provide much more diversified courses of study than at present, and in the universities

greater stress should be laid on scientific and vocational education.

Appointment Boards should be created for university graduates as also for the products of the secondary schools.

SUMMARY

NATIONAL INCOME

The extreme *poverty of India* is brought out clearly by the various estimates of the *national income* made from time to time and by a number of more limited regional inquiries carried out in the different provinces. However, considering the position over the period since about 1870, there has undoubtedly been some progress, though it has been very slow, and quite insignificant when compared with the achievements of the advanced nations of the west. A discussion of the causes of Indian poverty must inevitably open up the whole field of Indian economics.

Besides low production, India also suffers from uneven distribution of wealth. The more pressing question of the moment, however, is how to increase the total production of wealth.

The effects of poverty are further aggravated by many defects of consumption due to the tyranny of custom and religious prejudices and to ignorance.

Consumption is found to err at present among other things as regards the selection of a proper health-giving diet. Many of the prevalent diets in India are seriously defective, and the question of changing the food habits of the people ought to engage the earnest attention of the Government and of the educational agencies in the country.

UNEMPLOYMENT

The problem of *industrial unemployment* of the modern type is growing in extent and seriousness. But it is not yet of the same order of importance as in the west.

Agriculture is the primary industry in India and its fortunes are dependent on the capricious monsoon. If the rains fail, this spells unemployment for large numbers of people who thus come face to face with the spectre of *famine*. (There is of course *seasonal unemployment* for a part of the year even if the rainfall is normal.) The elaboration of effective machinery for coping with famines belongs to the last three-quarters of a century and is largely made possible by the modern development of transport and communications. Each locality need no longer depend on the food-stuffs raised by itself. It can now draw upon the supplies available in other localities in the event of failure of local supplies. Famine has thus come to mean not absolute failure to obtain food at any cost, but comparative scarcity and high prices. Enough food is almost always available. The problem is to put people in the distressed areas in possession of sufficient purchasing power to obtain it.

Famine relief mainly consists in providing work and wages to those rendered temporarily helpless by the failure of the rains. Each province

has a famine code of its own which lays down in detail the plan of action to be followed for coping with a threatened or actual famine. Every province was also required to provide in its annual budget a certain fixed sum (depending upon its liability to famines, etc.) which was in the first instance paid into a *Famine Insurance Fund* upon which it was then entitled to draw, as occasion arose, for preventing or relieving famines. Since 1928-9, the old Famine Insurance Fund has been replaced by the *Famine Relief Fund*. Its main object is to provide for expenditure on famine relief proper. *The principles of Government famine policy* are: (i) as far as possible to make people help themselves, encouraged by Government assistance in the form of loans, suspension of land revenue, etc.; (ii) to limit relief to the minimum necessary for securing health; (iii) to make relief conditional on work in the case of the able-bodied and to utilize as fully as possible the services of non-officials; (iv) constant preparedness, eternal vigilance, and prompt and definite action as soon as danger is scented. The actual details of the programme of famine relief are most elaborate and represent the fruit of long experience and much thought.

The problem of *middle-class unemployment* has excited much attention and anxiety in recent years. Various committees appointed during the last few years by the different provincial Governments have deliberated and made recommendations for dealing with the evil.

The causes of middle-class unemployment are a defective system of education which is too academic and too much out of touch with real facts and needs, and the under-development of the industrial life of the country, which consequently limits the openings available to the educated classes. The latest of the provincial committees on this question is the Sapru Committee. They have made an exhaustive study of the problem, bringing under close scrutiny every field of activity open to the educated classes. Their recommendations cover a wide range and include many suggestions—some of which are intended to be mere palliatives, while others are radical and contemplate far-reaching changes. They envisage a great extension of Government activity and a thorough overhauling of the educational system of the country. These recommendations can all be placed under one or other of the following three categories: (i) those aiming at an increase of demand for educated men; (ii) those aiming at avoiding an excess of supply; and (iii) those aiming at a more effective adjustment of supply to demand (actual or prospective).

APPENDIX¹

DISTRICT, VILLAGE AND MUNICIPAL (URBAN AND RURAL) ADMINISTRATION AND FINANCE

DISTRICT ADMINISTRATION

§1. **The District as the unit of administration.**—The average British Indian province, being too large to be conveniently administered as a unit, is divided into several Districts. In all provinces except Madras, the Districts are combined into four to six groups, called Divisions. The administrative head of a Division is the Commissioner, who in revenue matters is subject to the control of a provincial Board of Revenue or a Financial Commissioner (in all provinces except Bombay). At the provincial headquarters are the Secretariats where the Governor, as head of the provincial administration, the Executive Councillors and the Ministers have their offices. They are assisted by a Chief Secretary and by Departmental Secretaries. Each Department (Education, Police, Forests, Excise, etc.) has its administrative head (such as the Director of Public Instruction, Inspector-General of Police, etc.). The Commissioner of a Division ranks as an administrative head in the Revenue Department and receives his orders direct from the Provincial Government, whose general authority thus descends through the Commissioner in a direct chain to the District Officer.

§2. **The Collector-Magistrate.**—The District is the most vital unit of administration, and a large part of Government business, including normally all communication with the general public, is done by District officers. The principal District officer has a dual capacity; as Collector (known in the old Non-Regulation provinces, like the Punjab, as the Deputy Commissioner), he is the head of the revenue organization; and as Magistrate he exercises general supervision over the inferior criminal courts, and in particular directs the police work. In areas where there is no permanent revenue settlement he is in continuous touch, through his revenue subordinates,² with every inch of his territory, and

¹ This Appendix is intended to meet the requirements of the Intermediate Economics syllabus of the University of the Punjab.

² See §4.

recommends adjustment of the Government land revenue if necessary.¹

The primary function of District administration is to collect the revenue and to keep the peace. But, because it is so close-knit, so well-established and so thoroughly understood by the people, it simultaneously discharges many other duties. It deals with the registration, alteration, and partition of holdings; the settlement of disputes; the management of indebted estates; loans to agriculturists; and, above all, famine relief. The revenue officials, and to a much more limited extent the police, convey the orders of the Government to the people in a hundred ways. These two agencies are the sole representatives of Government over vast areas of the country. Several other specialized services exist, such as the establishments for irrigation, roads and buildings, agriculture, industries, factories, cooperative credit, etc., which are controlled not by the District officer but by their own departmental heads; but in varying degrees the District officer influences policy in all these departments and he is always in the background to lend support or, if need be, to mediate between a specialized service and the people. Indeed the Collector is in the eyes of most of the inhabitants of a District 'the Government' itself. His prestige is very great and the range of his influence wide. He is usually a fairly senior member of the Indian Civil Service, which has always exercised wider powers than any purely civil service in the English sense. Some District officers rise to the rank of Divisional Commissioner, Executive Councillor and even Governor of a province. Before the Reforms of 1919, the Collector, in his capacity as the President of the District Local Board, came into intimate touch with the duties performed by these Boards, and even today has extensive powers of supervision. Although as the result of the constitutional reforms the functions of the District officer are becoming more purely advisory, the Collector is still the most important and most trusted representative of the Government. It is needless to add that his post calls for rare qualities of integrity, judgment and decision.

§3. Other officers in the District and their duties.—Almost all the administrative work of the Districts was originally done by the Collectors and their subordinates. There are now, as stated above, specialized Departments of administration with their respective District heads, provincial

¹ See ch. iii, §§30 and 31.

Heads of Departments and subordinate officers in the District. The more important District officers and their duties are noticed below.

(i) *The District and Sessions Judge* is at the head of the administration of justice in a District and has both original and appellate jurisdiction in civil and criminal matters.

(ii) *The District Superintendent of Police* is the head of the District Police force. He is, however, the assistant of the Collector for police purposes in the latter's capacity as District Magistrate, and has to keep him informed of all matters of importance concerning the peace of the District and the state of crime.

(iii) *The Civil Surgeon* is the chief District medical officer and is in charge of the civil hospitals and dispensaries. He is also the Superintendent of the District jail. A certain number of these posts are reserved for the members of the Indian Medical Service.

(iv) *Deputy Educational Inspector*.—Until recently the District head of education was the Deputy Educational Inspector working under the supervision of the Educational Inspector of the Division. Administrative officers appointed by the District Boards are now in charge of primary education in the district.

(v) *The Executive Engineer* is the District head of the Public Works Department and is in charge of roads, buildings and irrigation works.

(vi) *Other Departments of the administration* (e.g. cooperative, agricultural, excise, forest, veterinary, public health) working in the Districts are also represented by their respective officers. As pointed out above, although all these Departments are controlled by their respective heads, the Collector is in close touch with their general working and is indirectly influential in shaping their policies.

§4. *District subdivisions*.—The District, being too large to manage as a single unit, is always subdivided for administrative purposes into a number of subdivisions, and these are again divided into talukas or tahsils. The subdivision is in charge either of a junior I.C.S. officer called the Assistant Collector (known in the old Non-Regulation provinces as Assistant Commissioner), or of a member of the Provincial Civil Service called the Deputy Collector (known in the old Non-Regulation provinces as Extra Assistant Commissioner). These officers, like the Collector, combine in their person magisterial as well as revenue functions. The tahsil or taluka is in charge of an officer called by various names, such as

mamlatdar (in Bombay), tahsildar (in Punjab) or muktyarkar (in Sind). The tahsildar has been rightly called 'the non-commissioned officer of the administration', and discharges a host of duties, including magisterial functions. He is in the closest touch with village officers and the people, and is in most matters the intermediary between the District officers and the people. The tahsildar has his parallel in all the other services (e.g. the Inspector of Excise, the Inspector of Police, etc.).

VILLAGE ADMINISTRATION

§5. **The origin of the Indian village community.**—We now come to the village, which is the primary territorial unit of Governmental organization. From the village are built up the larger administrative entities, the tahsil, the subdivision and the District.

As we have said before¹ India is a land of villages. The Indian village community owes its origin to diverse factors, such as the need for cooperation in undertaking the difficult task of clearing the jungle for cultivation and in securing protection from hostile tribes and wild beasts. A corporate village community was also necessary for administering communal property and carrying out collective social and religious activities.

§6. **Village officials.**—We have already² indicated the two main types of village constitution and described the principal village officials, such as the headman (called by various names, patil, patel, reddy, lambardar, etc.), the accountant (known variously as the kulkarni, talati, patwari, etc.), the chaukidar and the messenger. There was also the village *panchayat* or council of village elders. We have mentioned the respective duties discharged by these village dignitaries, who are in some provinces called *alutes*, as distinguished from the *balutes* or village artisans and menials. The village community in India is very ancient but is not without parallel in other parts of the world—the medieval manor in England, the German mark and the Russian mir are obvious parallels. But the characteristic feature of the Indian village community has been its enduring quality and its persistence in the face of numerous political vicissitudes, which was, however, chiefly due to physical isolation and its corollary, the absence of central control.

¹ Ch. ii, §3.

² See ch. ii, §3.

§7. **Causes of village decay.**—As the Decentralization Commission (1909) pointed out, the Indian villages formerly possessed a large degree of local autonomy. The Central Government, owing to defective means of communication, could not effectively interfere in the affairs of the village. It did not concern itself with individual cultivators, but made the village as a whole, or some large landowner, responsible for the payment of the Government revenue, and for the maintenance of order. This autonomy has now disappeared owing to the establishment of local civil and criminal courts, the present revenue and political organization, the increase of communications, the growth of individualism, and the operation of the ryotwari system which is extending even in the north of India. All these factors brought about the decay of the old village organization, and the village *panchayats* languished in consequence of the policy of administrative centralization. Nevertheless the village remains the primary unit of administration; the principal village functionaries—the headman, the accountant, and the watchman—are largely utilized and paid by the Government, and there is still a certain amount of common village feeling and interests.

§8. **Revival of village panchayats.**—The Decentralization Commission devoted special attention to the advisability of fostering village government, and recommended the creation of *panchayats* in villages. The Government of India in 1915 laid down certain guiding principles. The Resolution on Local Self-Government of 1918 laid fresh emphasis on the need for developing the corporate life of the village as a step in the growth of self-governing institutions. Special Acts authorizing the establishment of village *panchayats* have been passed by the various provincial Legislatures. In the Punjab, for example, a Village Panchayat Act was passed in 1921, which places this ancient institution upon a modern legal basis and provides *panchayats* with powers to settle local disputes, and to take measures for improving the sanitation of villages. Similar measures are in force in Bombay, Madras, Bengal, the United Provinces, Bihar and Orissa. The progress of constitutional reforms and the village uplift campaign during the last few years have further strengthened the movement. It is now realized that local self-government will not be successful unless it is firmly planted on the foundations of the ancient village organization.

§9. **Constitution and functions of village panchayats.**—The village *panchayat*, or Union Board (as in Bengal and

Madras) is an attempt to recreate the village as the unit of self-government. It has jurisdiction over a village or a group of villages. Its primary function is to look after such matters as wells and sanitation, but it is sometimes entrusted with the care of minor roads and the management of schools and dispensaries and, in Madras, of village forests and irrigation works. In some provinces, it has also been given power to deal with petty civil and criminal cases. Except in the United Provinces, nearly all the members of a *panchayat* are elected, voting being often by show of hands. The village patel is an *ex officio* member. The Bombay Act empowers village *panchayats* to levy a house tax.

§10. **Prospects of the village panchayat.**—In spite of the efforts made to revive this ancient village institution, progress has been slow, and only a small percentage of the villages can boast of a really efficient *panchayat*. Difficulties that have to be overcome are the prevalence of illiteracy, ignorance and faction, the poor resources of the village folk, their reluctance to submit to fresh taxation even for their own benefit, and the lack of men of the necessary intelligence, integrity and force of character.¹ Persistent effort, spread of education and financial help should, however, ensure a progressive increase in the power and utility of village *panchayats*.

MUNICIPAL (URBAN AND RURAL) ADMINISTRATION AND FINANCE

§11. **Progress of local self-government.**—Governmental functions in India are exercised on three distinct planes: (i) Central, such as defence, currency and customs, affecting the whole country; (ii) Provincial, such as land revenue, excise, forests and education, affecting a province; and (iii) Local, such as sanitation, lighting, roads and water supply, affecting the inhabitants of a town, District, or tahsil. Certain subjects like education and roads are of interest to all three authorities. For the proper discharge of the third type of functions and for the convenience of people living in different localities, subordinate local bodies have been set up by provincial legislation. In the evolution of local self-government in India, Lord Ripon's Resolution (1882) on this subject is of basic importance. It stresses the great benefits

¹ *Report of the Simon Commission*, vol. I, par. 347.

of a well-developed system of local self-governing bodies, not so much in the shape of an improved administration, as of the valuable training it affords in the art of self-government. The progress of local self-government was, however, very slow, and local bodies, especially in the rural areas, were subject to excessive official tutelage before the Reforms of 1919. Since 1919 they have been enlarged and made more democratic and they are showing greater interest in civic affairs. But the relaxation of official control has perhaps been too sudden. Poverty and communal strife have also militated against rapid progress.

§12. **The Presidency Corporations.**—Before reviewing the constitution, functions and finance of Municipalities and Rural Boards, a few words may be said about the Municipal Corporations at the three Presidency towns, which were the first to develop self-governing institutions in India in the British period. The Corporations of Calcutta, Bombay and Madras have been constituted under separate statutes, each with its own specific powers and privileges. The Councillors vary in number from 106 in Bombay (which has always led the way) to 61 in Madras, and are elected on a fairly wide franchise, business interests being given special representation. The Corporations have now their own elected Mayors. These cities enjoy a considerable measure of freedom in the administration of their municipal affairs and have financed major sanitation and water works by extensive borrowings. They command large resources. For example, in 1932-3 the Bombay Corporation had an income of Rs. 3·00 crores, Calcutta Rs. 2·29 crores and Madras Rs. 0·67 crores. It may be noted, however, that the city of Glasgow, which is comparable to Calcutta in population, has twelve times its income.

In the big cities Improvement and Development Trusts have been in existence for many years, and loans are floated on such objects as the abolition of slums, the provision of open spaces, the construction of model tenements, the realignments of streets and the segregation of offensive trades.

§13. **District (mofussil) Municipalities.**—The unit of local self-government in other urban areas is the Municipality. There were 786 Municipalities in British India in 1932-3. Most Municipalities now have elected Presidents and substantial elected majorities. The percentage of nominated members has appreciably decreased. Since the Reforms the qualification for the municipal vote has been lowered in every

province, and about 14% of the urban population enjoys the municipal franchise. The voters are usually divided among a certain number of wards. There is a general body of municipal councillors with an elected chairman; a smaller body known as the Managing Committee; and several standing committees to look after the different municipal activities. There is also a Municipal Secretary and, in bigger towns, a Chief Officer.

§14. **Municipal functions.**—Municipal functions are divided into two classes, obligatory and discretionary. (i) The former include lighting public streets and places; removing noxious vegetation; extinguishing fires; regulating or abating offensive or dangerous trades; acquiring and maintaining places for the disposal of the dead; constructing, altering and maintaining public streets, markets, slaughter-houses, drains, privies, washing places, drinking fountains, tanks, wells, etc.; obtaining supply of water; registering births and deaths; public vaccination; establishing and maintaining public hospitals and dispensaries; establishing and maintaining primary schools, etc. (ii) The principal discretionary functions are the laying out of public streets; constructing and maintaining public parks, gardens, libraries, museums, lunatic asylums, rest houses, dharmshalas and other public buildings; taking a census; making a survey; maintaining a farm or a factory for the disposal of sewage, and any other measure likely to promote public safety, health, convenience or education.

While possessing little control over the details of administration, the provincial Government holds the ultimate power of superseding, suspending or abolishing a municipal council.

§15. **Municipal finance.**—Municipalities are given a wide choice as to the form of the taxes they may levy. The taxes levied by the local authorities may be grouped under four main heads: (i) taxes on trade, for example octroi duties, terminal taxes, and tolls; (ii) taxes on property, for example taxes on houses and their sites (and, in rural areas, the cess on land); (iii) taxes on persons, for example taxes on professions, trades and callings, on pilgrims, on menials and domestic servants; and (iv) fees and licenses. Fees are either for specific services rendered by the Municipality, such as scavenging fees, or are partly of the nature of luxury taxes, and partly levied for purposes of regulation, such as licenses for music, vehicles, dogs and other animals. There are also license fees for dangerous or offensive trades.

The following table sets forth the principal sources of income and the main heads of Municipal expenditure in British India :

(In lakhs of rupees)

SOURCES OF INCOME	1915-16	1932-3	HEADS OF EXPENDITURE	1915-16	1932-3
Municipal Rates and Taxes: Octroi ...	1,45	1,51	General Administration and collection charges ...	75	1,68-0
Taxes on houses and lands ...	1,87	4,89	Public Safety: Lighting ...	43-7	1,11-0
Taxes on animals and vehicles ...	21	45	Police ...	.4	.8
Taxes on professions and trades ...	18	31	Fire, etc. ...	9-1	14-8
Tolls on roads and ferries ...	17	31	Total ...	53-2	1,26-6
Water rate ...	97	2,03	Public Health and Convenience—		
Lighting rate ...	15	20	Water supply, drainage and Conservancy ...	3,32	4,82
Conservancy rates ...	61	1,21	Hospitals and Dispensaries and Vaccination ...	50	91
Other taxes ...	19	1,65	Plague charges, markets, gardens and sanitary ...	50	79
Total rates and taxes.	5,80	12,56	Public Works ...	1,42	2,01
Realizations under special Acts ...	11	15	Public Instruction ...	62	2,17
Grants from Government ...	84	84	Contributions for general purposes ...	27	65
Rent of lands, houses, etc. ...	23	51	Miscellaneous: Interest on loans ...	77	1,79
Fees ...	38	99	Other miscellaneous expenditure ...	43	1,07
Receipts from markets and slaughter houses ...	47	92	Total Expenditure ...	9,12-2	17,15-6
Other sources and miscellaneous ...	85	1,30	Extraordinary and Debt: ...	6,33-0	21,70-0
Total Income ...	8,67	17,27	Grand Total ...	15,45-2	38,85-6
Extraordinary and Debt: ...	6,44	21,82			
Grand Total ...	15,11	39,09			

INCIDENCE PER HEAD

	1915-16	1932-3
Rates and Taxes ...	Rs. 3-5-9	Rs. 5-8-2
Total income, excluding Extraordinary and Debt.	Rs. 5-0-3	Rs. 7-9-3

Since the total income, indicated in the above table, is distributed among as many as 789 Municipalities (including

the three big Presidency Corporations), it is obvious that the average Municipality in India is very poor in resources. The main source of income is rates and taxes, which accounts for about two-thirds of the total municipal revenue. The remaining one-third is derived from municipal property, contributions out of provincial revenues, and miscellaneous sources.

The heaviest items of expenditure, as the table shows, are conservancy and public works, water supply, drainage and education. Municipalities are often unable to meet their expenditure from ordinary revenues and have generally to borrow money, either from the Government or in the open market, for carrying out large projects in connexion with water supply and drainage works.

§16. **Rural Municipalities: the District Board.**—In all the provinces except Assam, the most important unit of self-government in rural areas is the District Board, the jurisdiction of which is coterminous with the District. It may be compared in composition and powers with the English County Council, though the area and population for which it is responsible are, as a rule, far larger than those of an English administrative county. The majority of the members are elected on a franchise which, though greatly extended since the reforms of 1919, even now gives the vote to little more than 3·2% of the population. The chairman is elected, except in the Punjab, where, although the option to ask for the privilege of election exists, only a few Boards have exercised it. This result has been attributed to the feeling that the District officer could generally be trusted to be freer from communal bias than an elected chairman.

§17. **Minor rural bodies.**—Within the area covered by the District Board there are minor authorities varying in name, function and composition from province to province. The Local, Taluka or the Circle Board exists in all provinces, except in the Punjab and the United Provinces. It has jurisdiction over part of a District and is a subordinate agency of the District Board, except in Assam, where it takes the place of the District Board. It is composed in the main of elected members and, as a rule, chooses its own chairman. All the elected members of the District Boards in Madras and Bengal, and two-thirds of them in the Central Provinces, are chosen by the members of the Taluka Boards. In Bengal, Madras, Bihar and Orissa there are also Union Committees.

§18. **Importance and functions of District Boards.**—As only about 11% of the population of British India lives in towns, the vast majority of the people do not come within

the scope of urban municipal administration at all, and are only aware of the District Boards, or rural Municipalities. In 1932-3 there were 1,324 District Boards in British India (including 454 Union *panchayats* in Madras).

The functions of the District Boards are much the same as those of Municipalities, allowing for the different conditions of town and country, and the powers of control and intervention are similar. In Madras, the Boards have power to construct and manage light railways, and the Tanjore Board actually operates 134 miles of railway.

§19. **District Board finance.**—The main source of the revenue of rural authorities is a tax or cess (shown under 'Provincial Rates' in the following table) levied on the annual value of the land and collected with the land tax, though this may be and often is supplemented by taxes on companies and professional men, and by tolls on vehicles. Recently there has been a tendency in some provinces either to increase the general rate, or, as in Madras, to add new cesses for specific local purposes such as elementary education. The rates of the cesses are left to the discretion of the local bodies, subject to certain maxima and minima laid down by the provincial Legislatures. The limits vary from 6½% to 12½%. A very large proportion of the revenue of the Rural Boards consists of subventions from provincial Governments. These are given not only as grants-in-aid for particular services, but not infrequently in the form of capital sums for the provision of works of construction.

The subjoined table indicates the principal sources of revenue and items of expenditure and the aggregate revenue and expenditure of District and Local Boards in British India :

(In lakhs of rupees)

INCOME (excluding balances)			EXPENDITURE		
	1915-16	1932-3		1915-16	1932-3
Provincial rates ...	3.39	5.12	Education ...	1.82	5.91
Civil Works ...	1.43	1.94	Civil Works ...	4.16	3.70
Other sources ...	2.68	8.45	Sanitation, Hospitals, etc. ...	70	1.93
Total ...	7.50	15.51	Debt and Miscellaneous ous ...	1.32	3.57
			Total ...	8.00	15.11

		1915-16	1932-3
INCIDENCE PER HEAD	...	Re. 0-5-1	Re. 0-9-5

The above table shows an increase of income from Rs. 7.50 crores in 1915-16 to Rs. 15.51 crores in 1932-3. But as this income has to be divided among 1,324 Boards, the poverty of the average Board stands out clearly. Indeed the rural District Boards are even weaker financially and have shown less progress than the urban Municipalities.

§20. **Inadequate resources of local bodies, and their improvement.**—The question of local finance has come into increased prominence since the transfer of local self-government to the Ministers (1921). Considering the devolution of powers that has taken place and the wide range of functions—including public health and education—assigned to Municipalities, District Boards and *panchayats*, the resources of these bodies at present are utterly inadequate. It is impossible for them to reach modern standards unless they have more money. Apart from the low taxable capacity of the people and their alleged unwillingness to tax themselves, another difficulty is that only a very small share of the taxation of land (which in other countries like England is the principal source of local finance) is allotted to local bodies. The Taxation Enquiry Committee has rightly pleaded for the standardization of land revenue at a low rate so as to leave more scope for local taxation. The same Committee has also recommended (i) empowering Municipalities to tax advertisements; extending the scope of taxes on entertainment and betting; and giving local bodies a substantial share of the proceeds; (ii) empowering local bodies in selected areas to levy a fee for the registration of marriages; and (iii) supplementing the resources of local authorities by subsidies which ordinarily should be restricted to services of national importance and granted in such a way as to enable the provincial Government effectively to enforce efficiency.

PART II

TYPICAL QUESTIONS

CHAPTER I

RESOURCES AND POPULATION

1. Consider India's advantages and disadvantages in respect of geographical location.
2. Draw a sketch map of India showing the principal harbours and rivers.
3. Describe the principal natural regions of India and emphasize their characteristic features.
4. Show the vital importance of rainfall to economic life in India. Briefly describe the course of the monsoons in India.
5. Draw a map of India to indicate the distribution of the rainfall in the different parts of the country.
6. Give a classification of the soils of India, and mention their chief products.
7. Do you consider India's mineral resources as adequate for industrial development on modern lines?
8. Describe the principal minerals mined in India and indicate their distribution by means of a sketch map.
9. Indicate the economic potentialities of forests in India. Give a short description of forest administration in India.
10. Explain the part played by the vegetable and animal resources in the national economy of India.
11. What are the principal sources of power available in India? Consider in this connexion the possibilities of hydro-electric development.
12. What is the average density of population in India? What inferences, if any, can you draw from average density with regard to the economic condition of the Indian people?
13. What are the factors governing density of population in the different parts of India? Illustrate your answer by means of a sketch map.
14. Give the principal statistics bearing on the occupational distribution of population in India, and comment on them.
15. Account for the fact that barely 11% of the Indian population lives in towns. How would you bring about a more even distribution of the population between town and country?
16. The Indian birth-rate is one of the highest in the world. What are the economic consequences of this fact?
17. 'The Indian birth-rate is high, but so also is the death-rate. Therefore there can be no question of over-population in India.' Do you think this is a valid line of argument?
18. State and explain the peculiarities of the death-rate in India.
19. Consider the remedies for over-population in India under the two headings (i) deliberate restriction of numbers; (ii) indirect remedies.

20. Briefly indicate the main features and economic effects of (i) the caste system; (ii) the joint-family system; and (iii) the laws of inheritance and succession in India.

21. Trace the influence of western individualism on the characteristic social institutions in India.

22. Is there any connexion between 'Indian spirituality' and the economic backwardness of India?

23. Examine the influence of social and religious institutions on economic life in India.

CHAPTER II

ECONOMIC TRANSITION IN INDIA

1. What is meant by saying that India is passing through a stage of economic transition?

2. Compare the economic transition in India with the Industrial Revolution in England.

3. In what respects does the old economic order differ from the new in India?

4. Describe the main features of the social and economic organization of the old village community in India.

5. How has the economic transition affected the Indian village?

6. Give a short account of the old village crafts and indicate their present position.

7. Show by means of suitable illustrations the varying success with which the different village artisans in India have met the forces of the economic transition.

8. Indicate the transition in Indian agriculture and show how it has been commercialized.

9. Trace the progress of ruralization in India and indicate the main causes governing it.

10. 'In the past India was both a great industrial as well as a great agricultural country.' Comment.

11. Account for the decay of the old indigenous industries of India.

12. Review the course of the transition in Indian industries, indicating the progress made by organized industries of the western type. (See also ch. iv.)

CHAPTER III

AGRICULTURE

1. Discuss the importance of agriculture as the chief national occupation in India.

2. What are the principal staple products of Indian agriculture?

3. Draw a crop map of India and account for the specialization of the several regions in the different crops.

4. Do you find any legitimate cause for alarm in the tendency for the non-food crops to encroach on the food crops in India?

5. Give a brief account of the sugar industry in India.

6. Indicate the efforts that are being made to improve the quality of Indian cotton.
7. Examine the part played by irrigation in India and show how it is an important factor in India's rural economy.
8. What are the different forms of irrigation prevalent in India and what do you consider to be their relative importance?
9. Give a brief description of the Canal Colonies in the Punjab.
10. Review the irrigation policy of the Government and mention some of the recent major irrigation works.
11. Explain the distinction between productive and unproductive irrigation works, and indicate the objects of each of them.
12. What are the causes of the low agricultural yield in India? What measures would you adopt to bring about an improvement?
13. 'One of the greatest handicaps of Indian agriculture is the endless subdivision and fragmentation of land.' Comment.
14. Show how consolidation of holdings has been effected in the Punjab and indicate its benefits.
15. What are the strong points and the special weaknesses of the Indian cultivator? What are the directions in which improvement is to be sought?
16. Describe the methods followed and the implements used by the Indian cultivator. What improvements would you suggest?
17. Explain the live-stock situation in the rural areas and show how the quality of cattle could be improved.
18. Consider the problem of subsidiary industries in Indian rural economy.
19. Discuss the uses and limitations of hand-spinning as a subsidiary rural industry in India.
20. Examine the question of the marketing of agricultural produce in India.
21. What is the approximate amount of rural indebtedness in India? Explain why you regard it as a serious evil.
22. What are the important general causes of rural indebtedness in India?
23. Describe the money-lender and his system and account for the high interest rates charged by him.
24. What measures have been taken by the State to safeguard the interests of the agriculturist borrower in the different provinces?
25. What steps have been taken so far for remedying the evil of rural indebtedness in India? Have you any suggestions to offer in this connexion?
26. Trace the progress of the cooperative movement in India between 1904 and 1912.
27. What are the principal developments that have taken place since 1912 affecting the cooperative movement in India?
28. How far has cooperation helped the agriculturist to improve his economic position?
29. Mention the principal forms of non-agricultural cooperation in India and emphasize its value to cottage industries. (See also ch. iv.)
30. Give a reasoned estimate of the cooperative movement in India.
31. How would you solve the problem of long-term rural finance in India?
32. Give a brief account of Land Mortgage Banks established in India. How are these banks helped by the State?

33. In what different ways has the State come to the aid of agriculture in India?
34. Trace the evolution of the agricultural departments in the provinces and describe their functions.
35. Write short notes on: (i) Imperial Council of Agricultural Research; (ii) Provincial Boards of Economic Enquiry.
36. What are the principal items of rural uplift and how is it to be brought about? What do you know of the Gurgaon experiment?
37. Give a short history of Land Revenue in the pre-British period and explain the main changes effected during the British period.
38. What is a Land Revenue Settlement? What are the main systems of land revenue settlement prevalent in India?
39. Consider the relative merits of the zamindari and the ryotwari systems.
40. Why is it that Permanent Settlement has comparatively few advocates at present?
41. Examine the basis of assessment under the different land revenue systems in India.
42. Write notes on: (i) the question of land ownership in India; (ii) land revenue: a tax or rent?; (iii) legislative control over land revenue; and (iv) the proper scale of land revenue assessment in India.
43. How far does the Ricardian theory of rent apply to the land revenue in India?

CHAPTER IV

INDUSTRIAL DEVELOPMENT

1. Examine the benefits which will follow in the wake of industrial development in India.
2. Account for the industrial backwardness of India and review the industrial policy of the State.
3. Give a brief account of the events which led to the adoption of the policy of discriminate protection in India.
4. Describe the functions of the Tariff Board and mention the principal industries to which protection has been granted on the recommendations of the Board.
5. Emphasize the value of technical and industrial education in India.
6. Describe the functions performed by the provincial Departments of Industries.
7. How is Government patronage extended to Indian industries?
8. Draw an industrial map of India and account for the localization of the principal manufacturing industries.
9. Give a brief account of the cotton and jute mill industries and bring out their strong and weak points.
10. Explain the main provisions of the Indo-Japanese Trade Agreement. Why was it considered necessary?
11. Give a short history of the iron and steel industry and indicate its present position.

12. Write brief notes on the following Indian industries: (i) the tanning industry; (ii) the chemical industries; and (iii) paper-making.
13. Account for the survival of cottage industries in India.
14. Describe the principal cottage industries of India and indicate the difficulties experienced by them.
15. Give a brief account of the Indian hand-loom industry and discuss its present position.
16. What is the present position and the future prospects of the sericultural industry?
17. Describe the various methods of helping cottage industries. What measures have recently been adopted by the Government of India in this behalf?
18. Indicate the peculiarities of the factory labourer in India, and compare his position with that of the western worker.
19. How far in your opinion is the complaint regarding scarcity of industrial labour in India justified?
20. Review the labour legislation passed in India, and clearly show the nature of the protection afforded to the worker.
21. Write brief notes on: (i) industrial housing, and (ii) welfare work, in India.
22. Give a brief account of the Trade Union movement in India and indicate the difficulties in its way. What is the legal position of a Trade Union in India?
23. To what causes do you attribute the relative inefficiency of the Indian industrial worker as compared with the western labourer?
24. What provision has been made to bring about the settlement of industrial disputes in India?

CHAPTER V

TRANSPORT AND TRADE

1. Give a brief account of the state of communications in India before the advent of railways.
2. Give a brief history of railway construction in India, showing the changes in the policy of the State from time to time.
3. Distinguish between the old and new Guarantee Systems. Why was such a guarantee necessary?
4. What were the principal recommendations of the Acworth Committee, and how far were they accepted?
5. On what grounds is the State management of railways in India advocated?
6. Examine the economic effects of railways in India and emphasize the need for further development.
7. Give a short history of roads in India and indicate the main features of her existing road system.
8. What is the importance of road development in India? What measures have recently been taken to expedite it?

9. Give an idea of the rail *versus* road controversy. Give your own conclusions on this controversy.
10. Describe the organization of the Public Works Department in India, both at the Centre and in the provinces.
11. What are the main divisions of public works in India, and how are they managed?
12. Discuss the present position and the future prospects of waterways in India.
13. What has been done so far and what more could be done for the encouragement of shipping and shipbuilding in India?
14. Give a brief account of the development of India's foreign trade.
15. How does India's foreign trade at present differ from her foreign trade in the pre-British days?
16. Indicate the effects (i) of the World War (1914-18); and (ii) of the economic depression (1929-35) on India's foreign trade.
17. What are the main characteristics of India's foreign trade?
18. Indicate the principal articles of: (i) the import; and (ii) the export trade of India, and show their relative importance.
19. Review the changes in the direction of India's foreign trade between 1913-14 and 1934-5.
20. Discuss the relative position held by the United Kingdom and other countries in the foreign trade of India.
21. Write brief notes on: (i) the re-export trade of India; (ii) the land-frontier trade; and (iii) commercial intelligence.
22. Explain why India has normally a favourable balance of trade. Indicate the changes in her balance during the recent years of economic depression.
23. What are Home charges? Explain and criticize the 'drain' theory.
24. Give a short account of: (i) the coasting trade; and (ii) the inland trade of India.
25. Mention the principal trade centres of India.

CHAPTER VI

INDIAN CURRENCY, PRICES AND BANKING

1. Give a brief history of the Silver Standard in India during the last century. Why was it abandoned in 1893?
2. Examine the principal features and the mechanism of the Gold Exchange Standard before 1914. How was it upset during the war period (1914-19)?
3. What are Reverse Councils and Council Bills? What purpose do they serve?
4. Explain the scheme of the Gold Bullion Standard as recommended by the Hilton-Young Commission. How far was it given effect to by the currency legislation of March, 1927?
5. How and why was the rupee linked to sterling at 1s. 6d. in September 1931?
6. What do you understand by the ratio controversy?

7. Discuss the main issues raised by: (i) linking of the rupee to sterling; and (ii) export of gold. Do you favour the prohibition or regulation of gold exports?
8. How was the Gold Standard Reserve established? What were its main functions?
9. What is the present monetary standard of India? By what authority and how is it administered?
10. Describe the Paper Currency System in India before the war of 1914-18. How was it affected by that war?
11. Give a brief history of the Indian Paper Currency Reserve.
12. Indicate the existing arrangements for the issue and regulation of paper currency. In what respects do these constitute an improvement over the earlier system?
13. Review briefly the movements of Indian prices before the war of 1914-18.
14. Why did prices rise in India during the World War? How did this rise affect the country?
15. Account for the slump in prices during the last few years. How has it affected the Indian agriculturist and other classes?
16. Describe the principal constituents of the Indian money market.
17. Give a short history of indigenous banking in India and examine the functions performed by the indigenous banker today.
18. Suggest measures for strengthening the indigenous banking system.
19. Give a brief review of joint-stock banking in India.
20. Give a short account of the establishment of the Reserve Bank of India. What advantages is it expected to confer on the country?
21. Describe the constitution and functions of the Reserve Bank. How is it managed?
22. Show how the Reserve Bank can control other banks and make its credit policy effective.
23. In what ways can the Reserve Bank assist in the financing of Indian agriculture?
24. What are the duties of the Reserve Bank as bankers to the Government?
25. What are the functions of the Imperial Bank of India? How is it related to the Reserve Bank?
26. Describe the business transacted by the Exchange Banks in India.
27. What steps would you take to increase the share of Indians in the financing of the foreign trade of India?
28. Examine the functions performed by the Joint-Stock Banks in India. Mention the names of the leading joint-stock banks in the country.
29. Discuss the causes of bank failures in India. What can be done to prevent such failures?
30. Give a brief account of the Indian Postal Savings Banks. What purpose do they fulfil?
31. Why are industrial banks necessary in India? Show how they should be organized.
32. Account for the hoarding habit in India and suggest means of fighting it.

CHAPTER VII

FINANCE

1. Indicate the main characteristics of Indian finance.
2. State and discuss the main heads of revenue in the Central Budget.
3. Give a brief history of the customs tariff in India and indicate the main changes since 1914.
4. (i) How is the income-tax graduated in India?
(ii) What are the justification for and objections to the salt tax?
5. Write a brief note on the principal heads of revenue and expenditure in the budget of a province. Is the provincial revenue adequate for provincial needs?
6. Write brief notes on: (i) excise revenue and policy; and (ii) scheduled taxes.
7. What are the criticisms to which public expenditure in India is usually subjected?
8. What is meant by the 'burden of taxation'? Is it evenly distributed in India?
9. How has Indian finance fared during the recent years of depression?
10. Give a brief account of the public debt in India.
11. Comment on the distribution of the public debt as between (i) England and India; and (ii) productive and unproductive loans.
12. Give a short history of the financial relations between the Central and Provincial Governments.
13. What was the Meston Award? Why was it so unpopular?
14. Give a short account of Indian finance under the new Federal constitution.
15. What do you know of the Niemeyer financial settlement?

CHAPTER VIII

NATIONAL INCOME AND UNEMPLOYMENT

1. Mention the principal estimates of the national income of India.
2. What are the main general causes of Indian poverty? How has it affected the standard of living and efficiency?
3. Indicate the relation between diet and efficiency in the various provinces of India.
4. Distinguish between the various forms of unemployment in India.
5. Compare unemployment among industrial workers in India with that in western countries.
6. What are the causes of middle-class unemployment in India? What remedies would you adopt?
7. Examine the recommendations of the United Provinces (Sapru) Unemployment Enquiry Committee.
8. What are the causes of famines in India? What measures have been adopted for the prevention of famines?
9. Give a brief history of famine relief in India.
10. Describe the principal features of famine relief organization in India.

APPENDIX

DISTRICT, VILLAGE AND MUNICIPAL (URBAN AND RURAL)
ADMINISTRATION AND FINANCE

1. Show how the District is the most important unit of administration in India.
2. Explain how the authority of the Provincial Government is exercised in the Districts.
3. Mention the chief duties of the District officer and show how he has a dual capacity.
4. What are the powers and duties of the Collector with reference to the Superintendent of Police and other important officers in the District?
5. What is the justification for saying that the Collector is, in the eyes of the people living in a District, 'the government' itself?
6. Mention the principal officers in the District and describe the duties performed by them.
7. What are the various administrative subdivisions in a District? How is their administration carried on?
8. Show how the Indian village is the primary unit of governmental organization.
9. How did the Indian village community arise? How was it kept together?
10. Mention the principal village officials in India and describe their duties.
11. What are the causes of the weakening of the Indian village organization?
12. Clearly explain the need for the revival of village *panchayats*. How are they constituted? What are their functions?
13. Review the movement for the revival of village *panchayats* and indicate the difficulties experienced by these bodies.
14. What is local self-government? Give a brief review of local self-government in India.
15. Write a note on the Municipal government of the three Presidency towns in India.
16. Give a short account of the functions performed by Municipalities in India.
17. How is a Municipality constituted and managed?
18. What are the principal sources of income of a Municipality?
19. Enumerate the items on which municipal funds are expended.
20. Give a brief account of the organization of Rural Boards in India.
21. Examine the constitution and functions of a District Board.
22. What are the chief sources of revenue and expenditure of District and Local Boards in British India?
23. Comment on the poverty of local bodies in India. How would you strengthen their resources?

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