ECONOMICS IN OUTLINE

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by

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PREFACE

My best thanks are due to Professor Alexander Gray, Professor of Political Economy in the University of Edinburgh, who very kindly read through the manuscript of this little book. Professor Gray made many valuable suggestions and saved me from some pitfalls. But, of course, he is in no way responsible for the method of exposition I have adopted nor for the views I have expressed on particular problems.

A. B.

CONTENTS

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I

WHY STUDY ECONOMICS?

The Need for Economics.—Economics is a subject of which every intelligent person should have some kind of knowledge. This does not mean that all should be economists. The needs of the practical man in everyday life are different from those of the theorist in his study. We must all have some understanding of the laws of health, yet we need not be pathologists. We may acquire the rudiments of religious instruction, yet that does not make us theologians. In the same way, the modicum of economic knowledge which every conscientious citizen should possess falls far short of the extensive attainments and deep learning of the trained economist. This should be an encouragement to the plain person to make good what is usually a deficiency in his intellectual equipment. The task is not difficult, and the rewards are sure. From an elementary knowledge of economic theory, the plain person will derive two benefits. First, he will understand better his own position in the economic system. Second, he will be able to pass an intelligent judgment

on economic measures and policies submitted to him as a citizen for his approval. The first will deliver him from the perils and inhibitions of the restricted view. In relation to the economic system, the plain person is usually in the position of a private soldier on a battlefield, who understands nothing of the complicated manœuvres in which he takes part, or of the inhabitant of a town whose knowledge of it is confined to the small district in which he lives. A knowledge of economics provides the aeroplane view. The student sees the economic system as a whole and not merely the small corner of it with which he is personally familiar. He discovers the secret springs and gears of the economic mechanism, and its movements lose their mysteriousness for him. Such knowledge has a liberating effect. It delivers its possessor from the paralysing sensation of being at the mercy of blind social forces, just as the spread of scientific knowledge has released civilized man from the dread which the savage still feels for the powers of nature.

Economics and Citizenship.—The second advantage conferred by a knowledge of economics concerns the plain person as a citizen. The ordinary man as a rule does not have to evolve or construct economic policies, but he is constantly called on to judge them. This is true of all democratic societies, and even in countries with dictatorships it is public opinion which in the last resort calls the tune. Hence the immense importance of a widely diffused knowledge of economic principles. An honest and intelligent jury is necessary for the just conduct of a trial. A well-informed and

enlightened public opinion is indispensable for a state which seeks to pursue a sensible economic policy. Instructed common sense is the only sure prophylactic against the glittering sophistries which too often masquerade as economic panaceas. Accordingly, it is the imperative duty of every good citizen to secure that tincture of economic knowledge which will render him immune to the poisonous propaganda of the currency crank, the credit fanatic, the distiller of flashy social theories, the interested or prejudiced champion of the *status quo*. By rendering innocuous the anti-social activities of these "public enemies," he will make a valuable contribution, often the only contribution within his power, to the reconstruction of our economic life on sound and healthy lines.

The present book has been written to assist the plain person in discharging this part of his obligations as a citizen. It is intended for beginners, and contains a brief simple account of the science of economics. As probably most of those who read it will have little time for study, it has been kept purposely short and concise. But though a mere outline, it is, within its limits, a complete exposition of the subject. The elements of the science are all here. On the foundation provided the reader may, if he chooses, erect a larger and more substantial fabric of knowledge. But should he lack leisure for this, the book itself will supply him with a clue to the mazy windings of the economic labyrinth, and enable him to discriminate in the practical affairs of life between economic error and economic truth.

II

MEANING AND METHOD OF ECONOMICS

Subject-matter of the Science.—Economics is a study of man in his efforts to make a living. For most of us this is the chief business of life. We are born with pressing natural wants, which we must continuously satisfy if we wish to go on living. Food is necessary to appease our hunger, clothing to preserve our bodily warmth, shelter or housing to protect us from the inclemencies of the weather. To keep stomachs filled and skins warm has always been one of the heaviest and most exacting tasks imposed on humankind. Since the dawn of history it has absorbed the major part of the energies of the race. At times the struggle for existence has been so acute that man has had no time to think of anything else, and the growth of civilization has been arrested. The cultivation of the higher arts of life has had to be postponed to the satisfaction of these imperious physical wants which are the basis of life itself, And even to-day, when material progress has made such strides, the proportion of human energies which can be spared for the pursuit of purely cultural ends remains small. Only a favoured few can devote their whole time to literature or art

or music. The vast majority are harnessed to the daily task of obtaining food and shelter. Here we have the secret of the strenuous activity in which most of us pass our waking hours. The activities concerned with material needs rank first among human pursuits because they are the basis of all the rest. The cultivation of the higher faculties of man presupposes the satisfaction of his bodily wants. Hence economics is a fundamental study not because it deals with the highest interests of mankind (religion, philosophy, literature, and art all take precedence of it in this respect) but because it deals with a branch of social activity which is the indispensable basis of human culture and progress. Like Napoleon's army, the human race marches on its belly.

The word *economics* itself comes from a Greek compound meaning *household management.* This has a certain appropriateness since economic activity is concerned with the supply of the necessities of life to those family groups of which like cells the human hive is composed. But as the economist is chiefly interested in man as a member of the larger human group, the state or society, the older term, *political economy* (from Greek *polis*, a state), is in some ways preferable. Current speech, however, now favours *economics*, and it is the term most commonly used in this book. But the reader need hardly be reminded that names are largely a matter of convention. In themselves they are not of much consequence. The important thing is to understand what they stand for. In this case, then, the material point for the student

to grasp is that the subject-matter of the science called either *economics* or *political economy* is *man in his efforts to satisfy his material wants.*

Wealth.—Economics is sometimes called the science of wealth, so, before we go further, we must try to attach some definite meaning to this fundamental economic conception. In the first place, wealth consists of the things which man needs to supply his material wants. These things we may conveniently call *goods.* But not all *goods* are wealth. Some of the things which man needs come to him as free gifts from nature. The air he breathes costs him nothing, though without it he could not exist. He can draw water freely from springs and rivers, and help himself to fruits that grow wild. These are examples of what the economist terms *free goods,* and he does not include them within the category of wealth. The term is reserved for *economic goods—i.e. goods* which can only be obtained through labour or sacrifice. These greatly outnumber the *free goods.* To procure the bulk of the things he needs, man must expend *labour.* He must resort to some kind of bodily or mental effort. "In the sweat of thy face shalt thou eat bread." Practically the whole circle of human wants is subject to this inexorable law. To obtain food, man must clear and till the soil. To clothe himself, he must rear animals for their wool, weave the wool into cloth, and shape the cloth into garments. To build houses, he must fell trees and hew stone from the rocks. Even the free gifts of nature can seldom be made available for human use without effort of some kind. Water

costs nothing, but the urban householder who wishes a supply laid-on to his dwelling must pay for it. In Paris, before the institution of a municipal water supply, Auvergnat porters hawked water through the streets and sold it at so much a barrel. And if air could have been retailed to the victims in the Black Hole of Calcutta, it would have commanded a high price. Wealth, then, is identical with this large class of *economic goods*. It consists of those things which are necessary to man, but which require effort to make them available for human use or consumption.

Wealth and Morals.—The human desire or purpose which wealth serves need not be one which commends itself to the moralist or even to the man of taste. An *economic good* is not necessarily a good in the ethical or the æsthetic sense. It is simply something which satisfies a human desire, whether that desire be high or low, good or bad. To the economist, the demand for beer is on the same plane as the demand for Bibles. If a person wants something so badly that he is prepared to make sacrifices to get it, then that thing is wealth to him, be it absinthe or antimacassars, cocaine or cough mixture, pork pies or pornographic pictures. This does not mean that economics is an immoral science, or that in the opinion of economists no obligation rests on the individual to spend his money wisely. It simply means that the rightness or wrongness of human desires is no concern of the economist as such. The distinction is one for the moralist or the religious teacher to draw. To the economist, wants are merely the springs of economic activity, not the

raw material of morality. Because a desire is blameworthy, the economist cannot exclude it from consideration if it is one of those which set the economic machine in motion. He has to take human wants as he finds them, and reckon their importance according to the trouble people put themselves to in order to satisfy them. The resulting scales of values is often supremely unsatisfactory from any but the economic point of view. Milton's *Paradise Lost*, which fetched £18, is ranked lower than Tupper's *Proverbial Philosophy*, which brought in £20,000. The services of a film star or a famous boxer are assigned a higher place than those of a poet or artist of genius. But this cannot be helped. Human nature is to blame for these paradoxes, not the economist. His business is with human wants as they are, not as they should be. It is not his fault if men prefer the lower to the higher or the worse to the better.

Wealth and Money.—So many fallacies owe their origin to the confusion of wealth with money that it is advisable at this point to pause and try to get the distinction clear. Money, it may be said categorically, is a measure of wealth and a means of exchanging wealth, but it is only exceptionally a form of wealth, and then not an important form. Let us think this out. Why do we attach so much importance to the notes or coins which we receive as our wages or salaries? Not for their own sake surely. Paper notes and metallic coins are of very little use in themselves. We might make paper spills of the one and brooches of the other. But that would be about all. No, we prize notes and

coins because we can convert them into useful commodities and services—into food, clothing, newspapers, tobacco, tram rides, theatre tickets, etc. If some sudden social convulsion deprived our money of its currency, so that no one would take it in exchange for goods, of what use would it be? A man cannot eat money, or wear it, or burn it as fuel to keep himself warm. When Robinson Crusoe was searching the wreck for useful things he lighted on a store of money. The discovery caused him no elation. "O drug!" he exclaimed, "what art thou good for? Thou art not worth to me, no, not the taking off the ground. One of these knives is worth all this heap. I have no manner of use for thee. E'en remain where thou art and go to the bottom." The money was useless to Crusoe because on his desert island he could not exchange it for useful things. And money would be of no use to any of us if the same condition held good. A nation or individual which had nothing but money to subsist on, and no opportunity to exchange it for goods, would be very badly off, even if the money were made of the precious metals. We do not need the fable of King Midas to remind us that man does not live by gold alone.

The point of all this is that we must never be tempted to identify wealth with money. We must always penetrate behind the money measure to the useful things and services which it represents. It will save the reader a great deal of trouble if he gets this clear at the outset. When he wishes to picture wealth he must think, not of coins, notes, cheques, and bank-

books, but of lands, houses, factories, collieries, quarries, railways, locomotives, wool, cotton, rubber, oil, tea, coffee, cloth, overcoats, boots, pyjama suits, watches, umbrellas, pipes, cigarettes, pictures, books, tables, carpets, train rides, concerts, cinema shows, etc., etc., etc. At the risk of tediousness the difference between wealth and money must be insisted on. It is the *pons asinorum* of economics. Once safely across it, the reader will find the rest of his journey comparatively smooth. Let us repeat, then: money measures wealth and exchanges wealth; when it consists of the precious metals it is a form of wealth, though a comparatively unimportant form. But it must not be mistaken for wealth itself. Wealth consists of the useful things and services which man needs to satisfy his material wants.

The Economic System.—Unlike some of the lower animals, man does not seek his livelihood in isolation. Robinson Crusoe, despite his popularity with economists for illustration purposes, is not a normal human figure. If he were, the need for a science of economics would vanish, and teachers of the subject would have to line up for the dole. In a state of society where each man supplied his wants in complete independence of his fellows, few economic problems could arise. It is because men unite together to provide for their needs that a science of economics becomes necessary. Economic activity is *social* activity. It gives rise to intricate human relationships, and it is these relationships which it is the duty of the economist to study and analyse. Robinson Crusoe, solitary on his island, is no subject for economic investigation, but the

arrival of Man Friday adds just the necessary touch of complexity to justify an economic inquiry. Where two men work together they must enter into agreements and strike bargains; they must share out tasks among themselves and make an equitable division of the fruits of their labour. It is all this human side of economic activity that interests the economist and provides him with the raw material of his study. Economics is a social science. Its subject matter is not *wealth*, but *man in his relation to wealth*.

The conception of an *economic system* arises out of this view of economic endeavour as a co-operative process. By an economic system we mean the totality of human agreements and social arrangements which regulate economic activity in any society at any particular period. The conception is a little difficult to grasp since it is a creation of the mind only and is not represented by anything tangible. But this is true of other important things which we profess no difficulty in understanding. A political constitution is not embodied in a crown and sceptre, and a religious faith is something different from pews and steeples. An economic system (in this respect like many constitutions and religions) is partly incorporated in written documents; partly it is the result of customary understandings. The written law of the land is an important determining influence. A country which permits individual ownership of land and capital, for instance, will have a different economic system from one that limits private property to consumable goods. The contrast to-day between Britain and Russia will at once occur to the

reader's mind. An equally important factor is the nature of the spontaneous and voluntary agreements which men make with one another in regard to the production and distribution of wealth. These are not always the same. In the Middle Ages producers were grouped together in village communities or in gilds; and wages, prices, and rents were largely fixed by public authority or by custom. The early nineteenth century, on the other hand, was a period of economic individualism. The state left producers to themselves. They competed with each other and cut prices. To-day the tendency is in the opposite direction. Producers combine in order to keep prices up, and the state is steadily curtailing the field of unrestricted competition. It is obvious that the economic system at these different periods could not possibly be the same. This is a truth which the reader must firmly grasp. The economic system is not something unchangeable like the world of nature. Relationships between producers and between producers and consumers vary with time and place. The present economic organization of Great Britain or America is not the same as that of Russia or China. Wealth was not produced and distributed in the same way in the England of Elizabeth as in the England of Victoria.

Since there is more than one economic system, we have to decide which, as economic students, we shall select for study and investigation. Dead and gone systems we can ignore. They are the concern of the economic historian, and, however interesting in themselves, may be omitted in a book which professes

to deal only with the present. But amongst contemporary systems, which shall the economist choose? The answer is that it largely depends on his personal interests, his nationality, and his political creed. If he is a Red professor at Moscow, he will naturally elect to describe the peculiar economic organization of the Soviet Union. If he is an Oriental, he will be more interested in the rigid customs that have for centuries regulated economic life in Asiatic communities. But a western economist will almost certainly devote his attention to the system of free enterprise (sometimes called *capitalism*) which has prevailed for the last hundred and fifty years among the industrial nations of Europe and America. This will also be the subject of this little book, since it is intended for readers who live in capitalist societies. But while we limit our attention to one particular economic system, the one with which we are most familiar, we shall not forget that there are others which are both interesting and important, and we shall not fall into the error of the early classical economists who believed that nineteenth century capitalism was the one rational method of producing and distributing wealth, all other systems, past and present, being written down as examples of human ignorance or folly.

Method of Economics.—Economics is a science, but the plain person need not be intimidated by this formidable word. "Science," said Herbert Spencer, "is nothing but trained and organized common sense; and its vast results are won by no other mental process than those which are practised by every individual in the

humblest and commonest affairs of life." Science, indeed, is merely organized and simplified knowledge, and its growth is the result of the instinctive demand of the human mind for clear and orderly thinking. The real world around us is most appallingly complicated. To the untrained eye, it presents nothing but a mass of unrelated particulars. The scientist knows better. He penetrates beneath the external confusion and discovers order, regularity, and system. Facts, he finds, can be classified according to their resemblances, and, what is more important, relations of cause and effect can be established between them. These discoveries he embodies in scientific laws. A scientific law is simply a general statement of what will happen in certain circumstances. Given x, says the scientist, y will always follow, unless some disturbing factor is present. In other words, a scientific law is a shorthand statement, so to speak, of things that happen over and over again in the world of nature and life. It thus accounts for a vast multitude of facts, large and small. The law of gravitation, for instance, explains such different things as the fall of an apple from a tree, the flight of an arrow through the air, the action of the tides and the movement of the planets round the sun. In this way science makes knowledge easy and comprehensible. To know all facts is a sheer impossibility. The human mind could not contain them. But to understand the group of laws of which a science is composed is quite within our mental capacity, and this knowledge enables us to explain each particular fact as we come across it.

The method of the economist is the same as that of any other scientist. He tries to reduce to simplicity the infinite complexity of the economic world. He observes the regularities in man's economic behaviour, and embodies his observations in economic laws. Men are wonderfully alike in their response to certain stimuli. If a thing becomes cheaper, they all tend to buy more of it. If a job is disagreeable, they tend to shirk it. On the basis of these uniformities in human behaviour, the economist builds up a body of generalized knowledge which is easily assimilated and yet enables its owner to find his way about amid the endless confusion of particular economic facts. The orderly plan underlying the apparent aimless stir and bustle of the world of business stands out clearly. As a chart to a mariner or a map to a traveller, so is a textbook on economics to whoever would explore the material side of the life of society.

Economic Laws.—One possible misconception of the nature of economic law must be guarded against. A scientific law is not a precept or command like a law of the state, which must be obeyed under penalties. It is simply the statement of a tendency, and tells us what will happen in certain circumstances. No restraint is placed on our freedom of action. The law of gravitation tells us what will happen if we step out of an aeroplane in mid-air. But it does not forbid us to do so. If the machine is blazing we may have no alternative, and if we are provided with a parachute it may be done with perfect safety. Similarly with an economic law. It tells us the dangers that

attend a certain policy or line of action, but we may have to risk these dangers or take steps to avoid them. Thus an economist might point out that the payment of a dole to unemployed workmen may encourage idleness and check the production of wealth. But a statesman may nevertheless hold that a dole is necessary on grounds of humanity or of public order, and that its demoralizing effects may be counteracted by the institution of some kind of disciplinary training for the recipients. This illustration is given not to determine the rightness or wrongness of doles, but merely to show how meaningless is the statement sometimes heard that a certain policy is mistaken because it is a violation of an economic law. As well accuse a parachutist of violating the law of gravitation or an anæsthetist of infringing the laws of physiology. Economic laws give information; they do not prescribe conduct. They are to be obeyed, but only in the Baconian sense, by making allowance for them so that we may ultimately overcome and master them.* We are not condemned to be the impotent slaves of economic forces any more than we are obliged to submit helplessly to the powers of nature. As the lightning conductor deflects the thunderbolt, so concerted human action may avert the evils which arise when economic motives are allowed to operate unimpeded in the world of men.

Divisions of Economics.—The finite human mind cannot take in more than one aspect of a subject at a time. Hence a student attempting to master a science

* "Nature is commanded by obeying her." (Bacon.)

must proceed like a general invading a hostile country. He must set about conquering it in detail. *Divide et impera* must be the rule of every intellectual inquirer. "He that doth not divide," said Bacon, "will never enter well into business." It is a feature of every well-constructed science that it breaks up readily into parts, each of which can be studied separately. The main divisions of economics are three—Production, Exchange, Distribution. These correspond to the three main operations that men perform in regard to wealth. If we turn our gaze on the world of business, we observe that men are either producing wealth, or exchanging it with each other, or dividing it out among themselves. All these operations are going on continuously and simultaneously, but it is convenient to examine each one separately, ignoring for the time being the others. Accordingly in the next two chapters we shall examine how wealth is produced. Afterwards we shall inquire how it is exchanged, and then finally we shall consider how it is shared out among those who produce it.

III

HOW WEALTH IS PRODUCED

Agents of Production.—A cursory glance around us is sufficient to reveal that wealth is produced in a thousand different ways. The peasant tilling the soil, the woodcutter felling trees, the miner hewing coal, the weaver tending his loom, the engine-driver on the footplate, the sea captain on the bridge, the telegraphist at his apparatus, the clerk at his desk, the business man in his office, are each and all engaged in the great business of creating economic goods. What are the features common to so many diverse operations? What fundamental resemblances underlie their superficial differences? In short, what are the essential requisites of production?

The answer is that in every operation directed towards the creation of wealth, all, or at least the first two, of the following factors must be present—land, labour, capital, and organization. These are what the economist calls the *agents of production*, the things without which wealth cannot be produced. Let us glance briefly at each of them in turn.

Land.—As a term of economics, *land* is equivalent to *nature* in the widest sense. It is therefore the origin and source of all wealth. To nature man owes the

crops, fruits, and animals which form the staple of his food, the raw materials and minerals which he transforms by manufacturing processes into useful commodities, the different forms of motive power—wind, water, steam, and electricity—which he harnesses in his service. As already observed, few of nature's gifts come to man in the shape in which he needs them. They must be altered and adapted by human exertion. Labour consequently is likewise an essential agent of production. But without the land and its products, labour would be as impotent to produce wealth as an artist without a canvas would be to create a picture. In this sense, then, land or nature is the primary and indispensable agent in wealth production.

This being so, it is a fact of immense significance for the happiness of the human race that nature's bounty is not unlimited. Her gifts have to be wrested from her by labour, and, after a certain point, by an increasing expenditure of labour. The field that has been ploughed for a succession of years produces a smaller and smaller crop. If the farmer wishes to maintain or increase the yield, he must cultivate more intensively. He must put more labour and capital into the land. Similarly, the miner in search of coal must penetrate to deeper and thinner seams, involving heavier outlay on pit shafts and ventilating apparatus. Even the natural sources of motive power are far from inexhaustible. Nature is only generous up to a certain point. Beyond that she becomes niggardly, and man must lay his account with this indisputable physical fact.

The close-handedness of nature is expressed by the economist in an important law, the *law of diminishing return.* In simple terms, it states that beyond a certain point, increasing output can only be secured at more than proportionate cost. The clearest examples of this tendency are to be found in agriculture and the extractive industries. In manufactures the opposite law of increasing return generally prevails. Costs diminish with output. The printing of books is a simple and well-known example. To this fortunate tendency is due most of the unprecedented material progress of the last hundred years. But the reduction of manufacturing costs does not remove the dark shadow cast across man's path by the law of diminishing return. Manufacturing industry is dependent for its raw materials on agriculture, and in agriculture the law of diminishing return holds good. It is poor comfort to know that raw materials can be turned cheaply into manufactured goods if the raw materials themselves can only be obtained at ever-increasing cost. With the production of wealth thus curtailed at its source, the outlook for the future is not altogether reassuring. Can we in such circumstances hope for uninterrupted economic progress? May we assume that humanity will continue its unbroken march to some earthly paradise of material prosperity? Or will it be overwhelmed in some cunning ambush prepared for it by nature?

The Population Question.—To the question here stated the economist Malthus returned a famous answer. Malthus was a Church of England clergyman

who taught economics at the East India Company's college at Haileybury. In 1798 he published his *Essay on Population*, one of the books that have made history. Its argument can be stated very simply. Population increases faster than subsistence, and therefore a time must inevitably come when the number of mouths to be fed will be in excess of the country's or the world's food resources. What in this case will happen to the surplus population? Nature, said Malthus, will provide a sharp and effective remedy. By starvation and disease she will thin down the numbers of the people until the surplus is eliminated. This is not a cheerful prospect, but Malthus was a gloomy philosopher with no belief in progress. Indeed, his motive in writing his book was to show the groundlessness of the ideas held by Godwin and other idealists about the perfectibility of human society. According to the Malthusian philosophy, all Utopian schemes of social reconstruction contain within them the seeds of death. To begin with they may succeed in diffusing a larger measure of comfort throughout society, but this rise in the standard of living will be immediately followed by a rise in the birthrate. Population will shoot ahead of subsistence, and nature in the end will have to recommence her pitiless winnowing process with the instruments of famine and pestilence. Mankind, then, can never be happy. The perfect social state is a dream incapable of realization.

The cogency of this argument was somewhat weakened by a qualification which Malthus introduced into the second edition of his book, published

in 1803. He admitted that population might be artificially restricted by " moral restraint," *i.e.* by a general postponement of marriage until the male partner was in a financial position to maintain a family. Malthusians like Place and Bradlaugh went further, and advocated the deliberate use of contraceptive methods. Birth control in this second sense has become to-day a topic of current discussion. It raises grave moral issues which cannot be alluded to here. But its mere possibility destroys most of the plausibility of Malthus's pessimistic interpretation of history. If men can artificially restrict their numbers, then nature's drastic surgery will no longer be needed, and what appeared a fatal obstacle to the perfection of human society will be removed. Social happiness, then, need not be regarded as beyond the reach of mankind.

An additional point to notice is that Malthus's view of population as always tending to forge ahead of subsistence, while a natural one for a man of his generation to take, does not represent a universal or infallible truth. The age of Malthus was an age of unprecedented growth in the numbers of mankind. During his lifetime (1766–1834) the population of the British Isles more than doubled. He may be pardoned for regarding this as the normal rate of increase. But a cursory glance at the facts of history shows how exceptional it was. Before the eighteenth century it took the English people five hundred years to double their numbers. And if Malthus had survived into the twentieth century he would have witnessed the widespread phenomenon of falling birthrates and popula-

tions approaching a stationary level. The forces governing the rise and fall of the numbers of mankind are so obscure that it is impossible to predict how population will behave in any age. We cannot, then, accept as self-evident or universally valid the Malthusian thesis that population always tends to increase faster than subsistence.

Our doubts are reinforced by another consideration. Conditions affecting subsistence have altered vitally since Malthus's day. Not only has the margin of cultivation been extended to include what were almost virgin continents a hundred years ago, but the achievements of agricultural chemistry have enabled the same area of soil to yield an immeasurably greater quantity of food and raw materials. The operation of the law of diminishing return has been counteracted if not definitely arrested. Since the war, the output of food and raw materials has actually proceeded faster than the growth of population, as the following table shows.

	Percentage growth of world population	Percentage growth of world output of food and raw materials
1913–25	6	17
1925–29	4	11

For the present, then, we may console ourselves that the Malthusian spectre is laid. Malthus's theory represents merely a possibility, not an inevitability. In the world of to-day, the central assumption on which it rests no longer holds good.

Labour.—We now come to the second agent of

production, *labour*. The manner in which labour produces wealth must always be kept in mind. It does not create it in the literal material sense in which something is created out of nothing. Man can only operate on his physical environment. "All the labour of all the human beings in the world," said John Stuart Mill, "could not produce one particle of matter." The labourer can merely alter or adapt some fragment of matter to man's use. He does not make things; he puts *utility* into things, *utility* being the economist's technical term for the capacity of anything to fulfil a human desire or serve a human purpose. To produce wealth is in effect to produce *utilities*. Bearing this in mind, we can dismiss summarily a problem which once gave economists much trouble, the problem, namely, as to which labour is productive and which is not.

In the eighteenth century there was a French school of economists, the *physiocrats*, who roundly declared that no labour was productive except the labour of the agriculturist. The manufacturer, they said, creates nothing. He merely alters the shape or form of the raw materials supplied to him by the farmer. The merchant does not even do that, but passes on the commodities in which he deals unaltered to the consumer. Only the husbandman can be regarded in any sense as a creator of wealth.

The fallacy of this too materialist view will be apparent in the light of what has been already said. The alleged distinction between the labour of the manufacturer and of the agriculturist simply does not

exist. Both are creators of utilities, and each operates on the same way on nature. "To weave broadcloth is but to rearrange in a peculiar manner the particles of wool; to grow corn is only to put a portion of matter called a seed into a situation where it can draw together particles of matter from the earth and air to form the new combination called a plant" (J. S. Mill). Each is engaged in rearranging matter and putting it into a form more suitable for satisfying man's wants. Each is creating utility. And what of the merchant? He is doing exactly the same. He is conferring on things the utility of being within reach of the consumer. Coal at the pit-mouth will not warm suburban villas. It must be transported into a multitude of cellars, and the labour which accomplishes this has as much right to be considered productive as the labour of the miner, who, after all, merely sends the coal on the first stage of its journey to the consumer.

The labour of the manufacturer, of the merchant, and of the transport worker must then be acquitted of the charge of being unproductive. But what of those who do not handle material goods at all, but deal only in personal services? What of the *prima donna*, the actor, the teacher, the doctor, the preacher? Are they unproductive labourers? Adam Smith said that they were, because their labour "does not fix or realize itself in any permanent subject or vendible commodity." But we cannot accept this view. To produce wealth is to produce utilities which need not be embodied in a material object. Utility is subjective. Its seat is in the mind, the emotions, and the physical

sensations. The external influences that excite it need not be associated with any tangible thing. Words, gestures, attitudes, features are equally efficacious in producing it. Hence the film star who thrills the amorous couples in the stalls, the tragic actor who purges the emotions of the pit, the teacher who cultivates the youthful intelligence, and the pulpit orator who stirs the better nature of his hearers cannot be excluded from the category of productive workers. They are all purveyors of utilities (amusement, instruction, inspiration, etc.). Wealth does not consist only of material goods. It includes personal services as well.*

But we have not yet exhausted all the different classes of workers. What of public servants like the magistrate, the policeman, the soldier? These can scarcely be described as direct creators of utility. Nevertheless without them the production of wealth by other people would be seriously impeded. Unless producers have some guarantee that they will enjoy the fruits of their labour, they will not work so hard. Indeed, they may not work at all. The policeman and the soldier then contribute indirectly to the output of wealth. Of course, from the economic point of view, it would be more advantageous if their services could be dispensed with. They could then be employed in

* All economists do not regard personal services as forms of wealth, but there are great conveniences in doing so. A bus ride, for example, has all the marks of an *economic good*. It satisfies a human desire, the desire to be carried from one place to another, and it can only be obtained through labour and sacrifice on the part of the bus company and its employees.

the direct production of wealth and add to the national output. But so long as human nature makes it necessary to have a magistracy, a police force, and an army, so long must the members of these professions be classed as productive workers.

Is then all human labour productive? Unfortunately, no. A great deal of human effort is misapplied or simply wasted. The inefficient workman, the incapable domestic servant, the dilettante dabbler in the arts, the Micawbers of life—Mr. Micawber, we are told, "was never so happy as when he was busy about something that could never be of any profit to him"—these do not contribute much to the material prosperity of mankind. But people of this kind are not the worst parasites of society. More sinister figures are the bookmaker, the seller of quack medicines, the hawker of worthless shares, the bogus company promoter. All these are indistinguishable from the professional burglar except that they keep on the windy side of the law. They produce no wealth themselves. They simply filch it from those who do. They are the true unproductive workers, the drones of the hive, for whose existence there is no economic or other justification. It matters not how respectable a trade may be in the opinion of the public, nor how blameless it may appear in the eyes of the law. If it adds nothing to the general stock of utilities it must be stigmatized as unproductive and ought to be visited with the sternest social censure.*

* The objection, here expressed to the speculator, bookmaker, etc., is not moral, though there are plenty of moral objections to these gentry.

Capital.—Congenial work is pleasant and absorbing, but much necessary labour is of the nature of drudgery, against which the human spirit rebels. Accordingly, since the beginning of time man has set himself to discover labour-saving devices. The result has been the invention of a long series of tools and machines which have immeasurably lightened the burden of human toil. Tools and machines are material aids to production. They are *producers' goods* in contrast to *consumers' goods* like a loaf of bread or a suit of clothes. The distinction between these two forms of wealth is quite intelligible. The loaf of bread or the suit of clothes directly satisfies a human want; the hammer or the saw, the plough or the loom, do so only indirectly by helping to produce things capable of satisfying human wants. In other words, tools and machines are used not for immediate consumption but as a means to produce other forms of wealth. They are *capital* which the economist defines as *wealth used to produce more wealth.*

It would be convenient if we could confine the term capital to producers' goods only, because these fit the definition most neatly. But this is not possible. Goods on the way to become consumers' goods must be included, such as the leather which will be made into shoes and the wool which will be woven into cloth. Even what are clearly consumers' goods must

It is economic; namely, that they produce no wealth themselves and levy toll on those who do. Hence they discourage the general production of wealth. A friendly critic has suggested that the bookmaker is a wealth-producer, since he sells excitement. But is it really for excitement that the bookmaker's clients resort to him?

in certain circumstances be reckoned as capital; when, for instance, they are used by an employer to maintain his labourers during a lengthy process of production. What we speak of as liquid, floating, or uninvested capital is, if we penetrate behind the money measure, usually a store of food and clothing which can be used to employ labourers in a variety of ways in constructing a railway, building a factory, sinking a mine, or laying a submarine cable. Once, however, liquid capital has been used in one or other of these ways it becomes *fixed capital*, embodied in the railway, the factory, the mine, or the cable which it has been used to make; thereafter it can only be employed for certain limited purposes.

Capital and Saving.—How is capital produced? The traditional explanation is that it is the result of saving. This is only true in a very limited sense. Saving is merely refraining from consumption, and no such purely negative act could produce a thing so concrete and objective as capital. Capital goods are the product of labour, working on the materials supplied by nature. Where, then, does saving come into the process? The answer is, before it begins. While the labourers are making the capital goods, they must be fed and maintained, and this implies the pre-existence of a reserve of consumers' goods. This reserve will generally, though not invariably, be accumulated by saving. A community which wishes to amass capital must consume less than it produces. The surplus food thus obtained can be used to feed labourers while they are making producers' goods. This was what Russia

did during her Five Year Plan. The government compelled the people to curtail their consumption in order that part of the nation's labour force might be diverted to the expansion of the country's industrial equipment. In this secondary sense only is capital the fruit of saving. Primarily it is the offspring of nature and labour.

IV

THE ORGANIZATION OF PRODUCTION

Division of Labour.—The presence of *organization* among the agents of production is explained by the extreme specialization which prevails in every department of economic life. The old name for economic specialization was *division of labour*, and under this title Adam Smith gave a famous account of it in the first chapter of his *Wealth of Nations*. The history of economic progress is very largely the history of specialization in employments. The earliest producers were unspecialized workers who practised in combination a number of trades. They tilled the soil; they herded animals; they sewed their rough garments; they made their primitive farm implements and tools. A great step forward was taken when agriculture became separated from industry and distinct crafts grew up. In the Middle Ages the blacksmith, the carpenter, the mason, the tailor, the baker, the miller, and similar specialized workers plied their trades alongside the husbandman who cultivated the soil. A further advance took place when specialization was applied to processes within trades. The making of an article was broken up into a series of distinct operations each of which

was assigned to a separate workman. Adam Smith's classic illustration of this tendency was the making of a pin, which in his time involved the labour of eighteen persons. "One man draws out the wire; another straights it; a third cuts it; a fourth points it"; and so on. In recent times economic specialization has been carried to extreme lengths. The manufacture of the motor car, that technical triumph of the twentieth century, provides impressive illustrations. An average car consists of about five thousand different parts. Not only is each part the work of a separate department, but in each case the processes of manufacture and assembly have been divided and subdivided until it has become exceptional for a worker to perform more than one simple operation. In the Ford factory at Detroit, "the man who places a part does not fasten it. . . . The man who puts in a bolt does not put on the nut. The man who puts on the nut does not tighten it." * Production has become a vast co-operative process to which each worker makes only a small specialized contribution. The independent craftsman, the man who makes a complete article from start to finish, has vanished into the backwaters of economic life.

Division of labour brings many advantages in its train. The splitting up and simplifying of tasks enables each producer to find work suited to his special abilities, and shortens the time it takes him to learn his job. In the Ford factory, half the jobs can be learned in a single day. Next, by concentrating on one or two simple

* Henry Ford, *My Life and Work*, page 83.

operations, the worker acquires amazing dexterity at his task. The appropriate muscles are developed. The mental processes run in the proper grooves. The movements become automatic. Think of the speed with which the young lady at the typewriter rattles the keys. Finally, division of labour smooths the way for the progress of machinery. A machine can only perform one single operation. If it does more it is a combination of machines. Hence a necessary preliminary to the mechanization of any branch of production is the breaking up and separating out of the different manual operations involved. And that is what division of labour does.

Two conditions are necessary for the development of economic specialization: (*a*) an extended market; (*b*) some kind of organization. Where the demand for a commodity is limited, there is no room for division of labour. Rural industry, as Adam Smith pointed out, is largely unspecialized. "Country workmen," he observed, "are almost everywhere obliged to apply themselves to all the different branches of industry that have so much affinity to one another as to be employed about the same sort of materials. A country carpenter deals in every sort of work that is made of wood; a country smith in every sort of work that is made of iron." This point does not require to be elaborated. The reader will easily grasp for himself the connection between specialization and *large scale production*. The second requirement is *organization*. Specialization introduces a degree of disintegration into industry which only organization

can correct. The efforts of the different specialized producers must be supervised, co-ordinated, and directed towards a common end. The great army of industrialism must have its officers and its divisional commanders. Without them it would dissolve into a mass of unrelated units.

The Organizers.—Who are the organizers of production? Speaking broadly, they are the owners or controllers of capital, the employers, or the business men. The series of historical developments which have linked the control of production with the ownership of capital cannot be examined here. But the fact itself is undeniable. We live in an age of industrial feudalism. As in the Middle Ages the possession of land carried with it political privileges, and the landowners were the governing class, so under capitalism, the ownership of capital carries with it the power to direct production; the capitalists are the captains of industry.

Such an arrangement has one obvious drawback. It makes industrial leadership hereditary, whereas the qualities that make for leadership are seldom transmitted from one generation to another. But in practice the disadvantage of this method of selecting industrial leaders is tempered by the flexibility and fluidity of the modern social system. The organizers of production do not form a close corporation. Their ranks can be penetrated from the outside, even by men of small resources. The opportunities for borrowing capital are numerous. Not all capitalists wish to be producers. Many are willing to hire out their capital to others.

Banking and investment systems have grown up to facilitate the transfer of the means of production from those who cannot or will not use them to those who both can and will. It is significant that so many Napoleons of finance and industry have risen from comparatively humble circumstances. Rockefeller started life as a clerk; Ballin as an emigration agent; Rathenau as a small engineer. Ford was a farmer's son; Carnegie, the child of poor emigrants. It is a point in favour of capitalism that it permits the rise of organizing genius to the highest posts in the industrial world. But the truth is that the highest kind of organizing ability is so rare and precious that almost nothing can keep its fortunate possessors down. In the lower grades of the industrial hierarchy, however, where talent of a more ordinary kind is all that is necessary, capitalism possibly works less satisfactorily. Here the association of industrial control with capital ownership may sometimes lead to the insertion of square pegs into round holes.

Unit of Organization.—The unit of organization is not quite the same as the unit of production. The technical unit of production is the farm, the workshop, the factory, the shop, or the warehouse. The unit of organization is the *business*. Often, it is true, the two coincide. But with the growth of large-scale production it has become the normal thing for a business unit to include a number of productive units. A manufacturing firm will control a group of scattered plants. A big shopkeeping business will consist of hundreds of branches.

Within the business unit the work of the organizer is to bring together the three other agents of production —land, labour, and capital—and apply them together to the task of creating wealth. The whole process of production derives its impulse from the employer. He buys or leases land, builds or rents factories, installs machinery, purchases raw material, hires labour, explores markets, disposes of the finished article, shoulders the risk which attends the modern system of producing in anticipation of demand. For all these services he must be paid, but the arrangement is that he pays himself. From the price he gets for his goods he deducts his expenses of production and keeps what is left as his remuneration, or, as he calls it, his profit. Not only does he pay himself, he pays the other agents of production. Amongst his costs are reckoned rent for his factory site, interest on borrowed capital, and wages due to labour. He is the distributor as well as the creator of wealth. The whole industrial process revolves round him as its axis.

Joint-Stock Enterprise.—The enormous development of joint-stock production in recent years makes it necessary to add some qualifications to what has just been said. In a joint-stock company the ownership of the capital and the direction of the business are theoretically distinct. The capital is owned by the shareholders, who may most simply be described as sleeping partners. They draw an annual dividend which includes interest on their money, compensation for the risk they run of losing it, and, if they are lucky, something in addition. The management of the

business, on the other hand, is carried on by paid directors elected by the shareholders. This suggests a democratically organized enterprise, but the impression is quite misleading. Oligarchy, not democracy, is the nature of joint-stock government. The directors are in nearly every case big business men who have practically appointed themselves to their posts. They are directors whose decisions the shareholders accept like sheep. Only when dividends fall uncomfortably low do the shareholders make their voices heard, and then seldom to much purpose. Joint-stock enterprise in practice is merely a device which places the savings of a great many little people at the disposal of a small number of large capitalists. It does not interfere in any essential particular with the modern arrangement which puts the control of industry in the hands of the owners of capital.

Competition.—A curious feature of the modern industrial system is the absence of any control from the top. Within each business there is unified organization, but the relations between businesses are left entirely unregulated. There is no central authority to overlook and control the efforts of the separate producers. The industrial army has colonels and brigadiers. It has no commander-in-chief and no general staff.

Nevertheless its condition is not one of utter anarchy. The want of central organization is made good in what seems almost a miraculous way by the spontaneous agreements which men make with one another. The operation of the motive of self-interest is sufficient to co-ordinate the activities of producers

and secure a large degree of industrial harmony. Competition and freedom of enterprise supply the place of central control. The praises of this system have been chanted by a long line of economists and publicists from Adam Smith onwards. And certainly if we assume competition to be perfect (a very large assumption, as we shall see in a moment), then the advantages claimed for it are undeniable. Competition makes the satisfaction of the consumer the goal of economic effort; it automatically adjusts supply to demand; it ensures cheapness and plenty. Let the consumer suddenly desire commodity A instead of commodity B and immediately labour and capital are switched over from the manufacture of B to the manufacture of A. The consumer has not only the assurance that his wants will always be provided for; he can rely on their being satisfied in the cheapest possible manner. Competitive prices cannot rise above the level of cost of production. If they show a tendency to do so in any branch of industry, labour and capital, attracted by the surplus profits to be made, will flow in from other industries and the augmented output will bring down the price. On the other hand, the interests of the producer are safeguarded. The consumer must always pay him a price that will cover his cost of production, otherwise supply will fall off and demand will be left unsatisfied. Competition theoretically establishes the reign of economic justice. It fixes prices that are fair to both producer and consumer.

This is an attractive picture which, unfortunately,

has little relevance to the facts. In practice, competition works very differently. The chief reason for this is that it is *imperfect*. Perfect competition demands a number of conditions which are only partially fulfilled in the modern world. It implies, for example, complete mobility of labour and capital. These two agents of production must be ready to move at the shortest notice in whatever direction the price-index determines. This is only exceptionally possible. Capital which has taken the shape of buildings or plant cannot suddenly be applied to some other branch of production. Nor does labour migrate with ease from one region to another, while the workman who has been brought up in one particular trade is faced with tremendous obstacles when he tries to transfer himself to another. The perfect flexibility of social and economic structure which competition requires for its smooth working is not to be found in any country to-day. How slow, for example, Great Britain has been in adapting herself to the new economic environment created by the war.

Competition also implies equality in knowledge between producer and consumer, between buyer and seller. This hardly ever exists. The average person who enters a shop to buy a common article has to trust mainly to the honesty of the shopkeeper that he is not overcharged. He has no means of checking the price. He knows nothing of the conditions in which the article is produced, and can make only a very rough estimate of its cost of production. Occasionally the inferiority of knowledge is on the side of the seller. An expert in pictures may pick up a valuable painting

for an old song, or a book collector may make a precious find in the bookseller's penny box. The prices paid in such cases are not truly competitive.

Again, the operation of the competitive principle is interfered with when there is inequality in wealth between the two parties to a bargain. The starving slum-dweller who parts with his sticks of furniture for food will take anything he can get for them. He cannot afford to wait. The broker who buys them can. He does not care whether he gets the furniture or not. But a starving man must have food. It was the madness of hunger that drove Esau to sell his birthright for a mess of pottage. In the case of the wage-contract this economic inequality is very pronounced. Hence the general tendency for labour to get the worst of it in the bargain with capital.

If further proof is required of the practical deficiencies of the competitive system, we can find it in the widespread industrial crises and trade depressions which afflict the world at regular intervals. Their occurrence is conclusive evidence that the competitive principle is not working freely, for under a régime of perfect competition it is difficult to see how such disturbances could take place at all. How could supply ever fail to adjust itself to demand? How could demand fall off so long as wants remain unsatisfied? And yet this is just what happens in an economic crisis. Need and capacity for consumption suffer no diminution, and yet demand declines. Production has to follow suit, and soon the whole economic system is functioning inexplicably at a lower level. No proper

explanation of this mysterious phenomenon has yet been offered. Theories there are in plenty, but none which account for all the facts.

Finally competition suffers from the grave drawback that it is the parent of monopoly. Freedom of enterprise includes freedom to combine, and what is there to prevent producers combining to restrict the working of free competition! The present system is honeycombed with monopoly. Trusts, cartells, retailers' selling organizations, trade unions, and similar associations all aim at keeping prices above the competitive level. Capitalism has developed a hybrid character which gives us the worst of both worlds. We suffer from the economic disorganization which flows from free competition. We are exposed to the economic exploitation associated with monopoly. In these circumstances it is easy to understand the drift of opinion in favour of some deliberate regulation of economic activity by public authority which would correct the worst abuses of the present industrial organization without handing over the consumer to the tender mercies of the private monopolist. These are the motives behind the widespread contemporary movement in favour of *economic planning*.

Economic Planning.—All schemes of economic planning aim at substituting some kind of central (usually state) control for the automatic operation of free competition and private interest. The country where this principle has been put most systematically into operation is, of course, Russia, but even in the capitalist countries of the west, public control has invaded the

economic structure at a number of points. In Great Britain a whole series of government boards regulates the output and the sale of the chief kinds of agricultural produce, while in the coal industry something very like a state cartell has been established by Act of Parliament. In the United States, after the accession to office in 1933 of President Roosevelt, a vast scheme of state control was set up which included, among other things, a restriction of agricultural output, a general raising of prices, the fixing of minimum wages, and the establishment of a maximum working week. The economic creed of Fascism assigns an important place to public control, and in Italy and Germany important branches of production have been placed under state supervision. The tendency is general enough to suggest that it is a response to some deep-seated and universal need. There is much to support the view that economic planning marks a necessary and desirable stage in the evolution of capitalism. The anarchic conditions of the nineteenth century can no longer be tolerated. Some kind of central guidance and control must be established. The guerilla army of capitalism must be transformed into a well-disciplined regular force. If the advance towards the goal of universal prosperity becomes slower it will at any rate be surer. Criticism of concrete schemes of planning is, of course, quite legitimate, but unqualified condemnation of the principle is merely foolish. Every age is ruled by certain master tendencies against which it is as useless to contend as to try to stem the incoming tide. Economic planning seems destined to play this part in our

generation. One after another the last vestiges of individualism are vanishing from our social and industrial system. If economic liberty was the watchword of the nineteenth century, public control and state supervision have become unmistakably the guiding principles of the twentieth.

V

EXCHANGE AND MONEY

Importance of Exchange.—Exchange is the central department of economics. On the process of bartering goods against goods the whole business of producing and distributing wealth depends. Division of labour, the salient feature of the productive system, would be impossible without it. No producer would dare to specialize unless he was assured that he could dispose of his surplus products and obtain in return for them the things he does not make himself. The baker must be able to exchange his loaves for the meat of the butcher, the clothes of the tailor, and the shoes of the shoemaker. A breakdown in the machinery of exchange would throw every producer back on himself, reduce his productive powers, and enormously diminish the material prosperity of the whole community. Exchange not only determines how wealth is produced, it also determines how wealth is divided up amongst those who produce it. We all get our incomes by selling or exchanging something, either goods or services. Our share in the national wealth depends on the high or low price we can command

for the particular commodity or service in which we deal. Exchange, then, determines the whole character of the economic system. There is scarcely any operation connected with wealth into which it does not enter.

An additional reason which makes the economist devote special attention to this subject is that exchange is the part of the economic mechanism which functions least satisfactorily. The production of wealth is relatively a simple and straightforward matter. The human race indeed can produce more wealth than it knows how to deal with. Almost every branch of industry or agriculture is now busy concocting schemes to restrict output. We read of fields of cotton plants being rooted up in America, of bags of coffee being used to stoke locomotives in Brazil. Yet this appearance of superabundance is a complete delusion. The wants of the world's populations are only partially satisfied. There are impoverished people in Europe who could drink the coffee and wear the cotton which are being destroyed across the Atlantic, and who would gladly produce in return things which the coffee- and cotton-planters have at present to go without. But owing to the defectiveness of the machinery of exchange, these two groups of people cannot establish contact with each other. At almost every point in the economic system there is this yawning chasm between supply and demand, between wants and satisfactions. The two blades of the scissors obstinately refuse to close. This is one of the main weaknesses of capitalism. It can produce goods in overflowing

abundance, but it cannot always force them across the gap that separates producer from consumer. For this reason, problems of exchange must always possess special interest and urgency for the student of economics.

Money as a Medium of Exchange.—The earliest exchange transactions took the form of barter, the direct exchange of goods against goods. Barter has notorious inconveniences. To function smoothly, it implies a double or triple coincidence of wants which hardly ever occurs. If I wish to exchange a shoehorn for a bundle of toothpicks, I must find not only some one who has toothpicks, but some one with toothpicks who wants a shoehorn. Thorny problems of this kind have actually to be solved by travellers in backward parts of the world to-day. The following was the experience of an African explorer who wished to hire a boat to cross Lake Tanganyika.

" Syde's agent wished to be paid in ivory, of which I had none ; but I found that Mohammed ibn Salib had ivory and wanted cloth. Still, as I had no cloth this did not assist me greatly until I heard that Mohammed ibn Gharib had cloth and wanted wire. This I fortunately possessed. So I gave Mohammed ibn Gharib the requisite amount of wire, upon which he handed over cloth to Mohammed ibn Salib, who in his turn gave Syde ibn Habib's agent the wished-for ivory. Then he allowed me to have the boat." *

* V. L. Cameron, *Across Africa*, pages 183–84 ; quoted in Gide, *First Principles of Political Economy*, page 50.

To such shifts are buyers driven when barter alone is the instrument of exchange.

These difficulties can be overcome by the use of some medium of exchange. If in any society there is a commodity which is in fairly general demand, it can be used to facilitate exchanges. The economist's name for such a medium of exchange is *money*. In primitive pastoral communities cattle served this purpose. (The Latin word for money, *pecunia*, comes from *pecus*, meaning cattle.) In a village of herdsmen, every one can do with cattle; every one is prepared to take them in exchange for other goods. Thus to begin with, *money* is just some commodity which is universally desirable. The list of things which have served in this capacity at different times and in different parts of the world is a long and picturesque one. In addition to cattle, it includes slaves, skins, furs, corn, rice, oil, tobacco, dried fish, salt, tea-cubes, cowrie shells, and straw mats. But gradually the metals, and especially the precious metals, were found to have particular advantages for this purpose. They contain large value in small bulk; they are portable, durable, and can be divided into parts without any deterioration of value. The earliest metallic currencies were not coined. The metal passed from hand to hand in ingots which were weighed, as when Abraham, purchasing a grave for his wife Sarah, "weighed to Ephron the silver which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant" (Gen. xxiii. 16). This is what economists term a *currency*

by weight, and memories of it survive in the names of many famous coins which have a connection with units of weight, such as the pound, the livre, the mark, etc. A currency by weight has obvious inconveniences. Not only has the metal to be weighed. Its fineness has also to be tested. These operations become unnecessary when the metal is *coined*. A *coin* is simply a piece of metal bearing a stamp imposed by some public authority which certifies its weight and fineness. Coins do not require to be weighed. They need only be counted. Hence a coined currency is a *currency by tale, to tell* being the old word for *to count*, which we still use when we speak of a bank teller. When money is coined it ceases to be a mere commodity and assumes a legal character. Its weight and fineness are determined by the currency laws of the country in which it circulates, and it is manufactured in some kind of public mint.* A Lydian king, Gyges, who lived about seven hundred years before Christ gets the credit of being the first to strike coins, though their shape was very different from that with which we are familiar. Examples of them may be seen in the British Museum. Since this early period innumerable currencies have been struck of gold, silver, platinum, copper, lead, iron, brass, and tin. The Roman Empire had a gold coinage, but the chief metal used in mediæval Europe was silver, Shakespeare's "pale and common drudge 'tween man and man." In the nineteenth

* There are, however, a few examples of coined money which circulates without any legal character, such as the Maria Theresa dollars, which were widely accepted in the countries of south-eastern Europe.

century the leading commercial nations adopted a gold standard.

The rise of *paper* currencies followed the development of coined money. The first examples of paper money were the notes issued by bankers, which had no legal currency, but were accepted because they were convertible into legal coined money. In cases of emergency, the state might make them inconvertible, as was done with the Bank of England's notes during the period of the Restriction, 1797–1821. In this way governments discovered a useful financial expedient, though one of doubtful wisdom and equity. They could meet their liabilities by printing paper notes. It is usually in time of war that governments have resorted to this practice. The French *assignats*, the American greenbacks, and the paper currencies issued by all the belligerents during the Great War are historic examples. In recent years, and especially since 1931, the use of paper for currency purposes has become increasingly common. Only a handful of nations now adhere to a metallic standard, and even they employ convertible paper as an internal circulating medium.

Paper money differs from other forms of currency in that it has no intrinsic value. Gold or silver coins contain a certain quantity of metal which can be used for other purposes, but the material of a paper note is valueless. Why then are paper notes accepted? Partly because they are issued by the authority of the state or some reputable banking institution; but much more because, having become accustomed to the convenience of a circulating medium, people will

accept anything that professes to be such, provided they can count on other people doing the same. The use of paper money is due to a social agreement or convention very like that which makes all drivers of vehicles keep to the left of the road. There is no reason why it should be the left rather than the right, but it must be one or the other, and all must observe the same rule. Similarly, it does not matter whether money is made of paper or metal, provided all agree to accept it. Money does not need to have intrinsic value to do its work properly. The idea that it does is a superstition due to the way in which money came into existence. In the early stages of its history it had to have some kind of commodity value, because in no other way could it secure general acceptance. But once the monetary habit is established, this ceases to be necessary. Paper tickets will be as readily accepted as metallic counters, will carry through exchange transactions quite as effectively, and will have the additional advantage of being much cheaper to make and replace. This is the main reason why paper has so largely displaced the metals as a currency medium throughout the world.

Money, then, which started by being something natural has ended by being something artificial or conventional. In the last resort the inconvertible notes of the Bank of England circulate because the British people have agreed to accept them, and they accept them because they have become accustomed to the use of money and cannot do without it. The force of habit in these matters is shown by what happened

in eighteenth-century Scotland, when Scotsmen would refuse bright English guineas in favour of the dirty tattered paper notes to which they were accustomed. The prejudice against paper money is quite unjustified. A paper currency is an artificial thing, but most of the good things in this world are artificial. The principal cereals have been developed by human ingenuity out of coarse grasses. The chief breeds of animals are the result of a long process of crossing and selection. Man has always refined upon nature. And so with the social machinery which he uses to assist his economic activity. The gradual progress from the commodity-money of the savage to the conventional currency of civilized nations is one of the finest collective achievements of mankind.

Money and Prices.—Money is a medium of exchange. It is also a measure of value. We compare the worth of things by comparing their prices. We say that the value of an article which costs £10 is double that of the article which costs only £5. This is good enough for most ordinary purposes, especially if we are comparing the worth of two commodities at the same point of time. But when we wish to compare values over different periods, money is a most unsatisfactory measure. It itself has value, and this value is constantly varying. We might as well try to measure length with a yard-stick which at one time measured thirty-six inches, at another thirty, and at another forty. The value of money is its purchasing power, the command which it gives over other commodities, and the purchasing power of money is a thing that

fluctuates. Most of us are aware that the pound buys less than it did before the war. On the other hand, it buys more than it did immediately after the war. This is another way of saying that the level of general prices moves up and down; not the prices of particular commodities which are subject to fluctuations peculiar to themselves, but the prices of *all* commodities. How are we to explain these movements?

Quantity Theory of Money.—In spite of the innumerable refinements of monetary doctrine in recent years, the simplest clue to movements in general prices is still provided by the old-fashioned *quantity theory of money*. The theory states in the first place that the value of the purchasing power of money varies with the *quantity* of it in circulation. This is quite intelligible. If the supply of corn or of any other commodity is increased, its value goes down. So with money. In the case of a metallic currency, variations in the quantity are mainly due to natural causes, to fluctuations in the output of the mines. In the fifties of last century the discovery of gold deposits in California and Australia enormously increased the annual output of gold and sent down its value. The purchasing power of gold currencies fell all over the world; in other words, general prices measured in terms of gold rose. In the seventies there was a falling-off in the output of gold and general prices fell in sympathy. They rose again in the nineties when the gold mines of the African Rand began to pour forth their abundant supplies.

In the case of a paper currency, fluctuations in the supply of money are generally due to the action of

the government. If the currency consists of inconvertible notes, the government can increase their quantity by the simple expedient of setting its printing presses to work. All the belligerent nations did this during the war, and some of them continued it after the peace. The process is called *inflation*, because while the amount of money in circulation increases and the price of everything goes up, the quantity of goods in circulation remains the same as before. There is an appearance of greater wealth, but the amount of real wealth is no larger, just as in an inflated balloon, though it looks bigger, there is no increase in the quantity of rubber or other material of which it is composed. The opposite process is *deflation*, when the quantity of money in circulation is curtailed its purchasing power rises (owing to its scarcity) and the price of everything falls.

One factor, then, which determines fluctuations in general prices is the *supply* of money, Another is the *demand* for it. The phrase *demand for money* is here used in a special sense. It means, not the demand of particular individuals for money, which is really a demand for what money buys, but the demand of the community as a whole for currency to carry through exchange transactions. This demand will vary with circumstances. If business is brisk, many things will be bought and sold and the need for currency will be greater. In seasons of dull trade the demand for currency will fall off. These two factors of demand and supply must be balanced against each other. An increase in the quantity of money will not affect the

level of prices if there is an increasing demand for currency. Similarly the consequences of a contraction of the circulating medium may be counteracted by a falling-off in the volume of trade.

A third factor which must be taken into consideration is what the economist calls *velocity of circulation.* Sometimes coins or notes pass more quickly from hand to hand than at others. People are in a spending mood. As soon as money comes into their possession they make haste to convert it into goods. Various circumstances may induce this lavish disposition. The holiday-maker often dissipates in a fortnight the economies of a year. But a special reason which makes money circulate quickly is if people have any reason to distrust the currency, if they fear that it will soon lose its value. This is what generally happens when a government is inflating. An inflated currency is generally a depreciating currency. The government keeps on pouring out notes, as the German government did in the post-war years, and the purchasing power of the monetary unit keeps on falling. Hence people rush to turn their money into commodities which will not lose their value so quickly. The result is a perfect orgy of spending, and money flies from hand to hand.

The effect of velocity of circulation is just the same as if the quantity of money in circulation had been increased. Each note or coin does more work. A note which changes hands a hundred times a day will carry through a hundred times as many transactions as a note which only changes hands once. The effect is the same as if the government had increased the quantity of notes

a hundredfold. This was why the German mark had such a headlong career after the war. It depreciated not only because the amount of paper money in circulation reached astronomical figures, but because every one spent marks as soon as he got them. The quantity of money and the velocity of circulation are two factors that reinforce each other.

We can now state the quantity theory of money in its full form. The level of prices varies directly with the quantity of money in circulation (reinforced by the velocity of circulation), and, inversely, with the volume of business. If we call the level of prices P, the quantity of money Q, the velocity of circulation V, and the volume of business B, we get the following formula:

$$P = \frac{Q \times V}{B}$$

The reader, however, must beware of thinking that the relation between these different factors is one of mathematical proportion. For instance, if the quantity of money in circulation is doubled, other things remaining the same, we can safely say that the price level will rise, but we cannot say dogmatically that it will rise 100 per cent. The quantity theory is only a rough guide to movements in prices. Allowance must always be made for the friction with which the economic machine works.

Having now obtained some idea why the value of money varies as compared with commodities in general, let us now pass on to a kindred problem, namely, why

does the value of one currency vary in terms of another; why does a British pound not always exchange for the same number of American dollars, French francs, German marks, etc.? This brings us to the subject of the *foreign exchanges.*

VI

THE FOREIGN EXCHANGES

Money-changing.—Any one with the smallest experience of foreign travel knows that laying in a supply of foreign currency is almost as indispensable a preliminary to a trip abroad as taking out a passport. British money has no legal currency outside the British Isles. No foreign shopkeeper or hotel-keeper is bound to accept it. If he does it will be merely to oblige a customer, and because he knows he can change it afterwards into his own national currency. And for his complaisance he will probably make the unsuspecting foreigner pay a generous commission. Even the Scot on a visit to London finds that he is charged an extra sixpence in the pound when he offers to pay his hotel bill in Scottish banknotes. Accordingly, every well-advised tourist provides himself with a supply of foreign currency before he ventures abroad, and the thrifty Scotsman carefully changes his native banknotes into English money before he crosses the Border. Money-changing is as old as money itself. The profession was practised in Jerusalem in New Testament times, the money-changers whom Christ drove out of the Temple being there to supply Passover pilgrims from outside Palestine with Hebrew currency.

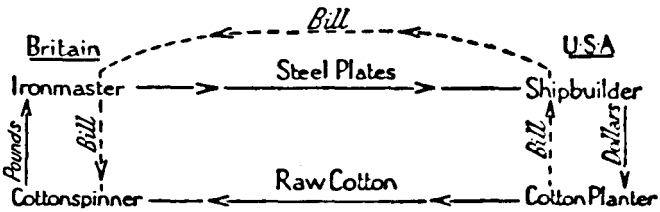
And in some countries, which, like Germany until 1871, had more than one monetary system, the money-changer performed an indispensable economic function down to the nineteenth century. The founder of the great banking house of Rothschild obtained a large part of his resources through money-changing. To-day the business is carried on by a host of special agencies, by the exchange departments of banks, by financial and tourist companies, and even by many private persons who find in it a profitable side line to their main job. The booking-clerk who hands you your ticket for Paris may inquire as he does so whether you wish to buy any French francs.

The needs of travellers and tourists, however, accounts for only a small part of the great business of money-changing. For most of it, the buying and selling of goods across national frontiers is responsible. International commerce necessarily involves the exchange of one currency against another. Suppose, to take an imaginary case, an American shipbuilder has bought £1,000 worth of steel plates from some British ironmaster. How is he to pay for them? It is no use sending dollars, because in such transactions it is usually stipulated that payment must be made in the seller's currency. The shipbuilder must therefore find some other American who has a supply of British pounds which he is willing to exchange for dollars. These pounds may be in the shape of actual notes and coins. But currency in this form is never nearly sufficient in amount for the needs of foreign commerce. Some substitute must be found, and the want is supplied by

various kinds of paper credit. What the shipbuilder will buy will most probably be not actual British notes and coins, but a *claim* to a certain amount of British currency, represented by a credit instrument like a bill of exchange, a cheque, or a bank deposit.

Bills of Exchange.—The bill of exchange was, until recently, the chief instrument by which foreign trade was financed, and it still continues to play an important part in the carrying through of international trade transactions. In form it is simply an I O U or promise to pay, drawn out by the creditor and acknowledged by the debtor, who adds his signature to it. A bill matures or becomes payable after a certain stipulated period, usually three months. Now suppose, in the case we are considering, our American shipbuilder finds an American planter who has sold £1,000 worth of cotton to a British cotton-spinner. He has sent over with the cotton a bill of exchange for £1,000, which the cotton-spinner has endorsed and sent back. The planter has now a piece of paper representing £1,000 in British currency. This is exactly the sum the shipbuilder owes. What simpler method could there be of settling his debt than to buy this bill and send it to his creditor in England? He pays for it in dollars, so that the planter receives payment for his cotton in his own currency and is satisfied. The shipbuilder discharges his debt by sending the bill to the British ironmaster. The ironmaster presents the bill when it falls due to the cotton-spinner, and is paid for his steel plates in British currency. The cotton-spinner in liquidating the bill pays for the cotton he has received

from the American planter. Thus by the simple posting of a bill of exchange, without any export of specie or currency two foreign trade transactions have been liquidated, as represented below.



Such transactions as described above still take place to-day, but less frequently than during the nineteenth century. The growing use of cheques has enabled the bill of exchange to be largely dispensed with. In the case mentioned above, the cotton-spinner would most probably send a cheque for £1,000 to the American planter, who would pay it into his bank. The bank would thus obtain a claim to British currency which it would sell to the shipbuilder in return for a cheque in dollars, crediting the amount to the planter's account. The shipbuilder would send the claim to the British ironmaster, who would collect payment through the cotton-spinner's bank, the bank debiting the amount to the cotton-spinner's account. Though the credit documents used are different, the essence of the transaction is the same as when a bill of exchange is employed. An exchange takes place of one currency against another. British pounds are bartered in New York for American dollars.

Par of Exchange.—We now approach the crux of our problem. At what rate will the exchange between pounds and dollars take place? In other words, how many dollars will the American shipbuilder have to give in order to secure the bill or claim for £1,000?

It will simplify our inquiry if we begin by assuming that the transaction took place in the early part of 1931, when both Britain and the United States were on the gold standard. By the currency laws of the two countries at that time, the pound and the dollar represented certain fixed weights of metal. The British sovereign weighed 113.001 grains of fine gold; the dollar, 23.22 grains of the same metal.* Obviously this establishes at once a certain relation between the pound and the dollar.

$$£1 = \frac{113.001}{23.22} = 4.8665 \text{ dollars.}$$

This is what is called the *mint par of exchange—i.e.* the rate which is fixed by the mint or currency laws of the two countries concerned. Unfortunately, the actual exchange rates which prevail at any time very seldom coincide with the par rate. This is one of the puzzling things about the foreign exchanges. The reason for it we shall consider in a moment. But in the meantime we shall just note that the par rate is a kind of standard or normal rate round which the actual rates fluctuate and towards which they always tend to return.

* In January 1934 the weight of the dollar was reduced 40 per cent.

The par rate is easiest to calculate when we are considering two metallic standards of the same kind, like the pound and the dollar when both consisted of gold. To compare a gold and a silver standard like the American dollar and the old Shanghai tael presents greater difficulties. Here not merely the mint laws of the two countries have to be considered, but the price of gold in terms of silver. This is something not fixed by law. It constantly varies with the state of the bullion markets. Hence the par of exchange between a gold and a silver monetary unit fluctuates. It is not a fixed rate as between two standards of the same metal.

The same is true if we compare a metallic and a paper standard, or two paper standards. Mint laws have no relevance here. At present, Britain has a paper currency and the United States a gold standard. It would be useless to try to establish a relation between the pound and the dollar by comparing the paper in a British note with the metal in a dollar piece. A solution must be sought in another direction. The parity between two paper standards or between a paper and a metallic standard depends on their *purchasing power.* How many dollars are required to buy the same quantity of goods as a pound? The answer to that question gives the *purchasing power parity* between pounds and dollars.

Purchasing power parity is something more elusive than the mint par of exchange. It is much more difficult to calculate, and it changes with bewildering frequency. Any change in the price levels of the two

countries concerned alters the purchasing power of their currencies, and sends the parity in one direction or the other. Thus it is often difficult at any point of time to say what the purchasing power parity precisely is. But it exists as a reality nevertheless, and the actual rates go fluctuating round it, just as they do with the mint par of exchange. Even the mint par is at bottom a purchasing power parity. Obviously, equal weights of the same metal will purchase the same quantity of goods.

Exchange Fluctuations.—We now come to consider the interesting point why exchange rates so seldom coincide with the par rate. The reason is shortly that the supply of any foreign currency in a particular country, and the demand for it, both vary. Hence its value in terms of the national currency varies also. If pounds, for example, are plentiful in New York, and the demand for them small, they may be bought cheaply. It will not be necessary to give so many dollars for a pound as before, and the exchange will be said to be unfavourable to Britain. Let us go back to our American shipbuilder, who wants to buy a bill on London for £1,000. At par the cost of such a bill would be 1,000 × 4.8665, or 4,866.5 dollars. But if bills and claims on London are plentiful and the number of buyers small, he may be able to bid down the price. He may get the bill for 4,850 dollars, representing an exchange rate of 4.85 dollars to the pound, which is less than the par rate. On the other hand, if bills are scarce and demand keen, he might have to offer 4,880 dollars, or an exchange rate of 4.88 dollars to the

pound, which is above the par rate. In this way the bargaining of the buyers and sellers of foreign currencies keeps the actual exchange rates moving in see-saw fashion, sometimes a little above the par rate, sometimes a little below it, but always tending to come back to it.

Specie or Gold Points.—Are there any limits to these fluctuations in the exchange? Where two currencies consist of the same metal there are very rigid limits. If at the time when our shipbuilder contracted his debts, Britain and the United States were, as we have assumed, on the gold standard, then gold could be freely purchased both in London and New York from the central bank or other financial authority at a price fixed by law. The shipbuilder could buy bullion and send it to London in payment of his debt. He would not do this if he could find some other way of meeting his debt, for the sending of bullion involves certain charges for freight, packing, insurance, the loss of interest on the purchase money of the gold while it is in transit, etc. But obviously he will not pay more for his £1,000 bill than the price at par plus the cost of sending £1,000 worth of bullion from New York to London. This amounts roughly to 25.8 dollars. Hence the top price for a £1,000 bill in New York is 4,866.5 + 25.8, or 4,892.3 dollars, representing an exchange of 4.8923 dollars to the pound. If asked to pay more than this, the shipbuilder will prefer to send gold rather than buy a bill. This maximum rate is called the *upper specie* or *gold point.* The exchange rate cannot rise above it. If it shows a tendency to do so, gold will immediately flow from New York to London.

Specie or Gold Points

Corresponding to the *upper specie point*, there is a *lower specie point*. There is a limit to the price which holders of bills on London will accept for them. They can always send the bill to London, turn it into gold, and fetch the gold back to America. Again, this will cost something, but it will pay the bill-holder to do this rather than accept an exceptionally low price for his bill. For example, the cotton-planter in our illustration knows that £1,000 worth of bullion can be brought from London to New York for a little over 18 dollars.* Hence the lowest price which he will accept for his bill is the par price minus the cost of fetching the proceeds in gold from London—*i.e.* 4,866.5 — 18.3, or 4,848.2 dollars, representing an exchange rate of 4.848 dollars to the pound. This is the lowest rate to which the British–American exchange can fall under the conditions mentioned. When it reaches this point, gold will begin to flow from London to New York.

Thus in 1931, when Britain and the United States were both on the gold standard, fluctuations in the pound–dollar exchange were confined within exceedingly narrow limits, as shown below:

Upper gold point . .	£1 = 4.892 dollars.
Mint par	£1 = 4.8665 „
Lower gold point . .	£1 = 4.848 „

* There are some differences in the charges for handling and assaying gold as between London and New York which explain why this figure is less than that mentioned previously as the cost of sending the same quantity of bullion from New York to London.

Are there limits to the fluctuations of the exchange where two paper standards are concerned? Not quite to the same extent. It is true that even where a country has gone off a metallic standard, as Britain did in 1931, it may still be possible to buy gold for export. But there will be no fixed legal price for it. The central bank will only sell at the market price of the day, and the market price will continually vary. Hence, though in a sense there will still be gold points, these points will be very elastic and changeable, and the limits within which exchange fluctuations can take place will be very wide. They will be still wider if gold is not procurable at all, because in that case the purchaser who feels he is being asked too much for the bill he wants to buy will have no alternative method of discharging his foreign debt except by exporting some commodity to the creditor's country, and meeting his liability with the proceeds of the sale. Clearly this will not be always practicable. With paper currencies, then, we must be prepared for greater fluctuations in the exchanges than with metallic standards.

Balance of Trade.—What accounts for variations in the supply of foreign currencies, and also for fluctuations in the demand for them? The answer is, in the first instance, the *balance of trade.* Every export of goods from a country creates a claim on the currency of some other state. Every import, on the other hand, creates a demand for some foreign currency. The balancing of these two forces determines the rate of the exchange. If the balance of a country's trade with some other country is favourable, if, for example, the

United States has bought less from Great Britain than she has sold to her, then there will be a big supply of British currency in New York, and only a small demand for it. The price of pounds in terms of dollars will fall. A favourable balance of trade creates a favourable exchange. On the other hand, when the balance of trade is unfavourable, when the United States has bought more from Britain than she has sold to her, there will be only a small supply of British currency in New York and a big demand for it. Pounds will cost more in dollars and the rate of exchange will move against America.

A favourable balance of trade, it should be noted, is never more than temporary. It always tends to pass into its opposite. By its very existence it sets forces in motion that make for equilibrium. And the same is true of an unfavourable balance. In the case of two gold standard countries, such influences work most swiftly and surely. Take the example of Britain and America in 1931, before Britain went off gold. When Britain's balance of trade with America was favourable, the American exchange rose until it reached the upper gold point. Gold began to flow from New York to London. The arrival of this bullion in Britain tended to raise the British price level (see what was said in the last chapter about the quantity theory of money). These high prices made Britain a tempting place to sell in, but an unprofitable place to buy in. The result was to check her exports and increase her imports. This went on until the favourable balance of trade disappeared. In America the loss of gold had precisely

the opposite effect. It lowered American prices, checked American imports, but augmented her exports until her unfavourable balance of trade became favourable again.

In the case of two paper currencies, equilibrium is not restored so quickly. In the absence of fixed gold points, a flow of gold will not be automatically set up. But the effect of an adverse or a favourable exchange will tend in the same direction. If the exchange is unfavourable to America, Americans will have to give more dollars for pounds. That will make all British goods automatically dearer to American purchasers, and they will buy less of them. On the other hand, to Britishers, American goods will be cheaper because the pound will now fetch more dollars, and they will buy more of them. Thus America's exports to Britain will increase and her imports will fall off until her balance of trade becomes favourable again. Conversely, as a result of the same movements of trade, Britain's favourable balance will become unfavourable. A permanently favourable or unfavourable balance of trade is impossible unless the creditor country goes on lending or making a gift of its surpluses to the debtor.

Balance of Payments.—The balance of trade is too narrow a conception to explain fully the fluctuations of the exchange. It takes account only of visible imports and exports. But to these must be added a number of "invisible" items which either lead to a demand for foreign currency or create a supply of it. These, combined with the visible items, make up a country's

balance of payments, which, in the last resort, determines the rate of its foreign exchanges. Chief among the invisible items are: (*a*) shipping services; (*b*) banking and financial services; (*c*) government payments and receipts, such as tributes, indemnities, reparations, payments to garrisons abroad; (*d*) export of capital for long or short period investment; (*e*) payment of interest on foreign loans and repayment of capital borrowed; (*f*) remittances of emigrants, expenses of tourists, etc. If the reader examines these various items he will find that all of them involve the exchange of one currency for another. If a British shipper carries goods for a Dutchman, the Dutchman must exchange guilders for pounds in order to pay the shipper in his own currency. If a syndicate of British capitalists lends £10,000,000 to the Turkish government, it must convert these millions of pounds into piastres. The throwing of this large quantity of pounds on the exchange market and the big demand for piastres which accompanies it will raise the value of piastres in terms of pounds and turn the Turkish exchange against Britain. But when the Turkish government comes to pay the interest on the loan, still more when it begins to repay the capital, the situation will be entirely reversed. The selling of piastres and the demand for pounds will lower the price of piastres in terms of pounds, and make the Turkish exchange favourable to Britain. The Italian emigrant in America who sends money to his family sells dollars and buys lire. He therefore helps to make the Italo-American exchange favourable to Italy. The wealthy Britisher

who winters on the Riviera exchanges pounds for francs and turns the exchange against his native country. So with all the other items. Like visible exports and imports, they create either a claim to some foreign currency or a demand for it. They must therefore be reckoned with in estimating the forces that raise or depreciate the value of one currency in terms of another.

To illustrate what has been said, the balance of payments for Britain and for the United States is given for the year 1932. It will be observed that the British statement does not include an estimate of the import and export of capital, though capital movements have a very important and sometimes a very disturbing influence on the exchanges.

BRITAIN

Creditor items (in millions of pounds):		
Net shipping income	70	
Net overseas investment income	145	
Net income from short interest and commissions	25	
Other services	15	
		255
Debtor items (in millions of pounds):		
Excess imports of merchandise	287	
Excess imports of gold	15	
Excess of government payments overseas	24	
		326
Debit balance		71

Balance of Payments

U.S.A.

Creditor items (in millions of dollars):		
Excess of exports of merchandise . . .	150	
Interest and dividends	455	
Excess exports of long term capital . .	247	
	—	852
Debtor items (in millions of dollars):		
Excess payment for services	504	
Excess imports of gold	11	
Excess imports of short term capital . .	489	
	—	1,004
Debit balance . .		152

VII

THE CHIEF CURRENCY SYSTEMS

The Ideal Currency.—Before proceeding to consider the chief currency systems of the world it will be well to have some standard with which to compare them. Let us ask ourselves, then, what are the requirements of a good currency. They are chiefly two. A good currency must first of all have *stable internal purchasing power.* Its own intrinsic value must not vary very much if it is to discharge efficiently its function as a general measure of value and if the community is to be spared the disturbing effects of fluctuations in prices. Movements in general prices tend to derange and upset the economic mechanism, besides producing unexpected and arbitrary changes in the distribution of wealth. Rising prices hit hard the rentier class, the people who live off fixed incomes. Automatically, their share in the national dividend is reduced. Debtors of all kinds, on the other hand, find their burdens lightened. The money they pay back to their creditors has less purchasing power than the money they borrowed. This applies to state as well as to private debtors. The tremendous rise in prices after the war in Germany practically wiped out the German national

debt. Falling prices have contrary effects. National burdens are increased. Those with fixed incomes gain, but those with variable incomes depending on profits lose. The result is a general discouragement to enterprise and a slowing down of economic activity. Clearly, both rising and falling prices have their disadvantages. The ideal condition is one in which the price level remains steady.

The second requirement of a good currency is *stable external purchasing power*, which means that the value of the currency in terms of other currencies should not vary much. A pound should always exchange for about the same number of dollars, francs, marks, lire, etc., so that its purchasing power in respect of foreign goods is not subject to sudden fluctuations. This is most important from the point of view of international trade. If a British exporter can never be sure how many dollars a pound will fetch, he will find it difficult to determine what prices he ought to charge his American customers, and this uncertainty will have detrimental effects on the Anglo-American trade. Stable exchanges are an absolute necessity if international commerce is to flourish and extend.

Let us now see how far the different currency systems of the world conform to the requirements of our ideal standard.

The Gold Standard.—This very famous monetary system is little more than a hundred years old. The Roman Empire, as we have already remarked, had a gold currency, but the first country to adopt a single gold standard in the modern sense was Great Britain

in 1816. In the later nineteenth century, most of the leading commercial nations followed her example, with the result that something like an international currency was established throughout the world. With the outbreak of the Great War in 1914, this era of monetary internationalism came to an end. Belligerents and neutrals alike forsook their metallic currencies and resorted to inconvertible paper. On the conclusion of peace, attempts were made to restore the monetary system of the late nineteenth century. Between 1923 and 1929 about thirty countries stabilized their currencies on a gold basis. But the experiment proved a failure. The conditions of the pre-war age could not be reproduced, and a period of increasing tension culminated in the crisis of 1931, which drove all but a handful of nations off gold.

What are the conditions of a gold standard? They are chiefly two. Gold is the only metal freely coined at the mint, and gold money alone is full legal tender. The Coinage Act of 1816, which established the gold standard in Britain, made the sovereign the British standard coin. This was a gold piece weighing 123.27 grains, and containing $\frac{1}{12}$ alloy. Any one could bring gold in unlimited quantities to the mint and get it converted into sovereigns, or if they preferred they could sell it to the Bank of England at a fixed legal price of £3, 17s. 6d. (raised later to £3, 17s. 9d.) per standard ounce.* Gold money alone could be offered in unlimited quantities in payment of debts. Silver and

* Standard gold contains $\frac{1}{12}$ alloy. The legal price for pure gold was £4, 4s. 11½d. per ounce.

copper coins were struck, but their legal tender was limited, silver to 40s., copper to 12d. They were *token* or *representative* coins, their face value being much higher than their metallic value. Hence no free coinage of silver or copper could be allowed. Private persons could not be permitted to turn sixpence worth of silver into a shilling. The state had to reserve to itself the right to strike token coins and to restrict the issue of them in order that they might not depreciate. They were meant only to be used as small change.

When in 1925 the gold standard was restored (after its suspension during the war), the Coinage Act was amended in an important respect. Gold sovereigns ceased to be coined, but the paper notes which had circulated since the war were made convertible into gold; not, however, into gold coins, but into gold bars worth about £1,700 each. The object was to ensure that paper, which is much cheaper than gold, should continue to be used as the internal circulating medium, but that merchants and others who required bullion for export should be able to get it at a fixed legal price. A system of this kind is sometimes called a *gold bullion standard.*

How far does the gold standard, in its older or in its more modern form, satisfy the requirements of a good currency? As far as stability of the exchanges is concerned it comes very near perfection. A gold currency has stable external purchasing power in relation to other gold currencies. The reason for this we saw in the last chapter. The existence of gold points restricts within narrow limits the movements

of the foreign exchanges. A gold pound exchanges for practically always the same number of gold dollars, gold francs, etc., hence the favour with which the gold standard is viewed by all who are interested in foreign trade or in the investment of capital abroad. Exporting merchants, international financiers, shipowners, etc., have all strong motives for supporting a general return to gold.

With regard to the other requirement of a good currency, the record of the gold standard is not so satisfactory. It cannot guarantee a stable level of prices. As we have already seen, the means by which variations in the foreign exchanges are corrected, through the inflow and outflow of gold, leads to slight upward and downward movements of the internal price level; while more severe price dislocation is caused over long periods by fluctuations in the output of the precious metals. In the fifties of last century the working of newly discovered gold deposits in California and Australia increased the world's stock of gold and diminished its value. Prices of other things measured in gold rose. In the seventies the output of the mines failed to keep pace with the world's currency needs. The value of gold went up and general prices (measured in gold) fell. In the nineties the fall in prices was arrested by the opening up of the rich South African mines, and a fresh upward movement set in. After the war gold was relatively scarce and prices fell again, but now, through the development of the Russian mines, the output is on the upward grade again. Thus the gold standard fulfils only one con-

dition of a good currency. It gives us stable exchanges, but not a stable price level. Half a loaf is certainly better than no bread, but the whole loaf is preferable if we can get it. Let us see if other monetary systems approach more nearly our ideal of what a currency should be.

Bimetallism.—The gold standard is an example of *monometallism.* Standard money of unlimited legal tender is coined from only one metal—gold. In a bimetallic system two metals, usually gold and silver, are on a footing of equality. Both are freely coined at the mint, and silver money as well as gold is full legal tender. France, during the first three quarters of the nineteenth century, was a bimetallist country. By the Napoleonic law of 1803 gold and silver francs were coined in the ratio of 1 : 15½.

What are the advantages claimed for this system? First, that it would stabilize the exchanges between gold- and silver-using countries. In the last chapter we saw that there is no mint par of exchange between a gold and a silver currency, because no relation exists between the two metals except the fluctuating one fixed day by day in the bullion market. Under bimetallism there would be a fixed legal ratio, and this would create a stable par of exchange with specie points, just as exists between gold-using countries. The exchanges could not fluctuate outside very narrow limits. This very real advantage which bimetallism enjoys has recently lost much of its importance owing to the decline in the number of silver currency countries. Since China deserted the silver standard

in 1935 there is no great nation to-day which uses silver as a circulating medium.

The second advantage claimed for bimetallism is that it would ensure greater stability of prices than a single standard, since variations in the output of the metals might be relied on to neutralize each other. Thus in the eighteen-seventies, when prices fell because gold was scarce, there was an abnormal increase in the output from the silver mines. If silver had been monetized, the deficiency of gold would have been made good by the plentifulness of silver. The world's supply of money would have remained equal to the demand and the price level would not have fallen. Bimetallists sometimes illustrate this point by the analogy of two drunken men. Separately they have more chance of falling than if they link arms, because in that case the lurch of one to the right may be counteracted by the lurch of the other to the left. "But what," the reader will be tempted to ask, "if they both lurch in the same direction?" Precisely. With two metals there is admittedly more chance of stable prices than with one, but even with a double standard there is no certitude of a stable price level. What is there to prevent both metals becoming scarce together or plentiful together? It is only by the merest chance that the abundance of one will balance the scarcity of the other. The output of the precious metals follows no law and cannot be predicted. Bimetallism, then, suffers from the same defect as the gold standard, though perhaps in a less acute form. It can stabilize exchanges but not prices.

Managed Currencies.—A managed currency is one of which the quantity in circulation is regulated in accordance with the demand for it, thus ensuring a stable price level. Obviously, metallic currencies are difficult to manage in this way, since the quantity of them in circulation depends on the production of the precious metals throughout the world, which governments cannot control. Nevertheless the American economist Irving Fisher has suggested a way in which this difficulty may be overcome. He proposes that governments should vary when necessary the metallic content of the standard coin. If gold becomes plentiful the amount of gold in the standard coin will be increased, so that no more coins will circulate than before and the level of prices will be undisturbed. Similarly, if gold becomes scarce, the metallic content of the standard coin will be reduced, and again the number of coins in circulation will remain unchanged. If, however, it is necessary to increase or diminish the quantity of money in circulation owing to an expansion or contraction of the volume of business, this again can be quite simply accomplished by the same method. If more coins are required their metallic content will be lowered; if fewer, it will be increased. As, however, it would be expensive continually to mint and remint metallic money, Professor Fisher suggests that the internal currency consist of paper convertible into gold, but not at a fixed legal price. The amount of bullion purchasable by the paper notes should vary with the plentifulness or scarcity of the standard metal. This would have precisely the same effect as varying

the weight of the standard coin. The Fisher scheme is known as the *plan for a compensated dollar.*

The most practicable kind of managed currency, however, is one of inconvertible paper, the supply of which can be most easily and cheaply adjusted to the demand. To raise the quantity of money in circulation it is only necessary to set the government printing presses to work. To reduce it, the government has only to burn some of the notes it receives in payment of taxes. Theoretically, with an inconvertible paper currency it should be possible to have an absolutely stable level of prices. The demand for money could be gauged from index numbers of the output and circulation of goods, and the supply could be adjusted accordingly. Even if mathematical stability is unattainable, the fluctuations in the level of prices are bound to be much less than under an uncontrolled metallic standard.

How about the exchanges? This, it must be admitted, is the weak point about a managed currency. Its value in terms of other currencies tends to fluctuate widely. If it consists of inconvertible paper, there are no gold points and no corrective inflow and outflow of gold to steady the exchanges. As we have already observed, an unfavourable balance of trade in a paper-using country can only be righted by the lengthy and uncertain process of exporting goods. Accordingly, fluctuations in the exchange will always be more intense and prolonged than in the case of a country with a metallic standard. The only remedy is an Exchange Equalization Fund such as has functioned in Great Britain since 1932. This is an arrangement by which

the government buys up quantities of foreign currencies when they are plentiful, and retails them when they are scarce. By alternate buying and selling of foreign exchange it helps to keep the value of its domestic currency in terms of other monies steady. But an equalization fund is at best a palliative. It remains true that whatever the merits of a managed currency as regards prices, from the point of view of stable exchanges it is distinctly inferior to a metallic standard. Again we must be content with the half-loaf which is better than no bread.

Modern Currency Problems.—Since the crisis of 1931 the international monetary situation has been exceedingly obscure. The main reasons for the breakdown of the gold standard in that year were the relative scarcity of gold and its maldistribution. By 1931 three-fifths of the world's gold was in the possession of two countries—the United States and France. Both these were creditor countries with favourable balances of payments which they insisted on having liquidated, instead of re-lending their surpluses to their debtors as was the convenient practice of Britain in the nineteenth century. The debtor nations, finding it difficult to pay in goods, especially as their creditors had surrounded themselves with high tariff walls, had to pay in gold. Thus their metallic reserves became depleted to a point which made the whole system unworkable. A country without an adequate stock of gold cannot remain on the gold standard. The breaking-point came in 1931, when a persistent drain, due to an outward movement of capital, drove Britain off gold and

precipitated a general flight from the gold standard. Of the small group of nations that remained faithful to it, the most thoroughgoing in their adhesion were the members of the so-called *gold bloc*, France, Belgium, Holland, and Switzerland.

After 1931 the gold bloc had to contend with formidable difficulties. Gold continued scarce, and prices measured in gold kept on falling. Wages and other manufacturing costs, on the other hand, did not decline in the same proportion. This proved most embarrassing to producers in the gold-using countries. Their costs of production remained relatively higher than those of their competitors in the countries that had gone off gold, and they consequently lost ground in neutral markets. The export trade of the gold bloc countries suffered an all-round decline. The situation was aggravated by the steady appreciation of the gold currencies in terms of other currencies, due to the rise in the value of gold. This gave them an external purchasing power greater than the internal and encouraged foreign buying. A Frenchman, for instance, found that he could buy more if he converted his francs into pounds and bought British goods than if he spent his money in the home market. This swelled still further the excess of imports over exports and accentuated the unfavourable balance of trade. The governments of the gold bloc countries tried to remedy the situation by a policy of *deflation*. They made savage cuts in wages, salaries, pensions, government expenditure, etc., in order to reduce costs and taxes ; and they depressed still further the domestic price level in order to bring

the internal purchasing power of their currencies into line with the external. But the policy did not work well. Owing to tacit agreements among retailers, retail prices did not fall in the same ratio as wholesale, so that the cuts in wages and salaries had merely the awkward result of curtailing demand in the home market. In 1935 Belgium was driven to try the opposite remedy of *inflation*. By devaluating her standard coin (the gold content of the belga was reduced 28 per cent.) she slightly raised her internal price level, restoring to some extent the lost equilibrium between costs and prices as well as lessening the discrepancy between the external and the internal purchasing power of her currency. In the following year the other members of the gold bloc followed Belgium's example and established a new ratio between their monetary units and gold.

Of bimetallist countries there is no example in the world to-day, but in the United States there is a strong bimetallist party, drawn mainly from the silver-producing states of the west. This group has great influence in the counsels of the Democratic party, and in 1934 it persuaded the Democratic president Roosevelt to take steps to raise the price of silver. The American government was authorized to purchase silver at any price up to 1 dollar 29 cents per ounce, until a fourth of the metallic reserve of the United States consisted of silver. Heavy American buying, following on this law, pushed up the price of silver to about 2s. 3d. an ounce (1935) from a previous low level of 1s. 6d. (1931). This put profits into the pockets

of the silver producers, which was their main object in promoting the policy, but it had disconcerting results for the one remaining silver-currency country of any importance, namely China. The appreciation of silver placed China in much the same position as that of members of the gold bloc. Her internal price level fell, her costs of production went up, the external purchasing power of her currency became greater than the internal, her markets were flooded with European and American goods, her domestic monetary system became dislocated by the flight of silver to America, depression settled on her industries. To remedy the situation the Chinese government first placed an embargo on the export of silver, and then finally, in November 1935, definitely abandoned the silver standard, substituting for it a "managed" paper currency. Thus paradoxically the efforts of the American silvermen to rehabilitate silver led to its demonetization in the one important country which still used silver as a circulating medium.

Of managed currencies the world has had since the war plenty of examples. The British currency, for instance, has consisted since 1931 of inconvertible notes, the supply of which can be varied at need by the Treasury in conjunction with the Bank of England. After the departure from gold, the British financial authorities made use of this power to push the price level gently upwards, and thus to remove the discrepancy between costs and prices, which was one of the unfortunate legacies of the gold standard. In regard to the exchanges, the Exchange Equalization Fund has

been used to smooth out temporary disturbances, while the formation of an informal monetary union among nations which find it to their interest to keep their currencies tied to the pound has greatly extended the area of exchange stability.* The fortunes of the "sterling group" have been in significant contrast to those of the gold bloc. While the exports of the gold bloc have consistently declined since 1931, those of the sterling countries have shown a slight but distinct upward tendency. This is interesting in view of what was previously said about the detrimental effects of managed currencies on the stability of the exchanges, and consequently on the flow of international trade. It would seem as if in practice there were methods by which the theoretical weaknesses of a managed currency might be counteracted.

* The members of the "sterling group" are Britain, Argentina, Australia, Bolivia, Brazil, Colombia, Denmark, Egypt, Estonia, Finland, India, Irish Free State, Japan, Norway, New Zealand, Paraguay, Portugal, Siam, Straits Settlements, Sweden, South Africa, the British Crown Colonies, and (since 1936) Latvia and Turkey.

VIII

BANKING

Nature of Banking.—A banker, in the last resort, is merely a respectable kind of moneylender. Though we do not usually associate members of this august profession with pawnbrokers, yet the essence of their business is the same. What distinguishes the banker from his humbler colleague is, first, the social status of his clients. They are business men genuinely engaged in production, not ruined spendthrifts or impoverished proletarians. Next, to a large extent, the money which the banker lends is not his own but other people's. It has been deposited with him at a low rate of interest, and he lends it out again at a higher rate. Finally, the banker can, within limits, *manufacture* the money which he lends. This artificial bank money is of two kinds. First, *banknotes.* A banknote is simply a promise to pay the bearer a certain amount of lawful money on demand. Hence the banker must keep a reserve of legal tender currency against his note issue. But bankers were not long in discovering that once the public became accustomed to their notes, very few of them were actually presented for payment. Most of them went on circulating from hand to hand as if they were legal money. Accordingly the banker's cash reserve need not be a large one. If he issued notes to the

value of £10,000, a cash reserve of about £1,000 would probably be sufficient to meet all demands. The difference between the cash reserve and the total issue, in this case £9,000, represents the amount of artificial bank money created and put into circulation by the banker.

Banknotes are no longer the only or the most important form of bank money. They have been very largely supplanted by what for convenience we may call *cheque money*. A cheque is really a kind of banknote. It is a promise to pay a certain amount of legal currency on demand. But the value of the cheque is not printed on it as in the case of the banknote. It is left to be filled in by the person who writes or draws it. And it is payable as a rule not to bearer but to the person named in the cheque. Hence it seldom changes hands more than once. The drawer of the cheque may have previously deposited with the banker a store of legal currency from which his cheques may be cashed. But much more often the only security behind a cheque is a bank loan, represented by nothing more substantial than an entry in the bank books. At one time when a banker made a loan he handed his client a bag of coins or a bundle of notes. Now he gives him a cheque-book and authorizes him to write cheques up to a certain amount. The cheques are money, because with them the drawer can purchase goods. But they are not legal money, since the law compels no one to accept payment by cheque. They are merely promises to pay legal money. Hence the banker must keep a cash reserve against them, but again it need not be a 100 per cent. reserve. Few cheques are actually

cashed. In the great majority of cases the person who receives a cheque simply pays it into his banking account. If the cheque is *crossed* he cannot do otherwise. A crossed cheque cannot be cashed, but the banker will add the amount to the payee's credit with the bank, deducting an equal amount from the drawer's balance if he is also one of the bank's customers. If not, the cheque is presented for payment to the drawer's bank. But again there is no exchange of cash. In all important centres the banks have *clearing-houses*, where they square up and cancel out claims against each other. Any balance owing by one bank to another is met by a cheque drawn on the Central Bank (where all the private banks keep accounts), the effect of which is merely to diminish the credit balance of one bank with the Central Bank and increase that of another. At no stage of the transaction is cash paid out. Thus in at least nine cases out of ten the drawing of a cheque leads to nothing more than a series of entries in the books of various banks. This is why a small cash reserve can support so considerable a weight of bank credit. In most countries the reserve to be held against note issues is prescribed by law. We shall state the British and American regulations on this point later. With regard to cheque money, American banks are bound by law to keep a certain reserve (varying from 3 to 13 per cent. according to the type of bank and the nature of the liabilities), but elsewhere the amount of the cash reserve is left to the banker's discretion. The practice of British bankers is to keep the ratio between their reserves and their liabilities at about 1 : 9.

How the Banks aid Production.—The business of the banker is to provide trade and industry with *liquid* or *circulating* capital. The need for capital of this kind follows from the conditions under which most goods are now produced and sold. Not only is production nearly always a lengthy process; it is usually carried on in anticipation of demand. Months may elapse before a manufacturing firm is in a position to market its goods; months more, before it finds purchasers for them. In the meantime it has to meet various running charges for wages, salaries, raw materials, heating, lighting, taxes, upkeep of buildings, etc. If the firm is prosperous it may be able to defray these costs out of its own resources, but most businesses have too much of their capital tied up in buildings, machinery, etc., to be able to afford this. Accordingly they borrow for short periods, repaying the loans out of the proceeds of the sale of their goods as these take place. The function of the banks is to supply producers with these short-period loans.

Of the funds which the banks advance in this way, part, but only a small part, consists of their own capital. Much more comes from the public in the shape of bank deposits on which the banker pays a little interest. The remainder, usually a very considerable proportion, consists of bank money, manufactured in the way previously described, on which, of course, no interest is paid at all. It is this last branch of the banker's activities that are the most intriguing. Deposit banking in the literal sense is a very simple matter. The bank borrows money at 3 per cent. and lends it out

again at 5 per cent., keeping the difference as payment for its services in negotiating between those who wish to borrow money and those who have money to lend. This kind of transaction presents no difficulties. But it is not quite so easy to understand how the bank, merely by issuing printed bits of paper, can induce lenders to advance wealth to borrowers, and make the borrowers pay interest not to the lenders but to the bank. Yet this is what actually and literally happens.

Let us take an imaginary case. Suppose A B C are coal owners who have coal to sell, and X Y Z are manufacturers who want coal but will have no money to pay for it until they have made and sold their manufactured goods. The coal owners refuse to sell on credit. How is the gap between them and the manufacturers to be bridged? It is bridged by the bank, which lends money to the manufacturers to buy coal with. Let us assume it grants X Y Z each a loan of £1,000 for three months at 4 per cent. It might advance this £3,000 in legal currency if its cash reserve were sufficiently large. But it is much more likely to make the loans in bank money. Suppose it advances the £3,000 in banknotes, keeping against them a cash reserve of 10 per cent., or £300. We must assume that the bank is trusted and that its notes circulate without difficulty. The manufacturers use their loans to buy coal. The coal owners pass on the notes they receive to tradesmen and shopkeepers, and these in turn hand them over to wholesale merchants with whom they deal, or pay them out in wages to their employees. The notes gradually percolate through the

community. Again we must assume that only a few of them are cashed. If all or a large number of them were presented for payment the bank would have to put up its shutters, because £300 of legal money will not cash more than 300 one-pound notes, whereas there are 3,000 of them in circulation. But this will only happen if public confidence in the bank is shaken. Let us suppose that everything proceeds smoothly, and that none of the notes are cashed. Then this will be the state of the bank's balance sheet during the currency of the loans.

Liabilities.		*Assets.*	
Capital of shareholders	£300	Cash . .	£300
Note issue . . .	3,000	Loans to X Y Z	3,000
	£3,300		£3,300

After three months, the manufacturers having made their goods and sold them, are in a position to pay back their loans. They owe the bank £3,000 plus £30 for interest. They may remit this sum wholly in legal currency, or partly in legal currency and partly in notes of the bank which are circulating throughout the community. Let us suppose they pay £2,000 in notes and £1,030 in legal money. Then the bank's balance sheet will stand thus:

Liabilities.		*Assets.*	
Capital	£300	Cash . .	£1,330
Note issue . . .	1,000		
Profit	30		
	£1,330		£1,330

The return of the notes not only helps to cancel the

loans of X Y Z but reduces the bank's liability to the public for the note issue. Notes in the bank's till cannot be presented for payment.

If the loans had been made in cheque money the transaction would have worked out exactly the same. X Y Z would have written cheques in favour of A B C in payment of their coal. A B C would have paid in these cheques to their account with the bank, and would then have proceeded to write fresh cheques in favour of tradesmen and shopkeepers. The tradesmen and shopkeepers would have the amount of the cheques added to their credit at the bank, and would then draw cheques in favour of their creditors, and so on. A few of the cheques would be cashed, but not many. Let us assume, for simplicity, that none are cashed, that all are passed through the bank. Then, during the whole period of the loans, the bank would have an item, *deposits*, standing in its balance sheet at the steady figure of £3,000. The way in which this £3,000 was distributed among the bank's customers would vary, but the total sum itself would not vary, and the transference of money from one depositor's account to another would be accomplished solely by entries in the bank's books. The bank's balance sheet would always present the following appearance:

Liabilities.		*Assets.*	
Capital . . .	£300	Cash . .	£300
Deposits in name of A B C and other people . . .	3,000	Loans to X Y Z	3,000
	£3,300		£3,300

In a community in which the cheque habit is so largely developed, as we have assumed, X Y Z will receive a good part of the payment for their goods in cheques drawn by depositors of the bank. They will pay these into their accounts, the effect being to reduce their indebtedness and at the same time to diminish the credit balances of some of the bank depositors. Suppose that when X Y Z finally liquidate their loans, they have paid £2,000 in cheque money and £1,030 in legal currency. Then the bank's balance sheet will appear thus :

Liabilities.		*Assets.*	
Cash	£300	Cash . .	£1,330
Deposits . . .	1,000		
Profit	30		
	£1,330		£1,330

With its greatly enlarged cash reserve the bank is now in a position to extend the credit facilities it grants to the community. Keeping a ratio of 1 : 9 between its reserve and its liabilities, it could advance loans up to £10,000 with perfect safety.

In a country with a fully developed banking system, a transaction of the kind just described would probably be carried through wholly with bank money. The loans would be advanced in the shape of notes or cheque money, and would be repaid with interest in the same way. Cash would be employed to only a trifling amount. The whole business would be conducted by entries in the bank's books, and by the issue of printed pieces of paper with the bank's name on them in the form of notes and cheques. Regarded in this

way, the transaction appears in rather a curious light. The bank has very little real wealth of its own, and yet it is able to juggle with very much larger quantities of wealth that belong to other people. It transfers the coal of A B C to X Y Z, and it transfers the contents of various shopkeepers' shops to A B C, and it enables the shopkeepers to obtain goods from the wholesalers and labour services from their workpeople. So the bank's credit gradually pervades the whole community, pushing on goods, wherever it comes, from one set of owners to another. Credit is the permission to use some one else's wealth. When the grocer gives me credit he allows me to consume his groceries without paying for them. But the curious thing about *bank* credit is that the wealth which is transferred does not belong to the bank, and yet the bank makes a charge for its use. It seems a little odd.

The explanation lies in the banker's power to *manufacture* money. In our modern economic system exchanges cannot be carried through without money, and sometimes money is not to be had, though there are goods waiting to be exchanged. To revert to our illustration, the coal owners could not get groceries, etc., from the shopkeepers because the shopkeepers would not take coal in exchange for them—they wanted money. But the coal owners could not get money from the manufacturers because the manufacturers, though they wanted coal, had no money, and would have none until they sold their manufactures. But meantime they could not make their manufactures until they got coal. The whole process of producing

and exchanging goods was jammed for want of money. It was the banker who relieved the situation. He manufactured some money, set it in circulation, and at once the machinery of production and exchange began to work. The manufacturers got their coal, the coal owners their groceries, etc., the shopkeepers the means to pay their creditors and get more goods, and so on right through the economic system. How is such a miracle possible? First, because the bank's money is respected by the community and passes as if it were legal money. Second, because this bank money has a backing of real wealth, namely, the manufactured goods which the manufacturers are hard at work producing. Sooner or later, to simplify very much what actually happens, the bank money will find its way into the hands of people who will use it to buy goods with from the manufacturers, and the manufacturers will transfer the money to the bank in payment of their loan. Thus the circuit will be closed, the transaction will be complete. Having accomplished the work it was sent out to do, the bank money may now be temporarily withdrawn from circulation.

We see, then, how the banker aids production. He is like the self-starter in a motor car. He sets the engine running. And he is a self-starter which has constantly to be called into action. Without him the wheels of industry would cease to revolve altogether. This is the service for which he gets paid. And his payment comes to him in two ways. First, he keeps the difference between the interest he pays on deposits and what he charges on loans. Second, he keeps, without do-

duction, the interest on loans which he advances in the form of bank money. Whether the remuneration he obtains in this way is more than he is entitled to is a question for debate. But some reward he must get if he is to continue to discharge his indispensable functions in the productive system.

A Bank Balance Sheet.—Let us look now at the balance sheet of an actual bank in order to see precisely how a banker carries on his business. The form of most bank balance sheets is very much the same. The one here submitted is chosen because it belongs to a note-issuing bank, and shows both kinds of bank money in use. Banks of issue, it may be observed, are tending to become rare, bankers finding that cheque money is more convenient for their purposes than notes :

Commercial Bank of Scotland, 1933

(In thousands of pounds.)

Liabilities.		*Assets.*	
To the shareholders :		Coin, Bank of England notes, and balance with Bank of England. .	4,072
Capital . .	2,250	Balances with other banks	2,173
Reserve . .	2,850	Money at call and short notice in London. .	2,695
Profit . . .	208	Bills discounted . .	1,159
To the public :		Investments . . .	20,725
Deposits . .	37,725	Advances	14,627
Notes . . .	3,244	Liability of customers for acceptances . . .	221
Acceptances .	221	Bank premises . . .	826
	46,498		46,498

Beginning with the debit side, we see that *Capital*, *Reserve*, and *Profit* appear as liabilities, for these are things for which the bank or its officials must account to the shareholders. The first of the liabilities to the public is *Deposits*. These to a small extent represent actual legal currency deposited by customers, but for the most part they have their origin in loans made by the Commercial Bank or by other banks. When the Commercial Bank lends Mactavish £1,000, this means that Mactavish can write cheques up to that amount. The effect is the same as if he had deposited £1,000 in the bank. Then when Mactavish writes cheques in favour of Mactaggart, Mactaggart pays the cheques into his account. So far as Mactaggart is concerned, he is making a genuine deposit, but the deposit had its origin in a bank loan. This is the meaning of the common saying that a bank loan creates a deposit. What proportion of a bank's deposits are genuine, and what proportion are due to bank loans cannot, however, be discovered from a mere inspection of the bank's balance sheet.

Next on the liabilities side comes the item *Notes*. The authorized circulation of the Commercial Bank was fixed by the Scottish Bank Act of 1845 at £374,880. Up to this limit notes can be issued against first-class securities. Beyond it legal currency must be held against every note issued. Legal currency in Great Britain consists of Bank of England £1 and 10s. notes. With a note circulation of £3,244,000, the Commercial Bank must keep Bank of England notes to the value of £2,869,000, but for convenience it is allowed

to keep special Bank of England certificates for large sums, which can be converted into notes at the Bank on demand.

Lastly, on the debit side, we come to *Acceptances.* These are simply guarantees by the Bank that bills and other credit documents issued by its customers will be honoured. They are balanced on the credit side by a corresponding item, *Liabilities of customers for acceptances.*

On the assets side the first item is the bank's cash reserve. This consists of coin (silver and copper, since no gold pieces are now struck), Bank of England notes (which are legal tender in Great Britain and Northern Ireland), and a balance with the Bank of England. Like all British banks, the Commercial Bank deposits any surplus it has with the Central Bank, and like them it counts this balance as cash. The Bank of England must be prepared to convert part or all of this balance into cash on demand. This is the somewhat anomalous arrangement that has developed, for historical reasons, in Britain, and has been copied by the banking systems of other countries. Its effect on the position of the Central Bank will be considered later. In the meantime we merely note that the cash reserve of a private bank consists to only a small extent of cash in the real sense of the word. Most of it takes the form of a balance with the Central Bank, which is convertible into cash on demand.

Balances with other banks are largely the result of uncompleted transactions, cheques in course of collection, etc. *Money at call or short notice* consists of

loans made for very short periods, a few days or even twenty-four hours, to bill-brokers in the London Money Market, and to a small extent to operators on the stock exchange. (In New York Stock Exchange speculation is largely financed by call money from the banks, but this is not so common in London.) The interest earned by these loans is small, but they have the great merit of *liquidity*; they can be converted easily and rapidly into cash. This is a great point with a banker, who must always be prepared for sudden and unexpected demands for cash from his customers. Next we have *Bills discounted.* Bills of exchange, as we saw, run for short periods, commonly three months. When the bank discounts a bill it gives the holder its cash value minus a discount, which represents the interest on the capital until the bill becomes payable. The rate of discount is just the rate of interest for very short loans. Bills are not quite such a liquid asset as call money, but the rate of interest is slightly higher. Bankers usually arrange to have a certain proportion of their bills maturing regularly every day or every week, thus keeping a steady stream of cash pouring into their tills.* Next we come

* Owing to the development of the cheque habit, the use of *inland* bills of exchange has almost died out, and the trade slump has reduced the number of foreign bills. This has put the bankers to some inconvenience. They have been compelled to invest largely in Treasury bills, *i.e.* bills issued by the government to meet its expenses until the taxes come in. The competition for these bills has brought their yield very low, and the number of them on the market has been recently very much reduced by the government's funding operations. Hence the banks have had to put a larger proportion of their resources than they like into non-liquid stock exchange securities, or else maintain their cash reserves at a higher level than 10 per cent., with consequent loss of interest.

to *Investments*, which are first-class stock exchange securities. They are much less liquid than either call money or bills, but the yield on them is higher. The banker has always to balance yield against liquidity. Usually he distributes his resources so that he has about 10 per cent. in cash, 7 to 8 per cent. in call money, 12 to 14 per cent. in bills, 15 to 16 per cent. in investments, and the remainder in loans, which appear in the balance sheet under the heading *Advances*. These may be actual loans of definite sums or *overdrafts*, the borrower being authorized to write cheques in excess of his credit balance up to a certain amount. Needless to say, practically all these advances are made on security of some sort, goods in process of manufacture or transit, securities deposited with the banker, mortgages over factory buildings, machinery, etc. As a cynical American once put it, there is nothing a banker will lend without security except an umbrella on a fine day. This makes banking a fairly safe business. The one mistake the banker has to avoid is that of lending money on security which cannot, when wanted, be converted into cash. In such a case the advance becomes "frozen," and may ultimately have to be written off.

Of the two remaining items on the credit side, *Liability of customers for acceptances* has already been explained and *Bank premises* needs no explanation.

Structure of Banking.—Nearly all the great banking systems of the world conform to one general type. Since the nineteenth century there has been a tremendous concentration of banking resources. Scarcely

any examples are left of the small private banker, whom Bagehot reckoned among the most fortunate of mankind.* Amalgamations and absorptions have created huge joint-stock banks, and the banking business of each country is now practically monopolized by a few gigantic institutions. In England we have the "Big Five" (the Midland, Westminster, Lloyds, Barclays, and the National Provincial); in France the four *grands établissements de crédit* (Crédit Lyonnais, Société Générale, Comptoir National, Crédit Industriel); and in Germany the three great banks (the Deutsche und Discontogesellschaft, the Dresdner, and the Commerz). The United States is the one great exception to this tendency among commercial nations. There, "unit" banking still prevails, and the total number of banks is something like 18,000. Nevertheless there are large American banks comparable to those of Europe, and these do most of the business. In regard to the other great feature of modern banking systems, the presence of a Central Bank which controls the rest, the United States conforms to type. The twelve Federal Reserve Banks under the supervision of the Federal Reserve Board perform the same function as the Bank of England, the Bank of France, and the German Reichsbank. In each country the great joint-stock banks, with the Central Bank at their head, form a closed system which is regulated from a common centre and functions as a single whole. How these

* "There has probably very rarely ever been so happy a position as that of a London private banker; and perhaps never a happier."—*Lombard Street*, page 269.

great national banking systems work will become plain from a short description of the duties which fall to be performed by a typical Central Bank.

Functions of a Central Bank.—(*a*) A Central Bank is nearly always the government's banker, keeping its account and carrying through any financial transactions in which it is interested.

(*b*) The Central Bank helps to regulate the currency. In Britain, for example, legal tender currency consists of Bank of England notes. The process which conferred this privilege on the note issue of what is still in form a private joint-stock bank began away back in 1844. In that year the Bank Charter Act provided for the gradual centralization of the note issue in the Bank of England. The circulation of existing banks of issue was fixed, and no more such banks were to be established in future. If an issuing bank failed or amalgamated with another bank it lost its right of issue and two-thirds of its circulation was added to the uncovered issue of the Bank of England. In 1921 the last English private bank of issue disappeared.* By the Act of 1844 the Bank of England was allowed to issue paper money up to £14 millions (the so-called fiduciary issue) against a reserve of first-class securities. Beyond that every note must be covered by gold. By 1921 the fiduciary limit had been raised, through the gradual disappearance of other banks of issue, to £19¾ millions. Then in 1928 the Bank took over the paper money issued by the government during the war. The fiduciary issue was there-

* There are still note-issuing banks in Scotland and Ireland.

upon raised to £260 millions, with the proviso that the limit might be exceeded by permission of the government for periods of six months at a time, parliamentary confirmation to be sought if the period of continuous suspension exceeded two years. Bank of England notes for one pound and ten shillings became legal tender throughout Great Britain and Northern Ireland. After 1931 they ceased to be convertible into gold, but in other respects the 1928 Act remains in force. The Bank is still compelled to keep a gold reserve against notes issued in excess of the fiduciary maximum.

In France and Germany the notes of the Central Banks provide the main internal circulating medium, and in the United States the policy of concentrating the note issue in the Federal Reserve Banks is being steadily pursued. So far, however, only about 50 per cent. of the note issue has been thus centralized. Against the notes, the law prescribes a 40 per cent. cash backing, the remainder of the issue to be covered by securities of a fairly liquid kind.

(*c*) The Central Bank acts as the bankers' bank. In Britain all the private banks have accounts with the Bank of England, and settle mutual claims by drawing cheques in favour of each other. In the United States only about a third of the banks come within the Federal Reserve System, but these banks hold about 80 per cent. of the total deposits.

(*d*) The Central Bank keeps the cash reserve of the other banks. It seems more natural that each bank should keep its own reserve, and this is what many

American banks (those outside the Federal Reserve System) still do. But the single reserve plan is more economical and in practice safer. It follows, of course, that the Central Bank must keep a bigger proportional reserve to its liabilities than the private banks (30, 40, or 50 per cent. as against 10 per cent.), and this reserve must consist of actual legal money, not of balances with other banks. In a gold standard country legal money consists of gold or of notes convertible into gold. In Great Britain legal money consists of inconvertible notes. Nevertheless, since the law compels the Central Bank to keep gold against its paper issue, legal money, so far as the Bank of England is concerned, consists of gold. But the bank's gold reserve must not be confounded with its cash reserve. The greater part of the bank's gold reserve is earmarked against the note issue and cannot be touched. For instance, on June 5, 1935, the bank's stock of gold was £193 millions. But the amount of the note issue was £395 millions, *i.e.* £135 millions in excess of the fiduciary limit of £260 millions. Hence, of the bank's gold stock, £135 millions had to be set aside as reserve to the note issue, leaving only £58 millions as cash against the bank's liabilities, which at that date amounted to £146 millions.

(*e*) The Central Bank regulates the issue of credit by the other banks. The amount of credit a bank can issue depends on its cash reserve. All banks, as we have observed, maintain a fixed ratio between their reserve and their liabilities. If the Central Bank can determine the size of a private bank's reserve it

can fix the amount of the credit it can issue. The Central Bank does this by what are called its "open-market operations." Like every other bank, it has part of its resources invested in stock exchange securities. Suppose it sells some of these securities in the market. They are purchased by clients of the private banks, who write cheques in favour of the Central Bank. When these cheques are passed through the clearing-house, the effect is not merely to reduce the credit balances of the purchasers with the private banks, but to reduce the balances of the private banks with the Central Bank. Now we saw that the private banks count their balances with the Central Bank as *cash*. By selling securities, then, the Central Bank reduces the cash reserves of the private banks and forces them to restrict their issue of credit. If, on the other hand, the Central Bank thinks that the business community requires an extension of credit facilities, it buys securities in the market. The cheques which it writes in favour of the purchasers are paid in by them to the private banks and presented for payment at the Central Bank. The effect is to increase the balances of the private banks with the Central Bank; in other words, to increase their cash reserves. They can therefore issue more credit.

(f) The Central Bank controls the domestic price level. The issue of credit by bankers leads to the creation of bank money in the form of either notes or cheques. As already pointed out, this is not legal money, but so long as it is accepted by the community it has the same effect as legal money. An increase of

the quantity of it in circulation raises prices, a contraction of it lowers them ; all the more so since every big payment to-day is made by some kind of bank money, usually a cheque. The Central Bank, then, by varying the amount of credit which the banks can issue sends the price level up and down as it pleases.

A Central Bank Balance Sheet.—To illustrate some of the above points, we give below an example of the weekly return which the Bank of England is compelled by law to publish :

Bank of England Weekly Return, March 21, 1934
(In thousands of pounds)

Issue Department

Liabilities.		*Assets.*	
Notes issued :		Government debt .	11,015
In circulation .	369,465	Other government securities . . .	245,257
In Banking Dept.	81,615	Other securities . .	184
		Silver coin . . .	3,544
		(Fiduciary limit) .	260,000
		Gold coin and bullion	191,080
	451,080		451,080

Banking Department

Capital . . .	14,553	Government securities	72,895
		Other securities . .	18,462
Rest (*i.e.* Reserve).	3,689	Notes	81,615
Public deposits .	12,167	Gold and silver coin .	1,055
Other deposits .	143,617		
Seven-day and other bills . . .	1		
	174,027		174,027

The somewhat unnecessary division of the Bank of England into two departments dates from 1844. The Issue Department looks after the note issue; the Banking Department attends to ordinary banking business. The Issue Department, it will be observed, holds securities and silver coin up to the limit of the fiduciary issue, £260 millions. The notes in the hands of the public are £369,456,000. This exceeds the fiduciary limit by £109,456,000, and the Issue Department must hold gold to that amount. But its actual holding of gold is £191,080,000. The difference, £81,615,000, represents the Bank's cash reserve. It prints off notes to this amount, and transfers them to the Banking Department for use there. In the Banking Department the Bank's liabilities to the public consist chiefly of *Public deposits*, which are deposits made by government departments, and *Other deposits*, which are mainly the credit balances of the private banks. The Bank does very little business with individual members of the public. On the assets side the Bank has securities of £91,357,000 (with which it carries out its "open market operations"), and a cash reserve of £82,670,000 in notes and coin. The proportion of reserve to liabilities is 53 per cent.

Banks and the State.—From what has gone before, it is fairly obvious that some kind of social control must be exercised, if not over the whole banking system, at least over the Central Bank. Its powers are greater than mere bankers have the wisdom or the moral authority to use. Seldom indeed do the problems it is called on to face have more than a formal connection

with the technical side of banking. They nearly always involve questions of public policy on which the last word must be said by the accredited political representatives of the community. Central Banks, where they are not out and out state banks, have to work in close alliance with the government. The governors of the Bank of France and of the German Reichsbank are appointed by the head of the state, and a recent law has given the American President power to nominate certain members of the Federal Reserve Board. Alone among Central Banks the Bank of England retains the appearance of freedom. In theory, it is a private joint-stock company with no public responsibilities whatever. But this is just another of the little anomalies so characteristic of English institutions. In practice, the Bank directors and the Treasury work hand in hand, and the Bank's policy is dictated not by a desire to make profits for its shareholders (who receive only a moderate fixed dividend), but by consideration for the public interest and the needs of the business community.

NOTE.

Fiduciary Issue.—The reader should note that the Treasury has power to reduce as well as to raise the fiduciary issue of the Bank of England. In December, 1936, the fiduciary limit was lowered to £200 millions. This was to "sterilize" £60 millions out of a purchase of £65 millions of gold which the Bank made from the Exchange Equalization Fund. The addition of this gold to the reserve would have led in the ordinary way to an expansion of credit, which was considered undesirable in view of a developing trade boom.

IX

THE MARKETS FOR CAPITAL

The Money Market.—When we speak of the *money narket* we use the word *money* in a sense different from he usual one. We mean by it *liquid capital*, lent for hort periods, in contrast to capital permanently tied up in a business in the shape of buildings, machinery, etc. The use of the term in this sense is unfortunate and misleading, but it has become too firmly established by custom to be got rid of. The only shadow of a justification for it is that liquid capital of the kind described is easily convertible into cash. But this is no reason for calling one thing by the name of another. The reader, then, must keep carefully separate in his mind these two uses of the word *money*; one to describe a certain species of capital, the other, the commoner use, to denote a medium of exchange.

The money markets of the world are situated in great capitals like London, New York, Paris, Berlin, etc. The London Money Market centres round Lombard Street, that of New York round Wall Street; and they are often described by these names. There is no hall or building which serves as a regular meeting-place for dealers in money as there is for those who

trade in stocks and shares. But they all have their offices in one quarter of the town, and are in constant touch with each other. The main elements of a money market are bankers, bill-brokers, accepting houses, and sometimes stockbrokers. All these are concerned with the advance of capital for short periods, either as lenders or borrowers. The banks, as we have seen, make short-term loans to their customers and discount bills of exchange. The bill-brokers specialize in bills which are too risky for the banks to take up. They work largely on money borrowed at call or short notice from the banks, and they are content with a very narrow margin of profit. The accepting houses guarantee payment of doubtful bills. This is a very useful function in an international market like London, where bills are dealt in from all over the globe. The ordinary discounter might hesitate to take up a bill drawn, say, by a merchant of Shanghai on a merchant of Hamburg. The names on the bill mean nothing to him. But the accepting house has made the necessary inquiries or has entered into some previous arrangement with the parties to the transaction, and is prepared to guarantee the genuineness of the bill. Bankers and bill-brokers, therefore, may handle it without fear of loss. Lastly, in centres like New York, where much of the short loan fund goes to finance speculative transactions on the stock exchange, stockbroking firms form an important part of the money market.

What are the sources of the capital that is lent in the money market? Mainly the banks, who, as we have seen, both discount bills themselves and lend

money at call or short notice to the bill-brokers. But much of it comes from private investors who have capital in their hands for which they have not yet found a safe permanent investment. And a considerable proportion of it comes from abroad. Since 1931 particularly there has been a large mass of floating uninvested capital in the world which keeps shifting about from one monetary centre to another (with most disturbing effects on the exchanges), now attracted by a high rate of discount, now repelled by fears of currency depreciation or political insecurity. The abnormal size of the international short loan fund in recent years is due to the uncertainty created by the trade slump and the obscurity of the general monetary situation. Private investors everywhere are afraid to tie up their capital permanently in any form of enterprise.

The Central Bank and the Money Market.—In addition to supervising the national banking system, the Central Bank has to watch over and regulate the money market. This, like so many other banking developments, had its origin in England. There was a time when the Bank of England accepted no responsibility for the London Money Market. It was part of the market like any other bank, and it discounted bills in competition with private bankers and bill-brokers with the sole object of making profits for itself. But gradually, as the result of a historical process which we cannot detail here, the Bank was forced out of this neutral position and compelled to take responsibility for the smooth flow of liquid capital. It was only

fifty or sixty years ago that it began explicitly to act in this capacity. Since then the regulation of the money market has come to be recognized everywhere as part of the duties of a Central Bank.

The Bank's main business in this connection is to see that there is no undue discrepancy between the supply of short-loan capital and the demand for it. Such discrepancy tends to arise regularly at certain seasons of the year. In the spring, for instance, "money" is scarce in London owing to the heavy payments that are being made to the government in income-tax. The Bank can remedy this very simply. It is the government's banker, and it can arrange for the government to buy back some of the Treasury bills which it issued earlier in anticipation of the returns from taxation. This will relieve the shortage of liquid capital. At other times the market may have a superfluity of funds. This is likely to happen at the periods of the year when the government pays out the interest on the National Debt. The Bank can draw off part of this redundant capital by procuring a fresh issue of Treasury bills. Sometimes, however, more direct means have to be used to control the flow of loanable money. If funds are exceptionally scarce, the Bank may try to attract capital from other centres by raising its rate of discount. At one time this was a very effective method, because the market rate of discount reacted at once to the bank rate. But this was when the Bank did a considerable amount of bill-discounting. Now that its activities in this direction have become so much curtailed, its rate has often no influence on the

market. Private bankers and bill-brokers ignore it and keep on discounting at a lower rate. Accordingly, the method of varying the bank rate has been largely abandoned in favour of the "open market operations" described in the last chapter (pages 112–13). These enable the Bank to exert its influence at once. If there is a shortage of floating capital the Bank buys securities and supplies the market with ready cash. If there is a plethora of funds the Bank draws them off by selling securities. In this way it keeps the supply of "money" accurately adjusted to the demand.

Financial Crises.—A financial crisis arises when there is a sudden famine in the money market. Anything that gives a shock to public confidence, such as the failure of an important bank or firm, the collapse of a stock exchange boom, or the rumour of a world war, may create an extreme shortage of liquid capital. At such a time, a deep distrust of all credit instruments spreads through the business community. People want cash, legal money, or something that can be immediately converted into such. Accordingly, on the one hand there is a big demand for short-loan capital. All sorts of people are afraid they may not be able to meet their obligations, and they try to get advances which they can convert into cash at need. On the other hand, the supply of liquid capital suddenly dries up, because the agencies that usually provide it, the banks particularly, curtail their loans. Where can the business community turn in its extremity? It has no resource except the Central Bank. The Central Bank must provide the credit which private bankers

and bill-brokers refuse to supply. If it fails to do so universal bankruptcy will be the terrible consequence. A breakdown of the credit system may mean economic ruin for the country involved.

It is at a time like this that the Central Bank's cash reserve becomes of supreme importance. However willing to make advances, it must always maintain a certain ratio between its credit issues and its cash resources. To meet the exceptional strain imposed by a crisis, it must first of all have a substantial cash reserve, and secondly it should be able to expand this reserve at need. In this second respect a country with a managed paper currency has a great advantage over one with a gold standard. To multiply cash in the form of paper notes it is only necessary to set printers and engravers to work. Experience has shown that paper money of this kind, provided it has a legal character, serves the purpose quite as well as gold. Business men in practice show no particular preference for metallic money whatever theoretical opinions they may express on the subject. An issue of paper notes has more than once been sufficient to kill a crisis. And even a gold standard country has usually to resort to this device when menaced with a crisis of peculiar intensity. In a gold standard country the Central Bank is faced with special difficulties when it wishes to replenish its cash reserve. It must get gold from somewhere, because gold or paper convertible into gold is alone legal money. It may try to get gold from abroad by direct borrowing or by raising its rate of discount. This second method was the classic

expedient used by the Bank of England in dealing with the crises of the nineteenth century. Raising the bank rate had a double effect. It attracted short-loan capital to London from abroad, and thereby helped to make good the deficiency of funds in the money market. And it promoted an inflow of gold, since part of the foreign capital came in this form, thus swelling the bank's cash reserve and enabling it to extend its advances. But if the crisis was severe, this measure was usually not enough. Raising the bank rate when public confidence has collapsed is something like locking the stable door when the horse is stolen. Foreign capitalists are not likely to transfer their funds to a market which is in the throes of panic and despair. Accordingly in the most notable crises of the nineteenth century a further step had to be taken. The gold standard had in effect to be temporarily abandoned. The stipulation that banknotes beyond a certain limit must be backed by gold was suspended. The bank was allowed to make an issue of notes against securities. Three times this was done (1847, 1857, 1866), and each time it brought the crisis to an abrupt conclusion. Only once (in 1857) was it actually necessary to take advantage of the suspension. On the other two occasions the mere announcement that money could be had if wanted was enough to restore confidence. The adoption of this emergency measure, involving a breach of the Bank Act of 1844, required the consent of the government and the passing of an act of indemnity, but in 1928 regular provision was made for the raising of the fiduciary limit for short periods

without recourse to Parliament. Thus even when Britain was a gold standard country the Bank of England had an expedient in reserve by which it could meet any exceptional demand for legal tender currency.

The stipulation that a Central Bank's reserve shall consist of gold is not only awkward at a time of crisis. It has its drawbacks at normal times as well. The bank must see to it that its reserve does not fall below a certain level. It must try to check an outward flow of gold by raising its rate of discount. But this, if effective, will send up the price of credit at home. Domestic producers will have to pay more for their bank loans, and to that extent trade and industry will be discouraged. The restriction of credit will be reflected in a depressing fall of prices. This is one of the inconveniences of a gold standard. To maintain its gold reserve at a proper level, the Central Bank must be prepared at times to ignore or sacrifice the interests of domestic producers.

The Long-term Capital Market.—In Britain, capital for permanent investment in businesses is supplied to only a trifling extent by the banks (though in Continental countries *banques d'affaires* which finance commercial and industrial enterprises are fairly common). Business gets its long-term capital chiefly from the private investor through the flotation of joint-stock companies. Company promoting has long been a regular profession, and the company promoter plays an indispensable part in the modern economic system. It is he who directs the flow of savings into profitable channels, finds funds for the flotation of new enter-

prises, and finances schemes for the extension or transformation of existing businesses. Some company promoters are dishonest and unscrupulous men, but this must not blind us to the real services performed by the genuine members of the profession. "There are," it has been said, "few who do more to increase the efficiency of labour in creating material wealth than an able and upright company promoter." *

The flotation of a company involves certain formalities, prescribed by law and custom. The company promoter takes the preliminary steps, draws up a prospectus, gets together a board of directors, fixes the amount of the capital and the nature of the shares to be issued. The sale of the shares to the public is carried through mainly by bankers and brokers, who take up large blocks of them and retail them in small lots to the private investor on commission. A share issue is usually *underwritten*, which means that certain brokerage firms in return for a commission agree to take up any shares not purchased by the public. Shares are roughly of two kinds, *ordinary shares* and *debentures*. The debenture holder is merely a creditor of the company, and has no say in its management. He has lent money on the security of the company's assets and his interest is a first charge on the profits. A debenture is usually regarded as a safe kind of investment, and therefore the return on it is low. An ordinary share, on the other hand, represents a sleeping partnership in the company. Its owner is entitled to attend the annual meeting of shareholders and criticize the con-

* Marshall, *Industry and Trade*, page 331.

duct of the company's business. He obtains a share in the profits, if any, but he risks the loss of his capital if the company becomes insolvent. In compensation for this risk, the return on ordinary shares is usually greater than on debentures. *Preference shares* occupy an intermediate position between ordinary shares and debentures. The holder obtains a certain fixed rate of interest after the claims of the debenture holders have been met but before any dividend is paid to the ordinary shareholders. In the case of *deferred preference shares* this claim to interest, if not met in any year owing to lack of funds, is carried over to the following year. In 1933 the amount of capital raised in Great Britain by the issue of shares and debentures was £133,000,000, of which £37,000,000 was invested in overseas enterprises.

The Stock Exchange.—The stock exchange is an essential part of the machinery for raising long-term capital. It is a market for the selling of shares. Investors would not so readily part with their capital if there was no way in which they could realize it at need. A shareholder cannot demand back his money from his company, but he can sell his share to a third party on the stock exchange. The London Stock Exchange dates from the eighteenth century, but it only became a corporate body in 1801 when the building in Capel Court was erected. Members are divided into two classes: brokers who transact business with the outside public, and jobbers who trade inside the stock exchange with the brokers and with other jobbers. There are a number of provincial exchanges

scattered up and down the country. The New York Stock Exchange, which is near though not in Wall Street, dates from the early nineteenth century. It does not recognize the distinction between jobber and broker, American stockbrokers acting in both capacities. On the Paris Bourse there are about seventy official *agents de change*, who act as jobbers and constitute what is called the *parquet*. But outside there is the kerb-market or *coulisse*, where any one may transact business on payment of a licence duty. The *coulissier* acts as an intermediary between the official brokers and the public.

Speculation.—The stock exchange is the field *par excellence* of speculation. The speculator buys something which is cheap in the hope that, by some unforeseen turn of events, it may become dear. Between speculation and gambling the partition is often very thin. At every stage of company finance speculative transactions enter in. The company promoter buys up a decaying business in order that, having reorganized it, he may sell it to a limited liability company at a greatly enhanced price. The private investor rushes to put his money into the new business in the hope that it will become prosperous, and that the value of its shares will rise. When the shares come on the stock exchange their price fluctuates with the fortunes of the company, and speculators buy for a rise or sell for a fall. The speculator who plays for a rise in prices is in stock exchange language a *bull*; if he is banking on a fall he is a *bear*. The bull offers to buy shares at a certain price for delivery at a future

date. He hopes that in the interval the price of the shares may go up and he will make a profit off the transaction. The bear sells shares at a fixed price for delivery at a future date. He has not got the shares; he is what is technically termed "selling short." But he hopes that before the prescribed date comes round the price of the shares will have fallen, and he will be able to fulfil his bargain cheaply. A great deal of stock exchange speculation is carried on by people who do not handle shares at all. In the case last mentioned, if the price of the shares has fallen, as the bear hopes, he simply collects the difference in price from the purchaser. If, however, the price has risen, it is the bear who has to pay out. On the New York Stock Exchange much speculation is carried on with borrowed money and by the deposit of a *margin*, representing only a fraction of the price of the shares purchased. Recent American legislation has imposed restrictions on this dangerous practice.

The great ambition of the professional speculator is to make a *corner*. He persuades bears to sell him shares of a certain issue for delivery at a future date. Meanwhile he himself buys up all the shares of this issue on the market. When the date of delivery comes round, the bears cannot fulfil their contracts, and the speculator can squeeze them to almost any extent, short of forcing them into bankruptcy.*

Speculation is not confined to the stock exchange. The whole economic system is permeated with it.

* The plot of Arnold Bennett's *Teresa of Watling Street* is concerned with a stock exchange corner of this kind.

And it is particularly prevalent on the great produce exchanges of the world which deal in foodstuffs and raw materials like wheat, sugar, cotton, iron, copper, rubber, pepper, etc. Here all the expedients of the speculator are put daily into practice, *dealings in futures*, *selling short*, trying to *corner* the market, etc. One of the most spectacular corners was that organized by Leiter in the Chicago Wheat Pit in 1897.*

How far is speculation economically justifiable? The defence put forward for it by Adam Smith is that it helps to steady prices. By buying when things are cheap, the speculator slightly raises the price; by selling when they are dear, he lowers it. He thus helps to smooth out oscillations in the price level. This is certainly a point in favour of moderate speculation. Another favourable consideration is that even the most frantic speculation does not lead to any destruction of social wealth. We hear of great losses in speculative booms. But these losses are suffered by individuals. The community is none the poorer. As in betting, every individual loss is balanced by a corresponding individual gain. There is simply a transfer of wealth from one person to another. Nevertheless there is a vital economic objection to speculation, apart from the dishonest practices so often associated with it. It is this. Speculation encourages the notion that wealth can be obtained without labour or effort, by the mere exercise of lucky guessing. Like betting and gambling,

* The Wheat Market at Chicago is called the *Pit* because of the shape of the hall in which it meets. For the story of an unsuccessful attempt at cornering, see Frank Norris's novel, *The Pit*.

sweepstakes and lotteries, it turns people's minds away from the prosaic pursuits by which alone a community can become rich, and dries up the springs of national wealth. Only a few people can profit by it, and they perform no social service in return for their gains. It would perhaps cool the ardour of the amateur speculator if he realized that he is the helpless prey of a small group of professional experts who rig the markets at their pleasure and relieve him of his money as easily and neatly as a pickpocket helps himself to a purse. The pickpocket has to outrun the constable, but the professional speculator very seldom finds it necessary to come into open conflict with the law, and when he does he is very difficult to catch. In spite of all the efforts of the legislature to protect the unwary investor, company promoting and share manipulating still remain the easiest and safest methods of robbing the public. Those who practise these ambiguous callings continue to enjoy a degree of social consideration which is hardly creditable to our public morality. "If you are prosperous enough," writes H. G. Wells, "you may have sat beside some of these browsers upon the investment public last night at the theatre or travelled very pleasantly with them in the train de luxe. Our sons and theirs may become great friends at college." * In view of the tremendous respect paid to the freebooters of finance, it is necessary to emphasize that they are mere parasites on the body economic who flourish with a strength not their own. Like all social pests, they thrive upon the weaknesses of mankind. There

* Wells, *Work, Wealth and Happiness of Mankind*, page 392.

would be little scope for their activities if the plain person could get rid of some of his moral failings; above all, if he would only forswear the feverish ambition to get rich quick, not by the honest labour of hand or brain, but by some fortunate chance, some gambler's throw.

X

INTERNATIONAL TRADE

Exports Pay for Imports.—At bottom, international trade, like every other kind of trade, is a form of barter. Money enters in, but as an intermediary only. The real exchange is one of goods against goods or goods against services. This is the justification for the familiar saying that exports pay for imports and imports pay for exports. It is true that if we confine our attention to isolated trading transactions, the real character of international commerce may escape us. In the illustration we took on pages 66–68, the British ironmaster who exported steel to the United States was paid in the money of his country, and so was the American cotton-grower who sent cotton to Lancashire. So far as each trader was concerned, he exchanged goods for money. But, as we saw, the two transactions were complementary. The British ironmaster could not have obtained payment for his goods had there not been an American import corresponding to his export. It was the arrival of American cotton in Lancashire that created the claim to British currency which was passed on to the British ironmaster in payment of his steel plates. But for this import, the ironmaster could not have been paid. Thus, in effect, it was the cotton that paid for the steel plates. Con-

versely, without the export of steel plates Britain could not have had her cotton. It is in this sense that exports pay for imports (including, of course, under these headings, "invisible" as well as "visible" items), and the two must roughly coincide. If there is any surplus on one side or the other it is corrected by movements in the exchange, as explained on pages 74–76. The popular idea that a nation can keep on selling more than it buys and somehow gain is a crude fallacy. Only in two special cases can a country have a permanently favourable balance of payments: (*a*) if it keeps on lending its annual surpluses to the countries with which it trades; (*b*) if it is paying a perpetual tribute or indemnity to some other country, as the Roman provinces did to the Imperial City.

If this point is clearly grasped, the distrust with which foreign imports are sometimes regarded will be dispelled. They are usually thought of as displacing some home product and throwing domestic labour and capital out of employment. This may be true so far as individual trades are concerned, but not as regards the industry of the nation as a whole. If British ironmasters, through producing cheaply, capture the American market a slump may follow in the American iron industry, but not in other American trades. On the contrary, there will be an expansion. The iron goods which are coming across the Atlantic must be paid for, and they can only be paid for by American exports. The depression in the iron trade will be offset by a burst of activity in some of the exporting industries, say cotton growing. Cotton will be sent

to Britain to pay for the iron goods she is sending to America. And there will be no net diminution in employment. The plain person sometimes fails to realize this. He fixes his gaze exclusively on the home industry which is hit by foreign imports and ignores the boom which these foreign imports cause in the exporting industries. If he will only remember that every import provokes an export, the activities of foreign traders will cease to worry him.

Why Nations Trade.—Nations trade mainly for three reasons. First, to get things which they cannot produce for themselves. Britain, for example, must always import such commodities as tea, coffee, rubber, silk, cotton, and petrol. Second, nations trade in order to get things which they can buy from abroad more cheaply than they can produce them at home. To take Adam Smith's extreme instance, " by means of glasses, hot-beds, and hot-walls, very good grapes can be raised in Scotland; and very good wine, too, can be made of them, at about thirty times the expense for which at least equally good can be bought from foreign countries. Would it be a reasonable law to prohibit the importation of all foreign wines merely to encourage the making of claret and burgundy in Scotland?" Obviously not. It would pay Scotland better to buy her wine from abroad and export in exchange some commodity in the manufacture of which she had a special advantage, say Scotch whisky. Lastly, there is the special case where one country can produce everything more cheaply than other countries. In such circumstances it might be thought there would

be no inducement to trade at all. But there is. If there is one commodity which the country can produce very much more cheaply than the others, then it is to its interest to specialize in that commodity and to buy the others from abroad. The reason for this will be explained in the next section, where we consider the theory of foreign trade.

Theory of Foreign Trade.—This will best be explained by confining our attention to two countries only, and to two commodities. Let us suppose that the two countries, Eldorado and Utopia, can each produce both wheat and cloth, and let us consider in turn two possible cases: (*a*) where Eldorado has special facilities for growing wheat and Utopia for manufacturing cloth; (*b*) where Eldorado can produce both wheat and cloth cheaper than Utopia.

(*a*) In this case let us assume that a day's labour (with the necessary capital) produces in Eldorado 10 bushels of wheat and 100 yards of cloth; in Utopia, 5 bushels of wheat and 200 yards of cloth. Then it will pay Eldorado to confine herself to growing wheat and to buy her cloth from Utopia by exporting wheat. Similarly it will pay Utopia to specialize in cloth. The reason is that with specialization the two countries produce more than without, as the following figures show.

Daily Production:

Without specialization.	Wheat (bushels).	Cloth (yards).
Eldorado	10	100
Utopia	5	200
	15	300

With specialization.	Wheat (bushels).	Cloth (yards).
Eldorado	20	—
Utopia	—	400
	20	400

With specialization there is a clear gain of 5 bushels of wheat and 100 yards of cloth.

Will this gain be divided equally between the two countries? Not necessarily. That will depend on the conditions of trade and the rate at which wheat exchanges for cloth. What that rate will be we cannot say precisely, but it must fall within the following limits:

Wheat (bushels).		Cloth (yards).
1	=	10
1	=	40

These were the rates that prevailed in Eldorado and Utopia respectively before specialization. If the trading rate is fixed outside these limits, then all the gain of specialization will go to one country, and the other country will refuse to trade. The reader may test this for himself. The trading rate, then, must fall within these limits. The nearer it is fixed to the previous Eldorado rate, the more will Utopia gain; the nearer it is fixed to the former Utopian rate, the more will Eldorado gain. Again the reader can work out these cases for himself. But the rate must be fixed so that both countries gain something, otherwise exchange will not take place. By specialization, then, both countries profit, though one may profit more than the other.

(*b*) In the second case let us assume that while conditions of production in Utopia remain the same,

a day's labour in Eldorado will produce 10 bushels of wheat and 500 yards of cloth. Eldorado can now produce both wheat and cloth more cheaply than Utopia. But her superiority is greater in regard to cloth than wheat. It will pay her, therefore, to specialize in cloth and buy wheat from Utopia. Let us consider, as before, the two cases with and without specialization.

Daily Production:

Without specialization.	Wheat (bushels).	Cloth (yards).
Eldorado	10	500
Utopia	5	200
	15	700
With specialization.		
Eldorado	—	1,000
Utopia	10	—
	10	1,000

Specialization results in a gain of 300 yards of cloth and a loss of 5 bushels of wheat. Does the gain outweigh the loss? To discover that we must convert the 5 bushels of wheat into yards of cloth. The limits of the exchange rate between wheat and cloth are fixed, as we saw in the last section, by the rates previously ruling in Eldorado and Utopia. These were:

Wheat (bushels).		Cloth (yards).
1	=	50
1	=	40

Taking the first rate, 5 bushels of wheat equals 250 yards of cloth, and the gain from specialization is 300−250, or 50 yards. At the second rate, 5 bushels

of wheat equals 200 yards of cloth, and the gain from specialization is 300 – 200, or 100 yards. As the trading rate must be fixed between these limits, the gain from specialization cannot be less than 50 yards of cloth, and may be as much as 100. As before, there will not necessarily be an equal division of this gain between the two countries, but each country must get a share of it, otherwise there will be no trade.

The Case for Free Trade.—The case for free trade rests on the theory expounded in the last section. Nations, the free trader points out, gain mutually by specialization, and any interference with this tendency by protective tariffs injures both countries, the country protected as well as the country which adheres to free trade. Suppose Eldorado, in the first case we considered (page 135), comes to resent her dependence on Utopia for cloth. She resolves to establish a native cloth industry, and with that object shuts out all foreign cloth by prohibitive duties. What happens? The two countries cease to specialize. Each must now produce both wheat and cloth, and their daily joint production is only 15 bushels of wheat and 300 yards of cloth against 20 bushels and 400 yards when they specialized. Both are poorer, protectionist Eldorado as well as free trade Utopia. But, it may be said, Eldorado has created a native cloth industry and has thereby provided more employment for her workpeople. This is true; but the expansion in cloth-making is counterbalanced by the decline in corn-growing. The wheat exported formerly to buy cloth from Utopia is no longer needed. The depression in agriculture must be

reckoned against the boom in industry. It is true that the unemployed farm labourers may find work in the new cloth industry. But does not this simply mean that labour and capital have been transferred from an industry in which Eldorado had an advantage to one in which she is at a disadvantage? Her cloth costs her more, now that she makes it herself, than when she bought it from Utopia. And against this material loss there is no expansion in employment to be reckoned. The tariff has merely redistributed Eldorado's labour and capital, and redistributed them in such a way that the country's capacity to produce wealth is diminished.

The Case for Protection.—The reply of the protectionist to the preceding argument is to say that the free trader makes an assumption which is not always fulfilled. He assumes that Eldorado's labour and capital are fully employed. In that case, admittedly, protection can only procure a diversion of labour and capital from one employment to another, which is seldom beneficial, since labour and capital, if left alone, seek out naturally the channels in which they can employ themselves to the best advantage. But suppose that Eldorado, like so many countries to-day, has a surplus of labour and capital. She has workless labourers living off the dole and idle capital lying in the banks. What effect will a protective duty on cloth have in such circumstances? The new cloth industry will be established now, not with labour and capital diverted from corn-growing, but with the idle labour and capital which formerly lacked employment. But what about

the wheat which Eldorado formerly exported for cloth to Utopia? Will that no longer be needed? Yes, it will still be exchanged for cloth, but for cloth manufactured in Eldorado, not in Utopia. An inland trade will be substituted for a foreign one. Eldorado's agriculturists will sell their surplus corn to domestic not to foreign manufacturers. But, the free trader objects, Eldorado's cloth will now cost her more than when she bought it from Utopia. Granted, but she will save the money she formerly spent on dole to unemployed labourers, and this gain will balance if it does not outweigh the loss caused by more expensive methods of manufacture.

Free Trade v. *Protection.*—This is not the place to make a dogmatic pronouncement on the arguments for free trade and protection stated above. Both are sound *given the assumptions which they contain.* More than that we are not justified in saying. Whether normally free trade or protection is the better policy, or whether in any particular case circumstances call for a protective tariff or for a measure of free trade, are practical questions which the scientific economist, as such, cannot attempt to settle. He must be content to state the conditions in which *theoretically* protection or free trade produces the best results. As Adam Smith pointed out long ago, the scientist's duty is to lay down general principles. Their application to the world of affairs is not his job. That must be left to the practical man, to "the insidious and crafty animal, vulgarly called a statesman or politician." *

* Adam Smith, *Wealth of Nations* (World's Classics), vol. i. page 47.

Methods of Protection.—The commonest protectionist device is still the imposition of customs duties on imports, unbalanced by any excise duty on domestic commodities of the same kind or manufacture. Much controversy has raged round the question as to who pays a tax of this sort, the foreign importer or the domestic consumer. Protectionists allege the first; free traders, the second. The true answer is that it all depends. The consumer will pay the duty if the foreigner has a seller's monopoly. If there is no other source from which he can get the commodity, and if he wishes to go on consuming it, he must pay the enhanced price. On the other hand, if the consumer has a buyer's monopoly, if he represents the only market where the importer can place his goods, he may be able to shift the duty on to the foreigner. Between these two extremes there will be all sorts of intermediate cases, where the duty will be divided in varying proportions between consumer and importer. It is very pleasant to make the foreigner contribute to the national revenue, but protectionists must remember that they cannot have it both ways. To the extent that a duty is paid by the importer, it ceases to be protective.

In recent years the method of protective duties has been supplemented by other devices, which in some cases recall the expedients practised by mediæval governments. As tariffs do not always succeed in keeping out foreign goods, more direct measures have been substituted, such as *embargoes* and *quotas*. The import of certain foreign goods has been prohibited

altogether, or the quantity of them allowed annually to enter the country has been restricted.*

Exchange control is another rusty weapon borrowed from the armoury of the Middle Ages. At one time foreign merchants coming to England were compelled to invest all or part of the proceeds from the sale of their goods in the purchase of commodities of English manufacture. Modern exchange restrictions have the same object. The foreigner who obtains a claim to native currency by the sale of an import must spend this currency within the country. The idea is to balance every import by an export, a futile and unnecessary regulation, since, as we saw, every import automatically provokes an export. Exchange restrictions aim at bringing about artificially and clumsily what would happen easily and naturally. Thus they are superfluous, and not only superfluous but positively harmful. They render trade impossible by making it one-sided. A British exporter who sells goods to Germany does not necessarily wish to take German goods in return. Indeed, he does not want goods at all. He wants payment in his own currency. On pages 66–68 we saw how this was managed. The British exporter finds some other British merchant who has bought goods from Germany. He sells him his claim for German marks in return for British pounds, and the British debtor transmits the claim to his German creditor. What is

* The British Wheat Quota is a peculiar example of this system. Foreign wheat is not directly shut out, but British farmers are guaranteed a price above the competitive level, the deficiency being made up by a levy on the sale of flour within the country.

effect has taken place is first the exchange of an export for an import, and second the exchange of German marks for British pounds. But this exchange of one currency for another is what the German exchange restrictions forbid. The marks due to the British exporter will only be released for the direct purchase of goods within Germany. Hence their British owner can only sell them to tourists and other people who wish currency for use within Germany itself. The demand for currency for this purpose is always far below the supply. Consequently "blocked" marks are always sold at a heavy discount. The effect of these restrictions is simply to strangle trade. They discourage imports and bring about a corresponding fall in exports.

A third method of protection, which is an invention of the post-war age, is *currency depreciation*. Suppose that the par of exchange between Britain and Czechoslovakia is £1=10 crowns, and that the Czechoslovakian government suddenly decides to devaluate the crown 50 per cent., so that the par of exchange becomes £1=20 crowns. Then an article which cost £1 to produce in Britain, and which formerly sold for 10 crowns in Czechoslovakia, will now be priced at 20 crowns. All British imports will be automatically doubled in price, just as if a 100 per cent. duty had been imposed on them. On the other hand, an article which costs 10 crowns to produce in Czechoslovakia, and which formerly was sold in Britain for £1, will now be priced at 10s. The effect is precisely the same as if the Czechoslovakian government had agreed to

pay a 100 per cent. subsidy on all goods exported to Britain.

With regard to this form of protection, two remarks only need be made. First, the stimulus to exports given by currency depreciation is generally temporary. In Czechoslovakia, devaluation will be followed after an interval by a rise in prices, in wages, and in manufacturing costs which in time will wipe out the advantage enjoyed by native producers in foreign markets. Second, while it lasts, the encouragement to Czechoslovakia's export trade is only obtained through sacrifices made by the native producers. The workers have to be content with smaller wages (their monetary wages may remain the same, but their purchasing power is less), and employers have to put up with less profits. What in effect is happening is that Czechoslovakia is giving Britain the produce of two day's labour in exchange for the produce of one. Any producer can capture a market in this way. But is it always worth while? Why should Czechoslovakians slave themselves to death in order that the British consumer may get his goods cheap? A policy of currency depreciation has no redeeming feature. It conceals, for one thing, what is really happening. If Czechoslovakian producers wish to capture the British market, they would be better advised to set about it by straightforward cutting of prices. And the policy has the further drawback of adding another element of instability to an already unstable monetary situation. Until the nations forswear the use of this dishonourable weapon the international currency problem will

remain unsolved. Devaluation to restore a lost equilibrium between costs and prices is permissible. Deliberate depreciation to capture a foreign market is utterly indefensible, and its evil effects will recoil most justly on the heads of those who practise it.

XI

THE PROBLEM OF VALUE

Importance of the Problem.—"He who has fully mastered the doctrine of value is already a good political economist." * The truth of this statement is almost self-evident. We are trying to analyse a system which is based on exchange, and the master-concept of exchange is value. If we cannot explain value, we can hardly hope to understand properly the economic system to which it is the clue. And yet we must confess that this part of economic doctrine, which ought to be the foundation of all the rest, has been least satisfactorily and adequately treated by economists. Sydney Smith joined the Political Economy Club to learn what value was. He resigned because he found the members knew no more about it than himself. This was a hundred years ago. But if Sydney Smith were alive to-day, and joined the Royal Economic Society with a similar intent, his verdict on the Fellows, it is to be feared, would be equally uncomplimentary. Not that economists have always been aware of their ignorance. There was a time when they actually

* De Quincey, *Collected Writings*, vol. ix. page 44. De Quincey's writings on economics, collected in this volume, are still worth reading, especially by those who have a taste for dialectical reasoning.

believed they had solved this problem. "Happily," wrote J. S. Mill in 1848, "there is nothing in the laws of value which remains for the present or any future writer to clear up; the theory of the subject is complete." * Time has played havoc with this unfortunate assertion. Since Mill wrote, not only have cartloads of books been produced on the subject of value, but whole schools of economists have founded their claims to distinction on the formulation of new theories with regard to it. Despite this interminable discussion, the question is still one of the unsettled problems of political economy, a fact which the ordinary textbook tends to gloss over, economists, like other philosophers, being somewhat reluctant to expose the weak joints in their armour. Nothing, however, is to be gained by trying to cover up our want of knowledge with a multitude of words. It is better to admit frankly that this problem has so far baffled economists and that a satisfactory answer to the simple question why one article is more valuable than another has not yet been devised.

Nature of the Problem.—"The value of a commodity means in economics its power of commanding other commodities in exchange. It means the rate at which the commodity exchanges for others." † To compare the values of different things we must have a common denominator, and we find it in money. We have already shown that money is not an altogether satisfactory measure of value, but it is the best we have

* *Principles of Political Economy*, page 436.
† Taussig, *Principles of Economics*, vol. i. page 111.

and we must just put up with its deficiencies. Assuming, then, that in most cases the value of an article is sufficiently indicated for ordinary purposes by its price, our problem comes to be this: Why does one article sell for more than another? Why do I pay more for my shoes than for my shoe-laces? How is it that a grand piano is priced higher than a mouth-organ?

Stated in this way, perhaps the problem does not appear unduly difficult. The reader is doubtless ready with plenty of explanations why shoes are dearer than shoe-laces, or grand pianos than mouth-organs. But this is because he is considering only a few concrete cases and feels no difficulty about explaining them on different grounds. The economist cannot do this. He must find *one general explanation* which will fit *all* cases. In other words, he must formulate an economic law, and this is by no means a simple matter. An economic law must first of all really *explain*; it must deal with fundamental causes and not merely with secondary causes or symptoms. And secondly, it must admit of no exceptions. The reader may be inclined to demur to these conditions, especially to the second. The exception, he is in the habit of saying, proves the rule. But in 999 cases out of 1,000 this statement is sheer nonsense. The expression has no claim to sense except when it is used by the legal fraternity. If a motor ambulance receives special permission to run past the red light at a street crossing, this "exception" may be said to "prove the rule" that ordinary traffic must wait till the light changes to green. But apart from this

special case, the exception never proves the rule. In science it always disproves it, because a scientific law assigns a particular cause to certain phenomena, and the same cause must always produce the same result. If it appears not to do so, then the law has been stated wrongly. A single exception is sufficient to destroy a scientific generalization, because the uniform action of nature admits of no irregularity. When we go on, as we shall do immediately, to consider the explanations attempted by the economists of value, we shall find that they sin in regard to one or other of these conditions; either they fail to penetrate beneath the mere surface of things, or they admit of exceptions, and cannot therefore claim to rank as economic laws.

Demand and Supply.—According to one familiar theory the price of a thing is always that which precisely equates the demand with the supply. Up to a certain point this is a satisfactory explanation. The only objection is that it does not go deep enough. Let us imagine a small horse market with 3 sellers and 3 buyers. Perfect competition reigns within the market, and the horses offered for sale are indistinguishable in age and quality. Of the 3 sellers, let us suppose that S1 wants at least £20 for his horse, S2 £19, and S3 £18. Amongst the buyers B1 will not offer more than £20, B2 not more than £21, and B3 not more than £22. Let us set out these prices in the form of a table:

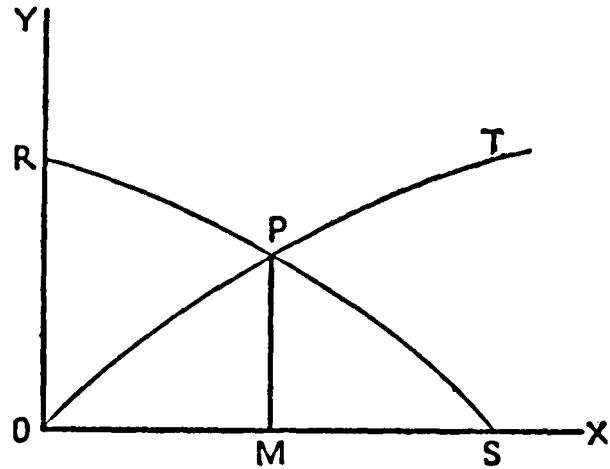
Sellers.		Buyers.	
S1	£20	B1	£20
S2	£19	B2	£21
S3	£18	B3	£22

A little inspection of this table will show that the price eventually fixed by the higgling of the market must be £20, because at no other price will all the horses be sold. If the price were £21 all the horse-dealers would be willing to sell, but B1 would refuse to buy. Only two horses would be sold, and competition among the horse-dealers not to be left with a horse on their hands would force down the price to £20. On the other hand, if the price were £19 all the buyers would be willing to buy, but S1 would refuse to sell. This time competition among the buyers not to be left without a horse would force the price up to £20. Obviously, £20 is the equilibrium price, the price at which the demand exactly equals the supply.

We may, if we choose, illustrate the interaction of these forces by a simple diagram. If we measure prices along OX and quantities supplied or demanded at these prices along OY (or along imaginary lines parallel to it), then RPS is the demand curve (the quantity demanded diminishing with the increase in price), and OPT is the supply curve (the supply increasing with the increase in price). The point where the two curves intersect gives the equilibrium price. At the price OM the quantity demanded and the quantity supplied are exactly the same, namely, MP. OM, then, is the market price.

There is nothing to be said against this theory except, as already hinted, that it does not go down to the roots of the problem. Demand and supply are merely symptoms of fundamental causes which are left unexplained. Why do the buyers and sellers

estimate the same article at different prices? What moves them to ask or bid the particular prices that they do? And how does the interplay of their calculations and desires produce an equilibrium price? Questions like these the demand and supply theory fails to



answer. We must probe deeper if we wish to discover the real causes that determine value.

Labour or Cost of Production.—One of the oldest theories of value makes it depend on *Labour.* "The ground of the value of all things lies in the quantity of labour which produces them" (De Quincey). This theory may be found somewhat vaguely stated by Adam Smith, and more precisely by Ricardo. It was used by Bastiat to justify the existing system and by Marx to condemn it. It is still the cornerstone of the

economics taught in Russia. During the nineteenth century the orthodox economists amended it by making value depend on all and not merely on one of the elements of cost of production. "Things," said J. S. Mill, "which admit of indefinite increase naturally and permanently exchange for each other according to the comparative amount of wages which must be paid for producing them and the comparative amount of profits which must be obtained by the capitalists who pay those wages." * We need not trouble discussing which of these two forms of the theory is the better, because both are open to the same fatal objection. They fail to explain all the facts. Cost of production, it is true, however interpreted, explains a great many, indeed most, cases of value. Every producer carefully estimates how much it costs him to produce an article, and fixes the price accordingly. If he cannot cover his costs of production he cannot long remain in business. But nevertheless the theory admits of too many exceptions to be considered a valid economic law. Let us note some of them. (*a*) Things which cost the same to produce have different values, *e.g.* this morning's newspaper and last week's, meat from different parts of the same cow, wool and mutton from the same sheep. (*b*) Things with different costs of production are charged the same price, *e.g.* wheat from fertile and infertile lands, coal from deep and from shallow seams, the postage of a letter from London to Brighton and from London to New York. (*c*) Things

* *Principles of Political Economy*, page 479. The orthodox economists did not believe that rent was an element in cost of production.

that cost nothing to produce have nevertheless value, *e.g.* mineral springs, building sites, "welcome stranger" nuggets of gold picked up by some lucky Australian. We cannot dismiss these cases in the summary fashion adopted by some writers of popular textbooks.* We must face up to them and, unless we can explain them away, admit that they knock the bottom out of any theory which makes value depend on either labour or cost of production.

Utility.—Let us now consider a more recent theory, which tries to find an explanation of value in conditions affecting demand. Why do we want things? Because they are *useful* to us. In *utility*, then, in the capacity of things to satisfy a human desire or serve a human purpose, may be found the secret of value. This idea occurred very early to the economists, but when they followed it up they found themselves landed in a dilemma. Some things with apparently great utility had very little value. Other things with little utility were of immense value. "Nothing," said Adam Smith, "is more useful than water; but it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond on the contrary has scarce any value in use,† but a very great quantity of other goods may frequently be had in exchange for it." § The early economists could not resolve this

* In the *Outline of Economics*, published by the Plebs League, it is stated in regard to this point (page 50), "We cannot discuss special cases. We must take the subject as a whole." This is a mere evasion. Ability to account for apparent exceptions is the crucial test of any theory.

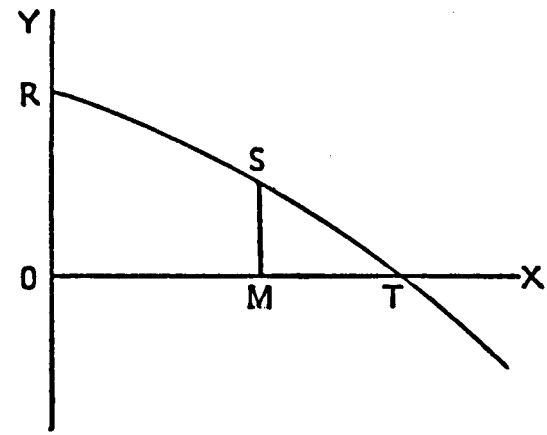
† Adam Smith's expression for what is now called utility.

§ *Wealth of Nations*, vol. i. page 31.

conundrum. Accordingly they could only conclude that while utility was a necessary condition of value since no one would give money for something that was utterly useless, yet the value of a thing did not correspond to its utility and must depend on some other factor, like labour or cost of production.

In the later nineteenth century this old idea was taken up again with better results. A number of Austrian economists subjected the notion of utility to a closer analysis, and established a distinction between the *total* utility of a thing and its *final* or *marginal* utility. The marginal utility is the utility of the last portion or dose consumed. The total utility is the utility of all the portions consumed. The total utility of a thing increases with consumption; the marginal utility diminishes. This is a perfectly familiar physical or psychological fact. To a man dying of thirst the first glass of water has immense utility, the second not quite so much, the third less still, and so on until a point is reached when further consumption of water is positively distasteful or even painful. This common experience is the basis of the economic *law of diminishing utility*, which states that successive doses of the same commodity or service yield a smaller and smaller satisfaction. It may be illustrated by a simple diagram. Measure along OX doses of the thing consumed, and along OY utilities of successive doses. The utility curve is RST. If consumption stops at M, the total utility of OM is ORSM, and the marginal utility SM. If consumption continues beyond T, utility passes into disutility, and the total utility also begins to diminish.

This discovery enabled the relationship between value and utility to be stated in a different way. According to the Austrian theory, the value of a thing depends not on its *total* but on its *marginal* utility. This at once explains the paradox about the diamonds and the water. Water has great total utility, but (owing



to its plentifulness) only small marginal utility. With diamonds it is exactly the reverse. Hence the high value of diamonds as compared with water.

Let us see how the theory works out in a hypothetical market. Suppose we have a milk market in which, for simplicity's sake, there is only 1 buyer but 4 sellers, each with a quart of milk to sell. The buyer can consume all the 4 quarts, but the utility of each additional quart after the first he buys will go on diminishing, and also the price he will be prepared to

give for it. For the first quart, if it was the only one available, he might give 5s. rather than do without it. For the second quart he would offer less, say 4s.; for the third, perhaps only 3s.; and the last he would not buy unless he could get it for 1s. To him, then, the marginal utility of the milk on the market is represented by the price of 1s. a quart. According to the Austrian theory this is the price at which the milk will be sold. Why? Because at any higher price some milk will remain unsold. If the milk dealers demand 2s. a quart the buyer will take only 3 quarts, and competition among the sellers not to be left with milk on their hands will gradually force the price down to 1s. It is only if the fourth quart is priced at 1s. that the buyer will take it. And if the fourth quart is sold at 1s. all the other quarts must be sold at the same price, because this is a competitive market, and in a competitive market you cannot have two prices for the same article. The assumption throughout is that there is no interference with competition, otherwise a higher price might be fixed. If the milk dealers formed a ring they might demand 3s. a quart. They would only sell 3 quarts, but 3 quarts at 3s. brings in more than 4 quarts at 1s. They might even, if they were powerful and intelligent enough, make the consumer pay a different price for each quart, 5s. for the first, 4s. for the second, and so on. Differential price fixing has always been one of the most effective weapons of trusts and combines.

Let us now, in order to make the market conform more closely with reality, assume that there are 4

buyers as well as 4 sellers. To each of these buyers the marginal utility of a quart of milk is measured by a different price, varying with his liking for milk, the quantity of it he already has, the greater or smaller supply of money he has to buy it with. Similarly, the price which measures the marginal utility of a quart of milk to each seller also varies according to how much milk he has, how much it cost him to produce it, his need for money, etc. Let us represent these different marginal utilities in a table.

Sellers.		Buyers.	
S1	4s.	B1	4s.
S2	3s.	B2	5s.
S3	2s.	B3	6s.
S4	1s.	B4	7s.

The market price will be fixed at 4s. a quart, since this is the price at which the demand for milk equals the supply. This price, according to the utility theory, is determined by the marginal utility of the milk in the market. But the marginal utility to whom? If we inspect the table we find to only one seller and one buyer, S1 and B1. The Austrians do not shrink from this conclusion. They call S1 and B1 the *marginal pair*, *i.e.* the seller least willing to sell and the buyer least willing to buy. Their theory, in its final form, states that the value of any article depends on its marginal utility to the marginal pair in the market in which it is sold.

Can we call this a satisfactory explanation of value? It is certainly built on a very narrow foundation. Who

are the marginal pair? Has any one ever met this interesting couple? Do they know each other? Do they realize the important part they play in the economic mechanism? How interesting to speculate on the identity of the marginal pair for, say, pencil-sharpeners or Empire tobacco, or Sunday newspapers or second-hand copies of the *Wealth of Nations*! To the cost of production theory we saw there were exceptions. But to the utility theory there seems to be nothing but exceptions. Consider the purchases of the ordinary person. How often do the prices he pays represent the marginal utility to him of the objects bought? Perhaps never once in a lifetime. Only the marginal pairs have the privilege of paying for things exactly what they are worth. Without these pale ghosts the theory would never touch reality. And they are as elusive as the Scarlet Pimpernel. Surely, if there were no other objection to the utility theory, its hopeless impracticability would suffice to condemn it. It directly explains only one in a million cases of value, and that case we cannot find. It never enables us to predict the price of a single commodity, and power of prediction is the acid test of the value of any scientific law. That there is some connection between utility and value no one can deny. But the precise relation between the two cannot be said as yet to be properly understood. Above all, it cannot be asserted that utility is the only factor that determines value.

Position of the Problem.—In our search for a satisfactory theory of value we must admit that we have drawn blank. All we have found are incomplete

generalizations which explain some, but not all, of the facts. The cost of production theory and the utility theory each contribute part of the truth. But neither is sufficient by itself. What we want is some economic genius who will fuse these two partial statements into a single universal economic law. The present condition of economics is very like that of astronomy in the days before Newton. In the sixteenth century Tycho Brahé made numerous observations of the movements of the planets, but was unable to determine the shape of the orbit in which they moved. Like most of his contemporaries, he thought it must be a circle. After him Kepler discovered that the planet Mars moved in an ellipse, and this was subsequently found to be true of the other planets as well. At this stage astronomers could make a number of partial generalizations about the movements of the heavenly bodies, but they knew of no universal law that would account for them all. Then Newton proved that any two bodies in the universe attract each other with a force varying inversely with the square of the distance between them. This simple statement explained everything, not only the elliptical orbit of the planets, but every movement of the heavenly bodies. The partial statements of Brahé and Kepler were absorbed in the law of gravitation and rendered superfluous. The broken lights of knowledge were focused into a single illuminating ray. This is the consummation that economics is waiting for. She has her Brahés and Keplers in plenty. What she needs now is an Isaac Newton.

XII

RENT AND INTEREST

The Distribution of Wealth.—In the last half-dozen chapters we have been discussing the subject of Exchange. Now we pass on to the third great department of economics—Distribution. By this we mean the division of wealth amongst those who produce it, or who on other grounds have a claim to share in it. Here we reach what philosophers would call the final cause of the economic system, the ultimate purpose which it exists to fulfil. The motive of all economic activity is to satisfy human needs, to supply men and women with food, clothing, housing, and other material necessities. The last stage in the process is Distribution, the division of the fruits of society's collective toil among its members. To this subject we shall devote the next two chapters.

The total wealth annually produced by a nation is generally spoken of as the *national income* or the *national dividend* (to be distinguished from the *national revenue*, which is the income of the state or government). For convenience it is measured in money, but the reader does not need to be told at this stage that actually it consists not of notes or coin but of a vast multitude of

goods and services which are being continuously produced and consumed; just as the income of each individual, though received first in the form of money, consists essentially of the goods and services which this money will buy. Nevertheless the money measure is a handy and indeed indispensable expedient, without which it would be impossible to establish comparisons between the wealth of different communities, as is done in the table below:

	Income per head.	Land and Capital per head.
United Kingdom	£50	£318
United States	72	424
Germany	30	244
France	38	303
Italy	23	128
Australia	54	318
Canada	40	300
Japan	6	44 *

A characteristic feature of all modern civilizations is the unequal way in which wealth is divided. As an illustration we give the division of the national income of Great Britain for 1928:

Above	Aggregate income. (£m.)	Numbers.
£100,000	26.01	139
75,000	35.66	250
50,000	52.04	521
40,000	64.72	806
30,000	86.2	1,417

* These figures are for 1914 and are based on estimates by Sir Josiah Stamp. They are quoted from Dalton, *The Inequality of Incomes*, page 209.

Above	Aggregate income. (£m.)	Numbers.
£25,000	101.52	1,981
20,000	123.73	2,976
15,000	157.06	4,917
10,000	216.07	9,805
8,000	255.36	14,249
7,000	281.17	17,701
6,000	311.82	22,441
5,000	351.19	29,658
4,000	402.76	41,230
3,000	474.09	61,919
2,500	522.1	79,389
2,000	579.9	104,514
250	1,665.0	2,080,000
159	2,257.0	14,875,000
All incomes	3,488.0	20,145,000 *

What information can the economist give us about the division of income? Admittedly much of what he tells us may appear somewhat vague and unsatisfactory, chiefly because he seems always to deal with the *general* and not with the *particular*. But this is a characteristic of every science. The scientist classifies facts or makes general statements about them, leaving it to the practical investigator to bring the particular cases in which he is interested under the appropriate generalization. Thus John Smith must not expect an economic textbook to answer directly the question why he is only earning £3 a week. But what he may learn is: first, the class of income to which his particular income belongs; second, what distinguishes this class of income from other classes; and third, what are the factors that

* C. Clark, *The National Income, 1924–1931*, page 76.

account for differences in the size of incomes within the class. Armed with this knowledge, and making use of his mother-wit and common sense, he should be able to form some idea of why he is earning £3 a week and no more. But this will involve a little mental exertion on his part. Knowledge does not apply itself. That is the tiresome thing about it. It has to be applied. Or as Bacon put it, "Studies teach not their own use; but that is a wisdom without them and above them, won by observation." The reader must not therefore expect this or any other book to supply him with ready-made solutions to practical problems. Books provide the intellectual worker with his tools. But they do not do his work for him. They are aids to thinking, not substitutes for it.

The different kinds of Income.—If we examine the different incomes drawn by various people we find that they can all be grouped, according to their origin, into four great divisions: (1) Rent, (2) Interest, (3) Wages, and (4) Profits. Rent is the payment made to landowners for the use of their land. Interest is a similar payment made to capitalists for the use of their capital. Wages (in which are included salaries) are the reward of effort, manual or mental, applied to the creation of wealth. Profits are the remuneration obtained by the organizers of production, the employers or the business men. Rent and interest are forms of unearned income. They are charges made for the use of two of the essential agents of production which happen to be in private hands. They are not, like wages or profits, the reward for some effort or output

of energy. The way in which the British national income for 1928 was divided between the different agents of production is indicated in the following table:*

	£m.
Wages	1,460
Salaries	835
Rent (land and buildings)	288
Profit and Interest	990
Total	3,573

Wages as per cent. of whole home-produced income 40.8
Salaries as per cent. of whole home-produced income 23.4

We shall now proceed to examine the different classes of income in turn, trying to do two things, (*a*) to explain what differentiates each class of income from other classes, (*b*) what accounts for differences in the size of incomes within each class.

Rent

Meaning of Rent.—Rent, as a term of economics, has a narrower meaning than in current speech. As popularly used, the word often includes what is really interest on capital. House-rent, for example, is not a payment for land. It is the return to capital invested in house-building. Even farm-rent often comprises payment for capital sunk in the land in the shape of agricultural improvements. All these loose uses of the word must be avoided in economics. To the economist

* C. Clark, *op. cit.*, page 72.

rent means the payment for land only, not for anything in it or on it. To mark this restricted meaning it is often spoken of as *economic rent.*

Justification of Rent.—Rent is the inevitable consequence of private ownership of land. If the state allows the soil to be appropriated and held as private property, then landless people who want land must pay the owners for permission to use it. This is the *legal* justification of rent. But the reader does not need to be told that many things are sanctioned by law which are indefensible on other grounds. Is rent one of these? Or is there a deeper and more rational explanation of its existence? What we are particularly anxious to discover, if possible, is an *economic* justification of rent. An institution or a practice is economically justified when it stimulates the production of wealth. Can we say this of the payment of rent? The test is to see what would happen if rent were abolished. Would the national production be impaired? Let us first consider the cultivators and exploiters of the soil. Would they be discouraged in their efforts if they were relieved of the payments they at present make to the landowners? Obviously not. Then, would the supply of land fall off? Again, no, because it is independent of human will or agency. Finally, would the landlords work less hard? Once more, no; because as landowners they do not work at all; they take no direct part in the cultivation or exploitation of the soil. Of course, many landlords put in a good deal of time at estate management, and for that they are entitled to a reward. But rent, in the

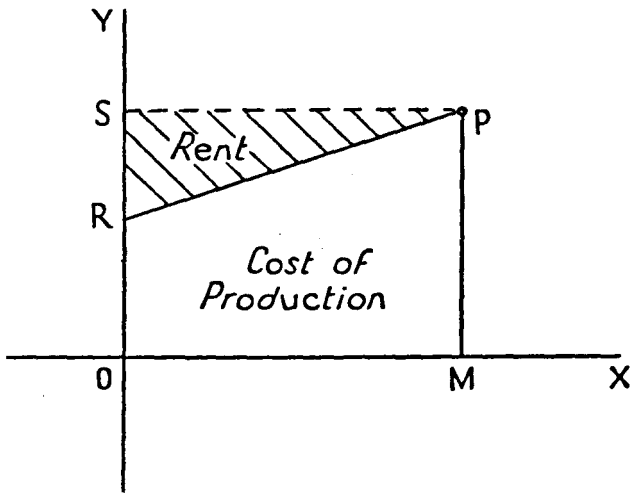
economic sense, is not a payment for that labour. It comes to the landowners solely because they own land, and not in return for any effort on their part. Its abolition, therefore, would not impose any check on agricultural production. It is a form of unearned income, and it is self-evident that unearned income can never serve as a stimulant to economic effort. If we confine ourselves to economic considerations only we cannot find a defence for rent.

Must we then hold that there is no justification whatever for this kind of income? Not necessarily. It is true that we can find no direct economic justification of rent, but arguments in its support may be advanced on broad grounds of social utility. It is, as we have seen, the inevitable consequence of a system which permits the private ownership of the means of production; and if we decide, on a general view, that the advantages of this system outweigh its disadvantages, then we must just put up with some of its incidental drawbacks. Rent is one of these. We cannot get rid of it without uprooting the system itself, just as the tares in the parable could not be removed without destroying the good grain. This, then, must be our verdict. Considered in isolation, rent cannot be justified. But considered as an integral part of a system which is otherwise good, and which could not survive if it were removed, an effective apologia can be made for it.

Theory of Rent.—Having now said something of rent as a special class of income, let us go on to consider why some rents are bigger than others. The classic

explanation of this was given by Ricardo in his *Principles of Political Economy and Taxation* (1817). Rent, he declared, is due to differences in the fertility of different portions of land. When a new country is first settled, no rent is paid, because there is land and to spare for every one. As fresh settlers pour in, the best lands are gradually occupied, and resort must be had to inferior soils. With every increase in the population, the margin of cultivation is pushed out until all the land, good, bad, and indifferent, is brought under the plough. It follows, then, that if wheat grown on the poorest land, the marginal land, can be marketed at a profit, wheat raised on the better lands must earn a surplus. Suppose in a country there are three qualities of land, A, B, C. On A the cost of raising a bushel of wheat and paying the farmer an adequate remuneration for his trouble is 10s.; on B it is 15s.; and on C 20s. If the demand for food is such that C must be brought under cultivation, then C is the marginal land, and the price must be sufficient to cover the cost of production on it. In other words, it must be 20s. a bushel. But in that case, assuming a competitive market in corn, wheat from A and B will also sell for 20s. a bushel. The A wheat will earn a surplus of 10s. on each bushel, and the B wheat 5s. To whom will this surplus go? It will go to the landlord, and will be called *rent*. So long as the demand for land exceeds the supply, competition among agriculturists for farms will transfer this surplus to the landowner. And if the growth of population pushes the margin of cultivation out further, then the landlord's rent will increase. If the

margin recedes, rents will diminish. These points can be illustrated by a simple diagram. Measure along OX successive portions of land of continuously diminishing fertility. (Let us assume that each point on OX represents an acre.) Then measure along OY (or along imaginary lines parallel to it) the cost of producing



a bushel of wheat on each acre of land. If M is the marginal acre, then the market price of wheat will be MP (the cost of production on M, including the farmer's legitimate profit). The total return for wheat grown on OM is OSPM. The cost of raising it is ORPM, leaving a surplus RSP which goes to the landlord as rent. The further M is to the right, the bigger will be MP and the larger the surplus RSP. If

M moves to the left, both MP and RSP will become smaller.

If this theory is correct, it follows (*a*) that the land on the margin pays no rent; (*b*) that rent does not enter into price, since that is fixed by the cost of production on the marginal land which pays no rent; (*c*) that rent depends on price, and not price on rent, so that the abolition of rent would bring about no reduction in price. These conclusions seem repugnant to common sense. It is inconceivable that the abolition of rent should have no effect on the price of food, and it is equally inconceivable that land used for any purpose should not pay a rent. Land lying waste or derelict might give no return, but the Ricardian statement applies to land which is under cultivation. This is sufficient to suggest that the theory conceals some fallacy. Another difficulty is that Ricardo makes rent depend entirely on the different fertility of different kinds of land, from which it would seem to follow that if all the land in a country were of the same quality no rent would be paid, which is absurd. On this point Ricardo himself makes a curious and misleading statement. "If all land," he says, "had the same properties, if it were unlimited in quantity and uniform in quality, no charge could be made for its use." * Ricardo's common sense seems to have deserted him here. Why did he add the phrase, "if it were unlimited in quantity"? Of course, if land is unlimited in quantity it will pay no rent no matter what its

* *Principles of Political Economy and Taxation* (Gonner's edition), pages 46–47.

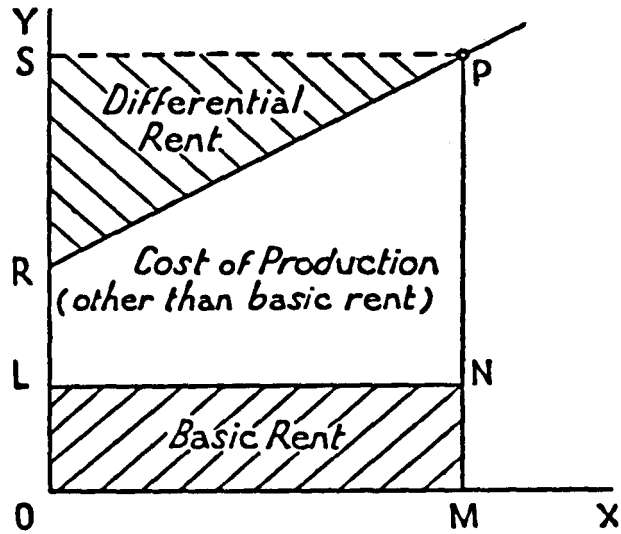
fertility. What we want to know is whether land which is both scarce and uniform in quality will pay rent. Common sense says it will. The Ricardian theory says it will not. Here is another contradiction which suggests a flaw in the argument somewhere.

The mistake is easily explained. Ricardo failed to realize that his theory accounted only for the *differences* in rent payable from different lands, and omitted all consideration of what we may call the *basic rent* paid by all lands, and paid by all lands at the same rate, since it is a payment for the bare soil, apart from any special advantages it may possess of fertility or situation. The amount of this basic rent will depend on the relative scarcity of land as compared with the three other agents of production. All land which is used for any purpose must earn this basic rent, but the better lands will earn an additional *differential* rent. The diagram on page 168 must be altered to the following to make it conform with the facts.

The return from wheat grown on OM is OSPM; the cost of production is ORPM, which includes the basic rent OLMN. The differential rent is RSP. We see at once that the deductions from Ricardo's theory mentioned on page 169 are only true of differential rent. Basic rent, on the other hand, enters into price, is an element in cost of production, and is paid by the marginal as well as by all other lands. Its abolition would make prices lower. In this amended form the theory of rent conforms much more closely with reality. Its air of paradox disappears. The bewildering statements that land in use pays no rent because it is

on the margin, and that a reduction in rent would not reduce prices, are shown to be only partially true. They hold good of differential but not of basic rent.

Urban Rents.—Hitherto we have been speaking as if land were used only for the purpose of corn-growing.



But land may be devoted to many uses. It may be used to raise crops, or to rear cattle, or to breed sheep, or to erect buildings on. To these various uses it will be applied according as it gives the highest return. In the later nineteenth century much corn land in England was converted into grass, because, owing to the drop in the price of cereals, pasture farming paid better. And as cities extend their boundaries, arable land is

converted into building sites, which command higher rents. It is said that the extension of the London Tube to Golders Green in 1927 sent up the value of land in the district from £200 to £3,000 an acre. Within each class of land the law of rent holds good. Thus with building land, sites near the centre of a town have the greatest advantages and earn a differential rent. This differential rent decreases the farther we go from the centre until we reach the marginal building land, which pays only basic rent. As the margin moves outwards or inwards, so do ground rents go up or down. The effect of pushing out the margin may be counteracted in two ways, (*a*) by building high, as in New York; (*b*) by improved methods of transport, which diminish the drawback of distance from the centre and reduce the differential rents that can be earned by central sites.

Rent and Progress.—In a progressive society where population is increasing the share of the national income absorbed by the landowners tends always to become greater. This was noticed by Ricardo. With the continuous extension of the margin of cultivation, owing to the increased demand for food, differential rent constantly grows larger. At the same time, food becomes dearer owing to the necessity of taking inferior soils into cultivation, so that the labouring class must receive higher monetary wages. These higher monetary wages come out of the profits of the farmer and the manufacturer and reduce their profits. Swollen rents, shrinking profits, and stationary or falling real wages were, in Ricardo's opinion, the inevitable

accompaniments of progress. The whole advantages of economic improvement were absorbed by one class—the landowners. In a sharper form this theory was restated by the great American land reformer Henry George. "Land," he said in his famous book, *Progress and Poverty* (1879), "being necessary to labour and being reduced to private ownership, every increase in the productive powers of labour but increases rent and the price that labour must pay for the opportunity to utilize its powers; and thus all the advantages gained by the march of progress go to the owners of land, and wages do not increase" (page 200). George proposed to remedy this by taxing rent, in order to secure for the state the surplus hitherto absorbed by the landlords. The revenue from this source would, he held, be sufficient to meet all the expenses of government, and so all other taxes could be abolished. The state budget would only include one tax, a *single tax* on land.

The Georgeist thesis is only true with certain qualifications. If the land of any country were owned entirely by one man, he might, under the existing land laws, extract from his fellow-citizens all the fruits of their toil except what was necessary to keep them alive. Or a combination of landowners might do this. But land is never a complete monopoly in this sense. Its ownership is divided, and competition among the separate landowners saves society from the ruthless exploitation pictured by Henry George. Rents do not always show an upward tendency. Sometimes they move downwards. In Britain, for example, dur-

ing the later nineteenth century, agricultural rents fell owing to the competition of corn from the virgin lands of the New World. Nevertheless occasions do occur when landowners are able to levy a heavy toll on producers. In nineteenth-century Ireland, land was so scarce in proportion to the demand for it, and rents so high, that the peasantry were reduced to a starvation diet. And in large cities the rise of land values has put huge fortunes into the pockets of ground landlords. In the City of London the rateable value of an acre of land rose from £760 in 1801 to £5,300 in 1881. In New York a site that could have been had for nothing when the first Dutch settlers arrived in 1623 was valued in 1911 at 20,000,000 dollars. These enormous increases are due not to anything done by the ground landlords themselves, but to the activities of the producers who live in these towns. The possession of sites enables the ground landlords to extract a certain portion, often a very large portion, of the wealth created by those actively engaged in production. Some famous fortunes have had their origin in this way: those of the Dukes of Westminster and Bedford in this country, and of the Astor family in America. In some countries attempts have been made to recover for the state the "unearned increment" in the value of land which is due to the general progress of society. Taxes on land values have been tried in Germany, Denmark, Australia, New Zealand, and Great Britain. The British land taxes, instituted in 1910, were abolished in 1920 on the ground, as alleged, that the cost of collection exceeded the receipts.

Interest

The General Rate of Interest.—Interest is the payment demanded by capitalists for the hire of their capital. Differences in the actual rates charged on loans are usually capable of fairly simple explanations. They can be accounted for by such things as: (*a*) the length of the period of the loan. Other things being equal, the interest payable on short loans is less than when the money is lent for a considerable period. The low rates prevailing in the money market are an example. (*b*) Risk is a second factor which accounts for differences in interest. If there is a chance that a loan may not be repaid, the rate of interest demanded will be higher, the difference being really an insurance premium against the danger of loss of the capital. South American republics with a long record of moratoriums and repudiations have to pay dearly for loan accommodation. (*c*) In what is called interest, there are often included payments of a totally different kind. Professional moneylenders like bankers and pawnbrokers have to cover their administrative expenses out of the interest rates they charge. (*d*) Frozen capital, *i.e.* capital tied up in decaying businesses must necessarily earn less than the current rate. (*e*) Exceptionally high interest rates may be due to the exploitation of helpless borrowers by unscrupulous moneylenders. In the Middle Ages the Jews charged 2d. weekly in the pound, or 42 per cent. The modern usurer is not a whit less rapacious, and if he gets a victim into his clutches may

strip him of everything he possesses. This, of course, is nothing less than legalized robbery, and in most countries the law has had to afford some protection to poor debtors. The British Moneylenders Act (1900) empowers the courts to cancel moneylending contracts where the conditions are harsh and unconscionable.

If, however, we make allowance for the influence of these different factors, a *general rate* of interest emerges which at any particular time is the same for all capital, though it may vary from period to period. Changes in conditions affecting the demand for capital and the supply of it will alter the general rate of interest. Influences affecting the supply are such things as (*a*) the general output of wealth in a country; (*b*) the saving habits of the people; (*c*) the existence of institutions like banks which look after savings; (*d*) the security enjoyed by capital from war and revolution, predatory taxation, currency depreciation, etc.; (*e*) the equal or unequal distribution of wealth, much saving (some authorities think most) being done by people with incomes so large that they cannot help saving. On the side of demand the most important factors are (*a*) the needs of the business community; (*b*) the demands of the government. The borrowings of the business community are heaviest when trade is brisk, and the prospect of making profits fairly bright. In seasons of depression the demand for loans falls off. The government's needs depend mainly on whether it is at peace or war. Military expenditure has been the great source of national debts. Indeed, governments seldom borrow for any other purpose.

The general rate of interest is fixed by the interaction of these different factors. During the second half of the nineteenth century, owing to the plentifulness of capital, interest fell to 2½ or 3 per cent. It began to rise about 1897, and the rise was accelerated by the Great War, during which the heavy borrowings of governments and the destruction of much material capital by military and naval operations sent the rate up to 5 per cent. Since about 1932 the rate has fallen back to 3½ or 3 per cent.; the reasons being, first, that the wastage of capital during the war has been largely made good; and second, that the demand of the business community for loans has considerably shrunk owing to the trade slump. A low rate of interest is always preferable from the social point of view to a high rate. It reduces the proportion of the national income that goes to non-producers, lightens the burdens of those engaged in wealth production, and facilitates the launching of new enterprises. At one time economists held that the movement of interest would always be in a downward direction, but the experience of the war period administered a rude shock to this belief. Nevertheless it is consoling to know that, in the view of experts, low interest rates are likely to prevail for another generation or so.

Justification of Interest.—For interest there is the legal justification that exists in the case of rent. The law allows the private ownership of capital; the demand for it exceeds the supply; and therefore its possessors can make a charge for its use. But this is not sufficient for us. We want some vindication of interest from

the economic point of view. Theories that profess to provide this are fairly plentiful. Let us glance briefly at some of them. One theory bases its defence of interest on the *productiveness* of capital. Capital is wealth that produces more wealth. Part of this created wealth should go by right to its owner. But how, we must ask, does capital produce more wealth? Only by the application to it of *labour*. By itself capital produces nothing. A hammer or a saw, a machine or a locomotive, are inert pieces of matter until human energy and brains stir them into life. It is true that capital enables labour to produce more wealth, and therefore producers are prepared to pay the capitalist for the use of it. But this is simply harking back to the legal justification of interest. It is not providing any economic defence for it. An economic justification of interest is only possible if we can show that its non-payment would react unfavourably on production, and, as we saw in the case of rent, it is exceedingly difficult to prove this for any form of unearned income. Attempts, however, have been made to show that interest is not unearned income. Interest, it is alleged, is payment for *past labour*, and is therefore on quite a different footing from rent. Capital, unlike land, is the creation of human effort, and interest is a legitimate reward for this effort. It is the equivalent of wages paid in arrear. Little discernment is required to detect the fallacy in this argument. By all means, if I create wealth, I am entitled to consume it, now or later. This is not in dispute. But what we want to know is why the mere possession of wealth should

entitle me to an unearned income in perpetuity which, if added up, will amount to far more than the wealth originally created. If I make £1,000 and put it out to interest at 5 per cent., I draw £50 a year. If I live another thirty years I shall have drawn £1,500. But I only created £1,000. On what ground do I base my claim to the additional £500 and all the further interest payments which I and my descendants will draw? Certainly not on the ground that the wealth was created by my labour. But, it may be said, if I had kept my £1,000 I could have used it myself to create more wealth. I have surrendered this opportunity to another man, and therefore I have the right to share in his gains. This is perfectly reasonable if it is true, *i.e.* if I could have used the £1,000 if it were left in my possession. But of how many capitalists does this hold good? How many of them would know what to do with their capital if it were flung back on their hands? Would the spinster living off her dividends, or the millionaire's sporting son, or the denizen of Mayfair, or the pleasure-seeker at Monte Carlo? We must try another line. Interest, it is maintained, is the reward of *saving* or *abstinence*. To this there are two objections. First, much saving is done by people who have larger incomes than they can possibly consume if they tried. It therefore entails no sacrifice or abstinence on their part. Second, even if this were not so, the reward of saving is the right to consume when convenient the *capital saved*, not the right to enjoy an unearned income in perpetuity. If I curtail my consumption and save £1,000, I am en-

titled to consume that £1,000 at the time convenient to me, but not to consume more than the £1,000. I am not entitled to go on consuming £50 a year after the £1,000 is exhausted. If I do I cannot justify my consumption on the ground that I am consuming wealth that I have saved. It might, however, be argued, that even if unwarranted on other grounds, the payment of interest encourages saving and promotes the accumulation of capital, and is therefore economically justified. If this could be proved it would be the nearest approach to an economic vindication of interest that economists have so far devised. But the truth of the proposition is doubtful. Few people save for the sake of interest. They save either because owing to the size of their incomes they cannot help it, or because they wish to have a capital sum in reserve for emergencies. Both these kinds of saving would go on though not a penny of interest were paid. As has often been pointed out, if we assume that people save for the sake of interest, a reduction in interest rates would stimulate saving, since, to obtain the same annual income, a greater capital sum would have to be accumulated. In the same way, if interest were abolished, people who wanted to live off their savings would have to live off their capital, and would therefore have to save more to begin with.

In conclusion let us note briefly the ingenious defence of interest advanced by the Austrian school, to whom we owe the utility theory of value. In their view, interest is a compensation for the loss which the lender undergoes by sacrificing a present good to a

future one. He gives, say, £100 now in return for a promise of £100 a year hence. But this is not a fair exchange, because £100 now has more value in our eyes than £100 a year hence, on the principle that a bird in the hand is worth two in the bush. To take an extreme case, the reader need only imagine which he would prefer, £50 to-morrow or £1,000 a century hence. Accordingly, to make the bargain between lender and borrower a fair and equal one, the latter must undertake to pay back £105 for the £100 received, the additional £5 being the sum required to make £100 a year hence equal to £100 now. To this over-subtle theory many objections could be offered, but one will be sufficient. Suppose we shift our viewpoint from the date at which the loan is contracted to the date at which it is paid. We observe the debtor paying back £105 and we ask, what for? For £100 received a year ago, we are told. But, we might argue, emulating the subtlety of the Austrians, that was twelve months past. Viewed across the stretch of time, the £100 received cannot have the value of £100 now, still less of £105. At most it is only worth £95. Why, then, should the debtor not get a discount instead of being called on to pay interest? The reasoning is as logical in the one case as in the other. The two-edged weapon forged by the Austrians may be used alternatively to defend interest or to condemn it.

Our search for a direct economic justification of interest must in the end be pronounced fruitless, and, as in the case of rent, we are driven back on the argument of general social utility. Interest is unavoidable

under a system which permits private property in the means of production. Unless we are prepared to condemn the system altogether we must be prepared to put up with this unfortunate but inevitable consequence of it. This is not a very satisfactory defence of interest, but it is the only one possible. As already observed, it is not easy to find an *economic* justification for any form of *unearned* income.*

* It is interesting to recall that the taking of interest was forbidden to Christians in the Middle Ages. A similar prohibition was inserted in the Koran, and is still observed by devout Moslems.

XIII

WAGES AND PROFITS

Wages

The Wage System.—Wages and salaries are the remuneration of human effort, manual or mental, applied to the creation of wealth. The historical process which divorced the worker from the means of production and turned him into a hired labourer cannot be investigated here. It must suffice to say that, owing to the immense development of mechanical production during the last two hundred years, the *independent producer, i.e.* the worker who himself owns the land and capital necessary to the creation of wealth, has become a rare figure, only to be encountered in the by-ways of economic life. The country blacksmith or cobbler, the jobbing tradesman or gardener, the peasant proprietor or the coble fisherman, are surviving examples of an economic status which was once enjoyed by nearly all workers. Other examples are to be found in the liberal professions, where the material equipment required is small and most importance attaches to brains or skill. The doctor, the lawyer, the novelist, and the free-lance journalist do not work for wages. They sell their knowledge and talents for

money. But these are exceptions. The vast majority of producers to-day have nothing to rely on but their brains, their manual skill, or their physical strength, and must hire these out to the owners of material wealth. In other words, they must accept the dependent position of wage or salary earners.

Differences in Wages.—The chief reasons why some workers earn more than others are clearly and succinctly set forth by Adam Smith. "The five following," he says, "are the principal circumstances which, so far as I have been able to observe, make up for a small pecuniary gain in some employments and counterbalance a great one in others. First, the agreeableness or disagreeableness of the employments themselves; secondly, the easiness or cheapness, or the difficulty and expense of learning them; thirdly, the constancy or inconstancy of employment in them; fourthly, the small or great trust which must be reposed in those who exercise them; and fifthly, the probability or improbability of success in them." *

Adam Smith illustrates these points by some interesting examples. "The trade of a butcher," he says, "is a brutal and an odious business; but it is in most places more profitable than the greater part of common trades. The most detested of all employments, that of public executioner, is, in proportion to the quantity of work done, better paid than any common trade whatever." Lawyers and physicians, on the other hand, receive substantial incomes because of the high degree of trust that must be reposed in them and

* *Wealth of Nations*, vol. i. page 115.

because of the long and costly training which these professions demand. The comparatively high wages of masons are explained by the irregularity of their employment. And finally, the successful barrister's £20,000 a year is justified because "in a profession where twenty fail for one that succeeds, that one ought to gain all that should have been gained by the unsuccessful twenty." The conclusion to which all this leads up is that the *net advantages* of different occupations are everywhere the same. Where wages are low, they are compensated for by the agreeableness of the occupation, the ease with which it is learned, the rarity of unemployment, or the assurance of a steady income. Big wages or salaries, on the other hand, involve a costly training, the acceptance of heavy responsibilities, and the danger of total failure. If everything is taken into account, no one profession is better than another. The youth starting life can take his choice; a small income with security and an easy time, or a big salary with strenuous toil and nerve-wracking anxiety.

But this optimistic reasoning only holds good (as Adam Smith himself was well aware) if we presuppose a state of perfect competition. And perfect competition implies many things which are not present in existing society. It implies, for instance, mobility of labour. If the net advantages in one particular occupation are unexpectedly multiplied beyond what is accounted for by the factors in Adam Smith's enumeration, then labour ought to flow into it from other trades until the competition of these fresh labourers restores the balance of advantage between

this and other occupations. But this will only take place slowly over very long periods. Young persons will be trained for the favoured trade in preference to other trades. But workers of mature age will find it impossible to change their occupation. Hence for a time the workers in the favoured trade will enjoy a partial monopoly and profit accordingly. The following is Adam Smith's example: "In time of war, when forty or fifty thousand sailors are forced from the merchant service into that of the king, the demand for sailors to merchant ships necessarily rises with their scarcity; and their wages, upon such occasions, commonly rise from a guinea and seven-and-twenty shillings to forty shillings and three pounds a month. In a decaying manufacture on the contrary, many workers rather than quit their own trade are contented with smaller wages than would otherwise be suitable to the nature of their employment." * Of this latter condition the heavy industries have in recent years provided many illustrations.

Another circumstance which impairs the working of free competition is the absence of equality. All producers do not get an equal start in life. A working-class lad cannot say to himself, "I may become either a bricklayer or a barrister. Hence all I have to settle is whether I prefer to start earning a small wage straight away or else earn nothing for ten or fifteen years with the prospect of making a big income afterwards." He has no such choice. He may become a bricklayer, but his chances of being called to the bar are infinitesimally

* *Wealth of Nations*, vol. i. page 127.

small. The expense of training for this profession is prohibitive to one in his financial position. Thus the members of professions which involve a heavy outlay in training and education enjoy a *partial monopoly*, which largely explains the big incomes they draw. A doctor earns more than a teacher, because entry to the scholastic profession is not so difficult as to the medical. A teacher, on the other hand, earns more than a plumber because it is easier to become a plumber than a teacher. This monopoly element in wages and salaries must be emphasized. There is a popular notion that the large salaries earned in certain professions can be accounted for entirely by the expensive training which is necessary to qualify for them; that if we added up the earnings of an attorney and a taxi-driver over their working lives, and deducted in each case the cost of the training involved, the result would be the same. This is a complete error. The attorney would still earn more, and the difference would be accounted for very largely, and in some cases altogether, by the partial monopoly which he enjoys through the restrictions on entrance to his profession.

Finally, we must never lose sight of the large part which custom and convention play in the fixing of wage and salary rates. We all accept it as perfectly reasonable that a bishop should be paid more than a scavenger, but if suddenly called on to justify our opinion we might find ourselves a little tongue-tied. The truth is that certain professions are considered entitled to a larger remuneration than others on grounds which are not strictly economic. The old

mediæval idea lingers on that men are naturally divided into classes, and that there is a standard of living appropriate to each class to which the remuneration obtained by its members must conform. At almost every point in the social scale this influence can be detected. Skilled artisans regard themselves as belonging to a better class than unskilled labourers. They consider they are entitled to a higher standard of living, and resent when the gap between the two labour grades is made narrower. Before the war an English manufacturer found that certain labourers in his employ were earning only 18s. a week. Considering this less than a living wage, he raised it to a guinea; whereupon a section of machinists earning 27s. 6d. a week, who had previously had no complaint, immediately put in a claim for an equal advance. Amongst the lowest class of workers, according to an American Commission, "wages are mainly the result of tradition and slight competition." This point must always be kept in mind when trying to account for the pay received by any particular class of workers. Economic considerations may not provide the whole explanation. Some allowance may have to be made for the influence of custom and convention.

Theories of Wages.—In the last section we were concerned with the factors that explain differences in the remuneration earned by different trades and professions. We now proceed to the more fundamental problem of what determines labour's share in the national wealth, in contrast to what is obtained by the other three agents of production. We may call this

the problem of *basic wages*. Basic wages should be the same for all kinds of labour, just as basic rent is the same for all kinds of land. It is the payment for bare labour, apart from any extra remuneration which the labourer may get as a reward for special skill, or as a compensation for special disadvantages attaching to his profession, such as irregularity of employment.

On this subject a number of famous theories have been elaborated which are worth considering, both for the influence they exercised over contemporaries and for the grain of truth which each of them contains. The oldest is the *subsistence theory* (sometimes referred to as the *iron law of wages*). It is stated by Ricardo as follows: "The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race without either increase or diminution." * Monetary wages may vary with the cost of living, but the labourer's *real* wage, *i.e.* the quantity of goods and services which he can buy with his money wages, will always remain the same, and will be just sufficient to keep him strong and healthy enough to do his work. Wages cannot rise above this subsistence rate, because if they did population would increase and competition among the additional labourers would bring them down again. At the same time they cannot fall below the subsistence rate, because this would lead to a decline in the birthrate, and the scarcity value of labourers would force wages up again.

* *Principles of Political Economy and Taxation* (Gonner's edition), page 70.

The vulnerable point in this theory is the automatic connection it assumes between wages and population. It is simply not true to say that a rise in wages will immediately increase the numbers of the labouring class. It might quite well be that the improvement in their standard of life might lead them to restrict the size of their families, as has occurred in the middle class. Further, facts do not confirm the implication that the labourer's wages cannot rise above subsistence level. During the last hundred years there has been a steady increase in the numbers of the working-classes in all countries, and yet this has been accompanied by a continuous rise in real wages. Fundamentally, then, the theory is erroneous, yet it does contain an element of truth. The general rate of wages cannot fall below what is necessary to keep the labourers physically fit to do their work. And, moreover, it cannot easily fall below what the workers feel they are entitled to as a minimum wage. This minimum wage varies with the cost of living, the state of opinion among the working-class, and the standard of living which they think they have a right to demand. But there is always at any time some such minimum which imposes a real limit to reductions in wages. Rather than take less the workers will fight desperately, and only yield when they have exhausted all the resources of opposition in their power. On the other hand, once the minimum is safe the labourers will bargain easily about any payment in excess, and often give larger proportionate quantities of labour for the same money when it is merely a question of bonus additions to the

wage they regard as essential. In this restricted sense, then, the subsistence theory is true. There is at any time a limit beyond which wages cannot be reduced at all without impairing production, and another limit beyond which they can only be reduced with difficulty.

A second famous explanation of wages is what is known as the *wages-fund theory*. At any particular time, it is alleged, there is a given amount of capital in a country which is unconditionally devoted to the payment of wages. This capital sum is the *wages fund*. The general rate of wages depends on the ratio between this fund and the number of labourers. If in any week the fund is £10,000,000 and the number of labourers 5,000,000, the general rate of wages will be £2 a week. If the number of labourers is 10,000,000 the rate will be only £1 a week. In the middle years of the nineteenth century this theory, as expounded by J. S. Mill and others, enjoyed extraordinary prestige. It was used to prove that trade unions were futile organizations without the slightest power to raise the rate of wages. Wages could only be raised in two ways, through an increase in the wages fund or a decline in the number of labourers. Strike action could have no effect on either of these factors. It was true, a strike might win for the labourers in a *particular* trade an increase in wages. But this was only because workers in other trades would have to take less. The wages fund would be unequally divided. What strike action could not bring about was a *general* rise in wages. Somewhat curiously, contemporary trade

unionists accepted this theory, opposed as it was to their own interests, and tried to behave as the economists told them. They seldom resorted to strikes, and since they could do nothing to increase the size of the wages fund, they concentrated on the one method open to them of raising wages, namely, reducing the number of labourers among whom the wages fund was divided. Hence they encouraged emigration and restricted entry to skilled trades by apprenticeship regulations.

The wages fund theory is true to this extent, that the amount of capital in a country is one factor determining the demand for labour and therefore the rate of wages, since without capital labour cannot be employed. But it is a complete mistake to say that there is a fixed amount of capital *unconditionally* devoted to the payment of wages. The capital expended in wage payments is a variable quantity. Each employer considers whether it would pay him better to buy machines rather than to hire labour, and his decision will depend on the comparative cheapness of machine as opposed to hand production as well as on a multitude of other factors. Thus, though there is certainly a connection between capital and wages, the relationship is not the precise one that is assumed in the wages-fund theory.

A third and very attractive explanation of wages makes them depend on the productivity of the worker. The *productivity theory* states that the labourer gets in wages exactly the amount of wealth he produces, in accordance with Adam Smith's dictum that "the produce of labour constitutes the natural recompense

or wages of labour." * Here again we have a theory which is at least partially true. There must be some connection between wages and productivity. No employer will pay a worker more than he produces, and the more the labourer produces, the more, other things being equal, will his wages be. But can we assert that the labourer will get the whole produce of his labour? Adam Smith did not think so. Once land and capital become private property, he pointed out, property owners are able to levy toll on producers and deprive them of part of the fruits of their toil.† Socialist writers go further and maintain that the worker is deliberately robbed by the capitalist, who strips him of everything except a bare livelihood. This is the conclusion of Marx's *theory of surplus value*, according to which the labourer creates by his labour more value than he receives as wages, the surplus being retained by the employer as profit.

Even if we do not take this extreme view it is difficult to see how the labourer can receive the full produce of his labour and yet leave the employer with a profit. One suggested explanation is that the labourers collectively, through division of labour, produce more wealth than they could do if each worked in isolation. Each worker gets in wages what he would have produced if working alone, but the employer keeps for himself the additional wealth which the labourers produce through their co-operation with each other, this co-operation being due to his activities

* *Wealth of Nations*, vol. i. page 71.
† *Op. cit.*, vol i. page 72.

as an organizer. Another explanation brings in our old friend the *margin*, which we have already come across in connection with the doctrine of rent and the utility theory of value. After a certain point, it is said, every additional labourer taken on by an employer adds less and less to the value of the total product. A, we will suppose, adds £10 a week, B only £8, C £5, D £2. Now if D is to be employed he must be content with £2 a week which is all the value he adds to the total product. But if D is paid £2, A, B, and C must accept £2 also since they are all indistinguishable from D in the labour market. If D adds less than A, B, C to the total product it is not because he is less efficient but because he is the last labourer to be taken on. His place might quite well have been occupied by either A or B or C. He is the marginal labourer, and it is his productivity that settles the wage rate. If wages are fixed higher than £2, then one labourer will not be employed, and his competition with the other labourers for a job will inevitably drive down the wage rate (assuming that there is no combination among the labourers). Thus it is not the productivity of all the labourers or of the average labourer that settles the wage rate, but the productivity of the marginal labourer. In this form the theory loses much of its attractiveness. It set out to prove that competitive wage rates were just rates, that the labourer gets exactly what he produces. What more could he demand? But it now appears that only the marginal labourer gets what he produces. All the others produce a surplus which is collared by the employer. We are

disagreeably reminded of the Marxian theory of surplus value. There is, however, a slight difference between the two theories. According to Marx, the employer robs all his workers without exception. According to the marginal productivity theory, he robs them all except one.

It cannot be said that our search for a general theory of wages has issued in anything very satisfactory. All the theories we have examined contain an element of truth, but in every case the truth is plentifully diluted with error. We shall be safer to confine ourselves to the broad general statement that the rate of wages depends on two things: first, on the larger or smaller size of the national dividend; secondly, on the greater or less bargaining power of labour as compared with the other three agents of production. The most important factor that determines bargaining power is scarcity. In a new country, where land is abundant and population sparse, wages are high. In a densely populated old country, where labour is more plentiful than capital, wages tend to be low. There is not much to improve on Cobden's pithy statement that when two masters run after one man, wages rise; they fall when two men are running after one master. The latter is the more normal condition. "Labour is the only factor of which the supply generally and permanently exceeds the demand" (J. A. Hobson). Hence the constant weakness of labour in its age-long contest with capital.

It has, however, to be noted that a scarcity of labour may be artificially created. This happens when

trade unions combine the workers and withdraw their labour by a strike. In this way a rise in wages is often obtained which the labourer bargaining by himself would be powerless to secure. The nineteenth-century belief that trade unions cannot affect the rate of wages is absurd. Trade unions strengthen labour's bargaining power and enable it to command a bigger slice of the national dividend. It is true that there are limits to the power of trade unions to raise wages. If wages encroach too much on profits the accumulation of capital may be arrested and the demand for labour will fall off. But, within limits, there is no question that trade unions can raise and have raised the rate of wages.

Profits

Nature of Profit.—We now approach the last great division of the national income. Profits are the reward of the business man, the employer, the organizer of production. The pivotal importance of this class has already been noticed. They not only organize industry. They distribute to the other agents of production their share in the national dividend. What is left after land, labour, and capital have been paid is kept by the organizer for himself and is called his profit. It is arrived at by deducting the total costs of production from the total receipts of any business. Of what does this surplus consist, and what right has the employer to retain it?

Firstly, it should be noticed that the surplus may

comprise elements which are not profit in the strict sense. It may consist partly, for instance, of rent and interest. If the employer owns the land and the capital required for his business he is entitled to some payment for them. If he had hired them out to other people he would have been paid for them. If he had had to hire them from somebody else he would have been compelled to pay rent and interest for them. Not having to make these payments, his surplus at the end of the year is all the bigger, but it has been swelled by elements which are not properly profits. The portion of it which consists of rent and interest must be deducted before arriving at the reward which the employer gets as the organizer of his business.

Another alien element is what the economist describes as *compensation for risk*. There are serious risks associated with production under modern conditions, danger of loss of income or of capital, and the producer has to provide against them. He might take out a policy with an insurance company, though the premium would be heavy if he wished to protect himself against all the risks of his business. Business men hardly ever do this, but the economist holds that part of their surplus should be reckoned as the equivalent of this premium, which they might use in the way described or apply to the building up of a reserve.

At last, having stripped profit of all these accretions, we are left with the payment which the business man receives for his work as an organizer, which is profit in the proper sense. In the majority of cases, as we have observed, the organizer pays himself. His re-

muneration is a residue ; what remains after the other agents of production have been paid. But occasionally the organizer of production is a paid servant. In a joint-stock business the manager or managers receive fixed salaries, which are reckoned as part of the cost of production. The annual surplus, if any, is divided among the shareholders. How far they are entitled to this is a matter for discussion. Shareholders can claim interest on their capital and an additional payment as compensation for the risk of losing it. But since they take no part in the work of organizing the business it is difficult to see how they are entitled to any further payment. If they do get more they must be getting something which should go by right to the salaried organizers of the company.

Differences in Profits.—At any particular period we can assume that there is a current rate of profit which depends on the relative scarcity of organizing ability as compared with the other agents of production. But many business men earn more than this basic rate. To what must we ascribe these differences ? First, to the possession of exceptional talents for business organization. If one shoe manufacturer can, owing to his superior organizing ability, produce shoes at 10s. 6d. a pair, whereas his less skilful rival can only produce them at 15s., then the first manufacturer will make a surplus profit of 4s. 6d. on each pair. If the demand for shoes is such that the output of his rival is needed as well as his own, then the public must be prepared to pay 15s. a pair, to cover the cost of production in the less efficient factory. The shoes of the more

skilful manufacturer can be sold at the same price, and each pair will earn a surplus profit. Owing to its resemblance to rent, this surplus profit is often spoken of as *quasi-rent*. It comes about in the same way as differential rent (see pages 167–8). The price of shoes is fixed by the cost of production in the least efficient or marginal factory. Shoes produced in more efficient factories sell at the same price, but since in each case the cost of production is less than at the margin, each earns a surplus. Quasi-rent, however, is less permanent than the rent of land. The amount of fertile land cannot be increased, but an efficient producer can expand his business, cut prices, and drive his rivals out of the field. Thus differential profit will disappear. But so long as there are producers of different ability engaged in supplying the public demand, so long will the more efficient producers be able to pocket a surplus profit.

The second factor which explains differential profits is monopoly, total or partial. The extent to which monopoly permeates the modern economic system is seldom fully realized. Apart from complete examples of monopoly such as trusts and cartels, the whole economic field is overrun with restrictions on the free working of competition. The number of producers with an artificial advantage of some sort is amazing. A shop may have a superior site which attracts the wealthiest customers, or it may have acquired a reputation for fashion which enables it to charge higher prices than its competitors for the same quality of goods. As a result of skilful advertising a patent food or medicine may come to be preferred by the public before com-

peting articles which are as good or better. A wholesale merchant may secure control of a supply of goods which are limited in quantity but for which a sudden demand has sprung up, *e.g.* mourning goods on the death of a monarch. One could multiply endlessly examples of these petty and often transient monopolies which, while they last, give producers a chance of plundering the consumer. The public would certainly be shocked if it knew how much is taken out of its pockets annually by dealers exploiting a natural or artificial condition of scarcity.

Is Profit justified?—For profit which is the reward of organizing ability no defence is needed. The business man is a worker, and as such is worthy of his hire. Whether he is paid too much is of course a question that may be argued. Unfortunately there is no certain criterion that can be applied to a problem of this kind. Our ideas of what members of the different classes should earn are so largely conventional. The business man creates wealth, but he does not do it alone. The co-operation of other agents of production is necessary, and what share of the final product should be assigned to each is almost impossible to say. We might as well try to decide whether Cromwell or his Ironsides won the battle of Naseby. All we can say is that the organizer of industry produces wealth and is therefore entitled to some reward. But what constitutes a "fair" reward we have no means of judging. The socialist criticism of the present system is that it allows the employer to exploit his workers and bleed the community. It is probable, however, that the

supremely great organizers, the Vanderbilts and the Carnegies, the Rockefellers and the Fords, endow society with far more wealth than they retain for themselves.

For the other kind of profit due to monopoly no excuse can be offered. It is a clear case of exploitation of the consumer, and it must always be regarded as one of the defects of the present system that it makes such exploitation possible. However, it is difficult to see how this kind of profit can be got rid of without such a radical reorganization of society as would entirely alter its character. Monopoly profit must then be put in the same class as rent and interest. It is an unjustifiable form of unearned income which, however, cannot be got rid of without the destruction of an economic system for which in other respects there is a great deal to be said. On this ground it may be tolerated. By no possibility can it be directly justified.

XIV

A FINAL WORD

The Point of it all.—We have now reached the end of our rapid survey of economic theory. We have considered how wealth is produced, how it is exchanged, and finally how it is shared out among the producers. We have examined the working of the economic system as a whole and in its different parts. It now remains to take stock of our knowledge and try to estimate its value. Are we better off for the information we have acquired? Have we added any cubits to our intellectual stature? Or have we merely wasted our time absorbing the useless learning of the schools?

In his essay on *Studies* Bacon gives us a useful criterion for estimating the value of knowledge. "Studies," he says, "serve for delight, for ornament or for ability"; or, in modern phraseology, studies are valuable for the intellectual pleasure they impart; for show or ostentation; or for the assistance they give us in the practical duties of life. How does political economy appear, judged by these standards? Its usefulness for "ornament" need not be considered. No serious person studies a science merely with this object in view. It is the capacity of economics to fulfil the

two other requirements of knowledge that primarily interests us.

Of the potency of the science as a mental stimulant we have valuable testimony from an unimpeachable source. It was an economic treatise that roused De Quincey from a two years torpor due to opium. "In 1818," he wrote, "a friend in Edinburgh sent me down Mr. Ricardo's book.* . . . Wonder and curiosity were emotions that had long been dead in me. Yet I wondered once more—wondered at myself that could once again be stimulated to the effort of reading; and much more I wondered at the book. . . . Thus did one simple work of profound understanding avail to give me a pleasure and an activity which I had not known for years; it roused me even to write." † This is not the only instance where an economic treatise has profoundly influenced the career of a man of genius. In his autobiography Charles Darwin relates how it was through reading Malthus on Population "for amusement" that he had suggested to him the principle of natural selection in the struggle for existence. These are surely sufficient tributes to the power of political economy to stir the mental faculties and to afford the keen pleasure that accompanies their application to the discovery of truth.

Nevertheless the interest which leads the plain person to the study of economics will nearly always be of a more practical kind. The transcendental ideals

* *The Principles of Political Economy and Taxation*, published in the previous year.

† *Confessions of an English Opium Eater*, pages 255–56.

of the scholar and the scientist make small appeal to him. He has no sympathy with Browning's Grammarian. Not knowledge for its own sake, but knowledge for the use he can make of it is what moves him to take up the study of any subject. And his attitude is perfectly reasonable. As one of the men responsible for carrying on the world's work, he has no time for theory divorced from practice. If invited to acquire knowledge, he is entitled to demand that its practical utility be made plain to him. Of economics from this point of view, enough has been said in the opening chapter. The importance of the subject to the business man, the politician, and the citizen need not be restated. But perhaps a warning may be useful about some of the difficulties and dangers attending the application of economic knowledge to practical life. First, the reader must realize that the application of knowledge is always a harder task than its acquirement. The latter requires only industry and intelligence. The former demands an intuitive power of seeing into the heart of things and a faculty of translating thought into action, which are among the rarest endowments of mankind. These things cannot be taught, nor does the study of economics by itself confer them. The reader must not therefore be disappointed if his economic acquirements sometimes fail to supply immediately the key to economic enigmas. A theoretical knowledge of economics is an indispensable preliminary to the solution of economic problems. But it is no more than a preliminary. Strenuous mental effort is required to bridge the gap between theory and practice.

Another important point is that in the majority of cases economics supplies only part of the knowledge necessary for the solution of practical problems. Material considerations are not always paramount. Wealth may have to be sacrificed for some other object. In other words, a measure or a policy which would be condemned on economic grounds may be justified for social or ethical reasons. Protection is an example. Even if we disapprove of protection as an economic policy we might defend it as rendering the nation self-sufficing in time of war, or as saving from destruction a class like the peasantry which is essential to the welfare of the state. Thus even if protection makes us poorer it might be possible to argue in its favour from the point of view of social advantage. To say when economic considerations must give way to others of a different nature is not a question which the economist, as such, can solve. He can only say what the economic results of the policy or measure will be. He cannot weigh in the balance wealth and welfare, and say to which side the scale should incline. That is a question for the practical man and the citizen to determine.

More embarrassing still are the problems which arise when economic and ethical considerations come into conflict. The slave trade was an extremely lucrative branch of commerce to Great Britain, yet it had to be sacrificed in obedience to the dictates of Christian morality. No one would question the rightness of that decision now. Yet we can easily realize how difficult it is for nations as for individuals to adhere faithfully to ideal principles which involve an economic

sacrifice. Economic considerations are concerned with hard realities. On the other hand, the "categorical imperative" of what is ideally right cannot be evaded. Instinctively, of course, we hold that economics and ethics are not fundamentally divergent; that what is ethically right will also prove economically expedient; and we can quote such examples as slavery, which is now recognized to be indefensible from the economic as well as from the moral point of view. But this faith in a beneficent natural or divine order does not diminish the hard difficulties of the present or simplify the world's daily task of reconciling expediency with principle. On the ground that it is better to be an optimist than a pessimist, we are probably right to cherish the dream of a perfect social order in which all these difficulties will be resolved. But countless generations will leave their bones to whiten in the wilderness before that ideal goal is attained. Meanwhile our immediate task is clear. We must keep on ploughing the intractable soil of social and economic circumstance in order to wring from it what meagre harvest of betterment we can. In this contest with a stubborn material environment economics will prove an invaluable ally. It will teach us to distinguish between the good which is attainable and the better which is beyond our reach. It will give us that vivid sense of reality without which the ardent enthusiasms of the social reformer so often evaporate in futile imaginings.

FURTHER READING

USEFUL textbooks which cover the whole ground are: Gide, *Principles of Political Economy* (trans. Rowe); Clay, *Economics for the General Reader*; J. H. Jones, *Economics of Private Enterprise*; and Taussig, *Principles of Economics.*

Of books on special topics the following may be mentioned: PRODUCTION—H. D. Henderson, *Supply and Demand*; D. H. Robertson, *The Control of Industry*; Ashley, *Business Economics*; Myers, *Industrial Psychology.* MONEY—Withers, *Money* (Nelson Classics); Withers, *Meaning of Money*; D. H. Robertson, *Money*; Cole (Ed.), *What Everybody Wants to Know about Money.* BANKING—Leaf, *Banking*; Withers, *Bankers and Credit.* FOREIGN EXCHANGES—Spalding, *Primer of Foreign Exchange*; Goschen, *The Foreign Exchanges* (old, but still good). FOREIGN TRADE—Whale, *International Trade*; Beveridge (Ed.), *Tariffs, the Case Examined.* UNEMPLOYMENT—Hobson, *Economics of Unemployment*; Layton (Ed.), *Is Unemployment Inevitable?* DIVISION OF INCOME—Bowley and Stamp, *The National Income, 1924.* RECENT DEVELOPMENTS—Bowley, *Some Economic Consequences of the War*; Cole, *The Intelligent Man's Guide through World Chaos.*

Large standard works suitable for advanced students

are: Marshall, *Principles of Economics* and *Industry and Trade*; Pigou, *Wealth and Welfare* and *Industrial Fluctuations*; Cassel, *Theory of Social Economy*; and Keynes, *Treatise on Money*. But the plain person is warned that these are exceedingly stiff reading. Should he find these treatises too heavy, let him go back to the great classics of political economy—to Adam Smith's *Wealth of Nations*, J. S. Mill's *Principles of Political Economy*, Bagehot's *Lombard Street*, and Bastiat's *Economic Sophisms* — where the great basic truths of economics are expounded with a lucidity and a literary grace which are regrettably rare among the moderns. If he is afraid of going astray among these pioneers of economic thought, he will find safe guides in Gray's *Development of Economic Doctrine* and Price's *History of Political Economy in England*. Finally, to those who may feel curious as to how the present economic system grew up and developed, the author takes the liberty of recommending two of his own books, *An Economic History of the British Isles* and *An Economic History of Europe, 1760–1930*.

INDEX

INDEX

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