

IN INTRODUCTION TO ECONOMICS

# An INTRODUCTION to ECONOMICS

By

# MAURICE DOBB, M.A.

Lecturer in Economics in the University of Cambridge

SERVANTS OF INDIA SOCIETY'S BRANCH LIBRARY BOMBAY

LONDON VICTOR GOLLANCZ LTD 14 Henrietta Street Covent Garden

1932



# 64805

Printed in Great Britain by The Camelot Press Ltd., London and Southampt

# CONTENTS

I	Introductory page	; 7
II	The Rise of Political Economy	15
III	The Theory of Value	29
IV	Ricardo and Rent of Land	41 4
v	After Ricardo	49
VI	Marx and Surplus-Value	57
VII	The New Economics	67
VIII	Subjective "Real Cost"	85
IX	General and Particular Equi- librium	101
X	Economics as an Apologetic	107
XI	Conclusion	133
	Bibliographical Note	139

# AN INTRODUCTION TO ECONOMICS

## AN INTRODUCTION TO ECONOMICS

To define what Economics is about is considerably more difficult than most people think. Economic text-books have provided a number of definitions. " Economics is a study of man in the ordinary business of life." " Economics is a study of those motives and actions which are capable of being measured in money." But such definitions do not carry us very far. In inductive and experimental sciences a preliminary definition of scope is given (at least initially) by the nature of the material, although even here the frontier may be a vague and fading one : for instance, the frontier between Astronomy and Physics to-day. But since experiment in the social sciences is so restricted, Economics is primarily a deductive science,

9

## AN INTRODUCTION TO

which (like Geometry and Mechanics) deduces a series of conclusions from certain premises or assumptions : and in a deductive study it is necessarily the development of the concepts themselves which provides its boundaries. In such a case when different schools of thought exist, employing qualitatively different concepts, a satisfactory definition is hardly possible which includes them all. Each may be separately defined, and then the relationship in which each stands to the other may be expressed in terms of something wider. But a final and satisfactory answer can only really be given when qualitative differences have been reduced to a common term, viz., to common differences of quantity or number. This stage, however, is far removed as yet in a field so little charted as the social sciences; and for the present the most satisfactory way of defining Economics seems to be in terms of the type of question which it asks and seeks to answer,

and similarly to define the rival schools of thought in terms of the different questions they pose to themselves or of differences in the type of answer they afford. Much of the confusion which reigns in the field of Economics to-day is, I believe, due to failure to use this simple device. Much barren controversy-for instance between the classical economists and modern economistshas been staged with no issue but stalemate and confusion, because the contestants have failed to realise that each is engaged in answering a different set of questions-Ricardo or Marx, for instance, being concerned with certain aspects of the distribution of wealth between classes, Jevons or Pareto with the conditions of price-equilibrium on a competitive market. Much of the discussion as to the adequacy of a certain theory (say of wages or of profits) turns on whether it answers the questions it claims to when those questions are framed with a greater or smaller

degree of explicitness. More than one economist has launched his enquiry in quest of answers to certain questions, and then has proceeded to employ an apparatus of assumptions which essentially precluded those questions from receiving any answer.

It is the fashionable view to imagine that the early economists were the crude craftsmen of economic science who, working with inferior tools and experience, built their structure in an imperfect way, and that their modern successors have retrieved their errors and mistakes in a more finished and completer structure. Ricardo is said to have emphasised "only one side" of the problem (e.g., supply, not demand) : to have noticed only one set of the forces at work ; Adam Smith to have laid certain foundations (his enquiry into the causes of the wealth of nations) which needed the improved technique of a hundred years later to complete. Hence the concepts of classical economy are laid against

the concepts of twentieth century economic theory and directly compared, to the undoubted credit of the latter for their greater finish and perfection of detail. Where they differ (e.g. in their emphasis on cost of production as against utility as determinants of exchange-value), argument is conducted between them as though it were solely a question of differences of answers afforded to the same basic *questionnaire*.

This method of approach is fundamentally erroneous. At best it is a sufficiently partial view of the matter to cause more confusion than enlightenment; and any further progress in the subject seems likely to be seriously obstructed until an alternative critical approach is tried. It is a commonplace in Art to-day that the "Primitives" of the fourteenth and fifteenth centuries were not merely cruder craftsmen compared to the representational painters of a later date—in many respects they very obviously were not—

#### AN INTRODUCTION TO ECONOMICS

but that they were trying to do something that was qualitatively different. The Physiocrats and the classical economists are in a sense the "Primitives" of economic science. In some ways they may have had a less finished technique than their twentieth century descendants. But what is more important is that many of the concepts they used were different and that they were trying to answer a different set of questions in a different way : questions partly concerned with the distribution of income between classes, partly with the conditions of maximum economic progress. This fact is obscured because economists of to-day imagine themselves to be answering, and certainly claim to answer, many of the questions which their classical forebears set out to do. But, to a large extent, I believe that the apparatus which they use produces, in reality, solutions which are in fact appropriate to a quite different and more limited context.

# THE RISE OF POLITICAL ECONOMY

## THE RISE OF POLITICAL ECONOMY

POLITICAL Economy was cradled in those social economic and ideal changes which marked the transition in Western Europe to the new bourgeois epoch. In France and Germany the remnants of feudalism were ripe for abolition. The centre of gravity, economically and politically, was shifting in favour of the parvenu "third estate." In England the bourgeoisie had come into its own much earlier, and the bourgeois State, pursuing a commercial policy, had been established two to three centuries before. England had had her economic writers at that period-Thomas Mun, Locke and Sir William Petty-but they were concerned with detailed points of State policy rather than with creating a theoretical system. By the

Be

17

end of the eighteenth century a new section of the bourgeois class was coming into existence: a class of industrial capitalists whose interests were ranged against the existing system established in the combined landowning and commercial interests of the eighteenth century Whig aristocracy. But it was in France rather than England that the unified concept of an economic society as the subject for Political Economy first appeared. The French Physiocrats of the eighteenth century sketched the outline which Adam Smith filled out in his enquiry into the Wealth of Nations, and Ricardo developed in his analysis of the distribution of wealth.

Both France and England at this time witnessed a considerable ferment of new ideas, couched in the language of natural science, which since Bacon and Descartes was making steady conquests. In antithesis to the old authoritarian order, with its prescribed codes and sanctions, there was

placed the concept of a "natural order," which showed its hand only when man was unfettered and free, and which gave its sanctions to the popular will. In antithesis to authoritarian "divine right" was placed the "natural right" of the individual. It was in this framework that there developed the concept of an economic society. This economic society was still in the foctal stage, taking shape within the confines of a system of sanctions and prohibitions which had at first nurtured and now cramped its further development as an independent entity. Hence, in opposition to the authoritarian views of Mercantilism, which held that a commercial system only existed as such by virtue of detailed regulation by the State and would relapse into chaos without such control, Political Economy offered the conception of an economic order ruled by "natural law," which would "go by itself" if left to itself and would only produce the best

results if "natural law" were left to operate free and unfettered. The individual had a "natural right" to pursue his own self-interest, because in so doing by virtue of this "unseen hand" he thereby promoted the common good. To discover and postulate this " natural law " was the rôle of Political Economy; and "the advice to the sovereign" which it tendered was not how to regulate, but why not to regulate, economic affairs in order to promote the greatest wealth of the nation. And while the Physiocrats coined the slogan laissez-faire, laissez-aller (let do as you please, let go as you please), the English economists followed Adam Smith in expounding that imposing symmetry of economic harmonies which would come to birth if it were not suffocated and strangled by an unnatural degree of obstetrical attention. Political Economy, therefore, had its origin and derived its force as a direct apologetic of capitalist individualism.

An economic order ruled by "natural law" must possess a unifying principle. However complex and apparently arbitrary the phenomena, they must be explicable in terms of generalisations which hold together in a consistent logical whole. Science is not a matter of classifying everything in an arbitrary arrangement of pigeon-holes, or fitting it into a convenient card-indexing system, even if this be a necessary preliminary device. Its ultimate aim is to refer the maze of qualitative differences which meet the eye to a single common denominator. The Physiocrats were the first explicitly to conceive of the economic order in analogy with a natural organism; and the dominant analogy which presented itself was that economic society was a system of the circulation of wealth. What was the physiology of this process? The economic system was to human society what the body was to the

human personality-the physical basis for the growth of the higher functions; and the condition of social progress was that the economic system should be capable of yielding to the State and the ruling class the largest possible surplus on which the development of the State and of culture could thrive. Quesnay's famous Tableau Economique was designed to show how of the annual produce part went by exchange to replace what had been consumed during the previous cycle, another part did not need to go back into the economic system as a condition for restarting a fresh cycle of production and circulation over again, but remained as a surplus or produit net; and labour was judged "productive" to the extent that it yielded such a surplus. What commerce and manufacture absorbed was what was necessary as fuel to their activities. Manufacture exchanged the products which it did not use itself against the agricultural production which

it required to supply its raw materials and the subsistence of its work-people. Manufacture by this act of exchange did no more than give an equivalent for equivalent received, and hence was not productive of any surplus. Said Mirabeau : "I give a length of cloth to a tailor : he will never be able to increase it, so as to make out of it a coat for himself as well as for me." Agriculture, on its side, exchanged a part of its products against manufactures which it needed for the maintenance of agriculture and the agricultural population, such as tools and clothing. But this part of its produce which it exchanged against manufactures, plus what it used itself for subsistence and seed-corn, did not exhaust the whole of the produce of the land : a third part went to the landowning class as rent, without any exchange of equivalents. This was the essential surplus, or produit net, of the economic system; and agriculture alone yielded this surplus. Progress consisted in the continual enlargement of this produit net.

These ideas have been so often misunderstood by later economists, that the Physiocrats are frequently assigned only a modest place in the hierarchy of political economy. Economic text-books customarily pass them by with a reproof for being so stupid as to assert that agriculture alone was "productive," thereby missing the essential definition of "productive" as creative of surplus or produit net, and missing, too, the whole fundamental significance of the distinction between surplus and gross produce and cost, as the unifying concept of political economy. And in tracing this surplus to agriculture alone the Physiocrats were asserting nothing so silly as their traducers claim : it was a concept born from, and appropriate to, economic society before the French Revolution, when manufacture on a capitalist

basis was still in its infancy and land rent was the essential basis of the income of the ruling class. In the history of ideology it represents an interesting transitional philosophy lying between the old epoch and the new. Formally, by its insistence on the importance of agriculture and of land rent, it seemed to rest upon the aristocratic society of the past. Certainly it contained no prophecy of nineteenth century industrialism or of the needs and functions of a new bourgeois class. Indeed, what grounds for such ideas were there in eighteenth century France? But in its implied insistence on removing feudal restrictions on agricultural development and restrictions on capital investment in farming, in its emphasis on freedom of commerce and on land rent as the appropriate basis of taxation, in its concept of a "natural" economic order which would "work of itself" unaided by authoritarian control, its significance was revolutionary. In the realm

## AN INTRODUCTION TO

of economic ideas, it played the same rôle of John the Baptist to the coming bourgeois revolution that Voltaire and Rousseau played in the realm of political ideas.

Adam Smith (1723-1790), who was considerably influenced by the Physiocrats, was much more concerned with composing a commentary on specific economic questions and in advancing a practical thesis than in establishing a conceptual unity. In this he was fully in the tradition of English empiricism. At the same time, his treatment was more comprehensive in the range of practical issues he touched upon, more thorough in its detail, and his championing of the new bourgeois philosophy of economic freedom was much more explicit. His enquiry into the causes of the wealth of nations produced a number of sound empirical generalisations about the division of labour and the accumulation of capital, a vigorous criticism of Mercantilism, and an acute analysis of the effects

of different forms of taxation. Temperamentally he differed considerably from the Physiocrats, at any rate from Quesnay. His empiricism even had a touch of atomism about it. He was at any rate quite willing to be eclectic where convenience seemed to demand it. The only considerable point of doctrine on which he differed from the Physiocrats was in their statement that agriculture alone was " productive "; but true to his temperament he left the matter there and developed the concept of a produit net in manufacture no further. Ricardo (1772-1823), on the other hand, whose essentially continental temperament was in many ways the antithesis of that of Adam Smith, was much more in the direct tradition of the Physiocrats (i.e. in the manner of his approach, and in his method, rather than in his conclusions). He was concerned to establish a unitary principle by which to interpret all the major phenomena of the economic system.

#### INTRODUCTION TO ECONOMICS

In particular, he was concerned, like the Physiocrats, with the problem of the distribution of wealth. In his treatment produit net, or rent, assumed specifically the garb of an exaction from the industrious classes for the benefit of the passive landowning class. This was an important shift of perspective. In his theory of Profit he virtually advanced a second species of produit net-an implication which Marx was quick to develop-the produit net of manufacture. But this species had essential peculiarities, even if it belonged to the same broader genus. As it represented the income of the bourgeoisie, the accumulators of industrial capital and the pioneers of industrial advance, its increase constituted a desirable engine of progress, whereas rent, which fed a passive and reactionary aristocracy, was a tax on progress. Ricardo was par excellence the economic prophet of the industrial bourgeoisie.

# THE THEORY OF VALUE

# THE THEORY OF VALUE

THE PHYSIOCRATIC analysis clearly turned on the distinction between surplus and cost and on the notion of equivalence. In Quesnay's circulation process the actual equivalence established on the market in the exchange of one commodity against another was taken for granted. But such a market equivalence was not a stable thing : cloth did not retain an invariable value in terms of corn, but changed from year to year, even possibly from week to week. What was the secret of such changes? Was there some fundamental, some "natural" basis of equivalence which market value might not always adequately express? Was there a sense in which corn might sell above its value and cloth below it? If so, might not a concealed surplus lie behind the act of exchange?

Such considerations led directly to the

31

search for a theory of value, which became the primary concern and the essential framework of classical Political Economy. Preoccupied with ideas of "natural law," the political economists came to conceive of a "natural value," or principle of economic equivalence, which was not necessarily synonymous with actual realised "market values" and would only be completely realised on the market in a "natural order "-the ideal laissez-faire individualist system. And since such a value was a principle of " natural law," it necessarily had something essentially proper, just and harmonious about it. Just as natural science dealt with such properties as "length" and "weight," it seemed that economic science ought to be able to base itself on the basic fact of "value." "Intrinsic value" was commonly distinguished from "extrinsic value" (or actual exchange-value). Petty (1623-1687) used the interesting distinction between

"Natural Cheapness (which depends upon the few or more hands requisite to produce the necessities of nature, as corn is cheaper where a man produces corn for 10 than where he can do the like but for 6)" and "Political Cheapness (which depends upon the paucity of the Supernumerary Interlopers into any trade over and above all that are necessary)." Much effort has subsequently been expended in demonstrating that the classical economists were confused when they spoke of a "measure of value" by which they sometimes meant the "cause of value" and at other times the measuring rod (be it corn or labour or gold) in which value was expressed. Probably they did not analyse their concept very deeply: it is easy in language, and consequently in thought, to confuse, say, length, or spatial extension, with the conventional foot, yard, and furlong measures. This confusion, however, was not very serious to their reasoning; and the criticism

Ce

## AN INTRODUCTION TO

neglects what was the essence of their point of view. The thing, the quantity, which constituted the "intrinsic value," in so far as it could be separately abstracted, ipso facto constituted an invariable measure of "value" too ; just as a pound weight constitutes weight and measures it at the same time. But the confusion of which the earlier economists definitely were guilty was between cost and value. It was distinctly tempting to identify the two: the distinction between gross produce and net produce turned on the concept of a cost which consisted in what was "necessary" to keep the productive system working-the essential fodder to the economic machine. In each cycle of production a certain amount is put into the economic system-seed-corn, subsistence for the workers, etc. In the course of the productive cycle enough is yielded to replace this original cost or outlay, plus something in addition-the produit net. So

long as this process is conceived in terms of a single composite commodity, corn, as it was with Sir William Petty and to some extent with the Physiocrats, the concept was an easy one. The real cost of a thing consisted in the outlay of corn necessary to finance its production, and it was a reasonable step to assume that this constituted the "natural value" of a commodity.<sup>1</sup> But as soon as one included other commodities than corn in "necessary" subsistence, the simplicity of the explanation broke down : one was involved in the circular problem of first establishing the equivalence of the various commodities (say corn, meat and cloth) which constituted cost. To resolve this difficulty, a transition was accordingly made from the corn necessary to feed labourers to the actual labour as constituting the fundamental "cost" and the basis of "natural

<sup>&</sup>lt;sup>1</sup> For this interpretation of classical doctrine and for several other ideas which follow I am indebted to Mr. P. Sraffa, of King's College, Cambridge.

value." Labour was essentially the creative agency in all production, the sine qua non of converting what nature offered into the actual requirements of man. The "real cost" to mankind of winning a livelihood consisted in the amount of labour it was necessary to expend; and it seemed "natural" that different commodities should be estimated or valued in proportion to the labour their creation required.

But the earlier idea of cost as "subsistence" still remained to sow confusion. From the standpoint of an employer and the employing class as a whole, "cost" in the last analysis consisted in the outlay of subsistence for workers—the necessary condition of production. What the workers returned to him by their efforts over and above this constituted for the employing class the net produce of the system—the source of profit on capital. Marx was the first to point out this confusion when he charged Ricardo with confusing labour as the basis of value

(the actual quantitative expenditure of effort) with the wages paid to labourers (the value of their labour-power).<sup>1</sup>

When Ricardo sought to show that in a "natural order" commodities tended to exchange at their labour equivalents, he did so on the assumption that competition would tend to establish a single level of wages (for labour of the same quality) and a single level of profits throughout different lines of production. Since the relative amount of wages expended, say, to produce a yard of cloth and a bushel of corn would be proportional to the labour employed, and since the profit, being the same rate on capital outlay in the two cases, would be proportional to the outlay in wages, it followed that the relative

<sup>&</sup>lt;sup>1</sup> The assertion frequently made that Marx was a man of hasty reading and understanding, who based his theories on one or two imperfectly understood ideas of Ricardo, is quite contrary to the fact. One need only read the very detailed and acute analysis of the Physiocrats, Smith, Ricardo and several less-known economists in Marx's *Theorien size den Mehrwert* (almost unknown in this country), to realise the absurdity of the assertion.

values (wages plus profit) of corn and cloth would be proportional to the labour involved in their production. Summarily, his argument amounted to an identification of money cost and real cost: market prices would be proportional to money costs (wages), and money costs proportional to labour expended.

This coincidence of normal market value with labour value applied so long as fixed capital, embodied in machinery and buildings, bore the same ratio to capital laid out as wages in all industries. But this is clearly not so : in agriculture or watchmaking the ratio of labour to machinery will be relatively high ; in iron or cotton production the ratio will be relatively low. Ricardo mentioned this as an "exception "—in his first edition as an exception of minor importance, insufficient to invalidate his general principle, in his third edition admitting it as a more serious modification of his theory. And a serious

modification it certainly was. For, to the extent that the ratio between machinery and labour varies, commodities will actually exchange on the market, not in proportion to the labour expended to produce them (including the stored-up labour embodied in the machinery), but some at a higher value and some at a lower. Where a relatively large amount of capital is locked up in buildings and plant, the need for this capital to earn a normal rate of profit (otherwise it will eventually migrate elsewhere) will require these commodities to exchange at a higher value against commodities produced with less machinery. The coincidence between labour values and market values breaks down : if labour constitutes the fundamental " real cost," then the equivalence which the market expresses is not this more fundamental equivalence. Instead, market values = wages plus normal rate. of profit on the capital employed.

# RICARDO AND RENT OF LAND
## RICARDO AND RENT OF LAND

BUT WHAT of rent of land? Did rent arise because agricultural commodities exchanged on the market at a higher value, relatively to their labour equivalence, than manufactures? Did it arise because agricultural values equalled not only wages plus a normal rate of profit on capital employed, but wages plus profit plus rent as well? In other words, was rent extracted because exchange on the market between agriculture and industry caused the former to give less than an equivalent for what it received in exchange? Ricardo formally answered "No" to this question by an ingenious analytical device. How, indeed, could he admit the inconsistency of a " natural order " producing " unnatural " exchange equivalents? But the answer was

43

entirely dependent on the ingenuity of the device, and not independent of it. This device was the concept of the differential, so dear to the economist heart ever since. Rent arose because of differences in the fertility of different soils. As the market for corn expanded, the more fertile soils being fully tilled, cultivation extended to inferior soils where the expenditure of labour required to produce a bushel of corn was greater than on the superior land. The value of corn was determined by the labour expended at the margin of cultivation, *i.e.* under the least favourable natural conditions. But since the price of corn in the market equalled the cost on the inferior land, the corn grown on the better land, where the cost per bushel was less, yielded a surplus. This constituted economic rent and accrued to the landowner : directly if he was both owner and cultivator, indirectly through the competition of farmers for the better land if the owner

leased to a tenant. Rent therefore figured as a product of Nature's bounty, which the landowning class was able to annex as attribute of its right of ownership. And as the progress of society increased the valuation placed upon these scarce qualities of Nature, resort had to be made to less and less fertile soils, the margin of cultivation was extended, and rent tended to rise. With the march of industrialism wages would tend to remain at, or near, subsistence level (owing to the law of population and the competition of labourers for employment), the rate of profit (with the progressive accumulation of capital, fall of price and rise in cost of agricultural production) would tend to fall, and at the same time rents would tend to rise.

The exclusion of rent from the problem of market value—excluding it as a pricedetermining element with the dictum, which has sown so much confusion, " that rent does not enter into cost of production" -was entirely formal. It was a trick of analytical framing, a trick of definition. the simplest of tautologies, and nothing more. If price equalled cost at the margin, then rent had nothing to do with it, for the simple reason that rent did not appear at the margin. But it still remained true that, if one spoke of the average cost of producing agricultural products, rent arose because a smaller quantity of cost-equivalents was yielded by agriculture in market exchange against a given cost equivalent yielded by manufacture. In other words, rent arose because the price of corn was raised above the average cost of producing that corn. But there was this much to be said for the Ricardian tautology: the reason for this raised agricultural price was the limitation of natural resources and was not the work of alterable man-made institutions or manmade restrictions. The landlord, as owner of scarce natural properties, was a passive not a deliberating agent in the process;

and the emergence of rent was consistent with, and not a violation of, a "natural order" of exchange-, or value-, ratios.

But Ricardo was less concerned with the qualitative characteristics of rent and profit than with the factors which influenced changes in them, and with emphasising the class antagonism which lay between them. And here he was most conspicuously champion of the new industrial order. His theory of rent as a surplus at the expense of the industrial classes, and a tax on their income, was heavy theoretical artillery against the landowning interests and against legislation, such as the Corn Laws, which by raising rent lowered profit. He was the bourgeois economist par excellence because he presented, more explicitly and fully than anyone before him, the "natural economic order" as a conceptual unity, and presented progress as essentially consisting in the process of capitalist industrialisation. And with him

47

### INTRODUCTION TO ECONOMICS

bourgeois Political Economy reached its zenith. His immediate followers did little more than repeat and elaborate his ideas. J. S. Mill (1806–1873), for all his undoubted qualities, was an essentially cautious and unoriginal mind, which played the rôle of careful editor, commentator and interpreter to Political Economy, rather than an inventor of new ideas.

## AFTER RICARDO

Dz

### AFTER RICARDO

THE MOST significant characteristic of classical Political Economy after Ricardo has usually been treated as a marked improvement. Certainly it followed as an attempt to avoid the impasse which Ricardo had reached in his attempt to identify market values with real cost. Viewed in correct perspective, I believe, this is to be regarded as a symptom of decline, since it constituted, in effect, an abandonment of the most fundamental part of the problem which underlay the Physiocratic enquiry and a passing over into empiricism and eclecticism. The attempted solution was really no solution, but a retreat from the issue. It consisted in virtually abandoning the conception of objective real cost. "Real cost " was retained in name, but was given an altered content which

51

was sufficient to change and to destroy its essential significance. Adam Smith was first responsible for importing the phrase "toil and trouble" into the problem of real cost. But when he referred to labour as the basis of value, he seemed more frequently to use it in the original objective sense of concrete material expenditure of human energy than in any subjective psychological sense. With Ricardo's successors and interpreters, the conception of real cost became explicitly and completely shifted on to a subjective basis. McCulloch had defined " real value " as regulated by the "quantity of labour required"; but at the same time he seems to have defined Smith's "toil and trouble" as measured by " the sacrifice to those by whom it (the labour) is performed."1 And after him " real cost " became explicitly something psychological-a disinclination, or malaise,

<sup>1</sup> J. R. McCulloch: Principles of Political Economy (1825), pp. 215-217.

in the mind. Given this shift of content, the logical next step was Senior's "abstinence," or refraining from present consumption in order to save and invest, as a second category of real cost, this " abstinence" affording the "explanation" of profit and removing it from the category of a surplus. Real cost = labour + abstinence. Money cost and price = wages + profit. Therefore, market values coincide with real cost. The Ricardian dilemma seemed to be solved. But the solution was no solution. Once the unitary conception of real cost had been abandoned, the possibility of using it as a concept of equivalence between commodities necessarily broke down : to enquire whether or not things exchanged in the market on the basis of these equivalents became otiose. One now had two dissimilar so-called quantities-" labour " and " abstinence " -qualitatively different. How to equate them to form a single quantity, real cost?

Was an hour of labour to be equated to an abstinence from the enjoyment of  $f_{1}$  for an hour, or for a day, a week or a year? "Real cost" remained merely as a catalogue-device to embrace two disparate categories which could only be equated in terms of money-i.e. in terms of their market values, which were themselves dependent, of course, on the market values of the latter. If the former reflected the latter, how could they be based on the latter? What meaning had enquiries about the identity of the two? Perhaps a Hedonist psychology (which explained human behaviour as motivated by calculations of pleasure and pain) could afford a solution by reducing both "abstinence" and "work" to terms of a single quantity---" Pain." But this solution, though it was suggested, was never very explicitly defined. If it had been, the concept of sacrifice would probably have had to be shorn of much of the meaning

generally imparted to it. At any rate, it is highly questionable whether any such solution would find acceptance to-day. As it was, Senior had considerable difficulty, I believe an insuperable difficulty, in delimiting his concept of abstinence. Was there a "sacrifice," or "real cost," involved in lending property that was inherited, as well as in lending property that had been accumulated out of one's income? If so, where was the difference between lending a factory or a railway and lending land? If not (as Senior decided), why so arbitrary a boundary to the virtues of sacrifice? So long as real cost meant "sacrifice," there seemed no solution : one cannot sacrifice unless one has something to sacrifice; and sacrifice becomes simply a "function" of available opportunities, variable with those opportunities and constituting nothing fundamental at all. The search for a theory of value became merely an

#### **INTRODUCTION TO ECONOMICS**

empirical one—a collection of the various proximate causes of changes in market price—which could afford no judgment as to the "natural" fitness, appropriateness, desirableness or otherwise of the system of exchange equivalents which the market established. Moreover, once an adequate system of real cost was gone, there was no basis for any fundamental distinction between gross and net produce : the concept of surplus no longer had a consistent meaning.

## MARX AND SURPLUS-VALUE

### MARX AND SURPLUS-VALUE

THE TRADITION carried down from the Physiocrats through Ricardo passed not to Ricardo's direct descendants but to Marx (1818-1883), who took the Ricardian system, sheared it of its "natural law" framework, and revolutionised its qualitative significance. Marx was remarkable precisely for these features of his work which have most rarely been appreciated; but set against the background of the type of questions which classical Political Economy was concerned to answer, his system can justly be said to have crowned the classical edifice. Certainly Marx crowned it in a peculiarly Hegelian way: in the manner in which he claimed in his philosophy of history to have turned Hegel upside down-to have stood him on his feet where he found him standing

59

on his head by substituting a materialistic interpretation of history for an idealistic one.

Marx did not start from the concept of natural order underlying the capitalist system; for him capitalism did not constitute the final term of economic progress, but was historically relative and transitional. Hence he was biased by no desire to identify market prices with real cost. Labour in an objective sense-the expenditure of human energy of muscle or nerve-constituted value, that is the social valuation to be placed on the commodities which were the fruit of this labour. It was the fundamental equivalent, the criterion by which one could judge the significance of the price relationships established by the market under varying sets of conditions. Without it there was no ultimate criterion. One could not say whether a certain act of exchange represented a passing of equivalents or not; and hence

without it the Physiocratic concept of "surplus," as something which accrued without any equivalent being absorbed in return, would have no meaning. Under certain sets of conditions,<sup>1</sup> market prices would coincide with values. Exchange would be of equivalent for equivalent; but by no means under all sets of conditions. It is precisely in the failure to appreciate this that the monstrous misapprehensions which affected nearly all Marx's subsequent critics consist. Marx never identified market value with labour value, as Ricardo tried to do. How then could there be a "Great Contradiction" when Marx, in vol. iii. of Capital, developing what Ricardo had admitted as an " exception," specifically stated that under conditions of modern capitalism commodities did not exchange at their values, but at what he called their " price

<sup>&</sup>lt;sup>1</sup> o.g. what Marx, a little obscurely, termed "a society of simple commodity production" in vol. i. of Capital.

of production"? This latter quantity equalled wages *plus* a normal rate of profit on the capital employed, and diverged from "value" to the extent that the ratio of machinery to labour what he termed the "organic composition of capital "—varied in different lines of industry.

Marx's problem was to determine the distinguishing characteristic, the social significance, of capitalist profit. If it was a surplus in the Physiocratic sense of values paid to someone without a giving of equivalents in exchange, how did it arise and on what conditions did its emergence depend? His method was to take a "simple commodity society" where commodities exchanged at their values (avoiding the complication of different compositions of capital), and to enquire how a surplus could arise on such assumptions. It could not arise in the course of exchange, because this was an exchange

of equivalents. The answer he gave was that it arose from the peculiarity of labourpower as a commodity in producing more commodities than were used up to produce the original labour-power-used up in the subsistence necessary to replace the energy expended. Labour-power produced a value greater than its own value. The capitalist purchased labour at its value; and this constituted for him the primary expense of production. The value of labour-power was itself determined by the amount of labour required to produce it—that is, by the subsistence necessary to maintain the worker in working efficiency under any given set of social conditions and at any given time. The capitalist was able to annex, as his profit, the difference between this (viz., wages) and the gross value which labour, when set to work, produced. Wages were the payment of equivalent for equivalent-subsistence of the worker replacing the energy he

expended in his employer's service. Profit, in contrast, arose from the peculiar quality of the commodity labour-power that, when put to use, this labour created a value greater than its own value—profit arose from an exploitation of the difference between the value of labour and its product. Hence its qualitative peculiarity, which he characterised by the term "surplus value"; hence a class antagonism between receivers of surplus value and the producers of it, which in our own day is more significant than Ricardo's antagonism between landlord and capitalist.

But labour-power only figured as a commodity, bought and sold in a labour market, under a definite set of historical conditions—when historical processes had created a propertyless proletariat without other means of livelihood, on the one hand, and a propertied class on the other hand. The emergence of profit, therefore, was not a "natural" category rooted in a

natural order of things : it was a category of income peculiar to a particular stage of historical institutions, to a particular form of class society.

In the later stages of his analysis Marx introduced the conditions which caused market prices to diverge from valueequivalents. Chief of these was the need imposed by the competition of capitals for profit to be spread out so as to yield an equal rate per  $f_{i}$ , as water finds a common level given a sufficiency of connecting pipes. This caused commodities which had been produced with a relatively large proportion of fixed capital to labour to sell above their value-equivalent, and commodities which had been produced with a relatively small proportion of fixed capital to labour to sell below their valueequivalent. But this divergence was not of a kind to invalidate his central theoremto upset the character of profit as surplusvalue. It effected an altered distribution

#### INTRODUCTION TO ECONOMICS

of this surplus between different lines of industry and altered proportions of production in different lines; but it did not affect the size of surplus-value in the mass.



# THE NEW ECONOMICS

## THE NEW ECONOMICS

INTHE last three decades of the nineteenth century Political Economy underwent an important change, which has a different and a deeper significance than is customarily realised. Simultaneously and independently the so-called Austrian School, on the one hand, with Menger, Boehm-Bawerk and Wieser as its giants, and Jevons in England, were building the new frame-work within which Economics (to use Jevons's new term) has moved ever since. Closely on their heels followed Marshall in this country and Walras and Pareto, of the so-called Lausanne School, on the Continent.

At first sight the change seems mainly a formal one. The new school of thought has frequently been referred to as the school of Marginal Utility to describe the

69

two most important features of the new theories. The first noticeable difference between the old economists and the new consisted in an important shift of emphasis from supply and cost to consumers' demand and utility as the determinants of exchange-value. Value was no longer regarded as determined by labour, or even by labour plus abstinence, but by the capacity of a commodity to afford satisfaction to consumers (i.e., its utility). This represented a psychological and Hedonist approach to the problem from the standpoint of consumers' desires. The second feature of the new theories was their emphasis on the effect of changes at the margin-for instance, the loss or gain of utility resulting from "a little less" or "a little more" of a certain commodity (say, cloth or corn or tea); and it was the utility of " a little less " or " a little more " (the marginal utility) which was regarded as important in the determination of value.

This emphasis on the margin was the result of an attempt to construct economic science in a mathematical framework. Jevons (1835-1882), for instance, was at considerable pains to prove that economics must be a mathematical science in form, whether the economist actually spoke in words or in algebraic symbols. He accordingly employed the mathematical conceptions of the differential calculus and of functional equations as a convenient analytical technique; and since the differential calculus deals in terms of small increments and decrements (of "a little more" or "a little less" of something or other), economists tended to frame their theories in terms of marginal changes of this kind.

But the change went deeper than this : it was a change of conceptual approach, and a change in the type of question that was being answered. The new economists were not concerned primarily with conceptions of "real cost" and "surplus"; they were not concerned with a principle of intrinsic value as a key to the problem of equivalence. They were concerned with a more empirical enquiry-the causes of changes in market values. This enquiry bounded their horizon so far as the theoretical core of economics was concerned ; and all the major economic problems could be reduced to these terms. It was natural that, in pursuit of such an enquiry, the analogy of a theory of equilibrium should be suggested from mechanics. "Value" represented a certain "position " or " level " which, in equilibrium, a commodity occupied relatively to the remainder of commodities. In this sense "value" was always a "relative" value ; and the concept of "absolute value" as a sort of "fixed star" in the economic universe was meaningless. The purpose of economic theory was to postulate the series of equilibria which would result under various possible sets of conditions; just as

a theory of mechanics enables one to calculate that, given a collection of forces at work in a certain arrangement, things will come to rest in a certain equilibrium position. But, as everyone knows who has ever played with a collection of pulleys or thought about the structure of a suspension bridge, it may not always be possible to calculate a "stable equilibrium "where opposing strains and stresses balance one another; while in certain very complicated situations one may not know enough of the facts to be able to calculate what the new equilibrium will be if one starts a movement by displacing one of the forces at work. To be able to calculate an equilibrium, therefore, the situation one is dealing with and one's knowledge about it must fulfil certain conditions. Whether these conditions are fulfilled or not is the criterion by which one judges whether a theory of equilibrium in economics, as in mechanics, is *adequate* or not.

#### AN INTRODUCTION TO

The attempt to calculate an equilibrium in a given situation is comparable to the familiar attempt in algebra to "solve" a system of simultaneous equations. In these equations there are a number of " unknown variables " (usually written as x, y, z, etc.) and a number of " constants " (usually written as a, b, c, etc.). About the former, it is assumed, one knows initially nothing at all. The latter are part of the given data of the problem : some particular value, or number, is, or can be, assigned to them; and the actual arithmetical "solution" of the equations will differ according to the value assignable to these "constants." The "solution" consists in " determining " (or finding the value of) the unknowns (the x, y, z, etc.). A simple rule exists as to whether a system of equations is capable of being solved : it has a solution if the number of equations (or known relationships) is equal to the number of unknown variables which have to be determined.

And this is the criterion of whether a theory of equilibrium is "adequate" or not.

Economic theory has employed the conception of "functional equations" (one quantity is expressed as a "function" of another if the one varies, or moves, with the other in some particular way). Moreover, it has employed functional equations of an "arbitrary" or general type, which merely postulate some functional relationship between quantities, and not any one particular relationship. By this means it has made its conclusions of a more general character—a given theory is made to cover a wider range of possible cases. For instance, economic theory may assume that consumers' demand for " a little more " of x will decrease with the quantity of it that is offered for sale, but without specifying the precise nature of that variation of demand; and in this way x can be taken to represent a wider range of particular cases

(e.g., corn or cloth or tea or gramophones or labour).

In the new economics, therefore, it was no longer a question of searching for a single "cause" of value, a primary constituent or principle to which all questions of exchange and distribution could be related. There was no longer a need (at any rate for the theory of value as now conceived) to analyse everything into terms of what was virtually a single factor of production-a common term of real cost in relation to which qualitative differences could be resolved. It was a question of grouping together certain functional relationships, all of which, in combination and "simultaneously," determined value. It was a matter of pure convenience how many factors of production there were, provided only one could make sufficient assumptions about the supply of them. All that was necessary was to be able to postulate a sufficient number of conditions

and to find the right number of independent variables for a determinate equilibrium to be established. In the search for these independent factors Jevons and the Austrians transferred their attention from conditions of production to consumption. from supply to demand, and sought the important determining factor in what. underlay consumers' demand. And here Hedonism gave them an important clue. Consumers' demand was a reflection of consumers' desire; and desire, in turn, (at least in rational men) was rooted in the pleasure which the object of desire afforded. This capacity of affording pleasure Jevons termed Utility. The earlier economists had indicated that value could not be a function of utility, since some commodities, like water, had a high utility but little or no value, and others, like diamonds, had small utility but high value; and Marx had pointed out that utility was not a quantity and could not

therefore bear a relation to a quantity value. The discovery which Jevons and the Austrians claimed to enunciate was that price was a function, not of aggregate utility (which it obviously could not be), but of the *increment of utility*—of the additional utility afforded to the consumer by the marginal unit of a given supply.

For instance, of a given supply of fish offered for sale on a market on a particular day the marginal utility of the supply of fish would be the utility to some consumer or other of the *n*th or final lot of fish sold. (By *n*th is meant, that, if there are 100 fish, it is the hundredth, if 1,000 fish, the thousandth, and so on.) Price could not be greater than this (if the fish is marketed at a single price), otherwise the final lot of fish would not find a purchaser who thought it worth while (as measured by its utility) to buy more fish at this price; while on the other hand the seller of fish, desiring to get the highest price he could,

would presumably not part with his fish at a price appreciably below this. Whether utility itself was a quantity or not, this marginal increment of it was capable of being expressed in quantitative form. Jevons said : "Repeated reflection and enquiry has led me to the somewhat novel opinion that value depends entirely upon utility... Labour is found often to determine value, but only in an indirect manner by varying the degree of utility of the commodity through an increase or limitation of the supply."<sup>1</sup>

The starting-point of the new theory was an empirical observation about the nature of desires, which has been variously described as the Law of Diminishing Utility or the Law of Satiety of Wants. The utility of a thing would generally increase with the amount of it possessed and enjoyed, but generally at a diminishing rate, the increment of utility afforded by an

<sup>1</sup> W. S. Jevons : Theory of Political Economy (1871), pp. 1-2.

increment of supply tending towards zero at some near or distant point-the point of satiety. It was this increment of utility at any one point-" the final degree of utility," as Jevons called it, or "marginal utility," as Marshall termed it-which determined value, since this fixed the worth of a little more, or a little less, of the thing to the person in question, and so determined the rate at which he was willing to exchange it against something else-against money or other commodities. For instance, suppose two persons A and B exchanging corn against cloth. One could express the utility of corn and of cloth to each of the parties as some function of the respective quantities of corn and cloth possessed. The seller of corn will find it in his interest to continue to give corn in exchange for cloth up to the point where the utility of the bushel of corn he is parting with is equal to that of the quantity of cloth he obtains in return; and similarly

for the other party. Hence the position of equilibrium—the point where exchange between them will stop—will be that rate of exchange where the marginal utility of corn and cloth is equal for each of the two parties. Hence, given this condition and the form of the utility function for the two parties, a determinate equilibrium —the amount of corn and cloth exchanged —can be calculated. Expressed symbolically in terms of two commodities a and b, we have the following conditions of equilibrium :—

$$\frac{\phi_1(x_1)}{\psi_1(y_1)} = \frac{x}{y} = \frac{\phi_2(x_2)}{\psi_2(y_2)}$$

where  $\phi_1(x_1)$  and  $\psi_1(y_1)$  represent the utility-functions of a and b to A, and  $\phi_2(x_2)$  and  $\psi_2(y_2)$  the utility-functions of a and b to B. In graphical form the relation between the pair of utility-functions to A can be expressed as a curve, and similarly for B; and the equilibrium will be Fg 8I
#### AN INTRODUCTION TO

represented as the point of intersection of the curves.

In this problem there are two equations and two unknowns, so that the equations yield a determinate solution.<sup>1</sup> Some economists have been quick to point out, as a corollary of this reasoning, that this equilibrium-rate of exchange, which the conditions of a free market tend to establish, is that which gives the maximum common gain of utility to the persons concerned in the exchange-in other words, that which coincides with what is socially desirable from a Hedonist point of view. Any interference with a free market and the prices which it tends to establish will accordingly reduce, and not augment, this common gain.

Prices are viewed simply as the resultant of subjective valuations in the minds of the individuals concerned. Expressed in

<sup>&</sup>lt;sup>1</sup> This was the view of Jevons. It has since been established that under direct barter the conditions do not suffice to give a single solution.

the simple form of two commodities being bartered against one another, the problem does not raise great difficulty; and in the manner of treatment of the simplest case the underlying unity of modern economics is typified. But when we depart from this abstract case and approach nearer to the conditions of the economic world, where exchange is generally not between owners of stocks of two commodities but between producers and consumers, and where the buyer is concerned not with one isolated transaction but with a multitude of related transactions, a number of complications arise; and it is in their different handling of these complications that the differences between schools of economists subsequent to Jevons mainly consisted. To a considerable extent, therefore, the differences between these schools is purely formal.

# SUBJECTIVE "REAL COST

## SUBJECTIVE "REAL COST"

THE FIRST Set of complications arises when allowance is made for the fact that in the modern commercial world the goods which he sells have no direct utility to the seller : they are "worth" to him merely what they have cost. His willingness to sell is a function, not of their utility to him (as in our corn and cloth example), but of their cost. An analysis of cost is therefore required. Here it would seem that economists had returned to the issue which principally exercised their classical forebears. The cost of a finished commodity consists of the price paid to the factors of production required to produce it. The problem becomes one of determining the value of the factors of production, land, labour and capital. Much confusion indeed has been caused by the

87

#### AN INTRODUCTION TO

habit of economists of labelling this part of their enquiry "Distribution," and imagining that here they were adequately answering the same questions as the Physiocrats and Ricardo were doing. Actually the issue was, in large part, a different one. The classical question was mainly one of the share (of the total produce) accruing to different social classes and the contrasting characteristics of these shares. The new question was simply one of the market price per unit of the constituent commodifies which entered into the creation of finished commodities. The factors of production, whether they were treated as three in number or twenty, were simply these constituent commodities; and for the purpose of this enquiry they were differentiated among themselves by no more fundamental characteristics than those which marked the x's and y's of our cloth and corn example. To enquire into their value was simply to add certain

additional variables to the set of simultaneous equations, requiring the addition of a similar number of fresh equations to complete a solution. They were part of the conditions of simultaneous equilibrium of finished and intermediate (or instrumental) commodities.

The Austrians adopted a simple condition in order to solve this problem. They assumed the quantity of the agents of production to be independently determined. By "independent," for this purpose, they meant that changes in the supply of them did not depend on the price of these agents or of commodities, or on any other of the variables directly involved in the problem. Hence the supply of land, labour and capital could be treated for any one problem as fixed : they could figure in the equations as "constants." The problem had then a simple solution : the value of each factor could then be expressed simply as a function of the prices

of the commodities which it produced. This is the famous "Theory of Marginal Productivity." Given the supply of, say, labour, the supply of labour will tend to be distributed between various sorts of production, so that the value of an increment of product yielded by an increment of labour (its marginal productivity) in all uses is equal; and the value of this increment which the final or marginal unit of labour is responsible for adding to the total produce determines the value of this factor of production. There are, then, n additional unknowns in the problem (the price of the n factors of production) and n additional functional equations.

Walras, and later Cassel, introduced in addition the conception of the "technical coefficients." The production of different commodities will require the factors of production to be combined in different proportions : corn production

will require more land relatively to capital than will the production of cloth. The "technical coefficients" for commodity x can be expressed by a series representing the quantities of the different factors required to produce a unit of x. The weighted average for all commodities (x, y, z) will then give the "technical coefficients" for the economic system in general. Every change in technique will change these "technical coefficients" in particular industries and in industry in general-for instance a new invention which increases the proportion of mechanical power to human labour in some industry or group of industries; and these changes will affect both the prices of commodities and the relative prices of the factors of production.

Jevons, on the other hand, did not make this simplifying assumption concerning the supply of the factors of production, except in the case of land. The

supply of labour, for instance, was likely to change with changes in wages, according as a higher wage gave a greater inducement to work harder and longer. The supply of labour, therefore, constituted an additional unknown quantity to determine. Here Jevons consistently applied the same Hedonist concept as he had applied to the problems of demand. As demand could be expressed as a function of "pleasure" or "utility," so the supply of labour could be expressed as a function of the " pain," or " disutility," involved in work. Not the supply of labour itself, but the disutility-function of work, was for him the independent constant by which the problem was resolved. "Labour," he wrote, " will be carried on until the increase of utility from any of the employments just balances the increase of pain. This amounts to saying that . . . the increase of utility derived from the first employment of labour is equal in

amount of feeling to . . . the increase of labour by which it is obtained."<sup>1</sup>

This method of handling the problem was extended by Marshall, and with him it became the basis for an attempt to redress the classical conception of " surplus," and to effect a synthesis between the modern and the classical school. We have already noticed that it was never perfectly clear whether the early economists, when they referred to " real costs," conceived of it in an objective or in a subjective sense. In the main, it seems to have had the significance for them of some objective quantity "used up," e.g., corn or the expenditure of physical energy. But already with Smith and McCulloch there were signs of a shifting of the idea to a purely subjective content. With Senior the identification of " real cost " with " sacrifice " was explicit. Jevons's "disutility" and Marshall's "efforts and sacrifices" were

<sup>1</sup> Theory of Political Economy, p. 185.

in the direct line of descent from this : and with them the exclusively psychological content of the idea was made abundantly clear. "Sacrifice" was measured, not in any objective quantity, but by the pain or aversion aroused in the mind of the person responsible for this effort or abstinence. For Marshall the labour of the worker and the saving of the investor and the risk-taking of the entrepreneur (the " undertakers" of the risks of a business) all involved such a "real cost." To persuade the worker to work, the investor to save, the entrepreneur to be enterprising, a reward equivalent to the sacrifice-a utility to balance the disutility-was necessary; and this necessary reward, required to evoke various guantities of labour, capital and enterprise, could be represented as a supply-function or as a schedule of supply-prices. Marshall said: "The exertion of all the different kinds of labour that are directly or

indirectly involved in making it, together with the abstinence, or rather the waitings, required for saving the capital used in making it : all these efforts and sacrifices together will be called the real cost of production of the commodity. The sum of money that has to be paid for these efforts and sacrifices will be called either its money cost of production or its expenses of production; they are the prices which have to be paid in order to call forth an adequate supply of the efforts and waitings that are required for making it : or, in other words, they are its supplyprice."1 The identification of price with " real cost," be it noted, was only at the margin; and hence the reward of a factor (representing the marginal disutility involved in it) would tend to be in excess of the average disutility involved. This difference between the sacrifice and reward constituted various species of producers'

<sup>1</sup> Principles of Economics (1890), p. 339.

surplus—a surplus of utility over disutility —which was simply another facet of the so-called consumers' surplus which a consumer enjoyed from the difference between the marginal utility and total utility —the difference between what he pays and what he gets.

Marshall and his school have sometimes been termed the neo-classicists, in contrast to the Austrians and certain of their American followers, such as J. B. Clark and T. N. Carver, who explicitly cut themselves adrift from the earlier Political Economy. The grounds for the label consist in his attempt to preserve the classical conceptions of real cost and of rent. Rent of land, in Marshall's treatment, remained qualitatively distinct from the rewards of other factors of production, for the reason that the supply of land was fixed, independent of human action, and that no "real cost "-no " effort or sacrifice "was involved in the supply of it. It

followed, as an important corollary, that cconomic rent could be taxed, or otherwise removed, without making the supply of land any the less; whereas to tax wages or interest, by reducing the reward below the necessary supply-price of working and saving, would cause a shrinkage of supply of these factors of production. Marshall was careful, however, to soften the rigidity of the Ricardian distinction. Rent of land appeared to him "not as a thing by itself but as a leading species of a large genus": elements of "producers' surplus " appeared in incomes earned by other factors of production; and, in particular, capital sunk in buildings and plant bore all the characteristics of land for the period of durability of such capital (for which reason he coined the term quasi-rent to designate a shortperiod view of the return on capital that is immobilised in fixed forms).

In the treatment adopted by the GE 97

Austrians, on the other hand, and still more clearly in the case of Cassel, the basis for any such distinction entirely disappears : all returns are equally "surpluses" or equally "necessary expenses." The distinction becomes meaningless, since by hypothesis all the factors of production stand on the same footing. The supply of all of them is assumed to be given : no question of a functional relationship between the supply of them and their reward enters in. Explicitly such writers have declared that the only cost is the loss of the utilities which a factor could have produced if applied in a different use from that to which it is actually applied. Cost is simply the other " side of the shield " from utility: it simply consists of utilities of which one is deprived by adopting a certain course of action. The American economist Davenport has analysed all cost as "opportunity cost." Cassel speaks of the "scarcity-principle" as underlying

equally the return to all the factors of production; while in England Wicksteed devoted considerable space to enunciating his thesis that the Ricardian theory of rent was only a special case of the general Theory of Marginal Productivity, and that what could be argued concerning land was equally capable of being argued, on the same assumptions, concerning any of the other factors of production.

# GENERAL AND PARTICULAR EQUILIBRIUM

# GENERAL AND PARTICULAR EQUILIBRIUM

THE SECOND set of complications arises when from the simplified case of exchange between two commodities, say cloth and corn, we pass on to more complex considerations of equilibrium in the real world, where purchase and sale of a large range of commodities are continually taking place. In considering the price of any particular commodity, say corn, one must consider it as being exchanged against the whole mass of other commodities or against generalised purchasing power, or money. (The two things come to the same thing, since money has no utility of its own apart from that of the things it can purchase.) Hence the buyers' demand for corn (whether measured in terms of money or

103

of commodities in general) must be expressed as a function not only of the utility of corn, but also of the marginal utility of all other commodities. Any change in the supply, and hence in the marginal utility and price, of any of these other commodities will therefore alter this demandfunction. The so-called Lausanne School. represented by Walras and Pareto, have accordingly occupied themselves with this more complex problem of general equilibrium, attempting to establish the terms of equilibrium of all commodities by means of a system of simultaneous equations to cover the aggregate of commodities. English and American economists, on the other hand, have in general confined their analysis to the problem of a particular commodity treated in isolation. To make this possible, the assumption is necessary that the price of all other commodities (and hence the marginal utility of money to buyers) is constant; and this requires

the further assumption that the commodity in question is so small a part of the buyers' total expenditure that a change in its price exerts no appreciable influence on the price of other commodities (by affecting the demand for them) or on the marginal utility of money to buyers. Such a reaction is regarded as being so small as to be negligible (what mathematicians call of "the second order of small quantities"). A similar assumption has to be made on the side of supply. It has to be assumed that a change in the output of this particular commodity (say, silk stockings) does not appreciably affect the demand for the factors of production (land, labour, capital) and hence does not alter the price of these latter. This assumption will be valid if the production of the commodity in question occupies only a small part of the factors of production in the community at large. When, however, a commodity such as corn is

### INTRODUCTION TO ECONOMICS

being considered, which bulks large both in the average consumers' expenditure and in the employment of one or more of the factors of production, this convenient assumption breaks down, and a solution is only possible by the more complex methods of the Lausanne School. Neglect of these essential limitations to an analysis of particular equilibrium has produced some impressive fallacies, even among the great; and for this reason those categories of "elasticity of demand," "increasing returns," etc., so familiar to economic textbooks are pitfalls for the unwary.

# ECONOMICS AS AN APOLOGETIC

### ECONOMICS AS AN APOLOGETIC

As we have mentioned, the exponents of the utility theory have commonly underlined a significant corollary of their theory. They have pointed out that the competitive equilibrium which their equations establish represents the system of prices which yields the greatest common gain (of utility) to all the parties concerned. This can be demonstrated to follow as a direct corollary from the cloth and corn example which was cited above. If the seller of cloth, for instance, stopped his exchange of cloth for corn before the equilibrium (or "normal") rate of exchange was reached, he would be getting a smaller total utility than he might otherwise have done; for the marginal

109

utility of the cloth he possessed would be less than the utility of the corn he might have got had he continued the act of exchange further. This will continue to be true up to the point where the utility of the marginal cloth he parts with is equal to the utility of the corn he gets in exchange. And similarly for the seller of corn. Again, it can be easily demonstrated that the distribution of the factors of production between their various uses in such a way as to equalise their marginal yield is the condition of their maximum productivity. This follows for the reason that, if the marginal unit of labour employed in cultivating, say, potatoes is producing more than the marginal unit of labour employed in cultivating carrots, there will clearly be a gain in shifting labour from carrots to potatoes-a gain which will only cease when labour is so distributed between potato-culture and carrot-culture that the marginal productivity of labour in

both directions is equal. Hence, any interference with competitive equilibrium, and with the prices which competition tends to establish, is likely to decrease, rather than to increase, economic welfare.

Such conclusions were clearly of very considerable significance; and it seems evident that to establish these important conclusions was the primary concern of the earlier utility theorists. By the middle of the nineteenth century industrial capitalism had won its battle against the old society. There was no longer much need, at least in England, for a cudgel against the dominance of the landed interest; while America, having no feudal past to hamper it, was born bourgeois from the colonial days. Nor was there any longer the same need to create economic society as a conceptual unity in antithesis to the old authoritarian sanctions. Men were no longer interested in precisely those solutions which were the concern of bourgeois economists a hundred years before. Moreover, the tool which Ricardo had fashioned had been subsequently turned to dangerous uses in the hands of Marx. The new subjective economics, therefore, served a double purpose. It provided a new justification of the bourgeois order, and one more convincing to an age grown sceptical of the "unseen hand" of "natural law." At the same time, as an analysis of market price it provided a technique better suited to the more detailed, more microscopic problems with which capitalism in its maturity increasingly engrossed the minds of its servants.

Actually this imposing apology of *laissez-faire* is hardly more than a clever sleightof-hand. The corollary follows simply because the necessary conditions to support the corollary are included in the assumptions from which one starts. And since these conditions are implicit in the assumptions, rather than explicit, the corollary

can be produced in that atmosphere of surprise which (along with his " patter ") is so commonly the conjurer's most valuable stock-in-trade. If two persons are equally situated, they will, by hypothesis, continue to perform the act of exchange with one another until it does not profit them to continue the transaction further : and therefore it follows that their common gain would be smaller if they carried on their transactions either further than or not so far as this point. On the other hand, if the two parties are unequally situated, there is nothing to say that the outcome of free exchange between them would not represent a smaller gain than if they had been less unequally situated, or to say that laissez-faire will do anything but perpetuate this inferior state of affairs. Again, Professor J. B. Clark may assure us that he can convincingly demonstrate (by the Theory of Marginal Productivity) that "a natural law exists" which causes He

"free competition (to tend) to give to labour what labour creates, to capital what capital creates and to *entrepreneurs* what the co-ordinating function creates "1; but the fact remains that if society were not a class society, where "labour" is provided by a proletarian class possessing no land or capital, the "creation" attributable to labour and the "creation" attributable to capital would be considerably different from what they are. Here, in particular, the demonstration of an "economic harmony." is a mere trick of words.

Increasingly, indeed, to-day economists are stressing "exceptions" to this supposed harmony of *laissez-faire*; even while they still customarily admit *laissez-faire* as a "general principle." Marshall himself was particularly careful to fence his analysis with a careful regard for the "exceptions" and modifications which

<sup>1</sup> Distribution of Wealth (1899), p. 5.

special conditions (ignored in the more abstract formulation of theory) imposed. And Professor Pigou, developing certain hints of Marshall, has (in his Economics of Welfare) turned a powerful battery against the laissez-faire position, stressing the inadequacy of laissez-faire to achieve the optimum result in the case of industries subject to "increasing returns" (or decreasing cost) as the scale of production is expanded and in the case of various social costs and social utilities which do not figure in the economic calculations of individuals. At any rate, with the competitive capitalism of the nineteenth century passing increasingly into the monopolist capitalism of the twentieth century, discussions of the value of competitive equilibrium retain little more than their academic interest; and the increasing need of the new capitalist forms for systems and methods of economic control, whether by the State, public corporations, or trade

#### AN INTRODUCTION TO

associations, has rendered the vindication of laissez-faire largely otiose.

It is, however, in the realm which economists term "the Theory of Distribution" that the modern proletarian challenge to capitalism has mainly come; and here economic theory is still successful as an apologetic. Not all economists may be so daring in their verbal agility as Professor Clark. Few to-day would join him in explicitly enunciating that the distribution of income is governed by "the hidden hand " of " natural law." Yet the theory that the returns to labour and capital correspond to the "effort and sacrifice "involved is a definite bulwark against Marxist criticism. Interest and profit, as well as wages, are the "necessary" reward for an essential economic contribution ; and without the reward the contribution would not be forthcoming. True, rent remains as a surplus, a deduction from producers for the enrichment of a

passive class. But pure economic rent today, when land has been improved by decades of capital investment, represents only a relatively small portion even of the return to land, while "surplus" elements are also found in other incomes, including wages. Marshall's theory of "normal profit" was clearly fashioned to demonstrate that, from a long-period standpoint, profit contains no surplus, no "nonnecessary" element; while Cassel is at pains to demonstrate, by the "scarcity principle," that interest would still exist in a socialist State.<sup>1</sup> Welfare may be augmented by any measures which reduce the inequality of incomes; certain surpluselements in income may be desirably appropriated by the community for the common good. Still, economic theory postulates various limits to such remedial action in the connection which exists between incomes and the supply of

<sup>1</sup> Theory of Social Economy (1923), vol. i., chapter vi.

necessary services. At any rate, even in the treatment of the matter by J. A. Hobson (who has carried Marshall's surplus and supply-price distinction furthest), there appears no defined class antithesis between qualitatively contrasted class-incomes an antithesis such as figured in the treatment of Ricardo and Marx, holding the possibility of a revolutionary change of institutions.

To the extent that Economics concerns itself with this type of consideration, it is clearly attempting to answer somewhat similar questions to those which the older Political Economy sought to answer. Most noticeably with Marshall, we find the attempt to use the new technique and to fit it to a classical framework. Yet we have suggested that it has really set out to answer not the same but a different set of questions. Is it then competent to answer the former, as well as the latter questions?

Or is it claiming competence over a sphere from which it is properly debarred by the very assumptions which lie implicit in its method of enquiry? Clearly, if modern economics is simply a theory of market price and no more, it cannot provide a criterion by which to gauge the significance of any particular arrangement of prices. Being simply a theory of equilibrium-a group of equations showing the relationship between a system of variables -it can do no more than postulate the system of prices appropriate to a number of possible situations (for instance, the prices appropriate to a competitive situation, on the one hand, and to monopoly, on the other; to a class society and a classless society). It says nothing about the relative character or significance of these various situations ; and hence it can make none of the normative judgments which economics is usually required to make, for the simple reason that a mere system of simultaneous

equations by itself contains no norm (or standard). It was such a norm that the old Political Economy sought to provide in its theory of value (as distinct from market price). But a mere equilibrium theory, which expresses market price as a function of certain variables, cannot itself supply such a norm.

It is in providing such a norm to a simple equilibrium theory that the Hedonist basis of the utility theory has its importance. For a pure theory of equilibrium such a basis is quite unnecessary, as various writers such as Pareto and later Cassel have indicated. It is sufficient for the theory of price to postulate simply certain *choices* to take the observed fact of a certain scale of preferences among consumers as between different goods. Nothing need be assumed concerning the *significance* of these preferences—whether the market's preference for cocaine, quack-medicines or diamonds is because they yield more

satisfaction or welfare than opera and working-class houses. Given one set of preferences, there will be a set of prices appropriate to them; to another set of preferences another set of prices. There is nothing postulated about the value of the first set of preferences against the second. This may be very convenient so far as a mere equilibrium theory goes--more economical in its hypotheses. At the same time, without these further inconvenient assumptions one's scope is strictly limited. One cannot say that an economic system which adjusts production so as to satisfy those preferences to the full is any more economically desirable than a system which deliberately ignores those preferences and establishes a set of prices appropriate to something quite different. If, however, one assumes that the demand for goods which is expressed by consumers on the market is a true index of some fundamental satisfaction (the old sense of utility)

which they derive from these goods, then one can postulate the conditions under which this satisfaction will be maximised. A criterion then exists by which, for instance, it can be said that the set of prices appropriate to competitive conditions comes nearer to this *optimum* than that appropriate to monopoly. A criterion exists by which it can be said whether an economic society based on the price system and the market is economically preferable to a communist, society which strictly subordinates the open market and curtails the price mechanism.

The modern tendency, however, is explicitly to sever this connection between Economics and Hedonism and to define "utility" in a purely empirical, behaviourist sense as measured by a person's observed desire for a commodity. Cassel goes even further, and bases his theory of price on observed demands on the market *expressed in money*. Price becomes, therefore,
on the side of demand a reflection or a product of consumers' preferences, or choices. For the purpose of the equilibrium theory these choices are taken as ultimate -as the data of the problem. They are " constants," which in the concrete case give the actual numerical value of the equations. But, in fact, these choices are not necessarily the reflection of anything ultimate : they may be arbitrary, ephemeral. They may be the result of a passing whim, of a convention or the creation of a cunning advertiser. They may, indeed, themselves be partly dependent on pricefor example, the changes of habits and conventional desires which accompany changes in relative prices or in the general price-level. In Cassel's treatment, indeed, they are largely a function of the distribution of income, not merely through the influence of the distribution of income on conventional standards and desires of different classes, but because the distribution of wealth between rich and poor will directly affect the market preference (as expressed in money-demand) for, say, rare luxuries as against cheap articles of mass consumption. At any rate, the theory of price endows these market preferences with no other significance than as the data for a theory of market equilibrium. In any wider sense they are entirely non-significant.

Some economists, particularly those of the school of Marshall and Jevons, still attempt to retain the old notion of utility as implying satisfaction of *needs*, and so to make economics into a normative science of economic welfare—that is, a science which implies *judgments* as well as merely describing things as they exist. Marshall pointed out (though in no more than a footnote)<sup>1</sup> that *desires* and *satisfactions* may diverge. But since, he said, the measurement of satisfaction is impossible, " we fall

<sup>1</sup> Principles of Economics, pp. 92-93.

back on the measurement which economics supplies of the motive or moving force to action : and to make it serve, with all its faults, both for the desires which prompt activities and for the satisfactions that result from them." Following him, Professor Pigou has admitted the possibility of a "gap" between them: one may "desire" a patent medicine and at the same time acquire a negative amount of lasting satisfaction from it. But he has suggested that such a divergence is probably not serious in the case of "most commodities, especially those of wide consumption that are required as articles of food and clothing." These, being "wanted as means of satisfaction, will consequently be desired with intensities proportioned to the satisfaction they are expected to yield."<sup>1</sup> This is probably true of prime necessaries-precisely the basic commodities which a communist society,

<sup>1</sup> Economics of Welfare (1920), p. 25.

for instance, could distribute without any difficulty on a ration-system, dispensing with a price system. But as soon as we pass from prime necessaries to comforts and semi-luxuries, coincidence of desire and satisfaction seems to become increasingly questionable. In all matters of acquired taste a large number of biasing circumstances seem likely to play a part in determining the taste that is actually acquired. There seems no warrant for assuming that the choice which ultimately results will necessarily be any more conducive to welfare than an alternative taste which might have been nurtured in a slightly altered set of circumstances. Moreover, purely conventional standards-particularly class conventions-enter surprisingly deeply into nearly all our tastes other than the primary needs of the body-a point which Thorstein Veblen illustrated with so much acumen. And these days, when advertisement plays the prime rôle

in business supremacy, thriving as it does on "educating the consumer," afford much temptation to regard consumers' preferences as significant of little else than the persuasive skill of the publicity agent, the poster artist and the insinuating salesman.

For somewhat similar reasons the attempt to base a theory of distribution on a subjective conception of " real cost " seems equally based on shifting sand. The new conception of " real cost " as " effort and sacrifice," which replaces the old classical concepts of an objective "real cost," bears on its face the obvious disadvantage, which we have already mentioned, that it rests on a basic dualism. There is not one type of "real cost" but two; and there is no discoverable means of equating the two by a common term. It is no answer to say that a comparison between the disutility involved in an hour's work and the disutility involved in saying,

say, £10 for a year, depends on which a particular individual himself would prefer to do, because such a preference varies with his circumstances-how rich or how poor he is. A more fundamental difficulty than this is the very delimitation of " sacrifice "-the logical difficulty which Senior originally found in knowing whether to define "abstinence" as including or as excluding the "abstaining" from the consumption of wealth that has been inherited. Similarly with the sacrifice involved in "saving" something which has not been expected : is it an equal "sacrifice" to save a "windfall" gain as to save an income that has been fully expected? If the answer is "Yes," the notion of sacrifice seems to fade into a bodiless ghost; if the answer is "No," then the frontier of " sacrifice " turns out to be drawn along the highly unsuitable line of whether the income that is "saved" has been expected or is unexpected. One

clearly cannot "sacrifice" what one does not possess ; and sacrifice seems, on analysis, to be hardly distinguishable from "opportunity-cost "-from the sacrifice of alternative opportunities. Reduced to these terms, it ceases to have any universal significance as a conception of " real cost " -it will change its coat with every change of regime. At any rate, it will have no significance which makes it at all comparable to the "real cost" involved in working an eight-hour day. If one uses "sacrifice," or "abstinence," in any sense that is at all fundamental, then it is not the rich men of the world who do the "sacrifice" involved in capital accumulation. The "sacrifice" rests in the lowered incomes and narrowed consumption of the proletariat which permits the propertied class to enjoy its privileged income. But the "sacrifice" which in Marshall's theory is the basis of supplyprice is clearly nothing so fundamental

Ig

as this. If Pharaoh lent his slaves for building pyramids, it was not the slaves alone who, in Marshall's sense of the word, performed a sacrifice: Pharaoh bore a " sacrifice," too, proportioned to the alternative enjoyments which his slaves might have yielded if put to other use. That the " real cost " borne by Pharaoh was of the same kind and order as that of the pyramid-building slaves may have been the viewpoint of the scribes of the Egyptian Court. But it is hard to think that anyone but a casuist or a sycophant to-day could discover any useful sense in which Pharaoh's "sacrifice" was of the same order as that which he would have incurred had he laboured at pyramidbuilding himself.

Modern economics seems to have developed a technique which may perhaps prove of lasting value, at least in the study of particular detailed aspects of the economic world. Here, it has made an

important formal contribution. The conception of the functional equation and of increments at the margin makes possible a precision of thought entirely unattainable before, and renders the study of economic theory an intellectual discipline somewhat akin to the study of mathematics, even if of a more elementary and inferior order. At the same time, the glamour of the technique has concealed considerable contradiction in its use. The technique seems to have been put to employments which it is quite unsuited to support, and has become enmeshed in not a little confusion concerning the assumptions on which analysis has been based. By its assumptions modern economics is confined to a limited enquiry-the conditions of market equilibrium in face of a given scale of preferences on the part of consumers and in a given state of supply of the factors of production. That is all it can really ask and answer. Yet economists have generally thought

### INTRODUCTION TO ECONOMICS

that they were answering-at least their audiences have imagined them to bethe much wider type of questions with which classical Political Economy dealt : questions such as the relation between classes and the comparative merits of different types of economic system. " Economics " and " Political Economy " are something more than differences of name : they are different enquiries, different in scope and aim; and while the former may be superior in finish and precision, at the same time it is necessarily more limited in its range. The answers which economists offer to the major issues of to-day are apt to be either implied in their assumptions or else excluded by their assumptions: unknown to itself, contemporary economics seems to have become caught on the dilemma of being either a tautology or a contradiction.

# CONCLUSION

### CONCLUSION

IN AMERICA in particular, in recent years, there has developed an important school of economic thought that has studied the future of economics along the lines of inductive enquiry.<sup>1</sup> Aided by the greater wealth of statistics which the modern world, and particularly America, affords, enquiry has proceeded along the lines of the study of business indices and of price-correlations. On the other hand, in Soviet Russia we find economists increasingly occupied with the specialised studies concerned with the concrete problems of economic planning-a development, perhaps, slightly reminiscent of the approach to particular problems of government adopted by the earlier economists prior to the Physiocrats, and particularly by the

<sup>1</sup> Cf. The Trend of Economics (1924), ed. R. G. Tugwell.

135

so-called Cameralists in eighteenth-century Germany. It may be that the differential calculus and equations of market equilibrium have said all of which they are capable, and that the future of economic enquiry lies in specialised experimental and concrete studies such as these. Nevertheless, such enquiries can hardly provide more than contributory evidence to the solution of the problems of the general distribution of wealth and the comparative results of different economic systems. This group of questions-those macroscopic, as distinct from microscopic, issues of the economic order-will still remain to be answered, and to be answered presumably in terms of the concepts which Ricardo and Marx employed.

It is arguable that, in all branches of knowledge, questions can only have meaning if they are reducible to terms of action; and action implies an arbitrarily selected subject who initiates the activity. At least,

in a study so intimately related to practical issues as Political Economy, it seems idle to pretend that one can be "above the battle" of contemporary history. Many economists, it is true, deploring so vulgar a stain of partisanship, have tried to rescue Political Economy by rendering it more formal, claiming exclusive interest in economics as a mathematical technique. In doing so, they may certainly be successful in withdrawing their science to cloistered purity; but they do so by evading, and not by answering, the questions which formed the raison d'être of Political Economy, at least in its classical form. Moreover, in practice those who boast most loudly of their formalism are frequently those who produce, as corollaries of their theorems, the most dogmatic judgments on practical affairs. It is seldom in differences of answer to the same question that partisanship is ultimately found : it is rather in the way in which the questions

### INTRODUCTION TO ECONOMICS

are posed, in their arrangement and combination, and in the exclusion of other questions. I have suggested that Political Economy arose as an apologetic of a certain social order and that it remains an apologetic to-day. And apologetic (or else counter-apologetic), it seems, Political Economy must necessarily be, so long as the questions which form its ground-plan are framed in a practical way. To see Political Economy as itself a part of history does not render the study of it one wit less illuminating. Indeed, to treat thought itself like other historical factors as having a definable alignment in the battle of contemporary history-to make explicit a bias previously implicit-may be the only way to rescue it from a barren scholasticism and to make its questions and its answers sense.

## BIBLIOGRAPHICAL NOTE

### **BIBLIOGRAPHICAL NOTE**

General Theory :

- J. K. INGRAM: History of Political Economy (London. 1888. Revised edn., 1915)
- H. HIGGS: The Physiocrats (London. 1897)
- ADAM SMITH: The Wealth of Nations (London. 1776. Everyman edn., 1911)
- D. RICARDO: Principles of Political Economy (London. 1817. Various subsequent editions)
- к. MARX: Capital; 3 vols. (vol. 1., London, 1886, and Everyman edn. in new translation, 1930; vols. п. and п., Chicago, 1909)
- K. MARX: Theorien über den Mehrwert; 3 vols. (Stuttgart 1904) Trans. into French as Histoire des Doctrines Economiques, 8 vols. (Paris. 1924)
- J. S. MILL : Principles of Political Economy; 2 vols. (London. 1848)
- w. s. JEVONS: Theory of Political Economy (London. 1871)

141

#### AN INTRODUCTION TO

- A. MARSHALL : Principles of Economics (London. 1890)
- A. C. PIGOU : Economics of Welfare (London. 1920)
- F. VON WIESER : Natural Value (London. 1893)
- E. VON BOEHM BAWERK: Capital and Interest (London. 1890)
- V. PARETO : Cours d'Economie Politique (Paris. 1909)
- R. AUSPITZ and R. LIEBEN : Recherches sur la théorie du prix (Fr. trans. Paris. 1914)
- G. CASSEL : Theory of Social Economy ; 2 vols. (London. 1923)
- J. B. CLARK : Distribution of Wealth (New York. 1908)
- F. W. TAUSSIG : Principles of Economics (New York. 1911)
- H. J. DAVENPORT : Value and Distribution (New York. 1908)

Special Aspects :

- IRVING FISHER: The Purchasing Power of Money (New York. 1911. Revised edn., 1920)
- D. H. ROBERTSON : Money (London. 1922)

- R. G. HAWTREY: Currency and Credit (London. 1919. Revised edn., 1928)
- J. M. KEYNES: Treatise on Money; 2 vols. (London. 1930)
- R. G. TUGWELL (ed.): The Trend of Economics (New York. 1924)
- J. N. KEYNES: Scope and Method of Political Economy (London. 1891. Revised edn., 1904)
- 1. LAPIDUS and K. OSTROVITYANOV : Outline of Political Economy (London and New York. 1929). For Marxism and presentday Russia.
- A. C. PIGOU: Industrial Fluctuations (London. 1927)