J. R. HICKS

Formerly Drummond Professor of Political Economy
in the University of Oxford

The Social Framework

An Introduction to Economics

FOURTH EDITION

OXFORD

AT THE CLARENDON PRESS

1971

J. R. HICKS

Formerly Drummond Professor of Political Economy in the University of Oxford

The Social Framework

An Introduction to Economics

FOURTH EDITION

OXFORD

AT THE CLARENDON PRESS

1971

Oxford University Press, Ely House, London W. 1

GLASGOW NEW YORK TORONTO MELBOURNE WELLINGTON
CAPE TOWN SALISBURY IBADAN NAIROBI DAR ES SALAAM LUSAKA ADDIS ABABA
BOMBAY CALCUTTA MADRAS KARACHI LAHORE DACCA
KUALA LUMPUR SINGAPORE HONG KONG TOKYO

First Edition 1942 *Second Edition* 1952
Third Edition 1960 *Fourth Edition* 1971

PRINTED IN GREAT BRITAIN

Preface

When *The Social Framework* was first published (in 1942) it was a new departure in the teaching of economics. This was explained, in the original preface, in the following way:

'Until lately the problem of how to begin the study of economics reduced itself to a dilemma: either one might begin with economic theory—which meant in practice the theory of supply and demand—or one might begin with descriptive economics, the practical problems of industry and labour. Now there were serious objections against each course. To begin with the theory of value meant starting off with problems whose significance it is difficult for the beginner to realize, and on a field where generalizations which will stand up to criticism are singularly difficult to attain. Descriptive economics, on the other hand, taken without a sufficient grounding in theory, is inevitably either a dull collection of facts or, alternatively, a discussion of practical policies which may be lively enough, but which it is hard to raise much above the intellectual level of political propaganda. In practice, whichever of these solutions was adopted, some of these difficulties were incurred. The student who pursued a long course of study would of course find his way round them in the end, though not without some waste of time. But those people whose acquaintance with economics was confined to a one-year course (and they are a large proportion of all students of the subject) were either sent away thoroughly bored—if their teachers had followed the austerer path—or, in the other event, they were left with nothing but ready-made opinions on a few topical issues.

'As a result of the developments in economic knowledge which have taken place during recent years, we are now (I believe) in a position to resolve this dilemma, and to do so by something better than a mere compromise between the existing alternatives. It is now possible to mark out a preliminary stage in economic study, which is wholly concerned with topics which are obviously interesting and important, and which is yet systematic enough to give some of the mental discipline necessary for study on a scientific level. At the same time, this stage involves very little of that process of *abstraction* which is such a snare in the elementary stages of the theory of value. The ideas involved are simple and obviously sensible; the discipline is provided by the considerable demands which are made for care and patience in putting them together.

'This change has come about because the chapters on definitions, which formed so indigestible a portion of the old textbooks, have been kindled into life by the work of economic statisticians, and also by some of the newer developments of economic theory. They have grown into a distinct branch of economics, a branch which is being pursued with very special success at the present time, and which is, nevertheless, particularly suited to serve as an introduction to the science in general. If we want a name for it, it might be described as Social Accounting, for it is nothing else but the accounting of the whole community or nation, just as Private Accounting is the accounting of the individual firm.

'The greater part of this book is taken up with the study of Social Accounting; but in suggesting that this is probably the best way to begin the study of economics, I am not of course claiming that it can replace the conventional elementary theory and elementary applied economics. I would indeed claim that, in these days of shortened courses, a student who begins with Social Accounting will learn something useful and something worth learning, even if his studies are broken off at an early stage. But my main contention is that the other topics should come afterwards, after the groundwork of Social Accounting has been mastered. I hope and believe that when a beginner has mastered the substance of this book, he will be able to turn to the theory of value with some idea of what he

wants to get from it; and that seems to be an essential preliminary to getting anything worth having.'

In the thirty years which have passed since that was written, the method of teaching economics which is there described has been very generally adopted; and *The Social Framework* itself has been one of the books that have been used for that purpose. But (as was obvious from the start) it could not go on being used—being properly used—unless it was kept up to date. Though the principles set out could well be expected to be permanent, the facts that were used to illustrate the principles must be expected to become less interesting, as they receded in time. It was essential to the method that the facts should be interesting—that they should tell the student about things on which he wanted to be informed. So, for this reason alone, the book would need, every few years, to be revised.

A first revision, in fact, was required rather soon. For when I did the first edition, in the middle of the war, the best year that was available to me, to be used as an illustration of the national accounts of the United Kingdom, was 1938—the pre-war year which the early national income White Papers used as a standard of comparison. It was urgent to get on with the revision for the second edition in order to illustrate with something post-war. But at the time when I did that revision, only the early post-war years were at my disposal (the year I took was 1949); and it soon became apparent that these, in an economic sense, were still war years—they were still dominated by war-time shortages. The war did not end, in that sense, until 1952 or 1953. It was not until after that that we got clear of the war. There was then a strong case for another revision, which would be descriptive of an economy in more normal order. That is what was done in the third edition (which this replaces). For that edition I found a quite good 'normal' year—the year 1957.

It was in fact so good a year that I have been able to leave the edition that was based upon it running on, unrevised, for quite a long time. But it is getting too long a time; the modern student cannot now be expected to take much interest in 1957—and still less in the comparisons between 1938 and

1957 which quite properly bulked large in the third edition. It has for some time been evident that the book must be moved in its time-reference: that it must be brought into closer relation with what is now the present day. That is what, in this fourth edition, I have done.

The year for which I do the accounts is 1969—the latest year for which figures are fully available at the time of writing. It is far from being such a good year, for my purpose, as 1957; one can already see (in the winter of 1970–1) that it was a very peculiar year. The impression that I have got of it, as I have been working, is that it may be regarded as a late stage, perhaps a Fourth Act, in a drama that began in the early sixties and is not yet finished. Perhaps I should have waited for it to be finished; but I am no prophet—not even a forecaster—and I might have to wait a long time before the end of it comes.

The specific alterations that I have made are the following. To the 'structural' chapters (I–III, VII–IX, XI–XIII) hardly anything. The principles of social accounting, as set out in earlier editions, remain quite unchanged. The classification adopted is not quite the same as that which has become conventional in official publications; but I remain convinced that for my educational purpose the classification I adopt is right. I still think that it is better for the student to learn to think in terms of National Income than in terms of the (curiously defined) Gross National Product; nevertheless, whether or not that is accepted, the bridge is not difficult to build. I have spelt out the way in which it is to be done—in most detail in Chapter XXI.

Chapters IV–VI, on population and labour supply, have been rather substantially altered—to take account of the curious things that have happened in these fields (which one might have expected to be slow moving) since 1957. The facts, it will be found, are surprising; the situation which they reveal has called for some change in comment.

Chapter X (on national capital) and chapter XIV (the elementary breakdown of national income) have been modified no more than is necessary for rewriting with the more recent figures.

My most extensive alterations are to chapters XV–XVIII (as here numbered). The inflation of prices, the growth of real national income, the inequality of incomes—these could sensibly be discussed, even in the former (third) edition, in terms of comparison between pre-war and post-war, 1938 and 1957. But such comparisons, by now, have become historical. The more recent past is a different story; and it is itself a most instructive story, from which (even at a level that is suitable for a book like this) there is much to be learned. So I have rewritten these chapters (which may now be of interest to others than beginners in economics) in order to draw some of these lessons.

The final chapter on Social Accounting (now XXI) has also been rewritten. But the principal object, in this case, has been to remove some obscurities in the former version. This is, deliberately, a more advanced discussion; I hope that in its new form it will be found to have been improved.

It was inevitable, when one was working through the Social Accounts for 1969, with 1957 before one as a model, that one should be struck by the changes that have occurred. It turns out that it is rather easy to exhibit them; this is done in an additional Note G which has been added to the Appendix at the end of the book.

I have two new acknowledgements to make. Professor Revell, of the University of North Wales, and Mr. A. Roe, of the Department of Applied Economics, Cambridge, have allowed me to draw upon their work on the National Capital, and have given me useful advice in the handling of it. Mr. P. D. Periton, formerly of the Oxford Institute of Economics and Statistics, helped me in the earlier stages of my statistical work.

J. R. H.

Oxford
February 1971

Contents

Tables and Charts

CHARTS

INTRODUCTORY CHAPTER

Economic Facts and Economic Theory

1. ECONOMICS, the subject which we are going to study in this book, is a science, one of the branches of that great systematic study of the world we live in which we call Science with a capital S. The division of Science into sciences—physics, chemistry, biology, physiology, and so on—is largely a matter of convenience; we group together in a science those particular special studies which are conveniently pursued together and pursued by the same people. This means that we cannot tell where the frontiers of a particular science will prove to be until we have developed that science; and we need not expect that these frontiers will always be found in the same place. Even between the two most highly developed of the natural sciences, physics and chemistry, the boundary is distinctly fluctuating. Chemistry deals with those aspects of the world which are conveniently studied by chemists; economics deals with those aspects which are conveniently studied by economists.

All the same, within the broad field of the sciences in general, economics belongs, without any doubt, to a particular sub-group; it belongs to the Human Sciences, the sciences which are concerned with human behaviour. These include some, like psychology, which are concerned with individual behaviour; and some which are concerned with the behaviour of groups, or with the behaviour of individuals in relation to other individuals—the Social Sciences. Among the Social Sciences are economics, politics (the science of government), and sociology, which is not the 'science of society', for that should properly include all the social sciences. What are studied by sociologists are those rather miscellaneous aspects of society which economics and politics have left out, or are supposed to have left out. The lines are in fact not easy to draw; the student of economics should be able to look across them, so that he needs to have some knowledge, at least, of the other social sciences. From his point of view politics is probably the most important; the close connection between economics and politics is illustrated in the older name for economics—Political Economy.

Provisionally, we may say that the particular aspect of human behaviour which is dealt with by economics is the behaviour of human beings in business. Economics is the science which deals with business affairs. But if we allow ourselves to say this, then we must be clear that business is to be understood in a wide sense. When a housewife goes into a shop to buy some bacon, the resulting transaction is undoubtedly a business transaction from the point of view of the shopkeeper, and so would fall within our definition of the subject-matter of economics. We should not so naturally regard it as a business transaction from the housewife's point of view. But once economics has undertaken the study of this piece of behaviour, the transaction has to be looked at scientifically, that is to say, in the round; economics has to pay just as much attention to the housewife's side of the bargain as to the shopkeeper's. Buying the bacon is an economic question just as much as selling it.

To take some other examples. When men or women are paid wages to work in a factory, their employment is obviously a business question from the point of view of the employer. Consequently it comes into economics, but economics has to consider the worker's point of view as well as the employer's. The payment of taxes on profits is again obviously a business question; economics has to consider the payment of taxes in the round, looking at it from the standpoint of the firms and private people who pay the taxes, from that of the government which receives revenue from the taxes, and from that of the people whose wages and other incomes are paid by the government out of this revenue. Once we make these

extensions—and they are absolutely necessary extensions—the subject-matter of economics loses most of the narrowness it might appear to have at first sight. The problems of profit-making business have been much more important at some periods of history than at others. But economic problems have always been of the utmost importance, and it is safe to predict that they always will be. Although there are wide stretches of human experience (the whole fields of art and religion, for example) on which economics has nothing, or nothing fundamental, to say, economic activities do occupy a large part of the life of nearly everyone, and are bound to do so. Economic science endeavours to study these activities scientifically; it has in fact made better progress in the application of scientific methods to the study of human conduct than has been made by the other social sciences. The study of economics can therefore take us a considerable way towards a general understanding of human society, that is, of men's behaviour to one another.

2. The method of modern economic investigation is the same as the method of all science. Economics studies facts, and seeks to arrange the facts in such ways as make it possible to draw conclusions from them. As always, it is the arrangement which is the delicate operation. Facts, arranged in the right way, speak for themselves; unarranged, they are as dead as mutton. One of the main things we have to learn is how to arrange our facts properly.

Where does the economist get his facts from? It might be thought that, since the object of economics is to study human conduct in business affairs, the simplest way of proceeding would be to go to the people engaged in business affairs, and to ask them questions. But a moment's reflection will show that this is not as promising a line as it looks. Even if we are lucky, and the particular man we select is willing to tell us about the things which seem to him to be important (in practice even that is far from certain), he is unlikely to be able to tell us about other things, which may be more important from our point of view. If we ask him about something which he did six months ago, he is not very likely to be able to remember. Yet that may be just the question we want answered. It is very difficult to get systematic information in this sort of way.

An improvement upon the simple method of interviewing is the questionnaire. If a large number of people are asked the same set of questions, some will not reply, some will make guesses or answer at random, some will reply seriously. By looking over all the replies together, it may be possible to sort out the replies which are significant from those which are not. The method of questionnaires has in fact been most successful in those cases where it is possible to induce the people questioned to take some trouble over the answers; this is becoming easier than it used to be, but it still presents some difficulty to the private investigator. Early investigators into the problem of poverty used to pay people to fill in their forms; but in most cases this would be quite impossibly expensive. Now that people are becoming used to official questionnaires, which they have a duty to answer, they can more easily be persuaded to answer questionnaires from non-official sources, provided that their interest is awakened by appropriate publicity. But the organization of such inquiries, and the digestion of the material when it has been collected, remains an expensive matter. Thus it is only in a few particular fields that we get much help from direct inquiries organized for scientific purposes; such inquiry is mainly used by economists as a means of supplementing another source of information which is, on the whole, far more valuable.

This other source of information consists in facts which have been collected for other purposes than for use by economists, but which can be used by economists. Naturally, since these facts have been brought together for other purposes than ours, there are pages and pages in these collections which are, from our point of view, sheer rubbish. But it is a perfectly feasible (though laborious) task to separate out from the rubbish the information we want.

Large quantities of facts, potentially interesting to the economist, are collected nowadays by business organizations; but the most important collections are those made by governments. Modern governments collect stupendously large quantities of facts, occasionally from pure love of knowledge, but more often for the pedestrian reason that they

need these facts for the ordinary running of public affairs. A government which employs many thousands of people has the greatest difficulty in keeping its left hand informed of what its right hand is doing; publicity makes for efficiency in administration. In 'democratic' countries there is a further reason for publicity. The ordinary way of making decisions about public policy is by a process of argument, in which the pros and cons of every measure are stated by either side. Facts are required in order that this argument should take place. It is a purely incidental advantage that it provides the economist with valuable material at the same time.

When using this administrative information, it is essential to remember how it is compiled, and why; otherwise one may easily go astray. For example, when the government publishes a statement that so many persons have been unemployed on a certain date, the precise figure which is given will depend upon the definition of unemployment used—whether people who have only been out of work for two or three days are counted as unemployed, and so on. It occasionally happens that the definition of *unemployed* is changed slightly; when this occurs, the figure given may change without there being any real change in unemployment. The definitions of unemployment which are used in the unemployment figures of different countries do in fact differ very considerably indeed; so that the international comparison of unemployment is a very ticklish matter. This sort of difficulty is one for which we have constantly to be on the watch.

3. The British Government collects and publishes material on all sorts of subjects; from the economic point of view the most useful parts of it are the series which give us economic information of a similar character for a number of different years, so that we can make comparisons.[1] Among the more important of such series are the following:

[1] The most convenient place to find this information is the *Annual Abstract of Statistics*, together with the monthly *Economic Trends*, which is less complete but still contains a remarkable amount of information. Some similar information is available for many countries in the statistical publications of the United Nations, of the Organization for Economic Co-operation and Development (O.E.C.D.) and of the International Monetary Fund (IMF). These works are as essential to the economist as the bottles of chemicals on his laboratory shelves are to the chemist.

A. *The Census of Population.* A Census of Population has been taken every ten years since 1801, with 1941 the only gap in the series. Modern censuses tell us not only the number of people living in the country at the date when the census was taken; we also get information about their ages, the sizes of the families in which they were living, where they were living, and what work they were doing. This detailed information only becomes available once in ten years, but some parts of it can be estimated for the intervening years in indirect ways. Thus the total population can be estimated fairly exactly by using the registrations of births and deaths, figures of which are published quarterly.[1]

B. *Imports and Exports.* Some information about goods imported into England, and goods exported from it, has been available since quite early times; a high standard of accuracy was reached after the middle of the nineteenth century. Modern 'Foreign Trade Accounts' give us both the quantities and the values of most of these goods, and also tell us where the imports come from and the exports go to.

C. *Government Revenue and Expenditure.* These are the accounts of the government, which are presented in outline when the Chancellor of the Exchequer makes his budget speech, and are published later in much greater detail. They are very important in themselves, but they also convey much valuable information indirectly. Thus the unemployment figures, to which we referred earlier, are linked up with government expenditure, because some of the government's expenditure assists in the relief of unemployment. On the tax side, our most valuable information about the level of incomes in the country, and about the inequality of incomes, is derived from the accounts of the income tax.

D. *Production.* During the twentieth century a number of Censuses of Production have been taken. These record such things as the numbers of workers employed in various businesses, the rates of wages paid, the new materials and new equipment purchased, and the amounts of goods turned out in a particular period. Information of this sort is extra-

[1] An attempt at a check on these estimates was made in 1966, by conducting a 'sample census'.

ordinarily useful to the economist; it tells him just the sorts of things he wants most to know. The first census of production in Great Britain was taken in 1907, but only the larger firms were included. Later censuses were taken in 1924, 1930, and 1935; it is now the practice for a full census to be taken every five years. It is only by a census of production that information of this sort is forthcoming for the whole of industry; but a great part of the field is now covered, by more or less direct methods, at much more frequent intervals. Far more is known about production today, even from month to month, than would have been thought possible before 1939.

This information, which comes from government sources, has indeed become so comprehensive that it scarcely needs (and certainly it does not get) much regular supplementation in other ways. The principal regular sources of information, from other than government institutions, are only two:

i. *Company accounts.* It has long been the legal duty of every business, which is organized as a 'public' company,[1] to publish accounts, primarily for the benefit of its shareholders. In the form which the law used to lay down, these accounts were rather uninformative, for the purpose of economic study; but by a new Companies Act (1967) a good deal more of the company's activities has to be revealed. This has made it possible for the economist to acquire information, about individual companies, of more or less the same kind as he has long been able to get, from Censuses of Production, about industries (the total of the firms working in the same line of business). But this has not been going on very long; and to make much use of such information is very laborious.

ii. *Market reports.* If you go into a shop to buy a bicycle, the shopkeeper will make a note of it for his own purposes, but no information about that particular transaction will be published. There are, on the other hand, certain kinds of purchases and sales which are carried on by professional dealers, who do find it convenient to publish a record of their

[1] What is meant by a 'public' company will be explained on p. 115.

transactions, so as to inform each other. These records are sometimes published in some of the daily papers (as in the case of the Stock Exchange), sometimes in specialized trade journals (as with the markets for raw materials—though the scope of these was very limited for a long time after the war). These market reports are very useful so far as they go, but only a small proportion of all business transactions is covered by them.

There are other special sources of economic information, but these are the main regular types, which give us similar information for a large number of different dates. In themselves they comprise an immense mass of material—when it is put together with similar material from other countries it is enough to fill a library of considerable size. Even so, there are many economic questions we might like to have answered whose answers cannot be found within this material; that is why some part of the time of some economists is properly spent in collecting additional information, by questionnaires and so on. But the questions which can be answered from the existing material, more or less satisfactorily, are numerous and important; however, we can only begin to answer them properly if we go about doing so in the right way.

4. There are four stages in the process of acquiring economic knowledge which can be distinguished from one another, so much so that they are often regarded as separate departments of the science. But we should be quite clear about the sense in which they are separate departments. It is not that the problems they deal with are different—the same problem is often handed on from one to another of them. It is merely that they do different parts of the work of solution.

First of all, there is the stage or department which is called *Economic Theory*. The basic function of economic theory is to prepare the questions which we want to ask of the facts. It is absolutely useless to study a mountain of facts without knowing first of all, and very precisely and clearly, what one is looking for. We start from common sense and the broad lines of obvious information which we derive from our daily experience; we set it in order, so as to get our questions into a useful form. It is only when we have done some preparation

of this sort that we can approach the facts with any prospect of getting something significant out of them.

At the second stage we make our approach to the facts. After we have decided what questions we want to ask, we have to pick out from the whole mass of economic information described above those parts which have something to tell us about the question in hand. Then, when we have made that selection, we have to examine the information and find out exactly what it means. This last is a very important step, as can be seen from the example of the unemployment figures which was given earlier. We have to examine how the figures were collected, and what definitions were used; we have to ask whether these definitions are the same as those we found convenient in our economic theory; if not, what adjustments can be made, on one side or the other, to allow for the difference. What is chiefly involved in this second stage is a knowledge of the material out of which we are to get our results.[1]

In the organization of the subject, this second stage is reckoned as a part of *Economic Statistics*. The word 'statistics' is used in two senses: in the plural, to denote the numerical facts, the figures, which are the material we have been discussing; in the singular, to denote the method of handling that material. Here we are concerned with statistics in the singular.

The third stage is also a part of economic statistics. When we have got our information sorted out we shall nearly always find that is is not complete; there are matters about which we should desire to have information, but unfortunately it has not been collected in the way we want. To some extent it is possible to remedy these defects by making guesses or estimates; a good deal of progress has been made in answering the delicate question what sorts of guesses are reasonably safe and what are not. This same problem of how to make reasonable estimates arises in many other sciences; we can, to some extent, borrow the methods which they have developed for this purpose. But a good deal of care has to be exercised in doing so.

[1] Useful guides to the British material are Ely Devons, *An Introduction to British Economic Statistics* (Cambridge, 1956); Conrad Blyth, *Use of Economic Statistics* (Allen and Unwin, 1960).

Finally, in the fourth stage, we have to arrange the facts so as to bring out the answers to our questions as well as we can. This is the stage which is usually known as *Applied* or *Descriptive Economics*. Since, as we have seen, the most useful sorts of facts are those which give us similar information for different dates, it is inevitable that the study of applied economics should come very close to that of economic history. Indeed, it is nearly true to say that economic history is just the applied economics of earlier ages; applied economics is concerned with the economic history of the contemporary world.[1]

5. In this volume we shall be concerned entirely with the first and last of these four stages: *Theory* for the purpose of clearing our minds and sorting out the questions, *Applied Economics* to the extent that we shall give some illustrations of the sorts of answers we get to our questions when they are applied to recent history, particularly to the history of Britain between 1950 and 1970. Economic knowledge is discovered, as we have seen, by co-operation between all the four stages, each of them passing on its difficulties to the others. But for purposes of learning what has been discovered, the first and last of the stages—the ones we are going to deal with—are the ones to begin on. Our basic ideas need to be sorted out before we can begin to think clearly about economic problems; and we have to start as soon as possible to get practice in the application of our theory to actual experience, if only

[1] As in all human affairs, it is possible to get a fuller understanding of events if one is not in too much of a hurry; but information (and analysis) is of more practical use if it can be provided quickly. It is therefore important that there is much economic information which can be 'processed' by more or less routine methods, and which is such that a good judge can see the sense of it in time for his opinion to be of practical use. Work of this kind is nowadays one of the main jobs (other than teaching) which economists are paid to perform. Much of their work is published, in newspapers, in bank reviews, and in regular specialized publications, such as the *National Institute Economic Review* and *The London and Cambridge Economic Bulletin* (extracts from which appear, quarterly, in *The Times*). These reviews are recommended to the student as sources of statistics—he will often find that he can get his answers out of them more quickly than he can from government publications. He should, however, remember that the opinions expressed, though they are the opinions of most competent people, have been got out against time; with longer perspective, and with more work and reflection, it should often be possible to do better.

because in the absence of such practice it is impossible for the theory itself to be properly understood.

The necessity for this preliminary clearing of ideas which we call Economic Theory appears at once if we reflect how many ideas are used in the ordinary practice of business whose significance is not at all directly obvious. Some of these ideas are of a technical character, arising only in some particular industry, such as bootmaking or cotton manufacture; questions of technique are not in themselves of direct interest to the economist, although of course if he desires to make a special study of some particular kind of manufacture he will need to learn something about its technique. The ideas with which economics is concerned are chiefly those which arise, not in connection with one industry only, but with most or all industries; such ideas as 'capital', 'income', 'cost' arise in all business problems—these are the sort of ideas we have particularly to study. One of the main purposes of economic theory is to clear our minds about such terms as these. It turns out to be a more complicated matter than might at first sight be supposed. For one thing, these terms were originally invented by business men, for business purposes; but, as we have seen, the economist has to study the business world from a wider point of view than that of the business man; consequently it is necessary for him, not only to understand the business use of these terms, but also to appreciate their wider social significance. Further, when we try to work out this social significance, we find that all these ideas are very closely connected. It is impossible to understand 'income' fully without understanding 'capital' and vice versa. Economic theory therefore tends to shape itself into a system of thought, for the questions we want to ask turn out to be interrelated; answering one helps to answer others. We cannot fully understand any one of these ideas unless we have understood its neighbours as well. Answering one question shows us another question to ask, and so on almost indefinitely—but that is of course what always happens when we ask any of those key questions about the world which lead to the growth of a science.

In Part I of this book we shall start, as we have to, with a bit of Theory. Beginning from common sense and everyday experience, we shall sort out our ideas until we have reached a point where we can turn to some of the statistics and hope to learn something from them. In the later parts we shall run our Theory and our Applied Economics quite closely together.

PART I

The Productive Process

CHAPTER I

Production and Exchange

1. Economic affairs enter into the life of every one of us, the most important economic activity in the life of the ordinary man being the way he earns his living. People earn their living in all sorts of different ways—by manual work, by brain-work, in factories, in offices, and on farms, in dull ways, in interesting ways—but the thing which is common to all ways of earning one's living is the doing of work for which one is paid, doing work and being paid for doing it. In most countries the majority of people earn their living by working 'for' some particular employer; they receive their payment in the form of a wage or salary (which latter is only a word of Latin origin meaning *wage*, used instead of 'wage' so as to sound grander). But there are some people (it happens with dockers, gardeners, and journalists, for example) who may divide their time between two or three employers. And there are others (shopkeepers, doctors, farmers who deliver milk directly, and so on) who serve quite large numbers of different employers or *customers*—for it is really very much the same thing. Whatever sort of work it is that is done, whatever form the payment for doing it takes, the common element is always there: in order to earn his living a man has to work, and there has to be someone—an employer, or customer, or client—who is prepared to pay him for doing it.

Now why should the employer be prepared to pay? There are in fact several distinct cases. In the first place, an employer may be prepared to pay to have work done for him because the work is directly useful to him personally. A sick man goes to (that is, employs) a doctor because he hopes as a result to feel better in health; a traveller employs a taxi-driver to get him from one place to another when there is no public transport; a householder employs an electrician to mend a fuse. In all these instances, and in others of similar character, the work which is performed provides something which the employer or customer directly wants; whatever the nature of the want which is to be satisfied, the fact that he is to get something which he wants explains why he is prepared to pay for the work to be performed.

In many other cases the employer is prepared to pay, not because the work done is of any use to him personally, but because he expects it to result in something useful to a third person (the consumer) who will be willing to pay for it. The immediate employer is here nothing but an intermediary; he pays his employee, and the consumer pays him. The wants which are to be satisfied are the consumer's wants; the consumer is willing to pay because he gets something he wants; the employer is willing to pay because he expects to be paid by the consumer.

The necessity of having some sort of an employer-intermediary is made evident when one reflects how many workers there are whose work is in itself absolutely useless, though it becomes very useful when it is combined with the work of other people. The typical factory worker, nowadays, is engaged on some small specialized operation, which is only a stage in the making of some part of a useful article, a part like the lace of a shoe or the chain of a bicycle. Unless there are other workers to perform the other stages, and make the other parts, his work is utterly useless. There is no point in doing work of this kind unless there is someone to organize the different operations into a unity; to do this is the work of the employer-intermediary, the business manager or director, the professional employer, who brings together the different people who have the different sorts of skill needed to produce the complete article. Such an employer is not a consumer like the man who employs a doctor or a chimney-sweep; he is a worker or producer, contributing his own very important share to the process of producing goods which consumers want. Employer and employed are in fact

co-operating together in the production of something useful to consumers; they each of them derive their earnings from the payments made by the consumers, who purchase the finished articles they have produced.

Every firm or business consists in essence of a co-operation of workers, organized in some way or another to produce saleable products. But it is not always the case that the products are sold directly to consumers; very often the product of one firm is sold to another firm, which performs some further operation upon it before it reaches the consumer's hands. Even when a firm has turned out the precise material product which the consumer wants—the jam, the tooth-paste, or the newspaper—there is still the further stage of providing it at the place and time where and when it is wanted; to do this is the function of the trader and the shopkeeper, who assist in satisfying people's wants just as much as other workers do. It often happens, on the other hand, that the product turned out by a firm has not yet reached the material form in which the consumer will finally want it; the products of steelworks and spinning-mills are only the raw materials of useful articles; they are usually sold to other firms, which use them as ingredients in further production. But even in these cases, although the chain connecting the particular firm with the ultimate consumer may be quite a long one, it is still there; if we take the trouble we can see for ourselves that the ultimate object of the work which is done is to assist in making something which some consumer will want, and will be willing to pay for. That consumer may be near at hand, or he may be at the other end of the earth; still he can always be found if we look for him. It is only because there is a prospect of finding a consumer at the end of the whole process, who will be prepared to pay for something he finds useful or desirable, that people can find employment in industry or in any sort of production at all.

2. Thus it appears that the whole of the economic activity of humanity (that vast complex of activities which we call the Economic System) consists of nothing else but an immense co-operation of workers or producers to make things