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IS the world rich in material wealth? Is it capable of giving the teeming millions of its human population a better standard of living than they presently enjoy—or endure? Do we make the best use of the material resources available to us, and do we fairly share the wealth that man's ingenuity creates?

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ECONOMICS TODAY AND TOMORROW

# ECONOMICS

## MAN AND HIS MATERIAL RESOURCES

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L. A. G. STRONG

*The greatest of evils and the worst of crimes is poverty*

GEORGE BERNARD SHAW

# ECONOMICS

## MAN AND HIS MATERIAL RESOURCES

AN INTRODUCTORY STUDY OF THE WAYS IN WHICH MANKIND TRIES TO WREST A LIVING FROM THE EARTH BY UTILIZING THE LIMITED MATERIAL AND OTHER RESOURCES WHICH NATURE HAS PROVIDED, TOGETHER WITH AN EXAMINATION OF PAST AND PRESENT ECONOMIC SYSTEMS AND AN ESTIMATE OF THE PROBABLE TREND OF ECONOMIC THOUGHT AND EVENTS


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# TO THE READER

MAN finds himself upon the crust of the Earth with the instinct and the desire to keep himself alive now and, through his posterity, in perpetuity. Nature has provided the wherewithal to make this possible, both in the resources of the Earth and in the capacity of Mankind to find and employ and multiply and adapt those resources. But Man can be, and has been, blindly improvident in regard to those resources. For, while his capacity and his ingenuity may be, humanly speaking, limitless so far as concerns the adaptation of himself and his material environment to each other, his material resources are certainly not unlimited; and so the central problem of his physical wellbeing becomes the need to make the most efficient use of scarce resources.

The urgent task confronting economic science today, therefore, is a re-statement of economic principles, not only in the light of much-needed research into the barely known facts of economic development, but also in terms of those human values which for a century or more have been conspicuously absent from economic thought, and about which Economics has so much to learn from the other social sciences.

A volume of this kind is not the place for such a restatement of scientific principles; it is, rather, the opportunity for a stock-taking, a re-examination both of the problems which we look to Economics to solve for us and of the success or otherwise of the science in solving them up to the present.

Nor does the book claim to be a textbook of Economics in the conventional sense of that ancient article of University furniture. It will be evident, however, that if the problem of the world's poverty is to be solved, we must know something of how man creates wealth (Production) and how he does or could share that wealth out among the population. And as, more and more, the ordinary citizen is called upon in advanced political societies to exercise through the ballot box his individual judgment on questions which fundamentally are questions of economic principle, it is vital that he or she should have an understanding of how different economic systems are believed to work and whether they do in fact measure up to the claims their advocates make for them. It is therefore important for the ordinary reader as well as the student to know something of the rival claims, for example, of capitalist "free enterprise" and "planned" economies.

The problems with which Economics sets out to deal are still the same problems as those, for example, with which Adam Smith had to concern himself nearly two hundred years ago in his famous book *The Wealth of Nations*, but as Man's knowledge and experience increase he is bound to view those problems from new angles, in the light of changed circumstances and, no doubt, even with new social or moral purposes in mind. We are today in the midst of a revolution in men's minds so far as concerns their attitude towards those economic problems and their solution; but although the ferment of new ideas and wider horizons is strongly at work, there is as yet no modern Adam Smith and no modern counterpart of his epoch-making classic of economic interpretation to read us the riddle of the mainsprings of our present-day economic life. Those who seek this new interpretation must perforce wait awhile; but there is in the interim much understanding to be done of the essentials of economic motive and purpose, and if this book helps towards that end it will have achieved its primary aim.

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*When society requires to be rebuilt, there is no use in attempting to rebuild it on the old plan.*

JOHN STUART MILL

# I. HOW MAN ORDERS HIS ECONOMIC AFFAIRS

## CHAPTER I

# THE WORLD'S POVERTY

WHAT we most expect from our economic arrangements is a high standard of living. Not everyone holds this opinion. The idea that men can and should have a high and steadily rising standard of life is comparatively new. It is not more than a few centuries old in Western Europe; and outside Western Europe, North America and the other overseas countries settled by emigrants from Europe this idea is still not very widely held. In China or India, as in Africa or Eastern Europe or much of Latin America, ordinary people do not think about the prospect of having a rising standard of living; rather are they worried about the chance of keeping what they have got. Subsistence and scarcity are all that the masses of mankind have dared to hope for until very recently. Menaced continually by flood, drought, locust, epidemic and war, they have been content if they could scrape through year by year, and have expected nothing but to die in no worse state of poverty than that in which they had the misfortune to be born.

### BENEFITS OF SCIENCE

The idea that we can have a rising standard of living had to wait until man learnt to fight nature, and to control her. Science has made it possible for us to free ourselves from the fear of natural calamities, of drought and flood and epidemic; and it has taught us how to force nature to yield us ever more and more material wealth for less and less human effort. As men learn more and more of the benefits that this knowledge can confer, they reject the limited ideals of their forefathers. In every country of the world today the demand for a higher standard of living is articulate and compelling. The objective of rising standards is almost the only one that today unites nearly all of the world's politicians and statesmen.

But there are dissenting voices. New methods of production conflict with traditional ideas, religious, political, legal and other, and traditionalists in Asia or Africa or elsewhere fear, and frequently resent, the impact of the new ideas on ancient institutions. They know what was good in the old

institutions, and do not know what may come from the new. Their fears are shared by many people even in modern countries, where the new methods are already in full fruition; by people who have seen what great benefits a higher standard of living may bring, but who nevertheless doubt whether it is a desirable social aim. Some of these people have a touch of mysticism. They think that man should cultivate his soul, and that the pursuit of material objectives is damaging to the soul. Others look back over the history of the past three or four centuries in Europe and America, with their great growth of industrial civilizations, their slums, their bitter wars and class struggles, and compare all this with the societies of simpler peoples. Were not men happier, they ask, before all this progress came upon them, and are not those who are stimulating men the world over to desire and to demand rising standards of life, really a danger to human happiness?

## THE CURSE OF MANKIND

True judgment cannot be reached on this issue unless we strip ourselves of illusions. There is nothing idyllic about life in the simpler societies. The simple, happy and contented peasant, living peacefully with his neighbours in his tribe or village, is a figment of poetic imaginations. Poverty, malnutrition, famine, insecurity and sudden death flourish together, and it is these, rather than happiness and contentment, that are most characteristic of those peoples whom the benefits of science have not reached, just as it is these that are the lot of the poor in the advanced and richer countries. Neither is it just a matter of material comforts. Poverty usually means ignorance, superstition, intolerance and narrowness of spirit. It is the curse of mankind. None of the things we want, material or spiritual, can be attained without greatly improving the world's standard of living.

There is much to be done, for the world is still a very poor place. We cannot measure its poverty by absolute standards, but the rough measures that we can devise leave no doubt about the issue. The simplest way to measure the standard of living of a country is to add up the incomes of all the people who live there, and to divide by the number of people at work.

## INCOME VARIATIONS

Adding up all the incomes gives us the "national income"; dividing gives us the "national income per head of the working population." There are great difficulties in getting the information needed to make this calculation, and still more difficulties in comparing the national income of one country with that of another. The different goods and services have all to be reduced to a single common denominator of money, and adjustments have to be made for the fact that prices are higher in some countries than in others. Mr. Colin Clark has braved all these difficulties, and after making

the necessary allowances to get really comparable figures, has calculated national incomes per head over the period 1925 to 1934. Taking the purchasing power of the dollar in that period as the standard, and converting roughly into pounds sterling, we find enormous variations between countries. Thus the highest standard was in the United States of America, where average income per head of the working population was £276 a year. In the United Kingdom it was £214, in Germany £130, in Japan £70, in Rumania £49, in China £23, and in many countries of the world it was less than £10 a year.

How poor is the world is shown in the following table which indicates how the world's population is distributed by country, according to the average income per head of each country:—

DISTRIBUTION OF WORLD POPULATION BY INCOME LEVELS

| *Average income of the country per head* | *No. of people in countries at this average (millions)* | *Income of countries (£ millions)* | *Percentages of people (col. 2) to world total* | *Percentages of income (col. 3) to world total* |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Over £200 p.a. .. .. | 204 | 20,000 | 9 | 39 |
| Between £80 and £200 .. | 318 | 11,700 | 15 | 23 |
| ,, £40 and £80 .. | 519 | 9,500 | 24 | 19 |
| Under £40 .. .. | 1,112 | 9,700 | 52 | 19 |
| | 2,153 | 50,900 | 100 | 100 |

Column 1 and column 4 taken together are very revealing. They show that more than half of the world's population lives in countries whose income is less than £40 a head per annum. Only 9 per cent of the world's population lives in countries where the average income exceeds £4 a week.

These figures serve only to confirm what we already know from other indices of poverty. For the world's poverty is obvious in every sphere—in malnutrition, in bad housing, in ill-health, and in barrenness of mind, as revealed by such matters as illiteracy and the prevalence of superstitious fears.

## MALNUTRITION

Take malnutrition. In 1937 a League of Nations committee, after lengthy deliberation, reached the following conclusion:—

"In the United States and Western Europe much malnutrition exists among the lower income groups. Available data suggest a figure of between 20 and 30 per cent of the entire population. In the British Dominions, although food consumption is relatively high, malnutrition is not uncommon,

especially among children. In Central and Eastern Europe, malnutrition prevails extensively, and there is often a lack of the staple foods as well.

"The diets of the great mass of the population in the East are grossly deficient in terms of any standards of adequacy put forward by nutrition workers. Some 75 per cent of the 1,140 million inhabitants of Asia have a diet far below the standard for health."

*Inadequate Diet*

We can put the same facts in a different way. The world produces too little food to give everybody a good diet. To quote Sir John Boyd Orr:—

"In the United States, where estimates have been made of the amount of food needed to feed the whole population on a health standard, it has been found that 40 million more acres of food and feeding-stuff crops will need to be grown. Fruit and vegetable output will need to be increased by about 75 per cent; milk by about 30 per cent; eggs by about 23 per cent; with smaller increases in other foods. . . . In poorer countries much larger increases are needed. In India some of the staple crops would need to be increased by 100 per cent to 300 per cent. In one rough calculation which was made of the world's food requirements, it was found that, simply to satisfy hunger, the energy-producing foods such as wheat, rice and other cereals, would need to be increased by between 15 and 20 per cent. Protective foods will need to be increased by something between 100 per cent to 200 per cent. The need for protective foods is so much higher than for cheap cereal foods on which the poorest people mainly live. As the standard of living rises, the consumption of the relatively expensive protective foods increases."

The protective foods—fruit, vegetables, eggs, milk, butter, meat, fats—are expensive because their yield, in hundredweights of food per acre, is very much smaller than the yield of cereals and root crops. Poor peoples live mostly on the cheaper foods, and their resistance to disease is very low.

## OVERCROWDING AND DISEASE

Bad housing is another of the consequences of poverty, and another cause of bad health. All over the world, housing conditions are bad. For example, Great Britain's standard of housing is among the best in the world. Yet, in 1936 there were nearly 300,000 houses recorded as insanitary and scheduled to be pulled down, using only a very restricted test of insanitary conditions.

Using a very restricted test of overcrowding, there were nearly a million families grossly overcrowded. In the United States, on less restricted definitions, it is estimated that some ten million families, or nearly one in three, are living in sub-standard houses. And that is in the richest country in the world. In the poorest countries, the majority of the people live in small hovels, dirty, badly ventilated, crowded and lacking elementary conveniences. Here, for example, is what a Royal Commission has written of housing in

the British West Indies, an area where income per head in 1925–1934 was well under £40 a year:—

"In both town and country the present housing of the large majority of the working people in the West Indian colonies leaves much to be desired; in many places it is deplorable; in some the conditions are such that any human habitation of buildings now occupied by large families must seem impossible to a newcomer from Europe. It is no exaggeration to say that in the poorest parts of most towns and in many of the country districts a majority of the houses is largely made of rusty corrugated iron and unsound boarding; quite often the original floor has disappeared and only the earth remains, its surface so trampled that it is impervious to any rain which may penetrate through a leaking roof; sanitation in any form and water supply are unknown in such premises, and in many cases no light can enter when the door is closed. These decrepit homes, more often than not, are seriously overcrowded, and it is not surprising that some of them are dirty and verminous in spite of the praiseworthy efforts of the inhabitants to keep them clean. In short, every condition that tends to produce disease is here to be found in a serious form. The generally insanitary environment gives rise to malaria, worm infection and bowel diseases; leaking roofs, rotten flooring and lack of light encourage the spread of tuberculosis, respiratory diseases, worm infections, jigger lesions and rat-borne diseases; overcrowding, which is usually accompanied by imperfect ventilation, is an important agent in contributing to the high incidence of yaws, tuberculosis, venereal diseases, and, to a certain extent, leprosy."

## POVERTY'S GRIM TOLL

Health and income are closely connected. In Great Britain, among the well-fed and well-housed, the infant mortality rate has been brought down to 20 per 1,000; but among the badly fed and housed it is 100 per 1,000; four out of every five of these babies dying simply because of the poverty of their parents. Similarly, when countries are compared, the infant mortality rates reflect very closely the differences in national income per head. For the United States the rate per 1,000 is 51, for the United Kingdom 55, and for France 66; for Hungary it is 125 and Portugal 139; for Barbados it is 221 and for Burma 223. In Burma, of every five children born one dies; and of every ten that die nine would live but for the poverty of the country. Adult death rates show the same connexion. In the U.S.A. a person who reaches the age of twenty has a further expectation of life of about 47 years; in Egypt of 34 years; and in India only of 28 years.

Further enumeration is not needed. The world is a very poor place, and poverty takes a grim toll in death, disease, pain, fear and ignorance. The mystic may tell us that men who live in such conditions are no less happy,

or no further from spiritual salvation than men whose standard of living is higher. But, mystics apart, most of us dislike the evils that are synonymous with poverty, and desire to abolish them. The world must have a much higher standard of living not only so that mankind may have more physical comforts, better health and more leisure, but just as much, also, so that we may cultivate the pleasures of the mind and the spirit, which do not flourish at low standards of living.

To give every country in the world a standard of living comparable with that of Britain or of the United States would require an increase in world production of between 300 and 400 per cent; that is to say, production would have to be some four or five times as large as it is at present. To get all the countries of the world on to an Anglo-American level is a pretty formidable task; but even the Anglo-American level is not really very high, leaving as it does millions in England and America still well below the poverty line.

## DISTRIBUTION OF WEALTH

Why is there such an enormous range between countries? Let us look again at the figures in the table on page 9. Reading columns 4 and 5 together reveals that a quarter of the world's population enjoys about two-thirds of the world's wealth, while 76 per cent produce only 38 per cent. The average worker in the United States has an income ten times as large as that of the average worker in China.

The principal reason for this difference is, of course, that the poorer countries make only very inefficient use of their resources. It may be that they have also not such good natural resources as those of the wealthier countries. We have no reason to think that in general the rich countries have better natural resources than the poorer ones; very little is known about the resources of the poorer ones, simply because scientific knowledge does not flourish in poverty. But even if the poor countries may have poorer resources, this does not at all explain why they are so poor. For every one of these countries could be very much richer if it would make better use of the resources that it has. The cause of poverty is not poor resources but poor utilization of what is available.

## SCIENCE AND PRODUCTIVITY

A high standard of living is achieved only when men apply science to production. Science gives us better strains of crops to plant; teaches us to control their diseases; irrigates deserts; shows how power can be used to increase output; and enables us to organize production and distribution more economically. Where science is fully applied, output increases several-fold. At present the vast majority of the world's workers are innocent of the benefits of science. They work with primitive equipment, little power, and

ancient and wasteful techniques. In manufacturing industry we are accustomed to the enormous difference which power, technique and organization make in increasing output per man, multiplying it many times over. The triumphs of science in agriculture are as revolutionary. One way of measuring this is to calculate for each country what proportion of its population would need to be engaged in agriculture to give the whole people an optimum diet, using the agricultural techniques current in that country. According to Mr. Colin Clark's estimates, the result is as shown in this table.

PRODUCTIVITY OF LABOUR IN AGRICULTURE

*Showing proportion of population required to engage in agriculture to produce an optimum diet for all inhabitants*

| *Country* | *per cent* |
|---|---|
| New Zealand, Australia, Argentina, Uruguay | between 6 and 16 |
| U.S.A., Denmark, Canada, Holland, Germany, Great Britain, Switzerland | „ „ 32 |
| France, Belgium, Sweden, Czechoslovakia, Estonia | „ 32 „ 64 |
| Poland | 99 |
| Japan | 141 |
| U.S.S.R. | 200 |

In Poland the whole population would have to be on the land, in order to have an optimum diet. In Japan and in the U.S.S.R. agricultural methods are so unproductive that, even if everyone did nothing but till the soil, the diet would still remain far below the optimum. Labour in agriculture is some twenty times as productive in New Zealand or Australia as it is in the U.S.S.R. and something like a half of the world's agriculturists are no more productive —many are less productive—than were the agriculturists of the U.S.S.R. in the period 1925 to 1934 to which these figures refer.

These figures explain low standards of living in two ways. The obvious way is that it is because of low productivity that people have so little to consume.

But there is also another point of importance. The first labour of mankind is to produce food, and it is only as the technique of food production improves that labour can be spared for other needs. If a country's agricultural techniques are so poor that a very large part of the labour force has to engage in agriculture just to feed the population, there will be correspondingly less labour to spare for manufacturing industries and for other services, and so the standard of living is bound to be low. In most countries of the world the urgent task of today is to improve agricultural productivity so that there may at the same time be more to eat and more labour to spare for raising the standard of living in other ways.

What are the prospects of improving the conditions of the countries at the bottom of the scale? More than half the world's population lives in Asia,

and it is inefficiency of production in that continent that is such a drag on the material progress of mankind. If the people of Asia produced more, not only would they themselves be better off, but their greater wealth would also increase the wealth of the peoples outside Asia through the increased opportunities for specialization and exchange.

Many centuries ago the peoples of Asia were in the vanguard of human progress. They were wealthy when Western Europe and America were covered with grass and swamp and forest, interspersed here and there with primitive clearings. And for many centuries after the birth of Christ they were still showing vigorous achievement. Then came periods of stagnation and disintegration arrested only within the last two centuries by the impact of modern Europe on Asia.

## REACHING HIGHER STANDARDS

The leeway to be made up is huge. The U.S.A. in the sixty years before 1913 was improving its standard of living at a rate of 0·8 per cent per annum. If China were to start now to progress at this rate, it would take her nearly 300 years to reach the standard of living of the U.S.A. in the 1930s, by which time, of course, the U.S.A. herself would have attained to even higher levels. These 300 years are the measure, in so far as such things can be measured, of how far China is behind the United States in material terms. However, in these days progress has speeded up. Some new countries, profiting from the experience of those whose application of science is older, have been achieving quite remarkable rates of progress. Thus from 1897 to 1928 the Japanese standard of living increased at a rate of $2\frac{1}{2}$ per cent per annum, and at this rate China would be only 100 years behind the United States.

Many people consider that it is only a matter of time before the peoples of Asia get down to raising their standards of living at a rate comparable to that which Japan had reached. But there are substantial obstacles to be overcome before steady progress becomes possible.

## CONDITIONS OF PROGRESS

First, the Asiatic countries must achieve stable and efficient governments. Riots, civil war, corruption, political insecurity and inadequate legal and administrative services are unfavourable to economic progress, and over much of Asia these conditions obtain at present. There is no question, in the light of centuries of history, that these countries can maintain stable and efficient governments, and neither is there any reason to doubt that political stability will be achieved in future. But existing conditions are so insecure that no one can venture to guess how soon this may be.

Given political stability, what is then needed is the application of science to production. Science in this context means not so much the discovery of

new knowledge as the application of existing knowledge. New knowledge is necessary and useful, but the gap between what scientists know and what is applied is so enormous that merely to apply what is already known would achieve an inconceivable increase in output. The problem is, therefore, in the first place one of education.

The mass of the population of Asia is illiterate. Much can be done among illiterate peoples by demonstration and by discussion, but where people are literate still more can be done by writing. Spreading literacy used to be considered an immense problem, requiring decades and generations, and vast expenditures on schools and teachers; but new techniques have been applied in this field also, with startling results. Thus, the U.S.S.R. claims to have wiped out mass illiteracy within its borders in twenty years, and by educating the people to all the benefits of science, whether in matters of hygiene, of administration, or of production techniques, to have achieved a rate of growth of production never previously considered possible. Even if the Russian claim to have quadrupled the national income in ten years is rejected, and a conservative estimate of an increase of 50 per cent per head in ten years is taken, China at the Russian rate is only sixty-two years behind the United States.

The Russian rate, however, required something more than political stability and a highly successful educational technique. It also required coercion to bring about big changes in organization, and to enforce an unusually high rate of saving.

## TRANSFORMING AGRICULTURE

One of the greatest difficulties in trying to improve primitive agriculture arises out of the fact that the average peasant holding is too small a unit for economic production. Most of the peasants in Asia work on holdings of from two to five acres, often fragmented into small parcels of widely separated land. In Europe the peasant farmers get the best results on a holding of about thirty acres; and, in growing cereals or root crops, to get the largest output per head by use of mechanical equipment calls for a farm of anything from three hundred to one thousand acres. But to transform an agricultural system from a basis of two-acre fragmented holdings to a basis of compact three-hundred-acre or even thirty-acre farms is a gigantic task.

### *The Russian Method*

The Government of Soviet Russia put its hand to the task in the early 1930s and succeeded, but only at a great cost in human blood and misery incurred in forcing a system of collective farming upon a reluctant and individualistic peasantry. The transformation can be achieved without such ruthlessness, by education and persuasion, coupled with material inducements and with measures to reduce the pressure of population on the

land; but it is then a slow process, requiring nearly as many generations as the Soviet Government took years.

The Russians also imposed on their people a rate of saving equal to about a quarter of the national income. The application of scientific methods calls for capital, to be sunk in means of transport, in mines, in industrial machinery, in tractors and in buildings of all kinds—schools, hospitals, houses, factories.

### RATE OF SAVING

Capital is very productive. Even in quite highly capitalized countries a doubling of the capital in use would increase output per head by at least 20 per cent per annum, and in less capitalized countries, where the scope for using new capital is even greater, doubling capital might increase output by as much as 33 per cent per annum. A poor country saving a quarter of its national income would just about double its capital in ten years, and this alone, excluding the effects of education on the productivity of labour, would increase its living standard by one-third in ten years.

To save a quarter of the national income is, however, a phenomenal effort. Poor countries can usually afford to save very little. Many save less than 5 per cent of their incomes, and those that save as much as 10 per cent are thought to be doing very well. Even a rich country like the U.S.A. was saving in the 1920s only about 10 per cent of its income. In deciding, therefore, that the Russian people should save as much as 25 per cent, the Russian government was imposing upon them an obligation which only the strongest measures, backed by unassailable state powers, could enforce.

### INTERNATIONAL LENDING

However, such a rate was considered necessary for the U.S.S.R. only because very little capital could be borrowed abroad. If rich countries are willing to lend capital to Asia, the peoples of that continent can make do on a much lower rate of saving. It is by this sort of international lending that the world has progressed in the past four or five centuries; the great creditor nations of the 1930s, the U.S.A., Great Britain, France, Belgium and Holland, have all at one time or another in their history been debtors, and it is only as they developed themselves on borrowed capital that they were able to repay their debts and eventually themselves to start lending to other nations.

The role of principal lender has now passed to the United States. Great Britain, the chief lender before 1914, is now very short of capital herself, and has become a borrower. Probably for the next four or five years the U.S.A. will be the only lending country of any importance, but as countries like Britain and France complete their post-war reconstruction they will probably lend again. The importance of international lending was given special

emphasis when, in 1945, the United Nations decided to establish a World Bank for Reconstruction and Development. With so many countries anxious to borrow for rapid development, and with the desirability of development so widely recognized, international lending will probably be larger in the next few decades than ever before.

To sum up, the application of science in Asia requires that the people should achieve a three-fold revolution, involving a wide spreading of education, a reform in the scale of organization, and a big increase in capital formation. There is no reason to doubt that these changes will occur; but how rapidly they will occur, and whether rapidly enough to deserve the title of revolution, only time will tell. The crust of tradition and of prejudice is difficult to break.

The attitudes of the people of Asia are fatalistic; and the masses are interested not in progress but in stability and security, which in the context of their present ideas and ways of living really means stagnation. What little impulse there is to new ideas has come from outside. European books and films and European immigrants in various roles, governors, teachers, industrialists, farmers, doctors, missionaries, political agitators and so on, have been the chief source of new ideas in the last two or three centuries, all tending in their various ways to reveal the possibilities of science. The immigrants have been few, but they have been enough to stimulate indigenous groups through whom the new ideas are steadily destroying the old. Perhaps the first and most visible fruit of the contact is a fierce nationalism which, on the one hand, resents the superior claims of Europe, and is forcing the Western Powers to relinquish their imperial authority in Asia; and which, on the other hand, resents the inferiority of Asia in material things, and is determined to catch up with the West. The future now lies in the hands of small groups of Asiatic intellectuals who are trying to push their countries along the way of economic progress, fighting each other as they go, over the methods to be used, and struggling with their own masses to stir them from their present ways. They are not numerous; pioneers never are; it is always the drive and passion of a few men that starts the process which eventually works a change right through society. The way of these pioneers will be hard, and may be long, but there is no reason to doubt their eventual success.

## THE DISTRIBUTION OF INCOME

We may now return from assessing the causes of differences in wealth between one nation and another, and consider instead the differences that there are in standard of living between one individual and another inside a single nation.

The pattern inside the nation is very similar to that which we get when we compare nations, namely one of marked inequality. Here, for example, are

figures showing the distribution of income in Great Britain in 1937, which Mr. J. R. Hicks has estimated.

| *Income per annum* | *No. of incomes in the class (thousands)* | *Total income in the class £ (millions)* | *Percentage of incomes in the class (col. 2)* | *Percentage of income in the class (col. 3)* |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Over £2,000 .. .. | 110 | 555 | 0·4 | 13·5 |
| Between £1,000 and £2,000 | 177 | 240 | 0·7 | 6 |
| ,, £500 and £1,000.. | 475 | 320 | 2 | 8 |
| ,, £250 and £500 .. | 1,888 | 615 | 8 | 15 |
| Under £250 .. .. | 22,300 | 2,330 | 89 | 57·5 |
| | 24,950 | 4,060 | 100 | 100 |

The similarity of this distribution to that of the distribution of the world's income between countries is very marked. Thus we found on comparing countries that 9·5 per cent of the world's inhabitants lived in the richer countries enjoying 39 per cent of the world's wealth; in the U.K. detailed analysis for 1937 suggests that the top 9·8 per cent of the people received 36 per cent of the national income, a remarkable parallel. Similarly, 24·3 per cent of the world's people, in the richest countries, received 62 per cent of the world's income, while 22·7 per cent of the people of the U.K. received 50 per cent of the income of the U.K. In so far as such figures can be accepted —and they include a large element of guesswork—they suggest that the inequality in Britain is closely similar to the inequality between countries, but slightly smaller.

## INEQUALITY OF INCOME

This pattern of inequality is found not only inside Britain, and as between nations, but also in every country whose income distribution has so far been analysed. Statisticians have evolved ways of measuring the inequality of incomes. They have found that in every country, if incomes and the number of people receiving them are plotted cumulatively on logarithmic paper, the points join up into a straight line (they call this Pareto's law, after the person who first discovered it). The slope of this straight line measures the inequality of income; the greater the slope, the smaller the inequality. Thus, according to Mr. Colin Clark's calculations, the British slope has increased from 1·47 in 1848 to 1·68 in 1932, indicating that the inequality has been somewhat reduced, and many other countries reveal the same tendency to greater equality. What is also interesting is the fact that the degree of inequality is much the same for most countries. In the 1930s the slope

ranged from 2·25, 2·21 and 2·03 in Australia, New Zealand and Finland respectively, which are somewhat equalitarian agricultural countries, through Denmark 1·94, and France 1·82, to the U.S.A. 1·70 and Great Britain 1·68, which are among the most inequalitarian countries in the world. However, the differences are not very large, and the general pattern of inequality is more significant than the different degrees of inequality.

## INEQUALITY OF PROPERTY

Inequality of income is very closely connected with inequality of property, and this particularly explains both the differences between persons and the different degrees of inequality in different countries. For example, in Great Britain three-fourths of the adult population in the 1930s owned no property at all or less than £100 worth, while at the other end of the scale 2 per cent of the population owned two-thirds of the private property in the country.

The distribution of property has a great influence upon the distribution of income because 30 per cent of the national income is paid to property owners. Thus in Britain we should expect to find the 2 per cent of the people who own two-thirds of the property receiving 20 per cent of the national income simply because of this ownership; and actually calculation shows that, when earnings from work are included, the top 2 per cent of the population gets about 24 per cent of the national income. The uneven distribution of property is one of the principal causes of the uneven distribution of income.

Two questions arise at once. First, why does property get as much as 30 per cent of the national income? And, secondly, why is the ownership of property so uneven?

## PROPERTY'S SHARE

The first question is not difficult to answer. The income of property depends on its productivity. As we saw earlier, statisticians have estimated the productivity of property, and have expressed the result in a mathematical formula which shows, for example, that if a country doubles its capital its national income will increase by something between 20 per cent and 33 per cent, according to the opportunities available for using capital in that country. The very same formula tells us what proportion of the national income will be received by capital if it is remunerated according to its productivity The calculations for different countries range between 25 per cent and 40 per cent, and in each country the calculation of what property would get if remunerated on this basis coincides with what property actually does get. There is a simple theoretical explanation of this coincidence. In a profit-making society, no one hiring property will pay for it more than it adds by its productivity to the results of his efforts; and in a competitive society no one will be able to pay property less than this because competition between

the hirers of property will force the rate up and prevent the hirers from exploiting the owners. Britain is not a perfectly competitive society, but it is sufficiently competitive to ensure that over a period of years property owners get the full productivity of their capital. It seems that during the past century or so there has been some tendency for the productivity of capital to decline, as the amount of capital has grown, and it may be this that explains the tendency for the distribution of income to become more equal.

### UNEVEN DISTRIBUTION OF PROPERTY

The uneven distribution of property is not so easily explained. Inequality of ownership varies quite significantly from one country to another. In new countries overseas, where agriculture is the principal industry and land is plentiful and cheap, land ownership is widely distributed, and so is income; for example, in Australia and New Zealand. It is in the older countries such as Britain that the greatest inequality is found. The reason seems to be that as, with the growth of population, land becomes scarce, the careful, the thrifty, the lucky and the astute acquire more and more of it from the careless, the spendthrift, the unlucky and the simple. Then, with the passage of time, the distribution worsens. As population grows, land automatically becomes scarcer and more valuable without any effort on the part of the owners—the biggest fortunes are those of people whose estates have become big centres of urban population, and have multiplied their rental value several times over in the process. Then there is also the inequality of opportunity resulting from the uneven distribution of property, and this also is cumulative. The sons of the well-to-do have much better opportunities for acquiring further wealth than have the sons of the poor. They get a better education. They are offered the best-paid jobs, frequently even when they are not as well qualified for them as are people of lower social status. They have better chances of making a rich marriage, which piles property on property, and so on. The ownership of property tends naturally to ever-growing inequality, and if inequality has tended to diminish in some countries in the last century or so, it is mainly because the unpropertied have made their governments take measures that have had the effect of checking the natural tendency for inequality to increase.

### ACHIEVING EQUALITY

Today in most modern countries the vast majority of the people, rich and poor alike, take it as beyond dispute that there is an obligation upon governments to adopt measures that will reduce inequality. But this is a modern phenomenon. Two hundred years ago it was hardly respectable, in the circles of the rich no less than of the poor, to suggest equalitarian measures. Today's defenders of inequality are more often to be found among the middle classes

than among the rich or the poor. Many of the rich, in a country like Britain, have become slightly ashamed of being rich. They no longer indulge conspicuously in extravagant expenditure, and they no longer flaunt their social status or expect it to bring them such great privileges as it used to; and when they see a rich Indian prince or a rich American manufacturer behaving conspicuously in the old manner, many of the British rich are embarrassed by what they feel to be vulgarity. The poor also take equalitarian measures for granted, and vote stubbornly for their extension. It is the middle classes who, having, unlike the poor, nothing to gain from redistribution, and unlike the rich, no need to feel ashamed of power acquired without effort, tend to resent equalitarianism, and are the main philosophical and political source of opposition to its rapid extension.

Equalitarian measures have taken three forms. The first is the effort of trade unions to increase by wage negotiations the share of the national income going to labour. The second is measures for the redistribution of property. And the third is the redistribution of income by means of progressive taxation and subsidization of such things as food and families.

## INFLUENCE OF TRADE UNIONS

The trade union effort has been a failure. The relative shares of labour and of property in the national income are determined by productivity, and wage negotiations do not affect productivity. The share of the national income going to property has declined a little in the last hundred years, but this corresponds exactly with a decline in the physical productivity of capital. There is no evidence that a hundred years of powerful trade unionism in Britain has altered the share of the national income going to property; the evidence suggests that there has been no effect one way or the other.

Trade unions operate by raising wages. Now a general increase of wages would increase the share of labour in the national income only if prices did not rise in the same proportion as wages. If prices rise by the same amount as wages, then the workers are no better off than before, and the property owners are no worse off. All the available evidence, including deliberate experiments in France, in the United States, in Australia and in New Zealand in the 1930s, points to the conclusion that when there is a general increase in wages there is a general increase in prices to the same extent; the property owners are no worse off, and the vast energies that labour has put into the wage struggle are frustrated. To alter the share of the national income going to labour it would be necessary, when wages are increased, for the government to take deliberate action to prohibit the increase of prices that would otherwise automatically follow. But if the government prevents prices from rising while wages are rising, so many enterprises become unprofitable that there is a considerable increase in unemployment. It is not sensible to

put so much effort into redistributing income in this way, at the cost of creating unemployment, when more effective and less painful methods are just as easily available.

This is not to say that trade unions do not fulfil a useful purpose. On the contrary, they are of immeasurable benefit to the working classes. Their contribution through wage bargaining is small, but their contribution in other ways is immense. In the sphere of wage bargaining, while they do not alter the proportions of the national income as between labour and property, they do substantially affect the distribution as between one class of labour and another. This they do, either by collective agreements which keep the earnings of one class of labour high relatively to those of other classes, or by measures which restrict entry into the better paid classes, and which, by keeping numbers scarce in those classes, keep earnings high relatively to the earnings of unregulated trades. Unfortunately trade unionism is always more successful among the better paid classes of labour than it is among the worst paid, and so it is actually a force that makes inequalities greater.

### POWERFUL PROTECTION

Thus the most powerful restrictive trade unions are those of the doctors, the lawyers, and the skilled craftsmen, who use them to protect their own incomes, and not among domestic servants, agricultural labourers or unskilled workers, whose need for protection is much greater. The government has sought to remedy this by setting up machinery, such as the trade boards, to raise wages among the depressed classes; the other part of the same remedy would be to prohibit the better paid from using their unions (or professional associations, as the best paid prefer to call them) for wage bargaining or restrictive purposes. This would not affect the share of the national income going to labour as a whole, but it would greatly improve the position of the poorest workers relatively to the position of the better paid.

### THREE TRADE UNION FUNCTIONS

But the greatest uses of trade unions are not in the wage sphere at all, but outside it. The trade union has three important functions to fulfil on behalf of the working classes. The first is that the trade union represents and strengthens the individual worker in relation to his employer. The worker is in a weak position; he is poor and insecure, and in the absence of a trade union to support him he could not afford to insist on justice in relations with his employer. Without trade unions he has to put up with much petty tyranny, insult and injustice, not necessarily connected with wages, and has to carry all this with a humiliating obsequiousness as well. But with a strong trade union behind him he can recover dignity and independence.

The second important function of trade unions is to represent the collective

view of workers on all matters that affect them. Thus they negotiate on hours of labour, on shift working and on similar conditions of employment. To an increasing extent they sit in on the higher councils of a firm in which policy is made affecting production, prices, finance, and all the other matters that will impinge upon the worker. And outside the firm their representatives sit on government committees, negotiate with departments, and so on. The interests of labour receive much more just consideration now than ever they did before the trade union movement became powerful.

This second function merges into the third, which is political representation. In Great Britain most of the unions of manual workers have a political fund. Most of them also use a part of this fund to support the party of their choice, but this is not an essential part of the political work of trade unions, and neither does it absorb the larger part of their political funds. Parliament is constantly passing legislation that affects the workers in their capacity as workers, and not just in their capacity as citizens—laws on wage determination, factory conditions, industrial injuries, etc.—and it is very desirable that the workers should be represented in such discussions.

To sum up, the effect of trade unions on the share of the national income going to labour is negligible, while the effect in improving the workers' position in less tangible but in important ways is invaluable. We pass then to the second method of reducing inequality; the redistribution of property.

### AGRARIAN REVOLUTIONS

In agricultural countries a social revolution, whether violent or peaceful, is usually marked by a change in the distribution of land ownership, the revolutions of the past thirty years, e.g. in Russia, in Mexico and in Central Europe, having usually resulted in the seizure of large estates and in their redistribution among the peasantry. There are limits to the usefulness of this method. In so far as it results in production being conducted on a small scale in many thousands of small holdings instead of on a large scale in a few large farms it usually causes the national income to decline. Of course, the incomes of the poor may increase, and frequently do, in spite of the decline of the national income as a whole, because of the redistribution. Nevertheless, the resort to uneconomic forms of production is a serious liability in countries which are already very poor. It is for this reason that in Soviet Russia, some thirteen years after the Revolution, the government retraced its steps, persuading and compelling the peasants to put their holdings together into large farms which can be worked collectively as single units. The same policy of collective ownership and operation is now being tried elsewhere, for example in Mexico and in Puerto Rico.

In industrial countries, similar considerations rule out the breaking up of the unit of production into smaller units, and it is accordingly argued that

redistribution is best achieved by nationalization. For example, if the government expropriates the owners of factories and mines, it can, if it wishes, dispose of the property by issuing share certificates for each undertaking and distributing these shares to the poor. The property will remain in private hands, just as expropriated landed estates remain in private hands when they are divided among the peasants, but the ownership will be different, and much more widely diffused than before—it can initially be so widely diffused that there is absolute equality of ownership throughout the nation. Many modern liberals favour such a policy, but it is open to the objection that such wide diffusion of ownership might render difficult the efficient control of industrial enterprises. Accordingly most advocates of redistribution are in favour of the government's retaining expropriated property in its own hands.

Expropriation of property is not to be confused with nationalization, where full compensation is paid to owners. Such nationalization does nothing to alter the distribution of income. If the owners get the full value of their property, as is usual with British nationalization, they are just as rich as before, and the poor just as poor.

### REDISTRIBUTION BY TAXATION

In Great Britain, governments are willing to expropriate only by taxation. Death duties and capital levies are really a form of expropriation of property, while income taxes may leave the ownership of property undisturbed, but expropriate the income, which comes to the same thing. Death duties and capital levies could be made more clearly and specifically an expropriation of property if the government would take the proceeds, not in money but exclusively in shares, bonds and other title deeds to property. (It has recently agreed to accept land in payment of death duties.) But this would have point only if the government intended either to distribute the title deeds to the poor or to hold them itself; for if it merely sold them for cash, the situation would be the same as if it accepted cash in the first place.

Many people are specially attracted by death duties as a form of taxation because they reduce the inheritance of inequality. An income tax or a levy on capital falls equally upon the wealth of a man whether he has worked hard to build it up, or has acquired it effortlessly by birth, but a death duty, while allowing a man to enjoy fully the fruits of his own labour, merely denies that others who come after shall gain a special advantage. The effect of high death duties would be that in each generation all children would start life with opportunities much more equal than is the case if some may inherit great wealth. Of course, many people point out that the right to leave money to one's family is one of the incentives that has made men work well and hard and they argue that heavy death duties, by diminishing such incentives, must reduce the rate of progress. But all heavy taxes probably reduce incentives,

and death duties probably do so less than income taxes or capital levies. Also the net effect on the rate of progress depends partly on how those who benefit from the redistribution react. If they are better fed, clothed, housed and educated, economic progress may be much more rapid than it would otherwise be. We just do not know whether equalitarian societies progress more or less rapidly than others, for the simple reason that the experiments in equalitarianism have been too few and too recent.

Considerable progress has been made in Great Britain towards redistribution of income through taxation. This is done by laying much heavier taxes upon the rich than upon the poor, proportionately to their incomes. Here, for example, is an estimate by Mr. J. R. Hicks of the distribution of taxation in Great Britain in 1937:—

| *Income per annum* | *No. of incomes in the class (thousands)* | *Total income in the class (£ million)* | *Taxes paid by by the class (£ million)* | *Income after taxation (£ million)* | *Tax paid as per cent of income* |
|---|---|---|---|---|---|
| Over £10,000 .. | 9 | 180 | 97 | 83 | 54 |
| £2,000–£10,000 .. | 101 | 375 | 130 | 245 | 35 |
| £1,000–£2,000 .. | 177 | 240 | 68 | 172 | 28 |
| £500–£1,000 .. | 475 | 320 | 78 | 242 | 24 |
| £250–£500 .. | 1,888 | 615 | 114 | 501 | 19 |
| Under £250 .. | 22,300 | 2,330 | 458 | 1,872 | 20 |
| | 24,950 | 4,060 | 945 | 3,115 | 23 |

This table yields several interesting results. First, the figures in the final column show how steeply progressive taxation was, even in 1937. People with incomes of over £10,000 a year were paying more than half their incomes in taxation, while the poorest people were paying only a fifth. Indeed the difference was greater than this, for it was estimated that about half of the government's expenditure, a sum of £520 millions, was being spent directly to benefit the people in the lowest class, on such matters as social insurance and elementary education. As this class contributed only £458 millions but received £520 millions directly, it was £62 millions better off, plus the benefits of having government services maintained for nothing. Since 1939 the progression has become even steeper, for the taxes levied upon the rich have been increased much more steeply than those levied upon the poor. Since 1939, also, an anomaly has been removed. The last column of the table shows that there was in 1937 an exception to the general rule of progressive taxation: the least taxed were not those with less than £250 a year, but those between £250 and £500. This is no longer the case today.

Another important point which the table shows is how much less is available for redistribution than is commonly believed. There were in 1937 some 762,000 incomes exceeding £500 a year, and the income left after taxation was £742 million. If each of these income receivers had been allowed to keep £500 a year free of tax, but no more, they would have been left only with £381 millions, and the difference between this and £742 millions would have been available for redistribution. This difference amounts only to £361 millions, and the simplest way to redistribute it would have been to reduce taxation on small incomes by that amount. But this redistribution would have added only 15 per cent to the incomes of people with less than £500 per year, or a sum of £15 a year each. Since the war, taxation has been even steeper, and the amount now available for further redistribution is proportionately even smaller. To say this is not to argue against any further redistribution of income; it is merely to put the possibilities into their perspective.

The extent to which the incomes of the working classes in Great Britain can now be increased by further redistribution is very small indeed, and the case for such redistribution must rest on grounds other than the exaggerated increases in income which are popularly expected from redistribution. In other countries this is not yet the case; taxation is not so progressive and the scope for further redistribution is substantial. But in Britain it is to greater production and not to redistribution that the working classes must look for an increased standard of living.

## THE PATTERN OF EXPENDITURE

There remains another way of raising the standard of living, and that is by better expenditure of income on the goods and services which in the aggregate constitute one's standard of living. We shall examine first how the nation as a whole disposes of its income.

Let us divide the national expenditure into the three categories indicated in the accompanying table, which shows the position in Britain in 1938.

| *Spent on* | *£ million* | *Per cent* |
|---|---|---|
| Private consumption .. | 3,602 | 78 |
| Current government uses | 794 | 17 |
| Capital formation .. | 214 | 5 |
| Total | 4,610 | 100 |

The comparative size of these three groups is interesting. Start at the bottom, with capital formation, private and public, which in 1938 amounted only to 5 per cent of the national income. This is a remarkably low figure. In the second half of the nineteenth century Britain was saving between

12 per cent and 15 per cent of the national income, and the rapid growth of the national income was partly due to this high rate of saving. Other countries also have saved a similar proportion of their incomes while undergoing rapid development; some countries have even exceeded 20 per cent.

## DECLINE IN SAVING

There seem to be two factors which have steadily reduced the level of British savings, and a third which was of special but only temporary importance between 1919 and 1939. We will dispose first of this temporary factor. The British economy in the inter-war years was relatively stagnant because the country took a very long time to adjust itself to the loss of a large part of its foreign markets after the First World War, and indeed never completely succeeded in adjusting itself. Production did not, therefore, grow as rapidly between the wars as it had done during the nineteenth century, and incomes, investment and savings were at a relatively low level.

### *Effect of Redistribution*

Of the two long-term factors one was the effect on savings of the redistribution of income which has been increasing steadily in the last fifty years. It was the rich who saved most in the old days. Nowadays their surplus incomes are taken by the government in taxation; the rich save very little, and other classes are not making up the deficiency. Of course the government may be said to be investing much of the money in people, instead of in bricks and engines, in so far as it uses the surplus incomes to pay for education and health services which make people not only better off but also more productive. Nevertheless the country needs investment in material capital as well as in people. It has therefore to find a way by which savings can be kept at a reasonable level in spite of income redistribution. Savings propaganda, addressed to the poorer classes, goes some of the way, but it does not go very far, and the government may find that savings can no longer be left entirely to voluntary effort. In that case there will have to be some form of compulsory saving. The simplest plan is for government to raise in taxation more than it needs for current expenses, and to invest the remainder.

### *Old and New Countries*

The other long-term factor reducing capital formation is the age of the country. It has been suggested that an old industrial country does not need, and has not the same opportunities for, as much capital formation as a new country; its railways have been built, its roads, harbours, schools, hospitals and so on are all there; and though they have regularly to be replaced, this is not as costly as the original effort of building them. We do not know how much there is in this argument. It is supported by the fact that in the United States of America, with much smaller redistribution of income through

taxation, there has been a similar tendency for investment to decline. On the other hand British industry has needed re-equipment for so long that it is difficult to believe that there has been any real or effective limitation of the kind of investment opportunities that savings respond to.

## GOVERNMENT EXPENDITURE

So much for saving. We may now return to the table showing how British resources were used in 1938 and take the second item. This shows that the Government in that year was using as much as one-sixth of the national resources for its own purposes. Moreover, this one-sixth does not represent all that part of the national income that was passing through the Government's hands. It excludes the expenditure of government trading concerns, such as the Post Office, or municipal electricity undertakings; and includes only the profits of such concerns. It also excludes "transfer payments"; the Government collects money from some people and pays it out to others, e.g. in unemployment benefit, and since such transfers do not increase the resources used by the Government they are excluded from the calculation. If we put in the transfer payments, the Government spent in 1938 the sum of £1,431 millions. The incomes of private individuals were £5,031 millions, and the ratio to this of £1,431 millions, or 29 per cent, serves to measure the burden of taxation upon the incomes of the British people.

### *Fruitful Spending*

A tendency for governments to absorb an ever increasing share of national incomes is world-wide and inevitable. There is still a common feeling that taxation is undesirable and that governments should spend as little as possible, but the truth is that much of the money spent by governments is spent more wisely than it would be spent if left in private hands. Thus, most governments still spend too little on education, on public health and on similar services, which improve the quality as well as the well-being of the people. Governments also might do more by way of compulsory saving and investment in useful assets. Of course, many governments waste the public's money in corruption, but not generally in modern democracies.

### *Cost of Defence*

The most wasteful expenditure of modern governments is the huge expenditure on military purposes. Already in 1938 some 42 per cent of the resources used by the British Government were for these purposes. Expenditure on defence is not wasteful in an unsettled world; it is wasteful only in the sense that the country would be better off if international affairs were on a healthier footing. Expenditures on defence may decline in the coming years, but the tendency to spend an ever-increasing part of the national income on other services seems certain to continue.

Let us next consider the 78 per cent of real resources that private individuals in Britain used for consumption in 1938. That was divided up as follows:—

| | *Per cent* |
|---|---|
| Food .. .. .. .. .. | 29 |
| Alcohol and tobacco .. .. | 11 |
| Rent, rates .. .. .. .. | 12 |
| Fuel and light .. .. .. | 5 |
| Clothing .. .. .. .. | 11 |
| Household goods .. .. .. | 7 |
| Other items .. .. .. .. | 25 |
| Total | 100 |

## PRIVATE SPENDING

This distribution of expenditure marks the United Kingdom out as one of the richer countries of the world. The index of this is the relatively low proportion of the national income spent on food. Poorer countries spend much more than 29 per cent; they spend as much as 50 per cent in the poorest cases, while richer countries spend less, the U.S.A. spending only about 20 per cent. The reason for this is that since food is essential, what is spent on other things is only what is left over from income after food has been bought. In rich countries much more is left over than in poor countries.

The same sort of difference is found when we compare not different countries but different classes inside the same country. The poor spend a much higher proportion of their income on necessaries than do the better off. Compare, for example, an average of working class budgets at about £220 a year, collected by the Ministry of Labour, and of bank clerks' budgets at about £650 a year collected by Mr. Nigel Balchin:—

| | *At* £200 *per annum* | *At* £650 *per annum* |
|---|---|---|
| | *per cent* | *per cent* |
| Food .. | 40 | 23 |
| Rent .. | 13 | 12 |
| Clothing .. | 11 | 10 |
| Fuel .. | 7 | 4 |
| Other .. | 29 | 51 |
| Total | 100 | 100 |

The bank clerk spends a much lower proportion of his income on the necessaries and has correspondingly a much bigger margin for other items.

Detailed examination of budgets shows that the distribution of people's

expenditure between different items follows a regular pattern, which can be expressed very simply by saying that, for any item of expenditure, as income increases a constant proportion of the increase of income will be spent on that item. To take a hypothetical example: suppose we find in a particular place the following budgets for the average man with £200 a year and the average man with £250 a year:—

| | *At* £200 | *At* £250 | *Increase* |
|---|---|---|---|
| | £ | £ | £ |
| Food .. .. | 80 | 98 | +18 |
| Rent .. .. | 26 | 31 | + 5 |
| Clothing .. | 22 | 29 | + 7 |
| Fuel .. .. | 14 | 16 | + 2 |
| Other.. .. | 58 | 76 | +18 |
| | 200 | 250 | +50 |

Total expenditure has increased from £200 to £250, i.e. by £50. Concentrate attention on this extra £50, and see, in the third column, how this extra amount has been distributed. The answer is that 36 per cent of it (£18) has gone to food, 10 per cent (£5) to rent, 14 per cent (£7) to clothing, 4 per cent (£2) to fuel, and 36 per cent (£18) to other items. What statisticians have discovered (they call it Engel's law) is that if income is further increased the extra income will be distributed in the same proportions, 36: 10: 14: 4: 36, however big the increase of income may be. Thus we can calculate at once, on this hypothetical basis, how income will be spent at different levels.

| | *At* £300 | *At* £350 | *At* £400 | *At* £500 |
|---|---|---|---|---|
| | £ | £ | £ | £ |
| Food .. | 116 | 134 | 152 | 188 |
| Rent .. | 36 | 41 | 46 | 56 |
| Clothing .. | 36 | 43 | 50 | 64 |
| Fuel .. | 18 | 20 | 22 | 26 |
| Other .. | 94 | 112 | 130 | 166 |
| | 300 | 350 | 400 | 500 |

This is a very valuable law because it enables us to predict how the demand for different commodities will react in a community as income increases. There are, of course, limitations to it. In the first place it is a law not about

individuals but about averages. It does not say that any one person would behave in this way if his income were altered; but it does say that, taking large numbers of people, individual variations cancel out to make this the pattern for the group as a whole. Secondly, the law applies only when other things remain the same. Thus it does not take account of changes in the relative prices of different commodities. If an increase in incomes alters prices, Engel's law will cease to hold. Also it does not apply if the taste and consumption habits of the people being compared are different. It does not apply, for this reason, if we are comparing the rich and the poor; it works for incomes ranging up to (pre-war) £500 or £600; beyond this there is a considerable change in consumption habits and the proportions of extra income spent on different commodities is very different for the rich from what it is for the poor. An American study, for instance, suggests the following proportions for persons of under £600 a year, between £600 and £1,600, and over £1,600:—

| | *Under* £600 | £600-£1,600 | *Over* £1,600 |
|---|---|---|---|
| | *Per cent* | *Per cent* | *Per cent* |
| Food .. | 18 | 3 | 3 |
| Home .. | 25 | 25 | 16 |
| Clothing .. | 9 | 9 | 9 |
| Other .. | 31 | 35 | 24 |
| Savings .. | 17 | 28 | 48 |

Clothing is the only item to conform strictly to Engel's law at all these levels of income; the others go their own way.

There are, for the same reason, differences of tastes and consumption habits, and also, because prices differ, quite a divergence if we compare one country with another. Statistics, compiled in the late 1920s, of different working-class budgets are shown for comparison in the table on page 32.

The most striking of these figures is that for food; in all these European countries people automatically spend upon food something like 8s. out of every extra £1 that they get. In the well-fed United States, workers spend less, only about 4s. of every extra £1, and in underfed China they spend much more, perhaps 14s. or more out of every extra £1 they get is spent on food. The reason for this is that, although food is essential, the type of food that people eat depends very much on their income, and a considerable part of any extra income is spent on improving their diet. The very poor live mainly on cereals and on root crops, and as income increases, expenditure on other kinds of food increases rapidly. If we take the Liverpool workers in the table, for example, this extra expenditure on food was distributed in this way—sugar 3 per cent, cereals 7 per cent, tea and coffee 7 per cent,

vegetables 20 per cent, dairy produce 29 per cent, meat 32 per cent. In other words, nearly all the increased expenditure is on vegetables and on animal products. Since these are the protective health-giving foods, it is not difficult to understand why the poor suffer so much from malnutrition.

Another way of measuring the urgency of different items in the budget is to compare the proportionate increase in expenditure on any commodity

HOW INCREASES OF INCOME ARE DISTRIBUTED IN TYPICAL WORKING-CLASS BUDGETS

| | *Proportions of increase (per cent) spent on* | | | | | |
|---|---|---|---|---|---|---|
| | *Food* | *Rent* | *Clothing* | *Fuel* | *Other Items* | *Total* |
| Liverpool .. | 42 | 16 | 12 | 4 | 26 | 100 |
| Belgium .. .. | 47 | 3 | 17 | 1 | 32 | 100 |
| Germany .. | 36 | 6 | 18 | 2 | 38 | 100 |
| Czechoslovakia .. | 46 | 5 | 14 | 3 | 32 | 100 |

with the proportionate increase in total expenditure. Thus, if when the total expenditure increases by 10 per cent, we find that the expenditure on an item has increased also by 10 per cent, we say that it has an "income elasticity" of 1, found by dividing the proportionate increase in expenditure on the item by the proportionate increase in total expenditure. If expenditure on this item has increased only by 5 per cent, we say that its income elasticity is 0·5: if by 20 per cent, its income elasticity is 2. An income elasticity of 1 is taken as the dividing line between "necessaries" and "luxuries." Since necessaries have to be bought even at low incomes, further expenditure on them does not increase as fast as income, and income elasticity is less than 1. We can use this test to see what the Liverpool workers, already quoted, considered to be luxuries. Income elasticities were: fuel 0·5, rent 0·8, food 0·9, clothing 1·4, and other items 1·7; and in the food group: cereals 0·3, sugar 0·5, tea and coffee 1·0, dairy produce 1·1, meat 1·1, vegetables 1·6, and miscellaneous 2·6.

Some big income elasticities are found in, for example, bank clerks' expenditure—motor car 4·5, domestic service 4, travel 2·5, amusement 2·2, furniture 1·7 (translated: if a large group of bank clerks has its total income increased by 10 per cent, the group as a whole will increase its expenditure on cars by 45 per cent, on servants by 40 per cent, on travel by 25 per cent, on amusement by 22 per cent, and on furniture by 17 per cent). Such high elasticities can be found only for commodities or services on which the average expenditure is very low.

The residual item "other expenditure" bulks so large in all budgets (e.g.

in the Liverpool figures 26 per cent of extra income goes on "other items," with an income elasticity of 1·7) that we must devote some attention to it. The most important feature of other items of expenditure is that they tend increasingly to be, not expenditure on goods but expenditure on services, such as amusement, travel, domestic service and medical service. Economists usually distinguish between primary production (agriculture, forestry, fishing), secondary industry (manufacture, building) and tertiary industry (services of all kinds, travel, government service, shopkeeping, hotels, professions, etc.). Now in any country, as income grows the numbers engaged in tertiary industry grow relatively to the numbers in primary and secondary industry.

The public spends more of its additional income on services than it does on goods. Poor countries spend about 20 per cent of their incomes on services, but in the richest countries 50 per cent and more is so spent.

Petty's law, as this principle is called, has an important corollary. The income elasticity of demand for "goods" as a whole is low (less than 1), while the income elasticity of demand for "services" as a whole is high. In consequence, the rate at which agriculture and manufacturing can grow in any fairly rich country is limited. In a fairly rich country, if technical progress is occurring and population growing only slowly, the numbers engaged in primary production and manufactures must fall constantly unless export markets are growing rapidly. It does not follow that there must be unemployment, for the reduced demand for labour in primary and in secondary production is accompanied by an increased demand for labour in "service" industries. If labour does not move easily from one industry to another there may be unemployment, but provided that there is easy mobility of labour no unemployment need arise from the operation of Petty's law.

## EFFECTS OF PRICE CHANGES

So much for the behaviour of consumption as income grows. Next we must consider how the pattern of expenditure is affected by changes in relative prices.

When the price of a commodity falls relatively to the price of other commodities, the quantity purchased is almost certain to increase. There are two reasons for this. The first is that a fall in price is equivalent to an increase in income, in the sense that if an individual buys the same quantity as before, he pays less, and so has more money in his pocket to spend, just as if his income has increased. We have just seen that consumption increases with income, and so it follows that consumption must increase as price falls, to an extent determined by income elasticity and by the importance of the commodity in the budget (a price fall for an important commodity releases much extra income, while a similar fall for a commodity on which very little is spent releases very little income). The other reason why the consumption

of a commodity increases as its price falls is that the commodity is substituted for others which give a similar kind of satisfaction. The effect of this is that if there are plenty of substitutes for a commodity a fall in price will lead to a big increase in demand; but if there are not, it will not. Butter, for example, has many substitutes; if its price falls it is substituted for margarine, for dripping and for lard, and demand extends considerably. But there is no effective substitute for ink, and a fall in its price has little effect on demand. Thus, taking these two reasons together we find that the effect on the quantity demanded of a fall in price depends on the income elasticity of demand for a commodity, on its importance in the budget, and on the ease with which it can be substituted for other commodities.

### PRICE ELASTICITY

Economists call the effect of a price change on demand the price elasticity of demand, distinguishing this from the income elasticity of demand, which measures the effect on demand of a change in the consumer's income. Price elasticity affects the distribution of budget expenditure. If we compare two prices for the same commodity, one 10 per cent higher than the other, total expenditure on the commodity will depend on how great is the price elasticity. If at the lower price the quantity demanded is exactly 10 per cent greater than it would be at the higher price, then the total expenditure will be the same at both prices.

But if the quantity demanded is more than 10 per cent greater, total expenditure will be greater at the lower than at the higher price; and if the quantity demanded is less than 10 per cent greater, total expenditure will be less at the lower price. We say that the demand is elastic if total expenditure is smaller at the lower price. We measure elasticity precisely by dividing the percentage increase in quantity bought by the percentage fall in price, with the result that demand is elastic if elasticity is greater than 1, and inelastic if it is less than 1. The price elasticity of demand for necessaries is low, ranging between 0·1 and 1, because demand is not very sensitive to changes in price. Correspondingly, the price elasticity of demand for luxuries is greater than 1, though it is seldom more than 2 (i.e. a 10 per cent fall in price will increase the quantity bought by at least 10 per cent, but seldom by more than 20 per cent).

Price and price elasticity have to be taken into account when we are comparing budgets taken in different places or at different times. If we find, for example, that one group of people spends more of its income on a commodity than does another group, the difference may be due to a difference in tastes or to a difference in income, but it may also be simply that this commodity is cheaper, when compared with other commodities, for one group than it is for the other. Cheapness of a commodity will increase its importance

in the budget if it is one for which the demand is elastic, and reduce its importance if demand is inelastic. For example, the demand for food is inelastic, and in agricultural areas food is cheaper relatively to other commodities than it is in industrial areas. So we should expect to find food absorbing less of the expenditure of a clerk in a rural area than it does of the expenditure of a clerk with the same income in an industrial area; but, within the food group the demand for butter is elastic, so we should expect the rural clerk to spend more on butter than the urban clerk, even though butter costs him less.

## INDIVIDUAL TASTE AND JUDGMENT

We come, finally, to the third factor on which the pattern of consumption depends; first income, secondly price, and thirdly the tastes of consumers, and the good judgment that they may, or may not, exercise in spending their money.

Not much is known about how tastes are formed, or why people buy what they do, but no one can pretend that the art of consumption is highly developed. We mostly buy in ignorance. In buying food we should know more about the nutritional content of various foods, and about the best types of diet available to our limited incomes. In buying clothes we should know more about materials. If our tastes were better we should get much more enjoyment out of our purchases where design and beauty of workmanship add to the joy of life. We are ignorant of what we really need, in the sense of what would be most useful or most pleasing; and even when we know what we need, we are frequently unable, when making a purchase, to tell whether what we are buying will really satisfy our need. We know that we need strong furniture, but not whether what we have bought is likely to last; or whether our watch, or wireless set, or pair of shoes, or our new suit of clothes, is really worth all the money we are paying for it.

### *Growth of Advertising*

It is odd to think that the educational system provides instruction on almost everything except the art of spending money, although every one of us starts spending from an early age. Thus we are left to fall back upon advertising and upon convention.

Nearly one hundred million pounds a year was being spent in Great Britain in the 1930s upon advertising—as much as the government spent in any year upon education. This is a modern growth. Formerly the consumer relied upon his own judgment, and on that of the shopkeeper, in choosing his purchases. Goods were sold loose, and could be inspected. With the growth of factories to mammoth size the advisory functions of the retailer have been by-passed. Goods are put up into small packages by the manufacturer, and the consumer is attacked by exhortations in the Press, on posters, in the

cinema, in the sky and in every place that ingenuity can reach. Opinions differ as to the effectiveness of all this money. Some say that advertising has never for long succeeded in selling anything that was bad, while others say that advertising is depriving the consumer of his powers of independent judgment. Doubtless both views are exaggerations. But it cannot be right that the consumer should be left so largely to the persuasion of interested parties. Either advertising should be more strictly controlled; or more independent advice on buying should be available. In the United States there are independent institutions that test commodities, check them against manufacturers' claims, and report on their respective merits and demerits. This is a subject to which more thought might well be devoted.

*Convention and Fashion*

The other great force that restricts the quality of our spending is convention. Consider for example the variations in clothes, men's clothes as well as women's; the different styles of architecture that have been fashionable; the custom that once prevailed to have a piano in the sitting-room, even though it was never played; the Victorian sideboards, with their display of unused glassware and knick-knacks; the over-furnished parlours of fifty years ago; and similar symbols of the tyranny of convention. We are all slaves to fashion in our expenditure, even when we are rebelling against it.

Convention works through social class. In each social class we are trying to keep up with the Joneses, and they with us. Each of us spends money wastefully on doing things that give us no real pleasure, simply because maintaining our status in our group requires us to do those things. At the same time our group as a whole is patterning itself upon the social group above, whose style of living it cannot really afford. And so fashion works its way down from the top. This is not wholly bad; it acts as an incentive, and so keeps output high, and facilitates steadily rising standards of life. Nevertheless sociologists have laid great stress on the waste involved in it.

*Social Extravagance*

In most societies through the ages, conspicuously extravagant expenditure has been characteristic of high social class. The rich have spent lavishly on idle servants, banquets, silks, large mansions, horses or cars, so that others might look on in wonder and envy, and be appropriately respectful or obsequious. The other classes have followed suit, according to their incomes; wasteful expenditure is everywhere one of the marks of social superiority and in every class individuals resort to waste in order to establish their social position. It is arguable that this is all right if it makes the spenders happier than they otherwise would be; on the other hand it is clearly wasteful to devote resources to the satisfaction of mere social prejudices when they could be so much more usefully employed. In many countries, through the

ages, laws have been passed, under the influence of philosophers or of churchmen, to restrict conspicuous luxury expenditure; but in modern times such laws are unusual except under stress of war.

It is quite clear that standards of living would be higher if people spent their incomes better, but that is about all we can say. We know so little about why people buy what they buy, or about the best ways to go about trying to make them buy more satisfyingly that we can hardly prescribe. Presumably it would be useful if more adult instruction could be given, e.g. in women's institutes and similar groups, by experts on commodities, such as some of the people who buy for big department stores and who could talk about the quality or durability or tasteful design of their commodities, and about the points for which the careful shopper could look. Much has been done in wartime, on the wireless, in the cinema, and in the Press, to spread knowledge on nutrition. Wartime shortages have nullified much of the nutrition campaign, but it is at least an example of the techniques at our command. More knowledge in these fields deserves a high priority.

A higher standard of living is one of the greatest needs of mankind, and its achievement is one of the worthiest objects of social policy. This is a many-sided problem, embracing all of our ideas and social institutions. The rate of growth of a country's standard of living depends on the attitude of the people towards new ideas, and on their veneration for tradition; on the scope given to men with "advanced" ideas, and whether they are encouraged or suppressed; on the educational opportunities; on the incentives to hard work, and to adventure; on the degree of equality; on the thriftiness of the people; on wise expenditure, whether private or public; on the efficiency of the State and the quality of the rulers; and so on.

## FINDING A MIDDLE WAY

Some would have it that the standard of living depends also very much on whether property is in private hands or is publicly owned, but this is hard to square with the facts. What sort of people run the country's affairs seems much more important than how property is controlled, and from this point of view the energetic and ruthless capitalists in America, the energetic and ruthless militarists in Japan, and the energetic and ruthless communists in the U.S.S.R. are really in the same boat. This is not to say that we must take as our heroes men who trample freely on the customs and ideas of their people, without regrets. But some ruthlessness is as necessary as great energy; as in all social problems, the real job is to find a middle way.

In Britain, the rate of economic progress is much lower than in the three countries just mentioned, and in many others; and it has been rather low for two generations or more. Different people advance different reasons for this, all of them guesses. It is said that the masses look to redistribution

of income for a higher standard of living, rather than to hard work and saving; that the trade unions have discouraged all-out effort, and the use of better machines, for fear of unemployment; that the more vigorous and enterprising young men go not so much into business as before, but rather into professions or the Civil Service; that the British have become self-satisfied; and so on. No one can prove how much truth, if any, there is in such assertions, or how important it is, but the fact remains that progress in Britain has been rather slow.

There are signs of a new spirit. At the end of the Second World War the British people have suddenly become conscious of their relative stagnation, and envious of the higher standards of life enjoyed in the United States and in the Dominions beyond the seas. There is a new emphasis on productivity, on saving and on new methods. This awakening comes none too soon. For the standard of living in Britain is too low. There is too much poor health, bad housing, and physical discomfort; and too little opportunity for leisure and the cultivation of mind and spirit.

But, while attitudes are important, the institutions through which they work are of great importance, too. How attitudes develop, and why a people comes to hold the views it does, is a question too big for any one of the social sciences to answer. Historians, sociologists, psychologists, philosophers and all who try to solve the riddle of human behaviour must co-operate in finding the answer.

Economists concentrate their energies mainly on the study of institutions and of the different effects that different institutions have on production and on distribution. In this first chapter we have charted only the objectives of an economic system. It is left to the writers of later chapters to translate these objectives into terms of economic institutions.

## *Test Yourself*

1. Is rapid economic progress to be sought even if it involves considerable and rapid change in the traditional customs, institutions and approach to life?
2. Is the gap between the standards of living of the "East" and the "West" likely to increase, or to diminish?
3. Is equality of income a danger to progress?
4. Should advertising be controlled?
5. How can wastes in expenditure be reduced?

*Answers will be found at the end of the book.*

CHAPTER II

# HOW MAN SATISFIES HIS MATERIAL WANTS

THE purpose of economic activity is the satisfaction of wants. Such wants include the want for food, clothing, shelter, entertainment and defence. The extent to which these wants are satisfied in the community as a whole might be said to show the level of material progress attained, or, put another way, the standard of living enjoyed, by that community. These standards have varied in the past and in fact still do vary in the world today. They range from the one extreme, where long hours of laborious work barely permit the most pressing needs for food and shelter to be met, to the other extreme where a working week of about forty hours is sufficient, not only to enable the mere elementary wants to be satisfied, but also to permit of the enjoyment of a wide range of luxuries and of considerable leisure.

The movement forward, which has been gradual and halting, from the one extreme to the other, characterizes the history of mankind in its material aspect. It is crystallized in the phrase, "the luxury of today becomes the necessity of tomorrow."

Writing in 1890 of Britain, Alfred Marshall in his book, *The Principles of Economics*, pointed out that "The modern suburban artisan's cottage contains sleeping accommodation far superior to that of the gentry in the Middle Ages; the working classes had then no other beds than loose straw, reeking with vermin, and resting on damp mud floors." Today, differences at least equally great exist between some communities and others. The relative "well-offness" of the industrial worker of the United States contrasts strongly with conditions, say, in the West Indies or with those in which the poverty-stricken, disease-ridden South African native exists.

These contrasts in conditions of material wellbeing at different times and in different places compel one to ask two questions. Why do such differences arise, and what can be done to obtain for all communities a reasonable standard of living? These questions are precisely those Adam Smith had in mind when writing his great book, whose full title—*An Inquiry into the Nature and Causes of the Wealth of Nations*—may be taken as posing the problem discussed in this book.

To satisfy human wants, goods and services are used up. We eat food,

we wear clothes, we live in houses, we listen to singers or look at pictures in the cinema. This using up of goods and services to satisfy wants is called consumption. The extent to which wants are satisfied is shown by the level of consumption. But this depends on the amount of goods and services available—the amount of food, the number of houses, and so on. It also depends on the kinds of goods and services available. People want things in reasonable proportions, not lots of cinemas and few houses, or an abundance of clothes and little food. Again, it is impossible to tell the standard of living in a community unless the share of each member of the community is known. The goods and services may be fairly abundantly available and in about the right proportions one to another, but the standard of living will nevertheless be low if one section of the community consumes the bulk of the available supplies. In other words, in order to tell the standard of living it is essential to know, not only the amount and kinds of things available to satisfy wants, but also how these goods are distributed among the members of the community.

But distribution is of less importance than the amount and kinds of goods. If the amount is small, even equal shares for everyone would still leave the standard of living low. Of course, it might lessen starvation and disease in extreme cases, just as rationing of foodstuffs and clothing gives everyone a certain minimum claim. But the only way to improve the standard of living would be to increase the supplies of things people want so that there is more to go round. And that is the problem to be discussed in this chapter.

## THE TEST OF PRODUCTIVE ACTIVITY

To raise consumption levels—the amount of goods and services people on the average use up to satisfy their wants—there must be available increasing quantities of the right kind of goods in the places they are required. "Man," as Alfred Marshall said, "cannot create material things. . . . All that he can do in the physical world is either to readjust matter so as to make it more useful, as when he makes a log of wood into a table; or to put it in the way of being made more useful by nature, as when he puts seed where the forces of nature will make it burst into life." All activity of this kind, that is, activity which is intended to increase the supply of goods and services which will satisfy wants, is regarded by the economist as productive.

The only test is whether or not the activity has increased opportunities for consumption. If so, the outcome of the activity is production. Of course, the actual kind of activity is as varied as the kinds of goods and services. It might be as simple as weighing ten pounds of potatoes or as delicate and complicated as a surgical operation on the eye or heart. It might take place in field, factory, office or elsewhere. It might be of interest to the person performing the task, like the conductor of an orchestra, or have very little

interest for the person engaged, as in the case of the worker repeating a monotonously simple process as goods pass on a conveyer belt. In any event, production has resulted if the amount of goods or services has been increased.

The superficial answer to the question about the causes of material progress, therefore, is the changing of the volume of goods and services in relation to the size of the community. The fundamental answer involves an examination of the influences that govern at any time and place the volume of production.

To produce, certain requirements are necessary. Suppose we take the simple case of producing bread. First, the seed must be sown in prepared soil which enjoys the right kind of climate. The harvest must be reaped and gathered. Then the grain must be milled into flour and delivered to the baker. Finally, the flour is baked into bread and delivered to the consumer. This simple example shows all the essential factors of production in operation. These factors may be grouped in several ways. For our present purpose it is convenient to adopt a fivefold classification: labour, natural resources, capital, organization and knowledge.

At all stages from sowing the seed to delivering to the consumer some form of labour is required. The growing of the wheat requires the right soil, rainfall and sunshine. To prepare the land, reap the harvest, transport the wheat, bake the bread, involves the use of implements, vehicles and apparatus. At all stages activities must be co-ordinated so that operations are carried out efficiently and at the right time. At all stages, also, knowledge is required. Knowledge of how to perform processes; of what system of production is most suitable; of how to improve the mechanical equipment in use or the economical and efficient use of it.

The next task is, therefore, to examine each of these factors in turn to find out how they influence the level of production; that is, how they determine the size of the pool of goods and services with which wants are satisfied.

## LABOUR

In considering the contribution that labour makes to production it is useful to divide the matter up into three parts and discuss each part separately. To start with, the question arises: how many workers are there? That is the problem of numbers. Then it must be asked: what skill have these workers? That is the problem of quality. And finally there is the question: what is the length of the working week? That is the problem of hours. Let us examine each of these in turn.

(1) *Numbers.* In 1940 the population of the world was estimated to be between 2,100 millions and 2,200 millions. All these people did not work. Some were too young, babies and young children, others were too old. Some women have paid employment, but the majority act instead as housewives and

mothers. Again, a small proportion of both men and women hold no paid employment but receive an income from owning property in one form or another—houses, land, stocks and shares. Of course, some fortunate adults are in both categories. They have some form of employment and receive income from property.

However, in considering the numbers of workers, the important considerations are, on the one side, the age distribution of the population and, on the other side, the sex distribution. If we divide up the population of England and Wales for the year 1931 into three age-groups, it will be found that the number of so-called "gainfully occupied" males is little more than the total number of males in that year who were between the ages of 15 and 64. But in the case of females little more than one-third of the numbers in the 15-64 age-group were engaged in paid employment.

### GROWTH OF POPULATIONS

The numbers of workers may, therefore, be said to depend on two things. We may call the first natural influences, for they involve the age composition of the population. If the population of a country is increasing it must increase in one of three ways or a combination of two or of all three of these ways. Firstly, it may be increased by immigration, that is, receiving people from other parts of the world. The population of the United States grew in this way in the nineteenth century at the expense of European countries, including the United Kingdom. When population grows in this way it immediately increases the working population because it necessarily involves in part the movement of adults in the working age-group. Looked at from the other side, from the side of the countries losing emigrants, it means a fall in the total labour force. Since 1914 the flow of emigrants has been fairly small, and after the slump of 1929 there was a considerable return flow back to the mother countries.

The second way is through an increase in births. For the first fifteen or more years this increase does not affect the numbers of persons requiring paid employment, but after that period it does, of course, swell the labour force.

The third way a population may increase is by a reduction of the death rate. This will come about through a reduction of deaths caused by accidents. Road and other accidents take a heavy toll each year. It also comes about through the improvement of housing, water supply and sanitation, through better and more adequate food and as a result of the more successful treatment of illness and disease. These affect children and adults at all ages and result in a lengthening expectation of life. As the first table on page 43 shows, in England and Wales in 1910–12 a female baby could be expected to survive to the age of 55, but by 1937 the expectation rose to 64. In a quarter

of a century the average expectation of life increased by nine years. It will be seen also from the table that this improvement is shown at all ages, but the

EXPECTATION OF LIFE OF FEMALES

| | Years | *Life Expectancy* | | | |
|---|---|---|---|---|---|
| | | *At Birth* | *At age of* 20 | *At age of* 40 | *At age of* 70 |
| England and Wales .. | 1910–1912 | 55 | 47 | 30 | 9·6 |
| | 1937 | 64 | 50 | 33 | 9·9 |
| United States .. .. (White population) | 1929–1931 | 63 | 48 | 31 | 9·9 |
| | 1940 | 67 | 51 | 33 | 10·3 |
| Germany .. .. .. | 1910–1911 | 51 | 45 | 29 | 8·4 |
| | 1932–1934 | 63 | 50 | 32 | 9·6 |
| British India .. .. | 1911 | 23 | 28 | 18 | 6·2 |
| | 1931 | 26 | 27 | 18 | 6·7 |

increase is least at the highest age. More people survive through the working-age group, but the span of life is only gradually lengthening. For purposes of comparison the position in some other countries is given. It should be remembered that the expectation of life of females is rather higher than that of males.

The extent to which the age composition of a country's population may change over a short period is shown by the second table on this page which

PERCENTAGES OF POPULATION IN DIFFERENT AGE GROUPS

| | Years | *Age Groups* | | | |
|---|---|---|---|---|---|
| | | 0–19 | 20–39 | 40–59 | 60 *and over* |
| England and Wales .. | 1911 | 40 | 33 | 19 | 8 |
| | 1937 | 30 | 32 | 25 | 13 |
| United States .. .. | 1910 | 42 | 33 | 18 | 7 |
| | 1935 | 37 | 32 | 22 | 9 |
| Germany .. .. .. | 1910 | 44 | 30 | 18 | 8 |
| | 1937 | 31 | 33 | 24 | 12 |
| Belgium .. .. .. | 1910 | 40 | 31 | 20 | 9 |
| | 1938 | 30 | 30 | 26 | 14 |
| British India .. .. | 1911 | 47 | 32 | 16 | 5 |
| | 1931 | 49 | 32 | 15 | 4 |
| Japan .. .. .. | 1925 | 47 | 28 | 18 | 7 |
| | 1935 | 47 | 29 | 17 | 7 |

gives particulars for six countries. It will be seen that except for Japan and British India the population over 60 years of age in the countries mentioned increased, sometimes considerably.

Apart from these influences on size and age distribution of the labour force, which may be called "natural" causes, there is another set of influences also to be taken into account. To distinguish them from the first kind, these may be called "artificial" causes. For the size of the labour force depends, not only on age and sex distribution, but also on the changing ideas and policies of the time. The tendency in England over the last century has been to raise the minimum age at which young people may be employed, either by passing Factory Acts or raising the compulsory school-leaving age or both. Restrictions have also been placed on the work of women. They are no longer permitted to engage, for instance, in coal mining. At the same time, the professions have been opened to women. These factors clearly affect the size of the working population.

### SKILLED AND UNSKILLED LABOUR

(2) *Skill.* The second factor on which the contribution of labour to production depends is its quality. Naturally, even highly skilled workers can produce very little if their tools are poor or if they work under bad conditions. These aspects will be discussed later. Here attention is focused on the worker's skill. This varies widely from one person to another in the same country, but still more widely as between different countries.

A close observer of native labour in Africa has said: "African labour is sometimes described as 'cheap'; in reality it is most expensive. The return for money paid, and not the rate of wages, is the true criterion, but this very elementary fact seems to be overlooked. The outstanding disadvantage of African labour is the necessity for constant supervision, if an adequate output is to be secured, and this usually costs a lot; it is, therefore, highly advisable that the reliability of the individual worker should be increased, so as to admit of the reduction of overseeing charges." There is no reason to accept this low output, for, as the same observer remarks, "the African has shown that with adequate training he is capable of a good standard of skill in most occupations."

The first essential in improving the quality of labour is adequate and balanced diets, sufficient clothing and adequate housing. In the British Colonial Empire in 1939 it was officially reported that diseases caused by deficiency of vitamin A were the most common. These deficiencies must be corrected before any start can be made in improving production capacity. The next step is to organize general education for adolescents and technical training within industry to equip young people for work in a skilled job. Anyone with the inborn ability to benefit from such training should not be denied it. It is a

personal loss because a potential skilled worker becomes an unskilled or, at best, semi-skilled worker. It is also a loss to the whole community because the amount of the more valuable work performed is less than it might have been.

In the past, as Sir Stafford Cripps, among others, has declared, the educational and social system of England permitted a wanton waste of human ability. Opportunities were too few and far between for the able child of poor parents to obtain the training suited to his ability. The most skilled and consequently best-paid work requires the longest and most expensive training. It was closed, therefore, to the vast majority of children, since they were born into families with lower paid employment and possessing no inherited wealth.

The recent war threw into sharp relief the limited supplies in Britain of labour with high technical training or specialized knowledge. These shortages will take time to correct, but until they are corrected the contribution of labour will be lower than it could be. Advances in this matter should not be held back by vague fears on the part of some of the more fortunate individuals that such a policy would lead in the end to such a shortage of unskilled labour that no one would be willing to perform many useful activities at present performed by untrained labour.

### LABOUR AND MACHINES

In a democratic society the wish underlying this point of view, a wish probably unconsciously held, should be utterly unacceptable. It amounts to the wish to maintain our own level of comfort by denying advancement to others. Quite apart from this issue, it should be remembered that inborn capacity is very uneven between individuals, and even the widest system of education and training would not raise everyone to highly skilled positions. But more important than this point is a further one. It should be remembered that many tasks performed by machines, for instance in the cotton industry, were once performed by children, and in innumerable other cases machines now do work which unskilled labour was formerly engaged to do. There seems little reason to doubt, therefore, that once any prospective shortage of unskilled labour, consequent upon the enlargement of opportunities for training, had been foreseen the result would be similar. Invention would be stimulated, methods would be changed. And, incidentally, the amount of dull, deadening work that labour had to discharge would be reduced.

(3) *Hours.* The last factor affecting the contribution of labour is the length of the working day and week. Over any lengthy period of time there is for each person a certain working day which maximizes output. If work is spread over longer hours, effort will sag and output will correspondingly suffer. If work is confined to fewer hours, the effort put into the last hour's work may

be high and the output correspondingly high; an increased working day would bring lower output. There is thus a working day which is "just right," that is, which sustains production at a maximum level. This is not, of course, in conflict with the view that over short periods long hours may produce higher output. But this will inevitably be a temporary spurt, if it causes fatigue and boredom which later react on output by lessening the intensity of work. What is regarded as the best length of the working day or week from the point of view of efficiency is often called the "optimum" length.

### WAGES AND LEISURE

As work is usually irksome to the doer, there is a tendency to work less than the optimum day. This is strengthened by rising wages. Part of the gain is taken in the form of increased leisure. Such a choice between more wages or more leisure naturally involves the forgoing of the consumption of those things which might have been produced. This point is generally overlooked by those who argue that if, say, a machine is invented to produce a certain output with the assistance of only half the men previously employed, then the same total labour should still be employed to work half the time. Movement of workers from one job to another or one district to another is usually inconvenient. But once the change has been brought about and the labour rendered redundant by the new machine has been settled in new employment, production will be greater than it used to be. The old output is still produced and in addition there is the new output of the labour that has changed employment.

In this way the fruits of invention are gathered in. Of course, a shift of workers is not necessarily involved. The lowering of costs brought about by the installation of the new machine might, if it leads to a lower price, increase people's demand for the product, so that none of the labour is in fact displaced. It depends on the particular circumstances of the case whether displacement comes about or not.

### TOWARDS A FORTY-HOUR WEEK

To those who believe that the fruits of invention should be taken out in the form of increased leisure it might be answered that leisure without the income with which to enjoy it is a rather hollow alternative. Moreover, the question has never been answered whether workers in industries benefiting from a rapid rate of invention should have their hours cut while those less fortunately placed continue to work longer hours.

The tendency has been for a general reduction of hours. In the Middle Ages it was taken for granted that work should continue from dawn to dusk and be carried on by everyone able to work. When the factory system came sixteen hours per day was quite usual. In Britain there was a prolonged

struggle for a ten-hour working day and the restriction of child and female labour. Eventually the eight-hour day became common, and at present the movement is towards a working week of forty hours.

The arguments in favour of this progressive shortening of the working day or working week are principally two, one social and the other economic. The first emphasizes the worker's health and wellbeing, his family life and activities as a citizen. None of these can receive adequate attention if work occupies the whole of his energy. Accidents increase, as a rule, with the length of the working day. The second argument contends that, if hours are not reduced, unemployment will result; that is, shorter hours are the best way of spreading work round. One aspect of this has already been discussed. Another point is that shorter hours may well increase efficiency and, therefore, increase output instead of reducing it. Whether or not this will be so depends on whether hours before the change are above the optimum.

Opposition to a reduction of hours is sometimes based on the ground that it will raise costs. Whether it will or will not depends on the effect on efficiency, that is on average output per worker. The opposition is valid only to the extent that output is brought below the maximum. Then the alternative must be squarely faced: either less work with fewer things to consume, or more work and more goods or services for the consumer.

In industries which are highly mechanized, shortening of hours means leaving the machinery idle for longer periods. This might be beneficial if, previously, hours were long, workers were fatigued, the accident rate was high and much production lost by breakages and repairs; otherwise, the fewer hours worked by the machines must carry the whole burden of cost without any offsetting advantages. Longer hours, provided they are not more than the workers' optimum, would mean that these costs could be spread over a bigger output. One way of combining shorter hours for workers with full utilization of plant and machinery is the introduction of shift-work, so that two or possibly three relays of workers man the machines.

## DISTRIBUTION OF PRODUCTION FACTORS

One aspect of the economic problem is how to obtain bread and motor-cars and many other things as well at one and the same time and in the best possible proportions. For this to be possible factors of production must be correctly distributed among the various occupations so that the right combination of bread, motor-cars and other things is reached.

### *Direction*

Three methods may be used to allocate factors among the various industries. Let us look at the factor of labour. First, labour may be directed or conscripted. This happens in time of war when quick changes are needed and

the requirements of war take priority over other considerations like the preference of the worker. It cannot pay much attention to preference or it would break down and, therefore, in some cases it is bound to cause real hardship. It may fail to obtain the co-operation of the worker.

*Complete Freedom*

The second way is to give workers free choice of occupation, that is, neither compelling nor even persuading them to take up one kind of work rather than another kind, or work in one place rather than work in another place. Suppose a guaranteed share of output were given to all workers, irrespective of what work they did, or where they did it?

What would happen if this method were used? No doubt many people would try to change their present occupations. Relatively few would be content to carry on exactly as they are. Many would prefer jobs less humdrum and less closely supervised and controlled. Few would choose the more arduous and dirty kinds of work. Obviously consumers would be offered a very different collection of goods and services and a collection which they would not have selected. Also, taking the method of producers' choice further, few workers would wish to work quite as hard as they now do. So, even if they remained in their existing occupations, their output would be less.

*Incentives*

The third method attempts to combine the allocation produced by the first with the freedom of the second. It does this by trying to provide *incentives* to workers in such a way as to make it most worthwhile for them to choose just those types of work that will lead to the best distribution of workers among all the various occupations open to them. It persuades producers to go into the occupations and produce the outputs that consumers' demands determine. Even those fortunate workers who get a direct pleasure from their work would rarely on that account alone, without some further inducement, produce as much as they are capable of producing. And the majority, who obtain little direct pleasure, are more in need of inducement.

There is nothing to be ashamed of in this. There is nothing wrong or improper in requiring an inducement to put one's full effort into doing a job. All paid work results in two things: an income for the worker and the product for the consumer. The two go together. The individual's motive may be the desire to obtain an income or the desire to perform a service. If it is the desire for income this is not a selfish motive, as the income is likely to be spent on others as well as himself: the family is usually the consuming unit.

Furthermore, the incentive is rarely a purely financial one, even if pension rights, holidays with pay and sickness allowances are lumped together in this group. Non-financial incentives play an important, perhaps growing, part. During wartime, for example, a national emergency may call forth

sacrifices related only very indirectly, and probably not at all, to financial gain And this important factor will operate not only in time of war.

To the extent that the motive is financial gain and the incentive takes the form of higher wages there inevitably results an inequality of earnings. It is illogical and contradictory to rely on wage-rate differences to attract workers or to obtain their fullest efforts and at the same time to tax away the higher earnings. Proposals that have as their intention a drastic modification of the resulting inequalities of earned income should be regarded as aimed in fact against the method of incentive.

### PIECE-WORK AND TIME-RATES

The incentive method is most obviously applied within the factory where workers are remunerated by results. There is no doubt that a system of payment by results may, if willingly adopted, provide very substantial incentives to full utilization of costly equipment and to greater output. The system may take a variety of forms. For example, a straight piece-rate may be fixed so that payment varies in direct proportion to output. Or a basic time may be set for a job, say an hour, and the work paid for according to that rate, whether it in fact takes more time or less; an hour or only three-quarters.

Piece-work rates are possible only when output is easily measurable either by counting or weighing. Quick workers obtain a clear advantage. But the danger has to be guarded against that work may be scamped. Workers are sometimes antagonized by the method by which piece-rates are applied. If it is found that at the prevailing rates workers are able to earn high wages, employers may be tempted to lower the rates. When this happens the worker naturally feels that work has been speeded up and that he will derive little benefit from the greater intensity of his effort.

An alternative to payment by results is payment on the basis of time. This is necessary whenever performance is not uniform. For example, it would be difficult indeed to pay work on repairs on a piece basis. Each repair is different from others. The only way is to pay according to the time taken. They are suitable also where a fairly definite number of performances per hour are involved as in some cases of work on a conveyer belt. It would be wrong to distinguish too sharply time and piece-rate systems of wage payment. There is an underlying piece basis in time-rates; the employer knows roughly the amount of work that should be performed. Again, in the case of piece-rates he has in mind the normal time taken for the process to be performed.

According to a survey undertaken in April, 1947, in Britain, which covered 5¾ million industrial workers, only 26 per cent were piece-workers. The distribution of these was interesting. Of the women included, 38 per cent were piece-workers; of the men only 23 per cent (the percentage of total is 26, because of the predominance of men in the total surveyed). In the metal,

engineering and shipbuilding group of industries, 46 per cent of the men were working on piece-rates; in some industries the proportion was over half (e.g. iron and steel manufacture and electrical engineering). Other industries, as we have seen, are not suitable for piece-rates. These include public utilities (1 per cent) and transport (2 per cent).

## NATURAL RESOURCES

All the substances and living organisms that man uses to promote his material wellbeing may be included under this heading. These may be classified in a variety of ways, depending on the particular purpose in view. The items include climate, topography, vegetation, fish, animals and minerals.

### *Relative in Amount*

For the purposes of the present chapter, two fundamental facts respecting the world's natural resources must be emphasized. In the first place, the natural endowments of the earth that can be used to minister to man's welfare should not be regarded as something like a fixed and unchanging pool but, instead, as something relative to man's capabilities of using what he finds on and in the earth's crust. In other words, something which at one time is regarded as being unlikely to contribute to the satisfaction of man's wants may, with an advance in technology, become most valuable in this respect. The point is well put by an American writer on this subject, E. W. Zimmermann: "In 1900 no copper-bearing deposit poorer than 5 per cent was counted among the reserves of copper ore; today (1933) much of the copper worked in the United States contains less than 1 per cent copper."

One of the features of the modern world is the advance in technology and there is no reason to doubt that this advance will continue for some time yet. The amount and variety of natural resources that may be employed is, therefore, likely to increase.

It is equally true that, until it was realized that things made with copper would satisfy wants, copper ore would not be classed among natural resources, however high the copper content or whatever stage technique had reached. New wants can change the amount of resources as can new techniques.

Increase is likely to come from another direction also. Knowledge of the earth's resources is still incomplete. While it is unlikely that some regions of the world, such as Europe, will yield more resources than are at present known, additions from Africa and Asia may be considerable when these continents are more fully explored and surveyed. On the other hand, the search for some resources, such as tin and petroleum, for example, has already been so exhaustive that further discovery of sizeable deposits is extremely improbable. But this would not apply to many materials.

Naturally, on the other side of the balance sheet allowance must be made for the exhaustion of some resources—for example, natural gas in the

United States—and for the replacement of other resources by cheaper substitutes. Thus, certain timbers and metals may for some purposes be largely replaced in the very near future by plastics .

*Uneven Distribution*

The second fundamental fact respecting natural resources that requires emphasis is that these are distributed over the earth's surface very unevenly. They are uneven, that is, when compared with the distribution of the world's population or with political frontiers. Trade between nations alters this distribution in a very real sense. Canada is well endowed with nickel and exports it to other countries. South Africa sells her gold and diamonds. Countries may alternatively sell the products of their special natural resources. New Zealand sells the lamb produced on her rich grasslands; France the wines produced in her vineyards. In this way all peoples may share the natural resources of the world wherever they are located. In this way, also, resources may be fully used. For her own purposes New Zealand would not require the employment of one-tenth of her grasslands in the manner in which, under existing conditions, they so handsomely serve the world. Others benefit from the fine products; New Zealand is richer for it.

Differences in the distribution of natural resources in this way account for many differences in the wealth of production per head between societies. The case of South Africa gives a striking illustration of this. The Union's economy has developed with, and still depends on, the production of gold. If her gold reserves were suddenly exhausted, the standard of living would markedly fall, since she would not be able to pay by exports of other goods for all the imports she now receives. Because Chile had been the sole supplier of nitrates in the world, it was a catastrophe for her when synthetic nitrates were made possible by the discovery of the method of fixation of nitrogen from the atmosphere. The wealth of Malaya will be similarly affected if her markets for rubber are seriously invaded by synthetic substitutes.

## INCREASING INTERDEPENDENCE

If some modern developments have tended in the direction of lessening reliance on particular natural resources, and bringing locally available materials into use, others have increased dependence on world-wide resources. The car-making and electrical industries, for example, require the use of raw materials from five continents, and could not easily dispense with any of them: tungsten from China for filaments in electric bulbs; shellac, which is a non-conductor of electricity and damp-proof, for coating electrical appliances; quebracho extract for tanning leather; tin for making the babbit-metal used in the production of bearings. Thus the development of the electrical industry and the search for a satisfactory filament led to the working of

China's deposits of tungsten and in this way increased her wealth. Owing to the uneven distribution of natural resources, developments usually either benefit some areas in particular or hit some areas with special severity.

The concentration of production may be illustrated by the following figures. They refer to the position in 1937. More than four-fifths of world coal production came from the United States, the United Kingdom, Germany, the U.S.S.R., Japan and France; the first three of these countries accounted for two-thirds of world production. Six countries (the United States, the U.S.S.R., Venezuela, Iran, the Netherlands Indies, Rumania) produced between them nine-tenths of the world's supplies of crude petroleum and shale oil; the first three of them alone accounted for eight-tenths. British Malaya, the Netherlands Indies and Bolivia were together responsible for three-fifths of the world tin ore output. The United States produced half the world's supply of raw cotton; Australia furnished a quarter of the supply of raw wool and mohair; India was the sole grower of jute.

Largely for this reason, world trade bears no close relation to either land area or population density.

In 1938, Europe (not including the U.S.S.R.), with only 4 per cent of the land area of the world and 19 per cent of the world's population, carried on half the world's international trade, while Asia (excluding the U.S.S.R.), with 20 per cent of the world's land area and 53 per cent of its population, was responsible for only 15 per cent of world trade. Africa, with 23 per cent of the land area and 7 per cent of the population of the world, had trade amounting to 7 per cent of the world total.

Of course, in time this distribution might radically alter. What is required is development of the relatively economically backward parts of the world. One illustration of the possibility of growth is given by the table on page 53, which shows the distribution throughout the world, as far as it can be estimated, of hydro-electric resources. Massive increases are possible in both Africa and Asia and there is also scope for striking developments in South America. In part the requirement is real capital. To this we now turn.

## CAPITAL

In the previous section we discussed certain aspects of conditions, like climate, and of resources like vegetation and mineral deposits. Although man may use up some of these resources at quicker or slower rates (e.g. petroleum deposits), he can do very little to add to their amount except by discovering new resources or more economical methods of their employment. He may, as in the use of the fertility of the soil, by careful use, drainage and fertilization, sometimes keep the resources at a high standard or improve their standard. By dredging he can keep rivers navigable and by drainage keep land free of water. But, broadly speaking, his activities must be adjusted to

the conditions and resources provided by nature. If the conditions are unfavourable or the resources scanty, little might be possible apart from movement elsewhere into regions where nature has been somewhat less niggardly.

But this is not so with capital, the factor, whose contribution to production we must next discuss. As we shall see, man decides on the amount of capital available; the supply is not more or less given by nature. In the first place it is essential to distinguish between money capital, or finance, and real capital. Money capital consists of £ s. d., the housekeeping money, the pocket money, the deposit in the savings bank, the till money in the shop.

DISTRIBUTION OF HYDRO-ELECTRIC ENERGY

(Million Horse-Power)

| *Region* | *Developed* | *Potential* |
|---|---|---|
| Africa | 0·175 | 275 |
| Asia | 6 | 150 |
| North America | 39 | 77 |
| South America | 1·3 | 75 |
| Europe | 27·5 | 74 |
| Australasia | 0·6 | 24 |
| | 74·575 | 675 |

We have seen that the standard of living depends on the average amount of consumption goods and services available at any one time. Except to the miser, money gives no direct satisfaction of wants. Money is useful simply because it gives command over goods and services; it is accepted in exchange for buns and bus rides. It is a link which ties together the output of two individuals without requiring direct exchange.

Let us illustrate this. The alternative to the use of money is barter, or swopping. I exchange with you what I produce and take part of what you produce, my buns for your bus rides. Barter clearly requires that I should have what you want and that you should have what I want. Barter clearly limits exchange, unless third and other parties can be brought in, and, obviously, this is a bothersome business for everyone.

But if I can exchange my buns for something everybody will accept, then the whole picture is transformed. After selling my buns I can purchase your bus rides, whether you want buns or not. Money is simply this generally acceptable link. It is like the oil in the machine which keeps the machine working and thus assists in the production of commodities. As long as we have enough lubricating oil everything goes well. We are no better off if more is poured into the machine. We need enough to keep the machine working. In the same way, if for every penny or pound we possess we were all given

another penny or pound there would be no improvement in the standard of living unless there were at the same time an increase in production; but if every pound of butter were doubled we should be quite a deal better off.

So real capital consists of things that either directly, as a bun, or indirectly, as a dough-making machine, satisfy wants. Three forms may be classified. There is private capital such as one's house and furniture, one's private motor-car, one's books and clothes, one's stock of food, coal, etc. There is business capital like factory, office, farm and shop buildings and the equipment in them (machines, desks, tractors, shop fittings and the like). There is social capital, which comprises roads, water-works, public buildings, and so forth.

### BUSINESS CAPITAL

In all three groups we include stocks of goods awaiting use. The biggest volume of these probably comes within the category of business capital. Stocks of coal, iron ore, new rubber, timber, wheat, etc., are included here. Also apart from these raw materials and the machines and buildings, it is usual to include within the group of business capital goods in process of manufacture and goods available for distribution.

Let us illustrate the various classes that come within the business capital group. Suppose we visit a bakery while it is working. We should enter the building, call at the office and be conducted to the machines and ovens.

REAL INCOME PER HEAD AND AMOUNT OF MACHINERY IN USE PER HEAD[1]

| *Countries* | *Real Income Per Head of Occupied Population (International Units)* | *Index of Machinery Per Head* |
|---|---|---|
| 1 United States | 1381 | 403 |
| 2. Canada | 1337 | 296 |
| 3. United Kingdom, Switzerland, Australia, Germany, New Zealand* | 1000 (average) | 200-100 |
| 4. Belgium, Netherlands, Sweden, Denmark | 700 (average) | 100- 50 |
| 5. Austria, Argentina, France, Norway, Czecho-slovakia, Union of South Africa, Chile, Italy, Fin-land, Hungary, Latvia, Eire | 430 (average) | 50- 25 |
| 6. Japan, Estonia, Spain, Poland, U.S.S.R. | 385 (average) | 25- 10 |
| 7. Egypt, Brazil, Portugal, Lithuania, Bulgaria, Greece, Yugoslavia, Rumania | 320 (average) | 10- 5 |
| 8. British India | 200 | 5- 1 |
| 9. China | 100-120 | 1- 0 |

[1]NOTE: For the real income estimates see Colin Clark, *The Conditions of Economic Progress* (Macmillan, 1940) pages 41-2, and for the index of machinery see Eugene Staley, *World Economy in Transition* (New York, 1939) page 70.

These are all forms of fixed capital. We should see bags of flour, packets of yeast, bins of coal or coke. These are the stocks that will be used up in production, forming what is called "working" or "circulating" capital. Then, in addition, there are also the bread in the ovens and the bread awaiting dispatch to the consumer.

The real capital of the community at any time thus consists of a very mixed collection of assets. We cannot add them up—"ton of coal and dozen of printing presses"—unless we express them in terms of money—"so many thousands pounds' worth of coal and so many of printing presses."

From observation we can tell some countries are better off than others in this respect, but no accurate calculations exist. Countries well endowed are richer countries than those poorly endowed. A rough idea of this relationship between real capital per head and standard of living may be gleaned from the table on page 54.

The table shows for various countries and groups of countries the standard of living expressed in terms of United States dollars according to their purchasing power between 1926 and 1934. These values are called International Units. It shows, alongside, machinery per head. This figure relates mainly to 1925 and is calculated on the basis of the level for North-western Europe being 100, so that a country twice as well off in machinery as North-western Europe would have an index of 200. Only one form of business capital is taken into account in this assessment.

### MACHINERY OR ROADS

Even after making all the necessary reservations, this table gives a striking testimony to the way that machinery per head and standard of living vary together. Of course, it would be the worst of follies to attempt to argue that all that is necessary to raise living standards is an increase of real capital. But the increase of real capital may be an important ingredient. Also, some countries would not benefit most from an increase of machinery: other types of real capital are more urgently wanted. In a recent survey of requirements for economic development in South-eastern Europe it was found that one of the needs with highest priority in the region was the construction of a vastly improved network of secondary roads.

How may a community increase its real capital? Let us take first the simple case of Robinson Crusoe. How may he supplement what he finds on his island by obtaining the help of real capital? Instead of spending a morning fishing, he might hollow out a log of wood. With this simple boat he can fish a little distance from the shore and get a better catch. But in order to get to this favourable position he must devote part of his time to the fashioning of his little craft; to do that he must possess a sufficient stock of food.

Similarly, in order to extend its capital equipment a community must

devote part of its resources to activities which will not immediately satisfy wants but, instead, assist in the satisfaction of wants over a period. Activity which results in the production of machines or in the increase of stocks of raw materials or finished goods awaiting consumption is called investment. The process is one of capital formation.

### PROBLEM OF SURPLUS WORKERS

We may distinguish four methods of capital formation. In the first place it has been established that in a number of countries more people are engaged in, say, agriculture than are necessary for raising a given output. The surplus workers would be better employed elsewhere. Why do these "passengers" not engage in other activities? The answer might be that there is nothing else to do, no alternative form of employment. If this be the position, then no problem of maintaining these "passengers" would arise if they were switched to other work, that does not arise already, providing, of course, the work was near their homes. The switch-over would not involve any new problem of raw material supply if local materials were used. Admittedly, in this way only a few forms of capital could be provided. Most forms require the use of skilled labour or some imported raw materials or both. None the less, a start might be made in supplying, for example, secondary roads if these were necessary before further development could take place.

This is a very special case. Generally, except in times of heavy unemployment, additions to the stock of capital involve a choice between making machines or roads and providing consumption goods, e.g. vegetables. In wartime this choice involves a painful sacrifice of consumption goods for bombers and battleships. But a problem very similar in kind to this invariably arises whenever capital goods are produced.

### STATE OWNERSHIP

The contrast between the monetary funds available for "investment" and the nature of real investment is most clearly brought out in the case of an economy which is run wholly or almost wholly by the State. In the case of the U.S.S.R., practically all natural resources and real capital are owned by the State. There are, therefore, no rents paid for the hire of land and equipment, nor any profits going to the owners of businesses. Payments are for work, that is, wages and salaries. A further difference between the economy of the U.S.S.R. and that of, say, Britain is that in the former the output of goods (agricultural machines or pencils or anything else), instead of being the sum total of the outputs of perhaps scores of independent firms, is the result of previous decisions by the State Planning Commission (Gosplan).

In making its decisions Gosplan must necessarily decide how the available productive factors are to be divided between the production of consumption

goods on the one hand and the production of capital goods on the other hand; that is, how the available resources are to be divided between consumption and investment.

Wages and salaries are paid to workers in both kinds of industry. But they may purchase only consumption goods, because capital goods cannot be privately owned. The real worth of money wages and money salaries depends, therefore, on the amount of consumption goods available. The consumption goods may be rationed to consumers or distributed as far as they will go by queueing—first come, first served. If neither rationing nor shop shortages are resorted to as the basis on which the available supplies are distributed, then money prices are used for this purpose.

### WHAT MONEY CAN BUY

Supposing this last method is generally applied. The total of incomes is made up of the wages and salaries earned in making consumption goods and services and in producing capital goods. The total of goods and services available for purchase is the output of only the consumption goods industries.

To absorb the whole of the available money income, prices of these goods must be raised above what they cost to produce by the amount of money earned in the capital goods side of industry. If prices are raised in this way, all consumption goods and services can be bought, and if bought, all wages and salaries are used up. The difference between cost of production of these goods and their selling price may be regarded as compulsory saving. It necessarily adds up to the value of capital goods produced. It indicates how much consumption has fallen below total production in order to invest in capital.

Let us now turn to the voluntary saving method used in various countries, the economies of which are not planned by the State.[1]

There are three possibilities. The choice to devote resources to investment may be entirely domestic, that is, within the country concerned. It may be largely domestic though supplemented by help from foreign sources. Or it may be largely from foreign sources.

The United Kingdom stands out as an example of the first possibility. When British industry began its great growth in the second half of the eighteenth century the individual units were small. They were small family businesses, as the names of some great businesses today show. They were started out of the wealth of families, who, instead of living more splendidly, spent their money on workshops. When profits were made from these workshops, part of them were put into the business and so the businesses grew. Britain was fortunate in having a combination of men with wealth and a

[1] The problem of voluntary *versus* state-planned saving is considered in detail in Chapters I and VII.

shrewd judgment of what to invest it in. They were both able to invest and willing to invest.

As time went on and businesses grew in size, they needed more than one person's wealth, and so partnerships were formed. Sometimes both parties put money into machinery and workshops and both helped to manage the business, while in other instances one was a sleeping partner who merely invested his wealth and took no active part in the business. In the successful venture of Boulton and Watt, who went into partnership to manufacture steam-engines in Birmingham, Watt was the inventor and engineer and Boulton was the investor and business manager.

It is still the case in Great Britain that new businesses start up on private wealth. The exception is where a business begins as a subsidiary of an existing business.

In those countries where the fortunate combination of a well-to-do and enterprising middle class was not found it was necessary to fuse together sufficient wealth and the ability to use it productively. This was often done through the formation of banks in Germany, France and the United States. For these historical reasons banks abroad have been more closely associated with the finance of industry than in Great Britain.

In any event, whatever the method of combining funds for industry and the ability to exercise judgment on their disposal, the funds enabled resources to be applied to purposes that would assist in the production of a flow of goods in the future. The supply of funds depended on the willingness to forgo for the time being the opportunity of consuming more goods and services. For this, some gain was expected when the scheme was completed.

### SAVING ALLIED TO BORROWING

Japan may perhaps be taken as an example of a country which increased its real capital in the main by internal saving, but supplemented this by borrowings from overseas. The twofold sources of finance in one of Japan's important industries is admirably brought out in the following description. It comes from Professor G. C. Allen's *Short Economic History of Modern Japan* (pages 63 and 64):

> "The raw silk trade was an outgrowth of peasant agriculture. In 1914 not merely silk-raising but also an important section of the reeling industry was still conducted by peasants or very small-scale producers. Even the filatures were comparatively small establishments, and there were only a few firms owning several plants that could be regarded as large undertakings. These had all risen from small beginnings. . . . The capital for such undertakings was for the most part drawn from the country districts in which the mills were located, and thus it might seem that the raw silk industry owed little of its astounding growth to the great city financial

houses which played a predominant part in large-scale manufacturing industry. This generalization, however, must be qualified. One of the reelers' major problems was connected with the provision of working capital for the purchase of the cocoons at harvest time from the peasants. A large part of this capital was in fact provided by, or through the medium of, the commission houses, who acted as intermediaries between the reelers and the exporters of Yokohama and Kobe. A considerable proportion of the silk export trade in this period was conducted by foreign merchants and was financed by foreign banks. . . . Thus, although the great silk industry might seem to be rooted in the old economy of the countryside, it was nourished by streams flowing from the terrain where the great Japanese merchant houses and the foreign financiers had their homes."

### SMALL FACTORIES

The small size of factory usual in Japanese industry is further shown by the fact that in 1930 rather more than half of the population occupied in industry and handicraft was engaged in work-places employing fewer than five persons. Clearly the setting up of such small work-places involved relatively small money capital. This helped Japan to provide much of her capital from internal sources. It was assisted by the fact that production could be increased without the provision on a large scale of roads, houses, waterworks and other forms of social and private capital. The workshops were scattered over the country; there were few large concentrations. The demand on transport was not as great as it would have been if production were concentrated in a few towns and the product distributed from those towns over the rest of the countryside. Of course, there were such industrial concentrations, but they were the exceptions.

### FOREIGN CAPITAL

Where, in order to begin development, it is necessary to build roads, railways, waterworks and the like, the necessary capital must largely be provided from abroad. For this kind of initial development is required only in recently settled countries or old countries which have not progressed economically. The British Dominions may be taken as an example of recently settled countries which required large-scale investment from abroad (mainly, in fact, from Great Britain). With the aid of this capital they have achieved high standards of living. But the borrowing created problems of particular severity. In order to pay interest on their loans and later to repay the money borrowed, they had to export. The loans arrived in the form of railway engines, machinery, consumer goods and services which were purchased mainly in the United Kingdom. The lenders wanted repayment and interest in United Kingdom £s. This could be obtained only by selling goods in the United

Kingdom or elsewhere, obtaining £ sterling and using the money received to clear the debits. So the Dominions had to export goods worth more than the goods they imported and pay over the difference in £s.

Debt payment was a heavy burden. In 1928 the proceeds from one-quarter of Australian exports, one-fifth of South Africa's exports and one-sixth of the exports of Canada and New Zealand were required for debt payment. They exported relatively few kinds of goods, principally meat, wheat, wool, gold and fruits. When the prices of their agricultural and pastoral products fell heavily in the depression of 1929–1933 the weight of the debt became insupportable. The fall of prices meant that a bigger amount of goods had to be sold to pay the debts which were fixed in terms of £ sterling. This was no easy matter in a time of slump. Of course, blame for this does not attach to the particular method of acquiring capital. The difficulties were due to the fact that the debt repayments were large and fixed in amount and prices of exported goods tumbled to extremely low levels. The Dominions were specially affected by the fall of prices because the prices of goods they sold abroad fell much more than the prices of goods they bought abroad.

### THE INSTABILITY OF INVESTMENT

Now that we have discussed the alternative methods of enlarging the stock of capital let us examine the part that investment plays in the modern economy. One feature of investment in the past has been its changefulness. Expenditure on investment has varied widely from year to year. Take by way of illustration the position in Canada. The following figures refer to Canada's own investment expenditure and lump together allowance for wear and tear of existing capital and additions to the stock. Note the decline between 1930 and 1933.

CANADA: GROSS DOMESTIC CAPITAL FORMATION: 1927–41

(Million Canadian Dollars)

| *Year* | | *Year* | | *Year* | |
|---|---|---|---|---|---|
| 1927 | 1094 | 1932 | 396 | 1937 | 818 |
| 8 | 1312 | 3 | 145 | 8 | 886 |
| 9 | 1224 | 4 | 421 | 9 | 935 |
| 1930 | 1256 | 5 | 508 | 1940 | 1354 |
| 1 | 741 | 6 | 420 | 1 | 1638 |

The questions arise: why does investment expenditure show such enormous changes, and with what effects on the economy as a whole? We may begin our answers by referring to the British Government's White Paper on *Employment Policy* (Cmd. 4527 of 1944). Chapter IV is headed, "General Conditions of a High and Stable Level of Employment." It declares that

the conditions that must be fulfilled in order to maintain high and stable employment are threefold: (1) total expenditure on goods and services must be prevented from falling to a level where general unemployment appears; (2) the level of prices and wages must be kept reasonably stable; (3) there must be a sufficient movement of workers between occupations and localities. Let us concentrate our attention on the first of these conditions.

## CHECKING A FALL IN SPENDING

As the White Paper says, "the first step in a policy of maintaining general employment must be to prevent total expenditure from falling away." The falling away of total spending results from two movements. One is the primary fall and the other the secondary fall. Suppose all the locomotives wanted by the railways have been constructed and no more will be required until either some wear out and need replacing or traffic increases and more engines are wanted to cope with the bigger demand for transport. Both of these occurrences will take time. For the time being the workshops have no further orders. Unless there is something else required the workshops will be unemployed. Men will have less money to spend, whether they work directly in producing locomotives or indirectly in producing the steel, coal, paint and so on used in the workshops. This is the first effect. It is spread throughout the economy in this way. Those first affected have less money to spend and so buy less. Shopkeepers and others do less business and in turn have less to spend. They do not order the usual amount of goods for their shelves and so those producing retailers' stocks suffer a decline of trade and have less to spend.

Together the initial decline and the later spread might reach considerable proportions. A policy for maintaining high and steady employment should as far as possible eliminate the primary fall, but if this is not feasible for one reason or another it must prevent the primary change having secondary repercussions. How may this be done?

## TYPES OF EXPENDITURE

Let us divide up the flow of spending according to the source of the various streams that go to make up the total flow. The White Paper on *Employment Policy* makes this division. It distinguishes five separate streams: (1) *Private Consumption Expenditure* is the money spent by individuals, business organizations, trade unions, etc., on such things as food, clothing, accommodation, entertainment, travel, education, insurance and so on. Our spending on these things depends on our income. If our income changes our spending changes also, but if our income remains unchanged our spending is more or less constant.

(2) *Public Expenditure on Current Services* is the money spent by the local

and central government authorities on the armed forces, the pay of civil servants and local government officers, the social services, public health and the like. Expenditure on any of these may be changed by a change of policy. Raising the school-leaving age will involve increased expenditure, for example. But apart from changes in policy of this kind, this stream of spending is also fairly constant so long as incomes are unchanged.

### INVESTMENT EXPENDITURE

(3) *Private Investment Expenditure* is spending by private individuals and private organizations on durable goods, like buildings and machinery, and additions to stocks of materials. These things are not wanted for their own sake; their function is to maintain or expand the output of consumers' goods. In considering whether to invest or not, an individual person or individual firm estimates the demand for goods and the prices they would fetch. If it seems profitable, they will invest in the necessary capital goods. The investment might come about by a diversion of money from some other line, or it might be spending additional to what has been going on. If it is a diversion from some other channel, it lowers earnings in the channel it leaves and raises it in the new channel. If hitherto the money was not spent it creates new incomes and thus raises the level of money income. This income is spent and raises the earnings of shopkeepers and others. It increases incomes throughout the economy by stages as it spreads.

If many business men decide at about the same time to increase their investment expenditure the result for the economy as a whole may be considerable. As incomes successively rise, not only are consumers' goods bought but other business men decide the time is ripe to add to their capital, and there is a further dose of investment. It continues to grow like a rolling snowball.

### EFFECT OF INCREASED INCOMES

To increase the output of, say, shoes by 10 per cent, once the existing shoe-making machinery is being fully utilized, it is necessary to add to the number of machines. Ten per cent more capacity is required. The orders to the shoe-making machinery firms are raised. The increase might be considerable.

Possibly these machine-making firms have for some time been turning out just sufficient machines to replace worn-out ones. Perhaps a replacement demand of 10 per cent has been usual, thus replacing each machine in use each decade. Now the order is for the 10 per cent replacement and the 10 per cent net addition. The demand for machines has thus doubled. The output of the machine-making industry must suddenly expand and then, unless a further increase in capacity is required, fall back to satisfy the replacement demand only. In this way one reason is found for the peculiar jerkiness of industries supplying capital goods—the so-called constructional industries,

which include building, steel-making and like activities, as well as the machine-making industry itself.

(4) *Public Investment Expenditure* is expenditure by central and local government authorities and public utilities on such things as roads, buildings and equipment. In the past these authorities have spent more on investment at times of good trade and high incomes than at times of bad trade and low incomes. This is explained by the fact that their available money has been greatest at times of high incomes, as they depend largely on tax revenue. Receipts from income taxes, entertainment taxes, and so on are highest when incomes are high. If they spent the same amount in times of lower incomes as before they would incur deficits. The budget would not be balanced. The deficit would be covered, as in wartime, by borrowing or creating new money or both. Budget deficits have been regarded as bad finance, just as running into debt by a private person is regarded as wrong. Yet the reduction of public investment expenditure at a time of unemployment further reduces the flow of expenditure. It dries up one stream because another or others have dried up. Clearly, to maintain the total flow the public investment stream should be increased when private expenditures fall away.

### IMPORTS AND EXPORTS

(5) *The Foreign Balance.* This refers to the difference between the money value of goods and services exported abroad and the money value of goods and services bought from abroad. If the total value of exports is greater than the total value of imports, the foreign balance is said to be positive; in the reverse case it is said to be negative. Suppose the balance is neither positive nor negative, suppose, that is, the value of imports and the value of exports is the same. This balance may be upset either because the demand at home for foreign goods falls off or because the demand of foreigners declines. The decline might come about for a variety of reasons. It might now be possible to produce as cheaply at home what was formerly obtained more cheaply abroad. People at home might change their tastes, preferring the home rhubarb to the foreign lemon. But the biggest cause of change, at least of sudden change, is due to a change of incomes. If people at home are less well off because, say, a big capital investment scheme has been completed and they are temporarily unemployed, then they will buy less goods. Some of the goods they cannot now afford will be either goods imported or goods made with the help of imported raw materials. Exporters abroad have less business and spend less and the ripple of reduced spending travels through their economy.

From this examination of the five streams that make up the flow of total spending it emerges that two of the five are peculiarly liable to fluctuate. These fluctuations bring about further changes in incomes unless appropriate and adequate steps are taken to prevent the spread. The two streams are

Private Investment Expenditure and the Foreign Balance. Of course, the former is absent in a fully planned economy such as that of the U.S.S.R., while the latter is unimportant for those countries having only small trading contracts with foreign countries. In Great Britain both are highly important.

One of the difficulties in maintaining steadiness in Private Investment Expenditure is pointed out in the White Paper on *Employment Policy*. It says: "If, through a decline in private investment, the construction of new factories is discontinued and building labourers are thrown out of work, it may be useful to stimulate the purchase of clothing, but it would be idle to expect the building labourers to turn up next day to handle sewing machines."

### CO-OPERATIVE NATURE OF PRODUCTION

More force is given to this point when it is remembered that production is a co-operative undertaking. All efficient production requires factors to be combined in the right proportions according to the task in hand. It requires the different grades and types of labour to be combined so as to form a team. The extent, therefore, to which a drop in demand for one kind of good can be offset by stimulating the supply of another good is likely in practice—unless there is general unemployment—to be limited and also, perhaps, difficult to bring about quickly.

The difficulty is likely to be greatest where the initial drop in demand is due to a decline of exports. Foreign countries cannot normally be compelled to buy a certain amount of goods from another country, and often it is not easy to absorb at home the goods formerly sold abroad. The United States does not want all the tobacco and cotton she produces, nor does Canada want all her own wheat.

In the case of Great Britain exports are now the essential means of paying for foodstuffs and raw materials. If her exports dropped, as the White Paper says, "it would be essential, at the earliest moment, to find alternative exports to fill the gap." Resources must not, therefore, be drawn away from the exporting industries. To reconcile this requirement with the desire to launch counter-measures before the initial drop in spending leads to a further spreading decline throughout the economy is indeed difficult.

### COMPETING CLAIMS

In the past, the difficulty has been one of preventing the spread of unemployment and the reduction in the standard of living that that entails. The problem has been one of keeping the flow of spending fast and full enough. But there is the possibility that the level of expenditure will be too great, that private and public consumption expenditure will be squeezed by private and public investment expenditure. Either consumption expenditure or capital expenditure must then be cut. Public investment expenditure may be drastically reduced

in order to free sufficient resources for the other claimants. This might be done by postponing road work, building of various kinds, extensions of public utilities and so on. This is precisely the kind of problem facing Great Britain and several other countries in the period immediately following the war.

## ORGANIZATION

Adam Smith began his great book with the claim that "The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour." He went on to give a simple but striking illustration of this, the trade of the pinmaker. "A workman not educated to this business, nor acquainted with the use of the machinery employed in it, could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only are employed, and where some of them consequently performed two or three distinct operations. These ten persons could make among them upwards of forty-eight thousand pins in a day."

It may be asked why such a method of splitting up operations, if it be so successful in multiplying output, is not everywhere applied. The answer is simple. Even when it is fully realized there would be this tremendous increase in output by dividing up the processes, it would not be worth doing so unless the full output was required. In a small and isolated community it would hardly be possible to use forty-eight thousand pins per day. Perhaps half that number would be adequate for all requirements. That might involve the labour of seven or eight men. Doubling the output by the employment of only two or three extra workers would not satisfy any wants not already adequately satisfied. It would be wasteful. So the first requirement for taking full advantage of the division of labour is that the market for the product should be big enough regularly to absorb the whole. This might come about by a growth of numbers, by greater wealth of the existing population, by opening up trade with other areas or, of course, by some combination of these factors.

The second requirement is that there should be someone whose business it is to organize the production of the team so that it works in unison. Wastages may be heavy indeed if some workers have nothing to do because other workers are not producing fast enough to keep them busy. The organizer must attempt to engage labour, raw materials and other requisites in the right proportions so that a smooth flow of work continues through the factory.

It is often thought that under modern conditions the gains of division of labour, of specialization, can be obtained only by having very large firms. There is some evidence for this view. British industry began from very small-scale workshops. With the growth of technique and with the widening of the market there has been a natural increase in the size of firms. For example, the typical size of a British spinning firm more than doubled between 1884 and 1911, rising from 25,000 to 60,000 spindles. Over the same period the typical number of looms in a weaving-shed rose by rather less than half, from 325, that is, to 475.

### EFFICIENCY OF SMALL FIRMS

But if it be thought that the smaller firm no longer has an important place in a modern economy it can easily be shown that such is not the case. Let us take the position in Great Britain in 1935, the last year for which there is comprehensive information. Of the 174,000 firms engaged in manufacturing industry, only 650 employed more than a thousand employees each. These 650 firms engaged 28 per cent of all those engaged in manufacturing industry. In building and contracting only thirty-one firms employed over a thousand employees each, and this accounted for rather less than one-thirteenth of the total labour force concerned. Firms employing less than eleven workers formed one-third of the industry.

If we take all firms engaged in mining, manufacturing, building and contracting which in 1935 engaged eleven or more workers, it is found that of the 53,217 firms no fewer than 41,215 engaged between 11 and 99 workers and only 101 engaged over 5,000.

Evidence from the United States tells the same story. Of about three and a quarter million business units of all types nearly one-half were one-man units with no hired labour. Fewer than 2 per cent employed more than 50 workers.

These small firms are not to be regarded as the unfortunate legacy of a dead past which should be buried as quickly as possible. Usually they are highly efficient. Take for example, the conclusion of the Working Party on the Boot and Shoe Industry. In 1935 there were 808 factories in this industry. They averaged 134 workers each; only 14 employed more than 1,000, and more than half employed less than 200. Yet the Report concluded that

"the industry is highly competitive, and the general level of efficiency is such that we do not find any striking and far-reaching economies that could be made by reorganization."

How may this apparent conflict between expectations based on economies of large-scale operation and hard fact be resolved? To begin with, there is no necessary connexion between the economies of scale and the individual firm. The wider the market the more firms can specialize and obtain the full economies of division of labour thereby. Thus, it has been pointed out[1] that "the successors of the early printers are not the printers of today, with their own specialized establishments, but also the producers of wood pulp, of various kinds of paper, of inks and their different ingredients, of type-metal and of type, the group of industries concerned with the technical parts of the producing of illustrations, and the manufacturers of specialized tools and machines for use in printing and in these auxiliary industries."

It might be further argued that this does not altogether explain why there is a multiplicity of such specialized firms each on a small scale rather than one or a few big firms. This may be answered in part by taking into account transport considerations. It would greatly add to the price of bread, for example, if it had to be distributed over wide areas. Bakeries, therefore, supply the surrounding area and because of the distribution cost do not produce on a very large scale. But many industries operating on a small scale are not similarly dispersed. Some are highly concentrated. The cutlery trades, for example, are greatly concentrated. Why, then, it may be asked, is there no marked tendency for them to develop into larger and larger units?

## HISTORICAL ACCIDENTS

Professor Sargant Florence attributes this kind of occurrence to human incompetence. He says: "The present structure of industry has its roots in history. Many of the small plants that exist at any one time have survived from days when small plants were necessitated by the restrictions of markets and sources of supply due to less efficient conditions of transport, communication, and technique generally. Logically under modern conditions the larger organization should immediately outdo the presumably less efficient smaller organization; but in fact there is a lag, owing to the stickiness or friction of the market, and owing on the production side also to the difficulties in the rapid growth of organizations."[2]

There can be no doubt that the early start and small beginnings of British industry have brought disadvantages as well as advantages. Also actual conditions do at times differ, sometimes widely, from what is the best possible. But Professor Sargant Florence omits other causes which are important.

[1] Allyn Young, *Economic Journal*, December, 1928, pp. 527–8.

[2] *The Logic of Industrial Organization* (Kegan Paul, 1933), p. 47.

Suppose there are not very many firms in an industry. They compete against one another for business, one's gain being another's loss. They might well do better if they combined together and so eliminated this competition. Profits would be higher or less variable or perhaps both. Why do they not do so? The business man may be occupied with other things besides immediate gain. He may be interested in retaining the separate identity of his own firm, particularly if it is a family business. Or else he may hope that one day his firm will be more important in the industry.

"As producers," Professor Sargant Florence continues, "they may resist the necessary specialization, adjustment and reorganization; as consumers they may, by the variability of their demands, introduce uncertainty and small-scale buying." Let us look at each of these points in turn.

### LIMITS TO SPECIALIZATION

There is no reason to doubt that production of 48,000 pins reduces the cost per pin to a minimum. It is cheaper, if such a quantity is required, than any smaller amount per pin produced. Yet it may well be the case that further subdivision of processes and enlargement of the factory would not make the cost of producing a pin lower still. In other words, there are both advantage to subdivision and limit to its effectiveness. It is widely thought that the gigantic wartime plant built by the Ford Company at Willow Run was too big, i.e. it had overstepped the limit. The limit is set by two forces. On the one hand, after a point the full economies of using expensive machinery, highly skilled workers and conveyer belts are realized. The best step is to duplicate the plant rather than extend it. Much confusion is caused by thinking in terms of large-scale firms, as though it meant the same thing as large-scale plants. The firm may be large although each of its plants is fairly small.

A second limiting factor is organization. The inefficiency of large-scale organization in wartime is proverbial. There are relatively few men who are able effectively and efficiently to administer businesses that employ several thousand workers and use capital worth several millions. There must be delegation unless problems requiring decision are to pile up on the desk of the head of the firm.

These two limiting forces—the technical limitations and the organizational limitations—generally work at different stages. Technical economies are usually exhausted before organizational limitations crop up. So the business man directs more than one plant. This is the usual position, resulting in "Big Business."

To take Professor Sargant Florence's second charge: by their changing requirements consumers introduce uncertainty and small-scale buying. Uncertainty would not necessarily be absent if consumers ceased to be so fickle in their requirements. Only one source of uncertainty would thus be

removed. The weather would still be unpredictable, sources of supply might change, methods of production might be developed, new products might emerge, people might be attracted to other industries. Obviously life would be simpler for the producer if we all said at the beginning of a year what we would buy and in what quantities. But part of the function of the business man is to make just this estimate. The purpose of the economic system is to satisfy consumers' wants. If there were only half a dozen different types of hats to choose from, each type could be mass-produced and some cheapening would result. But if people are prepared to pay for a model rather than wear a standardized type they presumably think it worth while. The growth of chain stores shows the extent to which people are prepared to standardize their requirements if there is a sufficient lowering of prices.

There are few economies that the small firm cannot obtain. It can employ specialist labour of the same quality as that of the large firm; for example, it can call in a consultant engineer in the same way as the family calls in the doctor or surgeon. By pooling, small firms can finance research organizations or may individually use independent organizations to work for them.

In an industry subject to quick change of demand or rapid technical change the small firm may be able to adjust itself more quickly than the large organization. The manager of a small undertaking might gain considerably by his ability to keep his finger on the human pulse of his firm. It is easy to overlook the simple but significant fact that production will not be at its best unless the selection and control of the workers concerned is efficient. They must work as a team and work with, rather than against, the management.

### KEEPING WORKERS INFORMED

According to the report, *People in Production*, prepared by Mass Observation during the war: "In several of the bigger firms visited the managing director was absorbed in finance, administration, contracts and officialdom; either he had not the time or the inclination to consider people working as part of his business. In such circumstances major decisions of human policy may be taken by quite subsidiary officials."

Perhaps, above all, the co-operation of workers is affected by feelings of fairness or unfairness in their treatment by the management. Feelings of unfairness may be avoided if the workers are adequately informed of the reasons for doing certain things and the purposes they are intended to serve. It might be better still if the workers or, more usually, their delegates are consulted before decisions are taken, so that all avoidable friction and inconvenience is avoided. Some part of the decisions may be put into operation by the workers themselves in their own way. None of these involves ultimate control. As Mr. Horner, of the National Union of Mineworkers, has said about the working of the mines in Britain under nationalization: "The

manager would be in complete control. He would be expected in pit committees to listen to, and often to apply, ideas which the workers put forward, and would be liable to criticism, but while the pit was working no person would have the power to countermand a lawful order."

The war focused attention on these problems and led to the speedier development of personnel management. This was greatly helped in Great Britain by the statutory requirement that, before an establishment could be scheduled under the Essential Works Order and thus obtain protection of its labour and raw material supplies, its welfare provisions had to reach a satisfactory standard.

Acute shortage of people suitable for appointment as labour managers, personnel managers and welfare managers was experienced. Short courses were improvised. The measure of success attained by these labour managers should be viewed in the light of the rather unfavourable circumstances of the time. Salaries and status rarely compared with other wartime opportunities. Managements often regarded them with suspicion. They were frequently regarded as a buffer between workers and the management.

The functions of the Personnel Department should include the following items. It is concerned with the securing and maintenance of the labour supply. This involves knowing the kinds of labour needed and keeping up to date its knowledge of the sources of such labour and using the best methods for filling vacancies as they arise. Once the labour is engaged, the Personnel Department should ensure that new entrants fit into the existing organization with ease and should control all transfers and promotions. The new entrants may require an initial training and other workers may need to learn new methods. Both are the concern of this department. Health, welfare and safety are usually responsibilities attaching to the department, which is also, in part, concerned with wages, methods of payment and other rewards.

The requirements of a good personnel manager are many. The tasks are difficult, requiring knowledge, tact and perseverance. To be fully effective, the manager must win the co-operation of the workers. To this end the dissemination of information and the practice of consultation with workers' representatives are invaluable.

## KNOWLEDGE

Economics is interested in knowledge as a means. It is not interested in knowledge for its own sake. Only that knowledge which assists in the satisfaction of wants is relevant. This assistance might, as we shall see, take place in several ways, but the common factor is that the opportunities for satisfying wants are enlarged.

The views of Marshall on this topic are interesting. He said in his *Principles of Economics* that "Ideas, whether those of art or science or those embodied

in practical appliances, are the most real of the gifts that each generation receives from its predecessors. The world's material wealth would quickly be replaced if it were destroyed but the ideas by which it was made were retained. If, however, the ideas were lost but not the material wealth, then that would dwindle and the world would go back to poverty."

These ideas of which Marshall spoke are, in two important respects, unlike all the other factors of production which have been discussed. In the first place, there appears to be no limit to the growth of knowledge. There are limits to our work; there are limits to natural resources; there are limits to which we are prepared to reduce consumption in order to enlarge the stock of capital. But knowledge can grow and the applications of it multiply. It is perhaps the only factor that directly benefits from modern war, which is a large-scale application of ideas, mainly technical, for a particular purpose.

### SHARING IDEAS

In the second place, unlike the other factors, ideas can be shared without loss to the original possessor. In modern times the growth of industrial production in both Japan and the Soviet Union has been immense. This has been brought about by the import of relatively little capital. It would not, however, have been possible in the time without much sharing of knowledge and techniques. In this way ideas have worked to raise living standards and have exerted precisely the same effect as that attained by better ideas concerning feeding, sanitation and medical care in the England of the eighteenth and nineteenth centuries. Much indeed might be done to improve living conditions and increase human enjoyment in the more backward areas of the world today if their inhabitants were shown how best to grapple with their problems. One problem is that of food production. Yields in very many places would be raised if out-of-date and unsuitable methods were replaced.

But little is possible unless and until the working population is capable of benefiting from such advice. The labour force must be able to apply the ideas. This points to a satisfactory level of general education for everyone. In areas like those of Western Europe and North America which face a fall in population owing to a decline in births, the quality of the population is, from this point of view, perhaps more important than it used to be.

This argument in favour of general education is strengthened by the point that Marshall expressed so well. Writing of England in 1890, he said: "The laws which govern the birth of genius are inscrutable. It is probable that the percentage of children of the working classes who are endowed with natural abilities of the highest order is not so great as that of the children of people who have attained or have inherited a higher position in society. But since the manual labourer classes are four or five times as numerous as all other classes put together, it is not unlikely that more than half the best natural

genius that is born into this country belongs to them; and of this a great part is fruitless for want of opportunity. There is no extravagance more prejudicial to the growth of national wealth than that wasteful negligence that allows genius that happens to be born of lowly parentage to expend itself in lowly work. No change would conduce so much to a rapid increase of material wealth as an improvement in our schools, and especially those of the middle grades, provided it be combined with an extensive system of scholarships, which will enable the clever son of a working man to rise gradually from school to school till he has the best theoretical and practical education which the age can give."

Important advances have been made in England since Marshall wrote, but it is as yet too soon to be satisfied. Few will disagree with the view of Sir Stafford Cripps and others that the waste of ability which the educational and social system has hitherto permitted must be avoided in the future.

### REDUCING BUSINESS RISKS

Within any economy changes are always taking place. The population is changing in size, in age distribution, in place of residence; the amount, forms and location of capital equipment may be changing; natural resources may be discovered, while others are being used up; consumers may change their wants, or fashions may change. All these changes are important to the producer as they affect either the demand for his product or the supply of it. Knowledge of such changes enables him more correctly to estimate demand. He might need to estimate six or twelve months ahead. The more uncertainty and ignorance of such changes are reduced, the better estimates can be.

Some business risks can be very much reduced. Technical advance has produced safety devices, such as fire extinguishers which reduce risk of loss from fire. Surveys of consumers' tastes or of crops help the producer to forecast better. Once risks are known and their chance of occurrence can be worked out, the producer might find others willing to take the risk for a payment. It is worth while for the specialist to spend time and money on looking into the chance of occurrence and possibilities of reducing it which it would not pay the single producer to do. Insurance is of this type. It is essential that an estimate should be made of the frequency of occurrence of particular risks—for example, whether 2 per cent or 7 per cent of houses are burgled per year. Also there must be a sufficient number of similar risks carried, so that year-by-year calls on the company do not vary much.

Owing to its often somewhat dramatic form, it is easy to place undue emphasis on purely technical advance, important though it is. The increased importance attached to research by both the Government and industry in Great Britain may be seen from the increased funds allotted for this purpose. Thus, in 1920 there were seventeen Research Associations in Great Britain

These obtained £96,000 from industry and £65,000 from the Government. In 1936 there were eighteen associations which received in all £250,000 from industry and £127,000 from the Govermnent. In 1937, Government research expenditure totalled £3,280,000 of which £1,536,000 was allotted to the defence services.

Once the Government assumes responsibility for the planning of the economy, as in Great Britain since 1939, it requires an immense amount of information. One important addition to economic knowledge came in 1941 with the publication, alongside the budget accounts, of the White Paper on *National Income and Expenditure*, which has since been published annually. It contains estimates of private income and outlay, the income of public authorities and the capital account of the economy.

However, much information indispensable for efficient overall planning is not yet available. The last census of production (from which figures have been quoted earlier) took place in 1935. An annual census is desirable. It should show the structure of industry, the output of firms, the amount of raw materials used, the position of stocks and so forth. In its new rôle in the economy, the Government must possess up-to-date quantitative information, if it is to administer and guide.

The application of knowledge sometimes requires painful adjustment in the economy. New sources of supply may render existing supplies unprofitable. New methods may make existing methods uneconomic. There is, therefore, sometimes strong resistance on the part of existing producers to the application of the knowledge. At one time this took the form of machine-breaking. More recently it has taken the form of the refusal to work new machines. If the new supplies are in another country, they may be kept out by tariffs, i.e. taxes on their importation.

These resistances are understandable. They are due to the upsetting of expectations. But in so far as they succeed, they rob the rest of the community of the rich fruits of advance. Of course, there is not always grave dislocation. Important changes may be brought about very simply. Thus, when it was discovered in Finland that more vitamins were contained in winter milk from cattle fed on silage than from cattle fed on hay the change was easy to effect. It merely required the haystack to be replaced by the silo or the still cheaper silage pit.

## TOWARDS MAXIMUM PRODUCTION

Two comparisons of standards of living throughout the world have been made. One is that of Mr. Colin Clark and the other by Dr. Simon Kuznets.

Mr. Colin Clark has calculated, in his book *The Conditions of Economic Progress*, the income per head in American dollars of each breadwinner. Of course, the standard of living for the whole community depends not only

on this figure, but also on the proportion of breadwinners to the total population. As we have seen already, this proportion is influenced by the age distribution of the population—in fact, principally by the proportion of males between 15 and 65 years of age. With this in mind, let us look at the upshot of Mr. Clark's calculations. In his own words (pages 2 and 3), "the world is found to be a wretchedly poor place. An average real income per worker below £2 or $10 per week is the lot of 81 per cent of the world's population." Only in the U.S.A., Canada, Australia, New Zealand, Argentina, Great Britain and Switzerland was the standard £4 or $20 or more per week for each worker. Rather more than half of the world's population was found to obtain less than $4 per week per worker.

The picture of poverty brought out by Mr. Clark's comparisons is confirmed by the figures of Dr. Kuznets summarized in the table on page 75. Unlike Mr. Clark, Dr. Kuznets takes the whole population into account and not only the working population. Dr. Kuznets calculates in terms of American dollars, at their value in 1913. Mr. Clark's dollars were taken at their worth on an average over the period 1924–1934.

## EFFICIENT UTILIZATION OF RESOURCES

The wide gap between the highest and lowest incomes requires no emphasis. If we look at the figures for the two periods it is clear there was uneven progress and in some cases a decline.

How may we account for (*a*) the poverty thus shown and (*b*) the different rates at which incomes were raised? One explanation that springs to mind very readily is unemployment, that is, that labour and other productive factors were not used as fully as they might have been. There is, of course, some truth in this contention. It should not, however, be given exaggerated importance. Mr. Clark points out that "Britain and Germany, working at full production capacity, could have produced in 1937 approximately 1,500 dollars and 1,000 dollars per breadwinner respectively, while actually they produced 1,275 and 828 dollars per breadwinner respectively." That is, full employment would have increased incomes by about one-fifth.

As we have seen already, it is not merely a matter of employing factors, but of employing them in the jobs and areas where they can most fully satisfy wants. Of course, when wants change it takes time to alter the distribution of factors of production. Building workers whose project is completed cannot turn up next morning to man sewing-machines. Where the change is possible producers may be reluctant to move. The cost of movement may be high. Information about openings elsewhere may be lacking or defective.

These difficulties can be best surmounted if information is adequate, re-training facilities are cheaply or freely available and conditions of employment in the economy as a whole are good. Then the shifts necessitated by

changing circumstances cause the minimum upset to the persons concerned and their opposition to movement is also minimized.

But this assumes that factors are free to move to jobs or areas where their services are most wanted. Unfortunately, this is not always the case. The flow of both capital and labour is subject to many restrictions. It has been said with authority[1] that in the case of Britain "the cost of entering certain pro-

INCOMES PER HEAD
(American Dollars at 1913 Values)

| *Country* | *Period I* (1911–1914) | *Period II* (1923–1929) |
|---|---|---|
| United States | 368 | 541 |
| Canada | 296 | 401 |
| Australia | 292 | 304 |
| United Kingdom | 250 | 293 |
| Germany | 178 | 179 |
| France | 161 | 188 |
| Switzerland | 171 | 178 |
| Austria | 132 | 152 |
| Belgium | 164 | 135 |
| Spain | 94 | 117 |
| Italy | 108 | 96 |
| Hungary | 64 | 85 |
| Russia | 52 | 62 |
| Japan | 22 | 53 |
| India | 14 | 13 |

fessions is higher than it need be in the interests of efficiency and that the professional associations are not free from blame for this position." The numbers of entrants is thus artificially restricted. Some suitable candidates have to look elsewhere. The community has fewer qualified men and women than otherwise would have been the case. As in some professions, so in some trades entrants are restricted and the cost of training is raised by an unnecessary prolongation of the apprenticeship period. Sometimes legislation has resulted in restrictions of this kind. Thus by the Hop Marketing Scheme of 1932 no new producer was allowed to begin growing hops, while those already growing them were limited to quotas based on their past output.

In the period between the two World Wars, but more particularly after the Great Depression, restrictionism grew. Speaking in the House of Lords in July, 1944, Lord McGowan, chairman of Imperial Chemical Industries, said that in Britain "many manufacturers have ceased to believe in the inherent superiority of free or extreme competition" and prefer to co-operate in

[1] A. M. Carr-Saunders and P. A. Wilson, *The Professions* (Oxford University Press, 1933).

order to "stabilize prices at a reasonable level." This is not dissimilar from the method of recruitment of some industrialists. As the Liberal Industrial Inquiry pointed out in 1928, "The family business passes by inheritance to sons or relatives who by no means inherit the required managerial capacity. This tendency is doubly destructive. There is the direct loss due to the exercise of administrative powers and functions by those unfitted to sustain them. There is the far greater indirect loss due to the fact that the promotion of able administrators is hampered by the necessity of finding jobs for representatives of family or financial interests. The career open to talent is restricted."

Perhaps above all—above monopolies of capital and of labour, above bad management and restriction of entrants—in trying to bring actual production up to the potential maximum it is indispensable that workers, employers and governments alike should rid themselves of the mentality born of bad trade and unemployment. The will must be there to achieve the maximum. In the words of a White Paper (Cmd. 7018 of 1947, paragraph 24), "We must remove the idea of spinning out production in order to avoid unemployment, or of restricting output in order to safeguard earnings. On the contrary, industry, employers and workers alike, must be ready to adopt every possible means of increasing production, secure in the knowledge that this does not carry with it any threat to employment. What is wanted is a new determination to achieve a high and stable level of employment and increased production. Indeed, without high production full employment itself is endangered."

## *Test Yourself*

1. What is meant in Economics by a "factor of production"?
2. Give an example of the large inequalities in the natural resources possessed by different nations and say whether you think measures ought to be taken to mitigate the position. What measures can you suggest as most likely to achieve more equality?
3. Is the growth of large-scale production in your opinion economically and technically advantageous? In any case, do you think it desirable?
4. Do you consider that actual production falls far short of potential production in Great Britain today? (Give reasons to justify your view.)

*Answers will be found at the end of the book.*

CHAPTER III

# WHAT TO PRODUCE AND HOW TO SHARE IT[1]

SUPPOSE that we were interested in the goods which could be produced in some area during a certain time—say a year. The area in question might be a country or part of a country or even the world as a whole. We might know the means which were available in the area to assist in the production. This would involve a knowledge of the size of the population available for work, of the particular types of skill which they possess, of the types of machines and other equipment which they could use, and of the amount and quality of land and other natural resources which were in the area. All these various means we can lump together under the general heading of the *productive resources* available in the area.

We might also know the extent to which the different resources were going to be used. We should know, for instance, the number of people who were going to be left unemployed, the normal hours of work for those in employment, the amount of short time or overtime worked, and the intensity with which people would work. All this knowledge would not be sufficient to allow us to say what goods would be produced in the year. It would be possible for the farmer to produce wheat or apples or potatoes and for the cabinet-maker to produce either tables or chairs. The farmer might even decide to try his hand at cabinet-making or the cabinet-maker at farming. The goods produced during the year would depend on the result of many such choices between different alternatives. There are a great many possible combinations of goods which could be produced during the year's work.

## VARIATIONS IN THE TOTAL PRODUCT

If, instead of looking at the position as it exists in a particular year, we consider the way in which it has developed over a period of years, we can see a wide range of new ways in which the combination of goods produced in the year could vary. Men might have undergone different training, so that we may have a plumber instead of a cabinet-maker. Different machines and factories might have been constructed, so that we may have a motor-van

[1] Since the problem of the distribution of incomes has already been discussed in Chapter I (pages 17 to 33), the reader who wishes to postpone to a later stage of his studies the more theoretical aspect of the problem can conveniently omit this Chapter for the present.

instead of a tractor, or an electricity generating station instead of a blast furnace. Thus the resources which are available in any year depend themselves on the use which has been made of the available resources in the past. Altogether there is an infinite number of ways in which the resources could be used to result in the production of different combinations of goods during the year. Yet, at the end of the year, there will have been produced just one of these possible combinations of goods. There will be a definite number of apples, of potatoes, of tables, and of every type of goods. In some way the choice has been made between all the possibilities and has led to this one result. One problem, with which we have got to deal in this chapter, is how this choice can be brought about. How is the choice made between the alternative quantities of goods of different sorts which could be produced?

If we know the amounts of the different goods which are produced during the year, we are still left with the question of how they are going to be distributed among the population. This question of distribution is best considered in two parts. First, we have the problem of the distribution of income, which is simply the question of why it is that some people get more income than others. The second problem is how this income is turned into goods. Why do people buy one lot of goods with their incomes rather than another lot?

## PROBLEMS ARISING FROM SCARCITY

We have raised three problems which will be discussed in this chapter. They are all problems which are of great importance in any economic system which has yet been known. They are, however, problems which exist only because it is not possible to give everybody everything that they want. If it were possible to produce enough of all sorts of goods to give everybody all they want, without anyone having to work when they do not want to work, then the economic system would function very much more simply. All goods would be free, and everyone would be able to help themselves to whatever they wanted. All that would be necessary would be a certain amount of organization to ensure that goods were available where they were wanted, and when they were wanted. Steps would also have to be taken, of course, to make sure that there were not too many of some goods being produced, and not enough of others, at any time. However, no such state of bliss has yet been achieved, and we may doubt whether it ever will be achieved. In the real world productive resources are scarce; there are not enough of them freely forthcoming to satisfy all the wants of everybody.

When, as in the world today, there is scarcity in this sense, then some, at least, of the population will be in the position of not being able to get all they want. Which of the people will be in that position, to what total extent they will go short, and which of their wants will be left unsatisfied will depend on the answers reached to the three problems referred to above.

However we decide which goods should be produced, and however we decide to distribute these goods among the population, there is one important principle to be noticed. In an area in which we know the resources available and the extent to which these resources are to be used, we can make a change from any solution so as to give someone something which he wants, but only at the cost of leaving someone else without something which *he* wanted.

If we produce more of one commodity, then we must produce less of some other. If we give one person a higher income (measured in terms of what he can buy with it), then we must give someone else a smaller income. If one man buys more butter with his income, he must buy less of something else. From the social point of view, we could consider such a change desirable if the new wants which would be satisfied were more urgent than those which would no longer be satisfied; in other words, if the good effect of the change is greater than the bad.

This is the ultimate test we must always apply to a solution of the problems of choice in production or in distribution. It is not sufficient just to consider the good effects—what we can give people that they want—we must also consider the bad—what other people (or possibly, even, the same people) will have to do without. We shall see later how we can apply this test in some cases and what are the difficulties in its application in others.

The choices which are made under our three problems are not independent of one another. It is obvious that there must be a connexion between the way in which production is divided among the different goods and the way in which individuals in the community divide their expenditure between the goods. Apart from the possibility of trading with people outside the area, the total amount bought of any goods must, in the long run, equal the amount which is produced; otherwise stocks would be accumulating or becoming depleted. Any economic system must contain some device for bringing about an adjustment between the amounts of the different goods produced and the amounts bought. One device for effecting this adjustment is the price mechanism and we shall have to study methods of pricing and costing and their effects, as well as alternative ways of making the adjustment, such as rationing.

### CHOICE IN SPENDING

Again, there is a connexion between a person's income and the way in which it is divided between different goods. A much larger proportion will go on the necessities of life if the income is low. Because of this fact, and because, normally, different people will use their incomes in different ways, there will be a connexion between the distribution of income and the amounts of the different goods which will have to be produced. In turn, the decisions on what should be produced may affect the distribution of income, since a

person's income may depend on the output of those goods to the production of which he is best able to contribute.

We have so far discussed our problems as if they related to a given level of total production. We have assumed that we know, not only the amount of productive resources available, but also the extent to which they are used. In the real world, however, the position will be complicated by the fact that the use made of the resources will depend on the way in which our problems are solved. Both the supply of any particular type of resource and the demand for its use may depend on the way in which income is distributed. The supply of labour of a particular skill might, for instance, depend on the wages offered for that type of labour. The intensity with which a man will work may depend on the method by which he is paid for his work, as well as on the total amount which he is paid. The amount of employment which will be offered to a certain type of labour, or to labour in general, may depend on the wages which have to be paid to obtain the labour.

Our problems have been formulated as if all economic activity consisted of the production of goods for the ordinary consumer to buy. This obviously includes such things as food and clothes, but there is no reason why the discussion should not be extended to cover such services to the consumer as the postal service, or the service of the barber, or the charwoman. In an economy which is progressing, however, there is another purpose for which the resources available may be used. This is the use of some of our resources, at present, in preparation for the future, in order that we should get increased production at a later date. Such is the case when we use some of our resources in building factories or making machines, or in providing education or engaging in research. This provision for the future is simply an additional choice which is open to us. From the general point of view, are we going to use our resources to produce more goods in the future, at the expense of lowering the amount which we can produce at present? From the individual point of view, are we going to cut down our expenditure at present, in order to save part of our income for some future date? Since these decisions will affect and be affected by the distribution of income, they provide further reasons for the interconnexions between our three problems.

## METHODS OF CHOICE

The problems of choice which we have raised can be solved in many different ways. The differences in the methods of reaching a solution form some of the main differences between the various economic systems of the world. One possibility would be for some central body, which we may call the government, to make all the decisions. It would decide how much of the available resources would be used for the production of each commodity. It would then collect all the commodities which were produced and

divide them among the members of the population. Another possibility would be for individuals to band together, as they pleased, to produce what they pleased, and then to divide what they produced among themselves as they pleased. The first possibility would be an example of a strictly planned economy, everything being planned centrally by the government; the second would be an example of an uncontrolled or "free" economy. Most economic systems lie somewhere between these two extremes. Some control of socially harmful practices will normally exist even in the most "free" economy (e.g. control of the production and sale of drugs) and some freedom of choice, outside the government, is allowed in the rigidly planned economy (e.g. the amount of unrationed goods which can be bought). The socialist economy will be nearer the first possibility mentioned, the capitalist nearer the second. Neither, however will be very near either of the extremes.

## NEED FOR EXCHANGE

Under the extreme type of planned economy which we have described, it would be almost impossible for the government to distribute the goods in the best possible way. One person, for instance, might prefer to have an extra ounce of tobacco rather than a pound of tea, while someone else would prefer to have the extra pound of tea rather than the ounce of tobacco. Both would be more satisfied if they were able to exchange the tea and the tobacco. In the type of uncontrolled economy described the need for exchange is even more pressing. If the people who band together are to do anything efficiently, they will have to spend their time producing just a few commodities. If they tried to produce everything they wanted for themselves, and there were only a few of them, they would be changing from one job to another so frequently that they would never learn to do anything really well. In the system described, however, each individual would only get a share of those goods in the production of which he took part. This means that if the group concentrated on a few commodities as suggested, each individual would only get a share in a few commodities—probably not even a wide enough range to satisfy his most essential requirements. He will want to exchange some of the commodities he does share in for others that he wants. In any of the economic systems between the two extremes we can see the same desire for exchange. Without the possibility of exchange, the choice of the way in which to spend his income does not exist for the consumer.

If we are to have exchange, it is convenient that we should have some form of money in which to conduct it. The alternative is what is known as the method of barter, in which we exchange directly something we have for something which we should prefer to have. This means that we have not only to find someone who has got what we want, but one prepared to take in exchange what we have to offer. If we think how much trouble this would

involve in our normal daily purchases, we can realize what an advantage some form of money is in any system. We can sell what we have got for money, and use the money to buy what we want from someone else.

The uses of money are not exhausted by its use for exchange. In the planned economy it will be convenient for the government to distribute part of the income of the members of the population in the form of money, rather than to try to allocate a share of every commodity to each member of the population. In this way the individual will not get goods he does not want and then have to exchange or sell them again. He simply will not buy them. We shall also see that money can be useful in determining how much of different goods should be produced and in what way, whether in a planned or an unplanned economy, since it forms a common basis on which comparisons can be made. Money is also convenient to anyone who wants to save part of his income for use at some later date.

## DISTRIBUTION OF INCOME

The first of the three problems which we are going to discuss is the one concerned with the distribution of income. We shall find, however, that the discussion is closely bound up with a second of the problems—that of how our resources are going to be used in the production of different goods.

In principle any method by which we can divide up the population could be used as a basis of the distribution of income. We could give each member of the population the same income; or we could give one income to all males and another to all females; or we could make the income depend not only on the sex of the person receiving it but also on the age. The income could also be based on the individual's estimated needs, where these might depend on the sort of person he is, both physically and mentally, and the sort of work which he does. All these methods are designed to divide what is available as nearly equally as possible, only giving someone more than another if he needs more.

Since people will use their incomes to satisfy their most urgent wants first, and, as their incomes go up, will satisfy less and less urgent wants, it follows that these methods are also attempts to provide the things which are most urgently wanted, before anything less urgent is provided. With the barest physical necessities of life it may be possible to say, roughly, how much more one person needs than another—although the arguments which are possible over the adequacy of food make it doubtful whether we have yet reached even this point. But when an area is able to provide its inhabitants with a higher standard of living than this, the practical difficulties of deciding which wants are the most urgent may be considerable. Different people want different things; some want more than others. Who is to decide whether this means that one person should get a much higher income than another?

Nevertheless, the attempt to base income on needs does agree with what we said was socially desirable in a solution to our problems—that any change would have more bad effects than good. It does try to ensure that if we changed the distribution of income the bad effect would be greater than the good. If some people were to get higher incomes they would be able to buy more things which they wanted, but the people left with smaller incomes would have to do without things which they wanted more urgently. This is strictly true only if the total amount of goods produced, and so the income to be divided, is left unchanged. As long as a person's income does not depend on the amount of work which he does, this condition is likely to be satisfied, at least roughly.

If, however, more income can be obtained by doing more work, our condition may no longer be satisfied. People will then earn different incomes, which may no longer reflect their different needs; yet the total amount of work done may be increased, so that there is a greater total income to divide. Some people will be able to get things less urgently needed than are things that others may be having to do without, but, on the whole, people may be given more of what they want. As we know, this practice of making the income received depend in some way on the amount of work done is common to nearly all economic systems, whether socialist or capitalist. We must, then, examine this method of distributing income, and we shall do so in regard to the form in which it is the basis of income distribution in a large part of the world today, that is, where the individual's income depends on the work which he does and the property which he owns. In such a system two things are obviously important in understanding what income an individual receives. First, there are the questions, why the individual owns the property which he does and how he comes to possess the particular skills which he does; and second, the further question why he gets what he does for the use of his property and the exercise of his skill. It will be convenient, for the purposes of our discussion, to deal with the last question first.

## EARNED AND UNEARNED INCOME

From some points of view it is useful to make a distinction between income derived from work and income derived from the ownership of property. This division could also be considered as the division between earned and unearned income, although it is to be noticed that it is not identical with the division under these heads for British income tax purposes. For our present purpose, however, it is useful to treat the two types of income in the same way. We shall consider a person's income as payment for the use of some productive resources which he owns. These resources would include his skill in labour, any land which he owns, and any factories or machines which he owns. Frequently, of course, the individual would not own the

factory or machine directly, but would have lent money to a firm to be used for some such purposes.

How much will a man get for the use of the productive resources which he owns? We may suppose, for instance, that he is interested in selling the use of his skill in labour for a period of, say, a day. He may be expected to sell his skill where he will get most in return for it. In this connexion he will consider, not only the wages which he will get for his work, but also the other advantages and disadvantages connected with such work; for example the amount of physical exertion required, the physical conditions under which the job is done, or even the general attitude socially to someone following the particular occupation under consideration.

### RATE FOR THE JOB

Just as the man will take a job where he gets most for it, so will the firm employ the man who will do most cheaply the job of work they want doing. From these two facts it should follow that men possessing the same skill would get the same wages, whether they were working for the same firm or for different firms, in the same industry or in different industries. On the one hand, if one firm paid higher wages than the rest, men would transfer to that firm, until all the available men with the required skill were working there, or wages had been levelled out. On the other hand, if the wages of some men were lower than those of others of the same skill and efficiency, the firms would compete for the services of the men with the lower wages, until the wages were levelled out. The only differences left in wages would be the differences which reflected differences in skill and efficiency.

In practice things do not work quite so smoothly to the conclusion we have reached, since there may be restrictions on the extent to which men can transfer from one job to another, or on the extent to which firms can compete for the men with the lower wages. Some jobs might be closed to one class of people—as, in the past, many jobs have been closed or partly closed to women—in which case, these jobs may always command higher wages than comparable jobs elsewhere. The differences from equality will not, normally, be very great, and we can take the equality of wages in jobs requiring the same skill and efficiency as being sufficiently near the truth for the purposes of our argument.

### EQUALITY OF REWARD

The principle which we have established for wages will apply generally for the use of all productive resources. As with wages we had to allow for variations due to advantages and disadvantages other than the money paid, so we must make similar allowances when considering the use of other resources. Thus, if a man is lending money to a firm, he will want to be paid

more for doing so if there is considerable risk of financial failure and consequent loss of his money. Subject to these allowances, however, we reach the general conclusion that any particular type of productive resource will earn the same payment wherever it is employed.

The next thing to be considered is, what will determine the actual level of the payment which will be made. At the same time we must discuss how it comes about that a particular type of resource is distributed in a certain way between the firms and industries which could use it. Why is it, for instance, that one industry employs a lot of men of a particular skill, while another industry, which could make use of the men, only employs a few? Let us consider the position of the individual firm.

## RATES OF PAY AND PRODUCTION METHODS

We shall discuss what the firm will do when it knows how much it has to pay for the resources it uses and how much it will receive for the product it makes. We shall see, first, how the firm will decide the way in which to produce any particular output, and then how the level of output itself is fixed. Finally, we shall see whether, when we consider all firms together, there would be the right amount of employment for all the resources. If not, we shall have to discuss how the prices of the resources could be altered to get the right amount. We shall continue to take the prices of the products as given. It is important to notice that we shall be assuming throughout this discussion that the right amount of employment of the resources can be reached. This assumption is justified as long as we can take the prices of the products as given. How far we can legitimately do this, and whether the right amount of employment will be reached, must be considered later.

### WAGES OR INTEREST

The firm, let us suppose, is engaged in making some commodity. There are several ways of making this commodity: some involve the use of a lot of machinery and only a little labour; some a lot of labour but little machinery; others, again, lie in between, with a moderate amount of both labour and machinery. The firm will have to pay wages for the labour it uses, and the more labour used the higher the wage-bill. It will also have to pay interest[1] on the money it borrows to buy the machinery (or, if it uses its own, lose what interest it could have got by lending the money), and the more machinery it uses, the greater the amount of interest it will have to pay. To obtain a certain output of the commodity, the firm will want to use the method in which the total cost of both wages and interest is least. Let us take one particular method and try to see whether it is the best possible.

[1] That is, the payment for being allowed to use the money, the *rate of interest* being the payment for the use of a fixed amount of money for a fixed time.

Suppose this method involves machinery costing £100,000, and employing 100 men. The interest charges on the money borrowed to buy this machinery might come to £100 per week, and the wage bill to £500 per week. Suppose that by spending an extra £10,000 on machinery, the firm were able to manage with only ninety-six men. If the rate of interest was the same, and the wages per man were the same, the interest charges would go up by £10 per week, and the wage bill would go down by £20 per week. It would pay the firm to use the more mechanized method, and machinery would be substituted for labour. If, on the other hand, after spending the extra £10,000 on machinery the firm still employs ninety-nine men, the interest charges would still go up by £10, but the wage bill would only go down by £5.

### LIMITS TO LABOUR SAVING

The firm would obviously lose by using the more mechanized method. In fact, a change would be indicated in the opposite direction, substituting labour for machinery—with 101 men employed, it might only be necessary to use machinery costing £91,000, in which case interest charges would fall by £9, and wages would only go up by £5. The only case in which no change is indicated in either direction would be when the use of the extra machinery meant the employment of ninety-eight men. Now interest charges would go up, and the wage bill would go down, by the same amount (£10), and the total cost would be left unchanged. By considering various combinations of machinery and labour, the firm is likely to be able to reach the position where this sort of equality is satisfied as nearly as possible. Normally, as we go on using more and more machinery for a certain amount of product, the amount of labour which we will save will become less and less.

### FINDING THE CHEAPEST METHOD

If we start by considering a method where it would pay to use more machinery, and go on to consider gradually more and more mechanized methods, the saving in the wage bill for a £10 increase in interest charges will gradually become smaller, until eventually we reach a point where this saving would also be £10. Beyond this point, the firm would lose by further mechanization, since the wage bill would fall by less than £10. With the interest charges at the rate of £1 per week on £1,000, and with the wage rate at £5 per man, the firm has found the cheapest way of combining men and machines. To make any particular output, then, we have found the number of men which the firm will employ and the amount of machinery it will want to use (and so the amount of money which it will want to borrow).

If either the rate of interest which the firm has to pay or the rate of wages changes, then the method which it would best pay the firm to employ will also change. If the rate of interest goes down while the wage rate remains

unchanged, the extra interest charges for more machinery would go down from £10 per week to, say, £9 per week, while the saving on wages would remain at £10 per week. It would pay the firm to use a method involving more machinery and less labour. Similar conclusions can be drawn for other possible movements of interest rates or wages.

The discussion has been developed in terms of two broad categories of productive resources, labour and machines. It could be extended in the same way to cover other or more detailed resources, such as particular kinds of skill. The general conclusion reached will be the same. More will be used of those types of productive resource of which the price is low; less of those of which the price is high. If a small amount of one type can be used as a substitute for a small amount of another, then the costs of these two amounts will be the same, when we start from the method which will actually be used.

## INCREASING THE OUTPUT

So far, we have considered the points which the firm will take into account in deciding how much of the different types of productive resources it will use to produce a certain output. In order to see just how much labour and machinery the firm will use, we must go on to find out how it decides on the output it will produce. We can assume that the firm will decide to produce the output which will give it as big a profit as possible. This means that the amount which the firm receives, when it sells its product, must exceed the cost of producing it by as much as possible. Let us continue with the example of the firm which we had before, and suppose it is making some commodity each unit of which it can sell for £1. Let us take an output of 750 units per week, and consider whether this is the best amount for the firm to produce. We may suppose that the firm has found that the cheapest way of producing 750 units is by using the machinery costing £100,000 and employing 100 men. It would then be receiving £750 when it sold its product, and, with the interest and wage rates as before, would be paying £600 in interest and wages. There would be a surplus of £150.

The firm wants to know whether it would pay to increase the output to 800 units per week. The best way of producing 800 units would, normally, involve rather more labour and rather more machinery than the best way of producing 750 units. Suppose that the cheapest way of producing the 800 units would be by using machinery costing £110,000 and employing 105 men. The firm would now receive £800, when it sold its product, or £50 more than before, and would spend on wages and interest £635, or £35 more than before.

The surplus would now be £165, or £15 more than before. The increase is, of course, the same as the difference between the £50 and the £35, and is due to the fact that receipts have gone up by more than costs. In these circum-

stances it would pay the firm to increase its output. On the other hand, if the production of 800 units had meant using machinery costing £110,000 and employing 110 men, the increase in costs would have been £60, against the increase in receipts of £50, and it would not have paid the firm to increase its output. In fact, the firm is likely to find that it would be getting a bigger profit if it cut down its output to 700 units.

### OUTPUT, RECEIPTS AND COSTS

Finally, we can take the case in which the production of 800 units would mean using machinery costing £110,000 and employing 108 men. Now both costs and receipts will have gone up by the same amount of £50, and it will make no difference to the firm whether it increases its output or not. In fact, the firm will go on increasing its output as long as the extra receipts it would receive from doing so are greater than the extra cost it would incur. It will go on reducing output as long as the saving in costs is greater than the reduction in receipts. It will only let the output remain unchanged when the change in receipts and the change in costs, for a small change in output, are the same. Unless the firm would be making a loss with any output—in which case it would pay not to produce anything at all—the firm will be able to find some output at which there is this equality between the changes in receipts and in costs, for a small change in output. This is the output at which the firm will get the greatest profits. At any output less than this, the receipts from increased output will be higher than the costs, and it would pay to increase output. At any higher output, it will, similarly, pay to reduce output. This position will eventually be reached, and it will not pay the firm to go on expanding indefinitely, because, after a certain point, it will cost more and more to get an increase in receipts of, say, £50.

There are several factors working in this direction. As the output increases, the firm might find it more difficult to sell its product without either lowering its price, and so its receipts, or spending more on advertising or on transport costs to find new markets; it may have to pay more for the labour or other productive resources which it uses—possibly only by having to take less efficient men at the same wage. In addition, the management of the firm may become more difficult, and so either more costly or less efficient.

### PRICES AND EMPLOYMENT

We have reached the position in which the firm, faced with a price at which it can sell its product, and with prices which it must pay for the use of the productive resources it wants, has decided how much to produce and how much of the different types of productive resources to use. Each firm will make its decisions in the same way, so that we can tell how much employment would be provided for each type of productive resource by all firms

taken together. In finding these amounts, we have not explained the prices which the firms will receive for their goods, and the prices they will have to pay for the resources they use, but have accepted them as things which are given. The employment which would be offered may turn out to be too high for some types of resources—there just is not that amount available—and too low for others—some would be left unemployed. This means that the system of prices has gone wrong. We need to get, if possible, some set of prices which would lead to just the right amount of employment being provided for each type of resource. This would mean the price going down for those types of resource which would have been unemployed, and going up for those of which there was not a sufficient supply.

For the moment we shall take the prices of the commodities as given. They can be discussed more conveniently at another point. At present, it is sufficient to notice that the change in the prices of the resources will have two effects on the firm. First, it will use more of the types which have gone down in price, and less of those which have gone up, in order to produce any given output. Second, it will change its total output; the output going up for those firms which use a lot of the resources which have become cheaper, and the output going down for the firms which use a lot of the resources which have become dearer. The adjustment of the amount of employment offered to the amount of the different types of resources available would then fix the prices which would be obtained by the owners of the resources.

### BEST USE OF RESOURCES

Having seen the way in which the prices paid for the use of the different types of resources are fixed under our assumptions, we may consider the social implications of this theoretical result. We shall, first, consider these implications from the aspect of the system as a method of deciding how the resources should be used for the production of different goods. For the moment we shall assume that the social value of a bit more of any commodity is adequately measured by the price which would be got for it. We shall be able to see how far this assumption is satisfied later in the chapter.

What we want to do is to use the limited amount of resources that there are at our disposal in the way that will provide as many as possible of the most important things that people want. We have seen a way in which it can be decided how we use the resources. This way is the best way, if there is no change we can make which would satisfy more urgent wants than those which would then be left unsatisfied. The effect of any change in the way in which we use the resources would be that we might have a bit more of some goods and a bit less of others. We are assuming that the social value (or the urgency of the wants which would be satisfied) of the bit extra would be measured by the amount for which it would be sold. Similarly,

the social value of the bit lost of other goods could be measured by the amount they were fetching. Thus, the change will only be beneficial if the goods of which we get more will sell for a higher amount than the goods of which we get less. It can easily be seen that, if all firms were like the one we have used in our example, there would be no such change possible. If we moved resources from one firm to another, the money value of the goods lost would be at least as great as the money value of the new goods produced. We can see this as explained in the following paragraphs.

### TRANSFERRED RESOURCES

Under the system which we have described, the resources which would be transferred in any change would have had paid for them a certain amount, which we can call, if we like, "the original cost of the transferred resources." The change might involve a change in the cost of these resources, but we are only concerned with the original cost, and this is unchanged. First, let us take the firm which has lost the resources. Its receipts must fall by at least as much as "the original cost of the transferred resources," because, otherwise, it would have paid the firm to have got rid of the resources before we interfered. For a similar reason we can see that the receipts of the firm which has got the resources must have gone up by less than "the original cost of the transferred resources." Thus, the receipts of the first firm have fallen by at least as much as the receipts of the second have risen. Now when a firm can sell what it produces at the same price per unit, both before and after it changes its output, as in the example we have used, the change in the firm's receipts is simply the same as the money value of the change in the output and so the social value. Thus the conclusion that the change is not a good one follows immediately. The method we have described is the best one, socially, for deciding how the available resources should be used in the task of producing a variety of different goods.

### THE BEST SOLUTIONS

It is important to notice both the implications and the limitations of our result. We have found that a certain way of valuing the various types of productive resources—rates of wages for workers of differing skills, the rate of interest, etc.—will, in certain conditions, lead to the best possible use of those resources. The usefulness of this method of valuation does not depend on who is the owner of the productive resources, nor does it depend on the owner's receiving this value as payment for the use of the resources. Income could be distributed according to some completely different method, but, under the same conditions as before, the solution we have obtained would still give the best way of deciding how to use the resources. It would still provide the best solution of this problem in a planned society. It might

also be stressed that we have not shown that basing income on the value placed on the productive resources owned is the best way of distributing income.

There are one or two things which might be said about the conditions under which we have reached the last result. The first is the assumption that the individual firm will get the same price for its goods when it increases its output, and the second the assumption that all the resources will be fully employed.

Suppose that our first assumption is not satisfied. In order to sell an increased output, the firm will have to lower the price of its product. This will happen when the firm is of considerable importance in the market for the kind of goods which it is making. When the firm reduces its price, it will have to do so, not only for the extra output which it is making, but also for all the output. Let us suppose that the firm was able to get £1 per unit when it was making and selling 750 units per week, but is only able to get 19s. 6d. per unit when it makes and sells 800 units. The value of its extra output is fifty times 19s. 6d. or £48 15s., but the firm's receipts do not go up by this amount. The receipts were originally £750, and they only become £780. So we find that the receipts have gone up by only £30.

### A SOCIAL GAIN

In this situation, would it still be true that the method of valuing the resources which we have described leads to the best use being made of them? It need not, since an important step in our argument is no longer valid. It is still true that any change in the way of using the resources would cause the receipts of one firm to go down by more than the receipts of the other go up.

The value of the extra output of the second firm might, however, be much greater than the increased receipts to the firm (as in the example above), while there might not be so large a difference between the value of the output lost and the drop in receipts of the first firm. The result might be that the value of the output gained was greater than the value of the output lost, and the change would be socially beneficial. It would, in fact, be a good thing to move resources from those firms which have the least influence on price to those which have the most. This means that we should increase the output of those firms which have what we might call the highest degree of monopoly. Since a large number of firms in the real world do have this sort of influence on price, the adjustment is of practical importance. In a planned economy the adjustment could be made by making the firm consider the value of the extra product it could make, instead of its own increased receipts, when deciding how much to produce. Since this method would involve a loss to the individual firm, though a social gain, it would

not be possible in an unplanned economy. In this instance we should have to rely on some system of taxes and subsidies. The system would be used in a way which will appear later.

The second assumption which we made was that all the resources were to be fully employed. Now we know that, in the real world, there is frequent unemployment of productive resources, both men and machines. How does this happen, and does it invalidate our result? The first thing to be said is that there is no reason why unemployment should mean that the resources actually employed are not being used in the best possible way. The only possibility considered here is that some change in the system would lead to more resources being employed, and so to a greater production of goods for the use of the community.

We have to notice two ways in which the unemployment might be caused. The first is that the movement of the prices of the resources is restricted. For labour, it might be by trade union action. The right level of the prices would not be reached, and there would be deviation from our "best" solution. The actual position could still be seen, however, in the sort of terms which we have used.

The second possibility is that the amount that people in the area are prepared to buy, at the ruling prices, is not sufficient to keep all the resources fully employed. The firms would only lower their prices if they could lower their costs—for example by lowering wages. But if they lowered wages, the amount of money available for buying the goods would be less, and it is possible that no more would be sold at the lower prices. In this situation, changes in the prices charged for the productive resources would not have the effect of increasing the total amount of them used.

If this last situation does exist as a cause of unemployment (and most economists would now agree that it has, at times, been very important e.g. in the 1930s), then our previous picture is not a complete one of the working of the economic system. We should have to bring in some link explaining the total amount of resources used. But our picture may still give a rough idea of the rest of the working of the economy, and it would still have its place as the ideal for the use of the resources in a planned economy.

## DIVISION OF TOTAL INCOME

So far we have dealt with the way in which the prices paid for the different types of productive resources are determined. Before we go on to see how this is linked up with the distribution of incomes among persons, it will be instructive to see how the total income of a country is divided among the main groups in which we can place the resources.The share taken by any group will, of course, depend both on the amount of resources there are of the types in the group, and also upon the prices which they receive for them.

For the United Kingdom, we can divide the total civilian income from work and property into two main groups, by using figures from the White Paper on *National Income and Expenditure of the United Kingdom, 1938 to 1946*. We find that the share taken by wages and salaries was between 59 and 60 per cent, both in the pre-war year of 1938 and in 1946. The remaining 40 to 41 per cent was taken by interest, profits and rent. It should be noticed that this last category includes farmers' profits, professional earnings, national debt interest, and the undistributed profits of companies. If we are interested in the division between income from work and income from property, part of the first two of these should properly be included in income from work. The undistributed profits of companies, we may also note, are not in private hands for use as the individual wishes. Excluding undistributed profits, the share taken by wages and salaries becomes about 64 per cent.

We can get a somewhat similar split of income payments for the United States from S. Kuznets: *National Income, A Summary of Findings*. The share of "employee compensation" in income payments is about 64 per cent, while about 17 per cent goes to "entrepreneurial net income" (that is, as direct reward for engaging in the risks of production or supplying services) and 19 per cent in dividends, interest, and rent. The "entrepreneurial net income" is another category which includes some payments regarded as income from work and some which should go under income from property.

## OWNERSHIP OF RESOURCES

We have seen that, if income depends on the amount of work done, people may work harder than they would otherwise do. Apart from this and similar effects, there is no reason, on purely economic grounds, why the values we have found for the various types of productive resources should, necessarily, decide how much income an individual should receive. In practice, however, they frequently have done so, and they still do throughout most of the economic systems in the world today. When the prices of the different resources are found, the income of the individual will, then, simply depend on the amount of the resources of which he is able to claim the income. If every person in the population were able to claim the income from the same collection of different resources, it would not matter that the prices of some of the resources were high, and those of others low. All the people would still get the same income. Inequalities of income arise from the fact that the distribution of ownership of the productive resources is not equal.

In a non-slave economy men receive income derived from their own labour. This does not mean, however, that all men receive the same income from work. As we have seen, there should be some differences in the wages to compensate for the other advantages and disadvantages of one occupation as compared with another. There are, also, differences between people, in

that some work harder, or more efficiently, than others. They provide more skill, and so contribute resources of higher value. The particular type of skill which they possess may be very uncommon, so that they offer almost a different type of productive resources from that represented by the normal skill of labour.

This skill may command a high income. Some occupations involve long and expensive training. If such training is necessary, the cost is one which should only be borne, either from the point of view of the individual who is meeting the cost, or from the social point of view, if the value of the work done after the training is sufficiently high. It must be much higher than the value of the work which could be done without the training. The result is a new acquired skill, an addition to the productive resources in the area, and will lead to a higher income. All these are genuine reasons for differences in the value of work which people do and so, at least, do not lead to the available resources being misused if incomes differ similarly.

## WHY INEQUALITY PERSISTS

Can we say that, when allowance is made for the items which we have mentioned, there is the equality of earnings in different occupations which we should expect? If there are inequalities of earnings greater than those we should expect, the effect should be for labour to flow into those occupations in which the earnings were unduly high, and force them down to the general level. Ignorance of conditions elsewhere might delay the flood for a time, but should not have a very great effect. Yet we do find differences in income from work which we should find it difficult to explain by the reasons mentioned. These differences can be largely explained by the forces which restrict entry to certain occupations.

The first such force is the expensive training which has already been mentioned. The cost of training generally has to be met by the parents of the man concerned, before he starts earning. If the cost is high there are correspondingly few parents who could afford to meet it, even though the extra earnings which would be received by the son, in the long run, would justify the expenditure. The number of entrants to the occupation with the high cost of training is reduced, and the earnings are pushed up. In this way the inequalities of income of one generation are passed on to the next, even when only income from work is considered. The effect will be increased if the cost is made artificially high by insisting on the possession of qualifications which are not essential, or by imposing an entrance fee for practising the occupation. Other forces in the same direction are limitations on the number of apprentices, or the habit of awarding jobs to men who have been to the "right" school.

Besides leading to greater inequality of incomes and causing the inequality

to persist from generation to generation, these restrictions lead to the resources of the community being used in a way which is not the best. There would be goods of greater value produced if men were transferred from the occupations with too low an income to those with too high. Such moves as the increased provision of scholarships are tending to lessen the dependence on the income of the parents. It is still true, however, that the income of one generation of a family depends to a large extent on the income of the preceding generation. This is the case when we consider only income from work. The conclusion is strengthened when we take into account income from property.

In capitalist societies, the ownership of property is distributed very unevenly, and, consequently, so is the income from property. To get anyone's total income, we must add together his income from work and his income from property. In many cases, high income from work and high income from property go together. There are many ways in which this connexion is brought about. We have seen that income from work is connected with the income of the parents, and so with the property possessed by the parents.

### SYSTEM OF INHERITANCE

There will also be a more direct connexion between earned income and the property of the parents, since people with an income from property might be better able to meet the cost of training the child than people with the same income from work. They could live on their capital for a time—sell some of their property to pay for the training. Through the operation of the system of inheritance, by which the property of the parent passes on, to a large extent, to the children, the income from property also depends, to a large extent, on the property owned by the parents. Thus both incomes from work and incomes from property are influenced by the same thing, and will be high or low together. There is a further connexion, since the fact that one has a large income from work makes it more possible to save and thus get an income from property. On the whole, then, incomes from work and property reinforce one another, and lead to a large amount of inequality in the distribution of incomes.

In *Redistribution of Incomes through Public Finance in 1937*, T. Barna works out indices for the degree of inequality of the distributions of income and of capital (or property) in the United Kingdom. The index would be higher the more unequal the distribution. If everyone had the same amount the index would be 0. If the distribution was as unequal as possible, where one person possessed all the income or capital, the index would be 2. For the distribution of income in 1937, he gets an index of 0·70; for the distribution of capital 1·76. If the capital were equally distributed, so that everyone got the same income from property, while the incomes from work remained

as they were, the index of inequality for the income distribution would be reduced to 0·4. Since we have seen that part of the inequality of the distribution of incomes from work, also, is associated with the distribution of property it follows that the equal distribution of capital would lead to an even greater fall in the inequality of distribution of incomes.

The following table, taken from *National Income and Expenditure of the United Kingdom, 1938 to 1946*, gives a picture of the inequality of the distribution of incomes in 1945. It should be remembered that a married couple count as one individual for income tax purposes, and, thus, for this table. The undistributed profits of companies are not included in the incomes of the people owning shares in the companies.

DISTRIBUTION OF INCOMES IN UNITED KINGDOM IN 1945

| *Range of Income* | *Number of Incomes (thousands)* | *Total Income (£ million)* |
|---|---|---|
| Under £250 .. .. | — | 3,565 |
| £250–500 .. .. | 5,400 | 1,895 |
| £500–1,000 .. .. | 1,650 | 1,140 |
| £1,000–2,000 .. | 410 | 535 |
| £2,000–10,000 .. | 124 | 462 |
| £10,000 and over .. | 8 | 138 |

We see, then, that the distribution of income is very uneven. How does this agree with our principle that resources should be used to produce as many as possible of the things which are most urgently wanted? There are, here, two questions, on both of which we have touched before. First, is so unequal a distribution of income helpful, or necessary, in order to get a large total output produced? Second, does it lead to a situation in which a given level of output is used in the best possible way?

## INCENTIVE FOR LABOUR OR CAPITAL

On the first question, it can be said that the possibility of getting an increased income is one, and possibly the main, reason which makes people work hard and fit themselves for more valuable work. Further, the possibility of high reward will encourage initiative, by making people embark their labour, or their capital, on a new enterprise, instead of keeping to the old safe ways. It also encourages capital to be provided for any enterprise which is expected to be successful. It is likely that savings will be higher when income is unequally distributed than when it is evenly distributed, with the result that more resources could be used for providing for a higher income in the future, by making machines and building factories, and less for

producing goods to be sold in the shops. When there is unemployment, the prospect of high return for money invested in the production of goods would lead to the provision of extra employment. All these are reasons for unequal incomes up to a point, but it is hard to see how they would justify a distribution of incomes as unequal as, in fact, it is. We have seen that incomes from work are unequal largely for reasons which have got nothing to do with the incentive needed to work harder. Risks would be taken even with the prospect of much smaller reward. Much of the capital needed could be provided by government action, which would not depend at all on incomes being unequally distributed. Large amounts of property, inherited for generations, cause part of the inequality of incomes. The present ownership of these has little to do with the incentives to help production at present, and the prospects for several generations ahead must have had little effect when the property was accumulated. A more even distribution of income might make it easier to keep up a high level of employment. We can answer our question, then, by saying that there is reason for some inequality, but only for a small part of the present inequality.

### SATISFYING THE MOST URGENT WANTS

Much more decidedly can we answer that the unequal distribution of income does not lead to a given level of output being used in the best possible way. The greater the income which a man gets, the less urgent will be the wants which will be satisfied by an extra pound. This follows since, with each extra pound which he gets, he will buy those things which he wants most urgently. The things he buys, however, will be things he did not consider sufficiently urgent to buy with the smaller income. In other words they satisfy wants less urgent than those satisfied by any pound he had spent before, but more urgent than any he could satisfy by spending a pound if he wishes to, but does not. Now suppose we have two men who have the same tastes. They want the same things, and want them equally urgently. Altogether, more wants of an urgent sort will be satisfied when the two men have equal incomes than when one gets a higher income than the other, out of the same total. If the incomes were not equal, any transfer from the richer to the poorer would enable the latter to satisfy wants of greater urgency than the wants the other would have to leave unsatisfied. Under the same conditions, the best way of dividing any total income among any number of people would be to give everyone the same. In fact, all people do not have the same tastes, and do not want things equally urgently. One person would be satisfied more easily than another. It is, therefore, likely that more wants of an urgent sort would be satisfied, in total, by some distribution of income which was not equal

It is not, however, conceivable that the distribution would have to be as

unequal as it is at present. We cannot believe that an extra pound would give as much satisfaction to the millionaire as it would to the agricultural labourer. In any case, if we are not able to get some way of measuring the urgency of people's wants, so that we can compare one person with another, we are not able to tell who should have the largest incomes. There is no reason why they should be the people who now receive them. In these circumstances, the way in which a given total income is most likely to satisfy the most urgent wants is when it is equally divided.

## LEVELLING OUT THE INEQUALITIES

If, then, in our economic system, the distribution of incomes is too unequal, what can be done about it? One way of dealing with the situation would be to make the incomes no longer depend entirely on the ownership of the productive resources. Another would be to alter the distribution of the ownership of these resources. Both of these could be achieved by a complete change in the system. They can also be achieved by government action in redistributing by means of the tax system. Nationalization of industries could be considered as a change in the ownership of the productive resources, although, when full compensation is paid, the effect on the income distribution will not be great. The most important thing for us to consider is the working of the tax system in redistribution.

### *Redistribution by Taxation*

The main aim of taxation is, normally, to collect the money needed by the government (and such other public bodies as local authorities) for meeting the expenses in which they are involved. In doing this the government has to decide who are the people who are going to provide the money —who is to be taxed and to what extent. Government spending, on the other hand, may include the giving of money to some members of the population. Even if the aim of either tax collecting or government spending does not include redistributing income, the effect does. In so far as the people most heavily taxed are those who are thought best able to afford it, the principles of tax policy do, in fact, include redistribution.

It would be possible for a tax policy to be deliberately extended to include any degree of redistribution thought desirable. The aim should then be to get income redistributed in such a way that it can be used to satisfy more urgent needs of the population as a whole, but to do so in such a way that as little as possible of incentive to hard work, initiative etc., is lost in the process. It is possible to treat as redistributive the effects of taxes and subsidies on commodities and the provision of free services such as education, but we will deal with these when we consider the effects of the price system.

The most important of the taxes which we are considering is the group of taxes on income, represented in the United Kingdom by income tax

and surtax. These taxes take a proportion of the income received, the proportion usually varying with the size of the income, with the responsibilities to be met out of it, and, possibly, with the way in which the income is received.

The working of the system can be seen by taking the taxes in the United Kingdom at the 1947–48 rates. The allowance for differing responsibilities is effected by allowing £110 free of tax for a single person, £180 for a childless married couple, and this sum plus £60 for each child, for a married couple with children. The varying proportion for differing sizes of income comes from this allowance free of tax, an allowance of £50 taxed at 3s. in the pound, and an allowance of £75 taxed at 6s. in the pound, before the full income tax rate of 9s. in the pound is reached. For incomes over £2,000, there is an additional payment of surtax at a steadily rising rate. There is, finally, allowance for the way in which the income is received by a deduction of one-sixth of earned income, with a maximum deduction of £250, before the income tax is worked out. Of course those amounts may vary from year to year according to the policy of the government in power.

The following table shows the percentage of income which goes in income tax and surtax for a few selected types of people. Figures are only shown for incomes which are either entirely earned, or entirely unearned. Mixed incomes—partly earned, partly unearned—would come between these two. The families chosen as examples are the single person, the married couple with no child, and the married couple with two children; all are taken at widely separate income levels.

PERCENTAGE OF INCOME GOING IN INCOME TAX AND SURTAX FOR VARIOUS FAMILIES AND INCOMES

| *Income* | *All Income Earned* | | | *All Income Unearned* | | |
|---|---|---|---|---|---|---|
| | *Single Person* | *Married Couple No child* | *Married Couple 2 children* | *Single Person* | *Married Couple No child* | *Married Couple 2 children* |
| £250 .. | 9 | 2 | 0 | 15 | 5 | 0 |
| £400 .. | 19 | 11 | 1 | 26 | 18 | 6 |
| £600 .. | 25 | 20 | 11 | 32 | 27 | 18 |
| £1,000 .. | 30 | 27 | 21 | 37 | 34 | 29 |
| £5,000 .. | 51 | 51 | 50 | 54 | 53 | 52 |
| £10,000 .. | 65 | 65 | 64 | 66 | 66 | 65 |
| £100,000 .. | 94 | 94 | 94 | 94 | 94 | 94 |

What is the effect of this system of taxation? We have seen that the value of an extra pound is probably less to someone with a high income than to someone with a small one. If the two people were to be deprived of the

same amount of satisfaction—if, in other words, they were to sacrifice the ability to buy things they wanted equally urgently—more money would have to be taken from the richer than from the poorer. Income tax and surtax not only remove more income from the richer, but also remove a higher proportion of income. Certainly, then, the system reduces the amount the rich can buy very much more than it reduces the amount the poor can buy. On the other hand, the things the rich would buy with a pound will be much less urgent, and will give much less satisfaction, than the things the poor would buy with the same amount of money. It is not possible to say, with certainty, which of the two is making the greater sacrifice with the tax system as it is at present. Something, however, can be said. Certainly the people with the lowest incomes, who pay no tax, are making the least sacrifice through income taxation. It is also probable, but not certain, that there is an increase in the sacrifice made as we go up the income scale, through most of its range. The tax system does, then, cause some evening-up of the amount of satisfaction which can be obtained from spending our incomes. It does lead us nearer the position in which the most urgent needs of the population are met first, as well as having an evening-up effect on the actual amounts of money which are left in people's hands. As far as the allowances for dependents are concerned, we get similar principles operating. The man with dependents will have a greater use for an additional pound than a man with the same income and a smaller number of dependents. Thus, if we are to have equal sacrifices in taxation, less should be taken from the man with the greater number of dependents.

### TAXATION AND INCENTIVE

One drawback of the income tax and surtax system is that, if the level of taxation is high, it does have an effect on the incentive to work hard, and so on the total amount of goods produced. There will be little incentive to increased work if a large part of the additional earnings is to go in taxation. This position is aggravated by the fact that, in the tax system as it exists in the United Kingdom today, the extra income will be taxed at a higher rate than the average for the rest of the income. Some concession is made to incentive in the allowance made for earned incomes, but it is still true that high rates of tax have a considerable effect on incentive. The effect might not be so marked if income tax were used mainly as a means of redistributing income, and not also as a means of getting a large part of the money necessary for government finance. A high rate of tax on unearned income, combined with a low rate on earned income, would have a considerable redistributive effect, but, probably, little effect on incentive and output.

The actual effect of income tax and surtax on income distribution can be seen from the White Paper on *National Income and Expenditure* already

mentioned. We have had a table giving the total amount of income in certain income ranges before the payment of tax. The following table shows the percentages of that income which would be retained after the payment of income tax and surtax at the 1945–46 rates.

INCOME RETAINED AFTER PAYMENT OF TAX

| *Range of Income* | *Percentage retained* |
|---|---|
| Under £250 .. .. | 96·7 |
| £250–500 .. .. | 85·5 |
| £500–1,000 .. .. | 73·1 |
| £1,000–2,000 .. | 63·4 |
| £2,000 10,000 .. | 47·6 |
| £10,000 and over .. | 18·8 |

The next important tax, from the point of view of redistribution, is the tax on the passing of estates at death. By death duties the amount of property which heirs receive is reduced, and so their income from property is also reduced. Since income from property forms a large part of the higher incomes, the existence of high death duties reduces the extent to which high incomes are passed on from father to son. Death duties reduce the inequality of the distribution of capital (or property) below what it would otherwise be—particularly if there is a sharp increase in the proportion taken in duty as the value of the estate increases. As we have seen, the inequality of the distribution of capital is responsible for a large part of the inequality in the distribution of incomes. Thus, death duties reduce the inequality of the distribution of incomes.

At present in the United Kingdom (at 1946 rates), estate duty, which forms the main part of the death duties, takes a steadily increasing share of the estate, varying from nothing on an estate of under £2,000 to 75 per cent on an estate of over £2,000,000. High death duties may have an effect on the incentive to harder work, since they discourage people accumulating large amounts of property to pass on to their heirs, and so discourage the earning of higher incomes than they personally need. It is doubtful, however, whether there would be any serious effect on incentive.

### THE CAPITAL LEVY

Other taxes which exist, or could exist, have their effect on the redistribution of income, but we cannot discuss them all here. There is one, however, which might be mentioned, and which, if practicable, would have an obvious and important effect on redistribution. This is the capital levy, or a tax on the amount of property owned. It could not be a tax imposed continuously like, say, income tax, but could only be used periodically. In any case, its

main effect would simply be to speed up the redistribution which could be achieved by death duties with adequate safeguards against evasion.

On the spending, as distinct from the collecting, side of government finance, we have an example of redistribution of incomes in the payment of family allowances. These can be considered as attempts to give money to those people who have the greatest need of it, and they thus lead to a distribution of income which enables more urgent needs to be satisfied.

We can treat as similarly redistributive the activities of public funds dealing with unemployment and health insurance and with pensions. Through these funds income is transferred to those whose need is greatest, for example from the employed to the unemployed.

## HOW INCOME IS SPENT

We turn now from the way in which the income is received, and go on to consider, instead, what people will do with the income which they have at their disposal.

After paying tax on his income, a member of the community will have a certain amount of money left to be spent. He has the problem of deciding what he will do with this money. He can choose to save part of the income for use at some future date, either by himself or by his heirs. He can choose to spend part of it on butter, part on a pair of shoes, and part on going to watch a football match. In fact, there are a multitude of ways in which he can use his income, but, since the income is limited, he will not be able to indulge all his tastes freely when he is spending it. If he buys the pair of shoes, he will have to cut out some alternative use for that part of his income. He might have to miss the football match and save rather less than he would have liked.

We may assume that the man will want to use his income in the way which gives him the greatest possible amount of satisfaction. This satisfaction we must interpret widely, to include the value of the food he eats in keeping him alive and well, the pleasure he gets from watching the football match, the prospects of spending, in the future, any income which he saves; and, in addition to all this, the use of that part of his income which is for the benefit of his family and not for himself directly.

### LIMITATION OF CHOICE

It will not be possible to measure the precise amount of satisfaction which he will get from using his income in a particular way, but we can say that he will prefer to get one collection of goods rather than another.

Suppose for the moment we ignore the limitations imposed by the size of the income, and consider all the possible combinations of goods which a man might buy. We could arrange all these different collections of goods in

some sort of order, putting at the top of the list the collections which the man would prefer most, and at the bottom those which he would prefer least. We might find that there were some different combinations between which the man would be unable to choose. In other words, he would be indifferent which of the two he possessed. He might, for instance, be indifferent whether he got five pounds of bread, one pound of potatoes and two pounds of meat as one combination, or two pounds of bread, four pounds of potatoes, one and a half pounds of meat and a cake as another. On the other hand, there will be some combinations which he will consider as definitely superior to these, and others which he will regard as inferior. It is almost certain that he would prefer to have, for instance, six pounds of bread, two pounds of potatoes and three pounds of meat. This would give him more of each of the commodities than he got in the first of the previous combinations, and no less of any commodity. In a similar way we could arrange all combinations of goods in a scale of preference.

We can now introduce into the system the fact that the man has only a limited income to spend. We will suppose that there are some fixed prices which he will have to pay for anything which he buys. He will now spend his income to get as far up his scale of preferences as possible. Let us suppose that he has 4s. 10d. to spend, and that bread costs 3d. per pound, potatoes 2d. per pound, meat 1s. per pound, and the cake costs 2s. 2d. Then he would just be able to buy the combination we have mentioned containing the six pounds of bread, or he would just be able to buy the combination containing the cake.

But we have already seen that the former of these comes higher up his scale of preference than the latter. He would, then, use his money in this way rather than in the alternative way given. There may, of course, be some other way of using the money which would give him a combination of goods still more to be preferred.

### PREFERENCE AND PRICE

Have we any principles which we can lay down for deciding the way in which our man will spend his money? Suppose we take one particular collection of goods which he could buy with the money—say the one we have already considered containing six pounds of bread. Our man would be indifferent (i.e. would not be left in a state which he preferred either more or less) if we were to take away one pound of bread and give him a certain extra amount of potatoes instead. It might be that the extra amount of potatoes which would be needed would be one pound. He might be equally indifferent if he lost the pound of bread in exchange for half a pound of meat. Now the pound of bread cost him 3d., while the pound of potatoes would only cost him 2d. Thus, if he substituted the potatoes for the bread, he

would still get a collection of goods which gave him the same amount of satisfaction as before, and he would have a penny left with which he could buy something else. It would be to his advantage to make the substitution. On the other hand, the half pound of meat would cost him 6d. It would not be to his advantage to transfer from bread to meat, since he would then have to cut down his expenditure in some other direction. It would, rather, be to his advantage to buy less meat and more bread.

From this example, we can see a condition which must be met if the income is to be spent in the best way possible. Suppose, when the income is being spent in this way, we take any two commodities, and see how much of one must be provided to replace a small amount of the other without the man being left in a position he prefers either more or less. Then these amounts of the two commodities must cost the same amount of money. Otherwise, it would be to the advantage of the man to buy some of the commodity with the lower cost in place of some of the other, and he would not be using the income in the best way possible. With the prices we have used, when the man is using his income in the best way, he will be indifferent to replacing one pound of bread by one and a half pounds of potatoes (since both would cost him 3d.), or to replacing one pound of bread by a quarter-pound of meat which would also cost him the same amount.

### CHANGES IN INCOME AND PRICE

How does it come about that our condition is met? We saw that, with the combination of six pounds of bread, etc., the amounts of potatoes and meat needed to replace one pound of bread did not satisfy the condition. He should have replaced bread by potatoes, and meat by bread. Is there any reason why he should not want to replace bread by potatoes indefinitely? There is such a reason since, as he replaces bread by potatoes, he will get more potatoes and less bread.

In these circumstances, he will tend to put rather a higher value on a pound of bread, and rather a lower value on a pound of potatoes. The amount of potatoes needed, in order to compensate him for the loss of a pound of bread, will increase, until the point is reached at which the one and a half pounds of potatoes of our condition are needed. He will then stop replacing bread by potatoes. A similar adjustment will be made between every pair of commodities that he buys. With a certain income to spend, and given the prices of the things he can buy, our man will, in this way, decide how much of each commodity he will buy.

We can now go on to consider how he will react if either his income changes, or the prices of the commodities change. Let us first take the case of a change in his income. If his income rose, he would still be able to buy the same things as he bought before, and he would have some money left

over. By spending this extra money, he would be able to get a collection of goods preferable to the collection he had before. We can certainly say, then, that more of his wants will be satisfied, but, on the other hand, we cannot go on to say that he will buy as much of any particular commodity as he did before, nor that he will buy more of it.

### INFLUENCE OF QUALITY

He will buy more of most commodities, but there may be some of which he would buy less. Such will be the case with those commodities which he considers inferior. A common example is margarine. A man may buy margarine in preference to butter when his income is small, because the margarine costs less. As his income grows, he might increase his total consumption of butter and margarine, but he will take an increasing proportion in the form of butter, with the result that the actual consumption of margarine is quite likely to fall. We get a similar situation when people switch to a higher quality of the same commodity when their incomes increase. The consumption of the lower quality may fall as incomes increase. However, when the man is spending his new income in the best way, he will be satisfying the same condition about the substitution between different commodities as he was with the old income.

Now suppose that the man's income remains unchanged, but the price of one commodity falls, other prices remaining unchanged. Once again, he will still be able to buy the same collection of goods as before, but, since the price of one of them has fallen, he will have some money left. He will be able to get to a position which he prefers to the one before the change.

### EFFECTS OF PRICE CHANGES

We can consider the change which will take place in the way he spends his money as made up of two parts. First, the amount of money which he would have left, after buying the old collection of commodities, will have the same effect on him as a rise of income of that amount. We have already dealt with the effect this would have on the amount he would buy of any particular commodity.

Second, even if this excess income were to be taken away from him, he would still change the way in which he spent his money. If he continued to spend his money in the old way, the condition we had for this being the best way would no longer be satisfied. Suppose, in our example, the price of potatoes had fallen from 2d. to 1½d. per pound. Buying the same goods as before, he would still need one and a half pounds of potatoes to replace one pound of bread, but the potatoes would now only cost him 2¼d. as against the 3d. for the bread. It would be to the man's advantage to replace bread by potatoes until our condition was satisfied once more at the new

prices. Similarly, potatoes would be substituted for meat, and for all other commodities.

When we try to combine the two effects of a change in the price of a single commodity, we find that we cannot say, with certainty, what the effect of the change will be on the amount bought of the commodity itself, or of any other commodity. For the commodity itself, the first effect will probably, and the second effect will certainly, increase the amount bought. The total effect is almost certainly an increase, but there can be exceptions. The exception is only likely to arise when incomes are low, and the commodity is a staple part of the diet, taking a large part of the income. If, for instance, the price of bread rose, in such circumstances, it might be necessary to cut the consumption of more expensive foods, and eat more bread to compensate for this cut. For the commodities of which the price has not changed, the effective change in income would probably lead to an increase in the amount bought, while the change in the relative prices would lead to a fall. For most commodities we cannot say, on balance, whether there would be a rise or fall in the amount bought. For inferior goods, there would be a fall.

### FAMILY BUDGETS COMPARED

We can get a rough idea of the effect of income on the amount which is spent on different goods, by comparing budgets of the households of industrial workers, collected in 1937–38 by the Ministry of Labour, with budgets of civil servants, local government officers, and teachers, collected in 1938–39 by the Civil Service Statistical and Research Bureau. The two groups can be taken as representative examples of British working class and middle class weekly budgets respectively.

EXPENDITURE OF WORKING AND MIDDLE CLASS BUDGETS

| | *Working Class* | *Middle Class* |
|---|---|---|
| | s. d. | s. d. |
| Rent or purchase of dwelling, ground rent, rates, etc. .. | 10 10 | 21 1½ |
| Food .. .. .. .. | 34 1 | 41 10 |
| Clothing .. .. .. .. | 8 2 | 15 6¼ |
| Fuel and light .. .. .. | 6 5 | 10 1 |
| Other items .. .. .. | 25 7 | 83 7 |
| Total .. | 85 1 | 172 1¾ |

It can be seen that it is the category "other items" where the greatest difference is found. This is the group for which the expenditure is, on the whole, the least urgent. Middle class expenditure was much higher on such items as motoring, education, voluntary insurance, and household equip-

ment and decoration. On the other hand, for some of the food items, we find that the middle class expenditure was actually less than the working class. Thus, on the group "bread, margarine and cooking fats, cheese, tea, potatoes, and sugar" the working class spent 2s. 2d., the middle class 1s. 11d. These items, or some of them, are in the position of inferior goods.

So far, we have considered the amount of a commodity which would be bought by an individual. If we want to find out how much would be bought by the whole population of a country, we have simply to add together the amounts bought by the individuals in the country. Thus, if the incomes of the individual members of the population and the prices of all the commodities are known, we can see from the previous argument how the amount bought of each commodity is fixed.

### HOW BRITAIN SPENDS HER MONEY

The following table shows the expenditure on certain categories of goods in the United Kingdom in 1946, and also shows the expenditure on each category as a percentage of the total.

CONSUMERS' EXPENDITURE IN UNITED KINGDOM, 1946

| | *Consumers' Expenditure £ million* | *Percentage of Total Expenditure* |
|---|---|---|
| Food .. .. .. .. .. | 1,650 | 25·9 |
| Alcoholic beverages .. .. .. | 680 | 10·7 |
| Tobacco .. .. .. .. .. | 603 | 9·5 |
| Rent, rates and water charges .. | 538 | 8·5 |
| Fuel and light .. .. .. .. | 289 | 4·5 |
| Household goods .. .. .. .. | 361 | 5·7 |
| Clothing .. .. .. .. .. | 611 | 9·6 |
| Travel .. .. .. .. .. | 263 | 4·1 |
| Private motoring .. .. .. .. | 121 | 1·9 |
| Books, newspapers and magazines .. | 104 | 1·6 |
| Entertainments .. .. .. .. | 179 | 2·8 |
| Other goods and services .. .. .. | 966 | 15·2 |
| Total .. | 6,365 | 100·0 |

It should be noted that this table includes the purchases in Britain of tourists and Dominion and Allied troops, but excludes expenditure abroad out of British incomes. It also excludes the income in kind of the armed forces.

The reasoning on the effect of a change in the price of one commodity is little affected when we try to apply it to total expenditure, rather than to individual expenditure. The result is only slightly blurred by the fact that the reaction, on balance, may not, in all cases, be the same as for every

individual. When we try to allow for the effects of changes in incomes, we do introduce new complications. A change in incomes which resulted in everyone having an increased income would give results much as for a change in an individual's income.

It will be found, however, that there are other kinds of income changes for a population. There can be changes in incomes in which incomes go up for some of the population and down for others. We have, in fact, changes in the distribution of incomes. A change in the distribution of incomes, while the total income of the population was left unchanged, would still have an effect on the goods which would be bought. A levelling of the distribution of incomes might lead to a reduction in the proportion of income saved.

For example, a fall in the income of a man with a large income will lead, largely, to a reduction in his purchases of luxury goods. If there was a corresponding rise in the incomes of several people with small incomes, the income would not be used, to the same extent, to buy luxury goods. There would be a fall in the total sales of luxury goods. On the other hand, there would be an increase in the sales of those goods which would be bought out of the increase in the smaller incomes. We reach the conclusion that the amounts which will be bought of the different commodities will depend on the total income of the population, the way in which that income is distributed, and the prices of the commodities.

## HOW PRICES ARE DETERMINED

We are now in a position to complete our picture of the way in which it is decided how the resources of the community should be used in the production of goods. Up to this point, both when we were considering the production of the goods and when we were considering the buying of the goods, we have had to take the prices of the commodities as something given which we have not attempted to explain. By considering the way in which the problems act on one another, we are able to see how those prices are themselves determined.

Let us take a situation in which the ownership of the resources is fixed, and in which each person is going to receive the earnings of those resources which he owns. In our previous argument we have seen various results which would follow from any particular set of prices for the different commodities. On the one hand, we saw that the resources would be used in a particular way, so that we should know the amounts of the different commodities which would be produced. We should also know the prices which would be paid for the different types of productive resources, and this, in turn, would enable us to know the distribution of incomes. On the other hand, we have seen that when we know the distribution of incomes and the prices of the

different commodities, we shall know how much of the commodities would be bought.

Thus, for any given set of prices, we see how much would be bought of any commodity, and how much would be produced of the same commodity. Since we have just taken our prices at random, it is most unlikely that these two things would turn out to be the same. We might find for one commodity that the amount which would be bought was greater than the amount which would be produced.

This situation is not one which could persist. There would have to be equality between production and sales, and this would most likely be brought about when the price of that commodity was rather higher. Similarly, for a commodity for which sales, at the old price, would have been less than production, we should be likely to get the necessary equality with a somewhat lower price. The prices will, in fact, be fixed at the point where the production and the sales of each commodity are the same. The incomes of the individuals in the community will be the incomes corresponding to these prices, and not to those which we first took as our example. The prices of the commodities, the prices of the resources, the incomes of the individuals, the amounts of the different resources used in making different goods, and the amounts of the goods produced, would all adjust themselves to one another.

For convenience, the argument has been developed as if the adjustment were made in a particular order—as if there were trial prices for the commodities and for the resources, the latter were adjusted to get all the resources used, and then finally the prices of the commodities themselves were adjusted to make production balance sales. There is no reason why the actual process of adjustment should take this order, but the final position would be the same however the adjustment was made. Since, in the real world, other things will constantly be changing—such as technical knowledge—the final position, itself, will be subject to constant change. The actual situation, at any moment, may not have reached this position, but will always be chasing after, and tending towards, the shifting goal.

## SOCIAL IMPLICATIONS

We can now survey the social implications of this theoretical method of answering the economic problems. We have seen various ways in which the actual working of the system leads to the resources being used in a way which is not the best. The distribution of incomes is not sufficiently equal; firms in the country possess different degrees of monopoly; some of the resources may be left unused. All these are reasons why the resources are not being used to satisfy the greatest possible number of urgent wants. These are practical difficulties in the working of the system, for some of which

remedies have been, or will be, suggested in this chapter. Leaving these difficulties to one side, can we say that the theoretical system of economics that we have just described would lead to the resources being used for society in the best possible way?

## MAXIMUM USE OF RESOURCES

We must assume that income is perfectly distributed, so that everyone would get the same satisfaction from an extra shilling, that all resources are used, and that firms do not have to take effects on price into consideration when they decide what output to produce. Under these circumstances, the working of the pricing system would lead to the best possible use of the resources of the community.

In the first place we shall notice that no interchange of goods between persons would lead to a gain in total satisfaction. For suppose we were to take some of one commodity from one person and give it to another person.

The first person had considered his need of that commodity sufficiently urgent for him to have bought it; he must want it at least as much as anything else which he could have bought with that money, but did not buy. The second person did not consider it sufficiently urgent to buy, that is to say, it was not more valuable than other things he could buy with the money.

## FINDING THE SOCIAL GAIN

But as the income is distributed perfectly, the money gives them both the same amount of satisfaction. Thus the commodity we were going to transfer is considered less important by the second person than by the first; we are giving it to someone who wants it less. The transfer is not a gain from the social point of view, if we accept people's own ideas on the way they should spend their money as correct. There would still be a loss, even if we took something else away from the second person and gave it to the first as compensation.

Our result is the same as saying that the prices of the different commodities do measure the social value of an extra unit of the commodities. Whatever the distribution of incomes, the solution we got for the way in which the *individual* spends his income meant that the prices measured the relative value that the individual placed on an extra unit of the different commodities; he adjusted his spending until this point was reached. When income is distributed in the way we are now assuming, the value of the extra units will be the same for all people, and prices will reflect general, social, and not only individual, values. We have seen that, in these circumstances, there is no change in the use made of the resources which would be beneficial. As the only changes possible in the system are changes in the use of the resources

and in the way in which the product is distributed, we have, thus, shown that there is no way of changing the system for a better one—provided our assumptions about the distribution of income, the full use of resources, and the degree of monopoly were satisfied.

## ADJUSTING THE PRICE SYSTEM

We may conclude by trying to find ways of improving the situation when our assumptions are not satisfied. One obvious way would be to tackle the problem directly, and remove either the inequality of the distribution of incomes, or the degree of monopoly which a firm possesses. We have seen another way of dealing with the monopoly situation in a planned economy, and we have seen the use of taxes on income in dealing with the inequality of the distribution of incomes. However, all these methods may not be possible to a sufficient degree, if at all. If so, we can try to find other means of improving the situation through interference with the price system.

Suppose a firm has some degree of monopoly in the sales of a commodity. As we saw earlier, the extra receipts which the firm would get through expanding output would be less than the value of the increased output. Suppose that the price of the product was 1s. 3d., but that through the effect on price, when it increased its sales by one unit, the firm only increased its receipts by 10d. Suppose, now, that a subsidy of 4d. per unit was placed on the selling price of the product. The price paid by the public for the commodity might now be 1s. 2d., but the firm could receive 1s. 6d. for each unit.

When it sold an extra unit, the firm might now receive 1s. At the lower sale price, more of the commodity would be sold, and with higher receipts for an additional unit of production the firm would produce more. The amount sold and the amount produced might still balance at these prices.

## SUBSIDIZING PRODUCTION

The production of the commodity would be greater—which, we saw, was necessary when there was this degree of monopoly. In the example given, we have still not reached equality between the value of the extra product and the receipts of the firm, but a slightly higher subsidy might enable us to get this equality—which was the condition which would make the use of the resources the best possible. So long as the distribution of income is not disturbed by the method of taxation used to finance these subsidies, we can reach the best position in this way, however much monopoly there may be in the country.

Suppose, now, that the distribution of income is wrong. There would be a social gain if we transferred income or commodities from a rich man to a poor man. Suppose we try to do this by putting a tax on the things bought

mainly by the rich man, and a subsidy on the things bought mainly by the poor man.

This will be equivalent to a redistribution of income. Since the prices of the things he buys has gone up, the rich man will lose in satisfaction in the way we have seen when discussing how one spends one's income; the poor man will have a corresponding increase in satisfaction. Resources will be transferred from making things bought by the rich man to making things bought by the poor man.

### LIMITS TO EFFECTIVENESS

It is true that there will have been a social gain. This time, however, it is not possible, in this way, to reach as good a position as there would have been if income had been equally distributed. The sale prices, including the taxes and subsidies, will bear different relations to one another from those of the prices governing production. Suppose that the selling prices for two commodities are the same, but that the firm making one gets twice as much per unit as the firm making the other. We could move resources from producing the first commodity to producing the second, so that the value lost of the first commodity, at the price the firm gets, would be roughly equal to the extra value of the second. At selling prices, this would mean that the value of the first commodity lost would be about half of the value of the second gained. One unit of the first might be lost and two of the second gained. Any individual member of the population would be in a better position if we took away from him one unit of the first commodity and gave him two of the second since he values the two things equally.

He would be better off from the change in the use made of the resources, and no one would be worse off. Thus our theoretical system of taxes and subsidies, while it can improve the general situation, cannot be said to lead to the perfect use of the resources.

### TAXES AS CORRECTIVES

There are, of course, taxes and subsidies on commodities in the United Kingdom, and some of them have effects similar to those which we have described above. The main reasons for the existence of the taxes are frequently, however, quite different from those we have given. Partly the taxes used are imposed because they are the most convenient way of collecting money for Government finance. Partly the taxes are used to correct what are thought to be unsatisfactory ways in which individuals would spend their money. In other words, what the individual would buy is not the best from the social point of view. Such motives can be seen in the application of purchase tax.

Purchase tax was imposed to cut down the consumption of commodities

which were considered least essential. This would help, in wartime, the concentration of resources on war production, with the use of less direct control.

Similarly, in peacetime, it would assist attempts to use resources to produce those things most necessary for the national economy. Even when the taxes are imposed mainly for revenue purposes, consideration is often given to what is thought to be the social value of the commodities. The high rates of duty on drink and tobacco are examples of the operation of this principle—even before the deliberate attempt in the first 1947 budget to use the tobacco duty as a means for cutting down the consumption of cigarettes and tobacco in order to reduce dollar expenditure.

### EFFECT OF REVENUE TAXES

Taxes and subsidies on commodities interfere with the free working of the price system. We have seen that they may, nevertheless, have a good effect if they act as correctives for monopoly or unequal distribution of incomes. If the taxes are imposed purely for revenue purposes, they are likely to reduce the efficiency with which the country uses its resources. If they are imposed because it is thought that the individual would buy the wrong thing, each person may get less of what he wants, but the general social wellbeing may be greater.

This could happen if, for instance, the purchases of one person, say of drink, led to inconvenience to other people—perhaps through the effect on his driving of a motor-car. It might also be thought that some people would buy things which would not contribute to their own welfare in the long run.

### SOCIAL AND PUBLIC SERVICES

The provision by the government or other public bodies of such free services as education or medical treatment can be considered as one form of subsidy. They might be justified on the grounds that they alleviate the effects of unequal distribution of incomes. It might also be held, for instance, that the value to the community of an educated population is greater than the value might appear to parents who had to pay for the education of their own children.

There are other services provided free by public bodies—or, if we prefer, provided out of taxation having no direct relation to the amount of the service the individual taxpayer would like to have. Examples are the service of the police or the army. It is thought undesirable, if not impossible, to sell the service in an open market but, since it is thought a good thing to have the service, it is supplied by government action.

The system of rationing is another example of government interference with the working of the system which we have described. It is an attempt to

control the distribution of something of which the supply is small, so that the price should not rise very much. In the absence of rationing, the price would rise until the amount bought was cut down to the amount available. To some extent, this would mean that people in the lower income groups would no longer be able to afford to buy the commodity.

### RATIONING

Rationing is, then, an attempt, in conditions of shortage, to alleviate the effects of an unequal distribution of incomes. If the commodities concerned are things of which the poorer people normally buy a great deal, the effect is to improve the distribution of the goods from the social point of view. Rationing, of course, divides the commodity among the population on some basis other than income. The division is normally either an equal one between all members of the population, or is made either on the basis of age or the heaviness of the work done. It is, then, a rough attempt to give people what they most urgently need.

Rationing, however, cannot get us to the best possible way of distributing the goods which are produced. The value which people attach to an extra bit of a commodity is no longer directly related to the price. The price of butter might be 1s. 6d. a pound, and the price of tea 3s. a pound. When he has got the rationed quantities, one person might be prepared to give 3s. 6d. for an extra pound of butter, and 3s. for an extra pound of tea, but he is unable to get either of them. Another person might be prepared to give 2s. for an extra pound of butter, and perhaps 4s. 6d. for an extra pound of tea.

The first person might be prepared to give a pound of tea in exchange for a pound of butter, while the second might be quite content to get half a pound of tea in exchange for a pound of butter. On the other hand, both individuals would be more satisfied if the first person exchanged three-quarters of a pound of tea for a pound of butter.

### PRICE CONCESSIONS

There is yet another method of trying to improve the distribution of goods among the population. This is to charge different prices for the same thing to different people.

An example of this is when milk is sold cheaply to children. The effect is, in some ways, much the same as subsidies on the goods mainly bought by the people who get the things at the lower price. The main difference is that you are now more certain that the benefit will only reach the people concerned. The use of lower prices to poor people and higher prices to rich could only lead to the best possible way of distributing the goods if one condition was satisfied. The condition is that the prices for the poor

people must be lower than the prices for the rich for every commodity, and by the same proportion for every commodity. Otherwise, there will always be the possibility of the different sections of the community swapping goods with mutual benefit.

If the condition were to be fully satisfied, the effect would be exactly the same as a redistribution of income. The people for whom the prices were lower would buy the same commodities as they would if their incomes were raised proportionately and they paid the same prices as everybody else. In any case, the different prices would be almost impossible to maintain in practice, owing to the very large scope they would afford to those people prepared to take part in black market operations.

### USING ALL RESOURCES

Finally we must consider the assumption that all the resources were fully used. We have seen that our system does not automatically ensure that the resources would be fully used. In considering the social implications of any economic system, the amount of use made of the resources must, of course, be taken into account. The pricing mechanism *could*, theoretically, lead to the socially best use of the resources at any given level of employment, but, if it also led to a higher level of unemployment than some other method of regulating the economic system, the total effects of this other system *might* be better. It is not possible to go into details of the theory of employment in the scope of this chapter. We can say, however, that there seems no reason why it should be impossible to maintain a high level of employment while using the principles we have discussed in deciding how the resources should be divided between the different uses. Special measures may have to be taken in any actual economic system in order to maintain employment. The measures chosen should be those which best satisfy our principles on the correct use of resources while, at the same time, leading to the full use of the resources.

### AIM OF ECONOMIC ORGANIZATION

We have developed the principles which should be applied in order to use our resources in the best possible way, and distribute what they make in the best way. These principles will apply in any sort of economic organization, but the extent to which the best solution is achieved will depend on the type of organization.

We have seen some of the factors which affect the extent of this achievement in the distribution of the ownership of the productive resources and the existence of monopoly elements in production. These, and other influences, will vary according to the type of economic system considered. We have taken an entity, the firm, which has decided its production by trying to make

the excess of receipts over costs as great as possible. The firm might simply be one of the units of a planned economy, or it might be an entrepreneur running his own business for profit in a capitalist society. The extent to which the firm can deviate from the practice we have taken as normal will vary from society to society.

Similarly, it is time that the extent to which the income of individuals depends on the ownership of the productive resources will vary. The value placed on the employment and satisfaction of different people will vary, with the result that the income distribution which is thought to be the best for society as a whole will also vary.

### DIFFERENT SOLUTIONS BY DIFFERENT SYSTEMS

The general principles on which the solution of the problems of the use of resources and the distribution of incomes will be based will remain much the same in whatever system we consider—the capitalist economy, the socialist economy, or, even, the slave economy. The details of how the solution works will, however, differ considerably in the various systems, both in the ways suggested and in others. It is, then, necessary to study the different systems to see how they solve the problems of the use of resources and the distribution of the goods produced among the population.

## *Test Yourself*

1. Describe the various causes of income-inequality as between different individuals.
2. Write down your own weekly expenditure in a form comparable with the table on p. 106, and account for the difference, so far as you can
3. Would you be prepared to work harder at the job you are doing if taxes were (*a*) higher; (*b*) lower; (*c*) as they are now, but differently arranged?
4. Do you consider it right that different prices should be charged for the same thing, according to whether the buyer is rich or poor? Give reasons for your view

*Answers will be found at the end of the book.*

## CHAPTER IV

# ECONOMIC SYSTEMS PAST AND PRESENT

In Chapter II it was suggested that every economic system is compounded primarily of four factors—land, population, capital and technical knowledge. History shows quite clearly that in no society does any of those factors remain permanently fixed in quantity. Populations rise and fall. Capital can be accumulated and it can be destroyed. Technical knowledge normally tends to grow in volume and to become more widely spread; but there have been times when it has contracted and when things once widely known have been either completely forgotten or remembered only by a few. Land, in the economist's sense of natural resources, is increased by the discovery of new territories or of hitherto unsuspected mineral deposits. It is diminished whenever soil fertility declines or minerals and forests are worked out.

Moreover, not only do these factors tend to vary in quantity over periods of time, but in some measure they vary independently of each other. Technical knowledge and capital, it is true, normally grow together. On the one hand, the use of complicated methods of production and of elaborate capital equipment stimulates scientific research and diffuses new forms of skill among those who operate them. On the other hand, scientific discoveries almost invariably call for new investments of capital to bring them to fruition. Yet, as the history of war makes painfully clear, the increase of technical knowledge may on occasion be accompanied by the large-scale destruction of capital resources.

The growth of population has often, it is true, been closely related to the development of medical skill, to the growth of opportunities for employment in industry, and to the discovery of new lands for cultivation. But, as the recent history of the West Indies, or of India, or of Egypt, makes abundantly clear, the growth of population is not always accompanied either by a corresponding accumulation of capital or by the discovery of additional natural resources. Nor, in fact, is the accumulation of capital necessarily accompanied by a corresponding growth in population.

The discovery of hitherto unknown resources is, as the story of the petroleum industry clearly illustrates, often the result of applying to the search for them increasing amounts of capital and scientific skill. But, as

the story of the petroleum industry also shows, that search is not always successful and, even when successful, sometimes makes its discoveries beyond the boundaries of the society to which the capital and skill belong.

## FOUR BROAD TYPES

Given, therefore, the fact that land, population, capital and technical skill may vary to some extent independently of each other, it follows that they may, at different times or in different places, be combined in different proportions. But, to a very great extent, the nature of any economic system must depend upon the proportions in which those factors are combined within it. Consequently, it is not surprising to find that a wide variety of economic systems has existed in the past, or that a considerable variety is still observable today. To describe them in detail is impossible within the limits of this chapter; but for the purpose of preliminary study and without, it is hoped, too drastic over-simplification, we may conveniently divide the economic systems of the past, and to a large extent also those of the present, into four broad groups.

### *Transitional Phases*

In making use of that division, two points must always be borne in mind. On the one hand, the economic systems within any particular group will not be identical in all respects but will often show a multitude of minor variations. On the other hand, the dividing lines between the groups themselves will not be clear cut. For, as the quantities of land, capital, population and technical skill within them change, societies tend to pass from one group to another and, therefore, to pass through a transitional phase during which they are hard to classify. Subject to those reservations, the major categories into which economic systems naturally fall provide useful tools for studying the world either of the past or of the present.

### *Key Distinctions*

In the first place, a major distinction can obviously be drawn between those societies in which capital equipment and scientific technology play a part of vital significance and those in which the rôle of those factors is comparatively unimportant. Secondly, each of those broad classifications can be further subdivided into two. Societies in which capital is comparatively unimportant can be separated into subsistence economies and exchange economies. The characteristic feature of the first is that, within them, goods are produced almost exclusively for consumption by the producer and his family. The distinguishing feature of the second is that, within them, production is largely for the purpose of exchange. Societies in which capital plays a dominant rôle can be divided, in the first place, into free capitalist economies, in which the use of that capital is determined by private individuals, and, secondly,

collectivist economies, in which the use of capital is determined by the State.

During the last thousand years, most parts of Western Europe have passed through the first three of those categories—subsistence economy, exchange economy, free capitalist economy—in turn, and today they appear to be entering the fourth. In other parts of the world the pattern of development has been less orderly, but even there the same categories can be usefully applied. It would, however, be carrying simplification too far to argue that there existed any universal tendency for all societies to pass from category to category in the same logical order. As the story of the Australian aborigines demonstrates, it is possible for a society to remain indefinitely at the same level of economic development. Under the stimulus of outside interference it is possible for a society to pass from the first category to the third or fourth without going through the same intermediate stages as did the nations of Western Europe. More than one tribe in Asiatic Russia has been transformed from a subsistence to a collectivist economy within less than a lifetime.

## SUBSISTENCE ECONOMIES

Hitherto, subsistence economies, such as those of the Australian aborigines or of the early Anglo-Saxons in Britain, have been studied mainly by anthropologists or medieval historians, neither of whom always ask the questions which come most naturally to the economist. Nevertheless, the main characteristics of those economies are clear enough. Inevitably, the great majority of their population are occupied in the production or collection of food; in hunting, fishing, tending livestock or growing crops. For, quite clearly, craftsmen and others not engaged in food production cannot possibly live by consuming their own output, and their presence in any substantial numbers is an infallible sign that an exchange economy has developed. Since, by definition, the bulk of their inhabitants are producing primarily or exclusively for their own consumption, trade within these subsistence economies is of but slight importance, and money is either unknown or little used.

Because most communities organized on a subsistence basis are sufficiently small for all families within them to have access to the land, hunting grounds or fishing waters from which their livelihood is obtained, wage labour is rarely found, and major undertakings such as housebuilding or the clea ring of forests are performed as co-operative tasks by neighbours. Competition need not be absent, for the joys of emulation and the emotional satisfaction to be obtained from growing the largest marrow in the village are as old as history But communal obligations tend to be strong, and the sick and needy can often claim, almost as a right, a share of the surpluses of their more fortunate fellows.

In subsistence economies technical methods are usually both simple and

conservative, for, once men have devised means of production adequate to meet all the needs of which they are conscious, there is little incentive to improve upon them. Nor is that conservatism peculiar to the field of technology, for, in the absence of economic change, social relationships tend to be hardened by tradition into customs that acquire an authority almost indistinguishable from that of law. A belief in, and a willingness to accept changes for the sake of progress, are seldom found in simple societies.

## CHARACTERISTICS OF PRIMITIVE ECONOMIES

To depict subsistence economies as idyllic, as poets and philosophers have sometimes done, would be naïve. But to dismiss them as necessarily barbarous and brutal, and to take their existence as proof of the natural stupidity of their members, would be absurd. For the limits to what a community can achieve are set largely by the physical environment in which it lives, and the fact that there still exist today communities which make no use of the division of labour (apart from the division of labour within the family) can often be attributed to purely geographical factors. To the Bedouin, the desert permits few occupations other than the herding of animals. To the Eskimo, the Arctic offers few, if any, alternatives to fishing and hunting. In the great spaces of the Pacific, trade requires forms of transport that the smaller islands can never provide, and offers but slight rewards for the effort which it would entail. Nearly all of the subsistence economies of today are to be found in remote or inhospitable parts of the world.

### *Simple Standard of Living*

Since the range of commodities which any family can produce from purely local resources is obviously limited, the standard of life in a subsistence economy is necessarily simple, and enjoyment tends to be derived from a wealth of leisure activities rather than from a multiplicity of material possessions; a fact which goes far to explain the accusations of laziness which Europeans and Americans often level against the African and the Asiatic. Whether that standard is also low, in the sense of being inadequate to men's physical needs, depends upon a variety of factors. Largely, of course, it depends on the abundance of local resources: a fertile river valley is likely to yield a higher standard than the barren wastes of the desert. Partly, it depends on the degree to which the society in question succeeds, by abortion, infanticide or some crude form of birth control, in setting limits to population growth, that is, to the number of mouths to be fed.

### *Class Divisions*

But partly, also, it is determined by the social structure of the community concerned, for a subsistence economy is not necessarily a classless economy. In societies in which production is *solely* for the producer's own consumption

it is no doubt difficult, if not impossible, for class divisions to appear. But such societies are rare, if they have ever existed at all. Normally, even though production is *primarily* for the producer's own consumption, surpluses are contrived for some purpose or other. Usually there is at least a trickle of inter-regional trade, for which goods have to be provided; most communities are aware of a need for certain basic commodities, particularly metals and salt, which they may not be able to provide for themselves. In all save the very simplest of societies there tend to appear at least a few specialists whose services have to be rewarded, if not in money, then in kind.

*Surpluses Required*

Whereas an ordinary family, with the occasional help of its neighbours, can produce its own food, shelter, furniture and clothing with comparative ease, metal working requires a peculiar skill; and smiths seem to have been among the first specialists to appear—a fact which is reflected in the incidence of English surnames to this day. Nor are such specialists necessarily concerned with the provision of material things. In the Trobriand Islands, for example, the medicine man is rewarded with yams, and in Anglo-Saxon England the local parson was paid his tithes. Often, surpluses are required for purposes of conventional display or religious ceremonial; marriage feasts and harvest festivals are both more ancient and more widespread than Christianity. Finally, in most communities, surpluses are required from the ordinary member to help maintain a privileged group.

*Limits of Exploitation*

Such surpluses may be paid to that group in the form of taxes, or tribute or rent; although clear distinctions between these categories of payments are seldom observed in simple societies. Their recipient may be a prince, a tribal chief or a feudal lord according to the pattern of the society in question. The burden which their payment imposes on the producer may be heavy or it may be light; but, in so far as our imperfect knowledge permits of any generalization at all, it seems usually to be light and often to be little more than nominal. In a subsistence economy, it has been said, the limits of exploitation are set by the walls of the overlord's stomach, though these limits may be extended by the stomachs of his hangers-on and by the exercise of that hospitality and ostentatious display which a society normally expects from its leading members. There is obviously little incentive to extort large surpluses from agricultural producers in an economy in which such surpluses cannot be sold or exchanged for other goods.

Thus, in a community in which production is mainly for the producer's own consumption, the pattern of economic activity is simple and the level of wealth, although it may be adequate for phsyical comfort, is far below that of modern Europe. Such communities, however, normally contain

within themselves the seeds of their own transformation. In all but the simplest some production is carried on for purposes of exchange, and one of the most obvious lessons of history is that, if and when production for that purpose grows in importance, the whole pattern of economic activity undergoes a great change. So much so that, as was suggested earlier in this chapter, simple exchange economies—that is, economies in which production is mainly or largely for exchange, but in which technical knowledge is still elementary and capital plays but a minor rôle—form a separate category.

## EXCHANGE ECONOMIES

Of simple exchange economies it is possible to speak with some confidence, for all the great civilizations of the past were based upon them; and that which existed in eighteenth-century England was analysed by a contemporary economist of genius, Adam Smith. In all cases the most characteristic feature is the degree to which they carry the division of labour. In a subsistence economy each family tends to follow a variety of occupations—farming, building, carpentering, hunting, weaving—in order to satisfy as many of its needs as possible. In an exchange economy, each man tends to specialize on a single occupation and to satisfy his other needs by selling his own produce or services and buying the produce and services of others. As a result, compared with subsistence economies, exchange economies are both more complex and more productive.

### BEGINNINGS OF SPECIALIZATION

This greater complexity is perhaps most clearly to be seen in the diversity of occupations within them. It has already been pointed out that, in a subsistence economy, nearly all of its members are of necessity engaged in the production or collection of food. In most simple exchange economies the majority of people are still so employed. For the number that can be released for other occupations is obviously dependent upon their ability to acquire food; and it is only when technical knowledge is well advanced that agricultural output increases rapidly, and only when both scientific discoveries and capital investment have revolutionized transport that it is possible to bring food from afar.

Nevertheless, since there is little incentive for neighbouring farmers to buy and sell among themselves, the phenomenon common to all exchange economies is the appearance of a substantial body of non-agricultural producers. Of those producers, by far the most numerous are the makers of those consumer goods which all but the simplest societies find necessary and which, in a subsistence economy, men normally make for themselves —carpenters and leatherworkers, weavers and potters, tailors and shoemakers. As the division of labour progresses, so the list of industrial

specialists grows larger and, as has already been suggested, the number of such specialist producers serves as a very useful indication of the degree to which an exchange economy is developing.

*Emergence of Trade*

But, although the division between agriculture and industry is no doubt fundamental and although many communities have scarcely developed beyond that point, other divisions also tend to appear. Clearly the division of labour implies trade. "When the division of labour has once been thoroughly established," wrote Adam Smith, "it is but a very small part of man's wants which the produce of his own labour can supply. He supplies the far greater part of them by exchanging that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. Every man thus lives by exchanging, or becomes in some measure a merchant, and the society itself grows to be what is properly a commercial society." Equally clearly, when production is for a purely local market, exchange can be carried on without the aid of intermediary specialists. The farmer or his wife can sell directly to the consumer; the tailor may be both a craftsman and a shopkeeper.

But when markets are more than local, and when not only individuals but whole regions begin to specialize, new occupations of necessity come into existence; the trader and the carrier appear, and their appearance gives a new stimulus to the process which called them into being. For, as Adam Smith pointed out, the division of labour is always limited by the extent of the market. "When the market is small," he argued, "no person can have any encouragement to dedicate himself entirely to one employment for want of the power to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for."

*Importance of Merchants*

Since it is obviously in the interest of merchants, and to some extent of carriers, to extend the range of their activities as far as possible, they have been potent forces in widening markets and thus encouraging the division of labour. It is no historical accident that, in all save the simplest exchange economies, the merchants—the "bourgeoisie" of the Marxists—have played a rôle of vital importance; or that such economies have developed most rapidly along sea coasts and in river valleys, where the existence of navigable water has enormously facilitated transport; or that the economic development of Western Europe was accelerated in the sixteenth and seventeenth centuries by the growing trade with America and the East.

Just as trade can be conducted in the absence of specialist traders, so it can be carried on without the use of money; and it may reasonably be

supposed that, in their early stages, many exchange economies made an extensive use of barter. But the disadvantages of barter are obvious, for it can take place only when the buyer and seller each wants what the other has.

*Money and Credit*

A feature of developing exchange economies, therefore, is the increasing use which they make of money That money may take the form of a special commodity socially accepted for that purpose—of cattle, as among the ancient Greeks; of tobacco, as in seventeenth-century Virginia; or of rum, as in the early days of New South Wales. But commodity money also suffers from disadvantages. Its supply often depends on such seasonal phenomena as harvests; it often deteriorates with time; its units are neither uniform in quality nor easily subdivided. In fact, most, if not all, economies that have carried the division of labour to any high degree of elaboration have eventually solved their monetary problems by employing a combination of metallic coins and credit instruments, such as cheques and bank notes, which serves both to effect payments and to make loans.

The complexities thereby imported into any economic system are both many and various. Short-term fluctuations in the supply of money and credit may easily alter the whole tempo of economic activity. For when that supply increases prices tend to rise and, at least for a time, production is stimulated; when that supply contracts both prices and production tend to fall. Long-term changes in that supply may well have effects of momentous importance. For example, during the sixteenth and early seventeenth centuries the influx of precious metals into England from the mines of Mexico and Peru enormously expanded the volume of metallic currency in circulation. As a result there occurred a continuous rise in prices, which gave a great stimulus to trade and consequently to the further division of labour; which wrecked a centuries-old system of customary rents and established in their place a system of competitive rents that gave English agriculture a pattern of organization quite different from that in most other parts of Europe; which made it impossible for the king to pay for the expenses of government out of his private income; and which made the establishment of parliamentary government a matter of comparative ease, since only by means of the taxes which Parliament granted could those expenses be met.

*Bankers and Financiers*

One result of the use of money and credit is to add another rung to the occupational ladder: financiers and bankers begin to appear. To emphasize the importance of their functions would be superfluous; and the fact that, at first, those functions are often performed by men who also engage in trade helps largely to explain why, in exchange economies, merchants play so vital a part. But whenever the division of labour is developed to any

high degree, specialist financiers tend to emerge as a class distinct from that of the merchants; and a banking system is usually found in any elaborate exchange economy.

*Developing Social Organization*

Finally, in all but the simplest exchange economies, there tend to develop occupations that are productive of services not usually considered as primarily economic, although their economic importance may, in fact, be very great. Even in subsistence economies, it is true, wars are fought, justice is administered, songs and stories are composed, works of art are painted or carved. But in such economies those functions are performed by ordinary members of society rather than by specialists. The professional soldier, judge, administrator, scholar or artist is as much a product of the division of labour as either the craftsman or the merchant. Sustained and large-scale warfare, elaborate systems of government, complex systems of philosophy, science, literature and art are as much the result of specialization as either industry or trade. On the basis of a subsistence economy no elaborate civilization can be built, and the transition to an exchange economy normally opens a new chapter in the history of the society concerned.

*Insecurity from Specialization*

One result of the development of an exchange economy is, no doubt, to import a new element of insecurity into the life of the individual. Compared with production for his own consumption, production for exchange involves certain new and obvious hazards. He may misjudge the demand for his wares and find that they are, in fact, unsaleable. The price which he expected to receive may be reduced by the superior bargaining power of the trader with whom he must deal. The market in which he hoped to sell may be isolated by war or ruined by one of many possible forms of disaster. Yet it would be illegitimate to argue that life for the community, as a whole, is more insecure in an exchange than in a subsistence economy. The fact that different men follow different occupations makes it less likely that they will all run into difficulties at the same time. The existence of trade between different regions reduces, even if it does not remove, the dread of periodical famines from which few subsistence economies are entirely free.

Above all, the increase in wealth which the division of labour makes possible enables at least some men to acquire reserves, upon which they can draw in times of distress, and of which, under the urge of either fear or charity, they may even give some share to others less fortunate.

For, that the division of labour leads to an increase in the output of wealth is undeniable. On the one hand, it enhances men's productive capacity for reasons that are too obvious to need any detailed exposition. It is a commonplace that "practice makes perfect," and that a man who specializes

in a particular trade will acquire a dexterity and a rate of production that the non-specialist cannot hope to equal. It is clear, too, that a man who tries to combine a variety of occupations will waste much time in repeatedly transferring his activities from one to another. And there can be no doubt that inventions are much more likely to be made when a man devotes all his attention to one particular task than when he divides it among several.

*Stimulating Demand*

On the other hand, the division of labour also strengthens men's incentive to produce. In any society, that incentive tends to disappear when men have met the needs which they hope to satisfy and the obligations which society places upon them. In a subsistence economy it often disappears comparatively quickly, since the range of needs which a man can hope to satisfy by his own efforts is obviously narrow, and the burdens which society imposes upon him are usually light. In an exchange economy, however, that disappearance tends to be postponed. The growth of trade offers men a wider choice of goods and either stimulates in them desires which had previously been dormant or induces others previously non-existent. Under that stimulus the farmer or craftsman may well be tempted to increase the surplus which he produces for sale; the ruling class may well be tempted to increase the dues which they demand from those below them.

*Income or Leisure*

But although the division of labour may lead to an immediate increase in productive capacity, the strengthening of the incentive to produce is often only gradual. Habits sanctioned by the traditions of centuries are not easily broken, and both historical and modern experience make it clear that the ordinary man is seldom inspired by a burning desire, *at all costs*, to increase his income.

Even under a capitalist system, in which the virtue of earning a larger income is preached with a zeal that borders upon fanaticism, men often, if not usually, prefer increased leisure to greater wealth. In pre-capitalist economies that preference tends to be even stronger, and, once the material standard of living to which they have been accustomed is ensured, men tend, to reap the fruits of the division of labour in the form of more relaxation.

The comments which are so frequently heard today about the "laziness" of colonial peoples were all made with even greater bitterness about the English artisan in the eighteenth century. "It is a fact well known in all manufacturing towns in the kingdom," wrote Arthur Young in the 1770s, "that the labouring poor will not work more days in the week than are sufficient to maintain themselves; the remainder is spent in idleness." By and large, however, although the acquisitive motive may burn early and fiercely only in the middle and upper classes, in all exchange economies it tends slowly to permeate

all ranks of society to at least some degree and to become an ever more potent driving force.

*Restriction and Regulation*

It would, of course, be unduly to simplify the story of economic development to argue that, whenever a desire for greater wealth exists at the same time as an increase in productive capacity, an increase in production always takes place. Under some circumstances the desire for greater wealth may in fact, lead to a curtailment of production. For, when markets are small, the fear of glutting them is inevitably great, and the temptation to increase one's income by reducing output and so raising prices is inevitably strong. Exchange economies tend, in fact, to be honeycombed with restrictive practices in the form of guild regulations, monopolies, and tariff barriers.

Moreover, particularly when they are confined to a small section of society, acquisitive motives may be restrained to a considerable degree by social pressure. Historical experience clearly shows that the belief that one man's gain is another man's loss dies hard, and, so long as this belief flourishes, both religious and political sanctions tend to be mobilized against economic change.

In medieval England, the Catholic Church condemned as greed what later ages were to sanctify as legitimate ambition, and the influence of the Church, although imponderable, was profound. In sixteenth-century England the Tudor monarchy deliberately curtailed the division of labour for fear of its effects on social stability. The acquisitive motive, in fact, usually receives open recognition as a public virtue only when religious doctrines have been adjusted to the business man's creed and when political power has been transferred, at least in part, into his hands

Yet, when all those qualifications have been made, the fact remains that the growth of the division of labour results, albeit gradually, in the growth of wealth. The acquisitive motive may spread slowly, but it spreads. Restrictive practices and the barriers erected by Church or State may retard the expansion of output, but they seldom prevent it altogether; and their ability even to retard it tends to diminish with the passing of time

## GROWTH OF UPPER CLASS

One of the most characteristic features of exchange economies is the development within them of a prosperous upper class drawing from taxes, rents and profits riches to which subsistence economies can afford no parallel. For the mass of the people within them, however, the increase in wealth is always much less spectacular and may, on occasion, be quite insignificant.

To some extent, their fate is obviously determined by the trends which

population growth happens to follow. For, quite clearly, whether an increase in the total income of a community is accompanied by a rise in the average income per head of that community depends on whether its population grows more or less rapidly than its total income. The study of history suggests that one of the first results of the division of labour is often to keep alive people who would otherwise have died in infancy and to bring into being some who would otherwise never have been born.

When, however, land and other natural resources are available, the additional population not only adds its proportional quota to the income of the community but, by increasing the size of the market, encourages an even greater degree of specialization and so adds to that income still further.

Land and other resources are never unlimited in quantity and, when they become scarce, any further increase in population tends to produce at the bottom of the social scale a poverty-stricken mass, whose farms, if they have any, are too small to provide them with an adequate living; whose opportunities for non-agricultural work are too irregular to provide them with more than a pittance; and whose competition for the means of subsistence raises rents and lowers wages to the detriment of all save the upper and middle classes. Such was the position in Ireland in the 1840s, until the Great Famine drove half the population either abroad or into its grave. Such is the position in parts of China today. Population pressure is neither unknown in subsistence economies nor common to all exchange economies. But it is in the latter that it tends to become a major factor in determining the standard of living, for there, when population does not grow too rapidly, the opportunities of rising above starvation level are greatest.

### TAXING THE SURPLUS

As in all other forms of society, however, the prosperity of the ordinary member of an exchange economy is largely determined by the distribution of income within that economy.

In most simple exchange economies the typical producer is the small agriculturist or artisan, working, with the aid of his family, on his own farm or in his own workshop for the supply of a predominantly local market. Since he is a specialist producing for exchange, his output tends to be greater than that of the typical member of a subsistence economy; but, since the growth of trade widens the range of desires which the upper classes can hope to satisfy, the surplus which they strive to take from him also tends to grow, and their success or failure in that effort largely determines the standard of living which he ultimately achieves.

In some cases, the most potent means of obtaining that surplus is found in taxation. It has already been observed that one characteristic of an exchange economy is the development within it of an elaborate system of government

Such systems of government not only cost money to maintain but are largely organized for the express purpose of collecting it; and some of the greatest exchange economies in history, such as that of Imperial Rome, have been noteworthy for the crushing burden of taxation which was imposed upon the farmer and the craftsman to pay for wars from which they did not benefit and for luxuries in which they did not share.

### BURDEN OF RENT

What is usually more important is the burden of rent. The history of land tenure is both complex and obscure, and generalizations about it have to be made with supreme caution. Yet it seems to be generally true that, with the growth of exchange economies, property rights in land either appear for the first time or become more clearly defined. So long as men farm purely for their own subsistence they have obviously no incentive to acquire more land than they need for that purpose. Consequently, in subsistence economies, except when it is scarce, land tends to be owned by the community as a whole and each family is allowed to use the amount that it requires for its own maintenance. But as soon as men begin to grow crops for sale they obviously have an incentive to increase the area of their farms in order to increase the size of the surplus which they hope to exchange for other goods. Under those conditions, and especially when population is growing, land tends to become increasingly scarce, and individual rights of ownership tend to appear or, at least, to become more definite. In some societies those rights of ownership remain with the farmers themselves and no question of rent arises. But in many societies those rights have been acquired, either by conquest or in some other way, by a separate landowning class; and as trade and population expand these landowners strive, usually with success, to increase the rents which their property brings them.

Finally, in all exchange economies the merchant and financier tend to reap high profits from their superior bargaining power in the market and their monopoly of liquid wealth. The combined exactions of the middlemen and moneylenders, tax gatherers and rent collectors are often heavy, and the standard of living of the small artisans and farmers in an exchange economy is often low. Nevertheless, except when population pressure is acute, the standard of life in exchange economies is usually higher, if more insecure, than that in the subsistence economy of simpler societies.

### APPEARANCE OF DEPENDENT LABOUR

Even in pre-capitalist exchange economies, however, by no means all production is carried on by independent farmers and artisans assisted by their families and apprentices. Once it becomes possible for a man to exchange his surplus output for other goods, there is an obvious incentive

for him to increase that output by employing the labour of others, and large-scale or medium-scale production tends to appear. In fact, in some communities, production for exchange seems to have begun in large establishments and to have been taken up by smaller men only later.

### SLAVERY AND SERFDOM

But large-scale production raises one problem of supreme difficulty. It can be carried on only when labour is available, and for most of recorded history men have infinitely preferred the rôle of an independent producer to that of a wage-earner and have freely entered the employment of others only when the pressure of population or the distribution of property rights has denied their access to the means of production on any other terms. Consequently, since in the early phases of exchange economies land tends to be plentiful and population tends to be scarce, large-scale production within them has often been based on unfree labour. On the one hand, it has often been based on slavery as in the case of the vast farms of ancient Rome, the sugar estates of the West Indies in the eighteenth century, and the cotton and tobacco plantations of the United States in the same period. On the other hand, it may be based on serfdom as in Western Europe during the Middle Ages or as in Prussia and Russia in the eighteenth and early nineteenth centuries.

To the economist, both slavery and serfdom are merely examples of the methods of obtaining labour for large-scale production when free wage-labour is either unavailable or, if available, is too expensive and unreliable for that purpose. Under slavery the problem is solved by reducing the workers to the status of cattle and forcing them to labour for no reward other than their bare maintenance. Under serfdom, it is solved by granting men small holdings upon which they can grow food for their own needs but forcing them to pay their rent in the form of unpaid labour on the lord's own land and, in order to ensure that such labour will always be available when required, by placing severe restrictions on the personal liberty of the serf and his family.

But, although unfree labour has been extremely important in stimulating the development of exchange economies, its usefulness is strictly limited by its very nature. In the first place, it is inevitably unpopular with those who provide it. History can show many revolts by slaves and serfs against the system which oppressed them; and when circumstances have offered them a chance of freedom they have normally taken it. In fourteenth-century England, for example, the decline in population which followed the Black Death so strengthened the bargaining power of the remaining serfs, and so reduced the market in which surplus crops could be sold, that large-scale agriculture based on unfree labour crashed in ruins and a society of free

peasant-farmers gradually took its place. In the eighteenth century the difficulties of recapturing escaped slaves in British Guiana was so great that a society of free peasants grew up beyond the slave plantations.

*Low Productivity*

In the second place, unfree labour is seldom highly profitable to those who employ it. Neither slaves nor serfs have any real incentive to work hard or to acquire any special skill. Consequently, even in unskilled occupations their productivity is low. In skilled occupations, and particularly in industry, they are of little use. The use of unfree labour therefore tends to be abandoned whenever free wage-labour becomes sufficiently abundant for the employers' needs or whenever the demand of free agriculturists for land makes the granting of leases more profitable than would production by slave labour.

Consequently, with the continual growth of trade and industry and with the expansion of population by which the growth of trade and industry is usually followed, the importance of unfree labour in an exchange economy gradually declines, while that of free labour gradually increases. In a simple exchange economy, however, free wage-labour is seldom concentrated in large establishments. It is scattered on the farms of the more prosperous peasants and in the workshops of the more enterprising craftsmen. Its most characteristic form is that which it takes under the "domestic" or "putting-out," system, whereby the worker continues to work with his own tools in his own cottage or workshop, but is paid by a merchant-employer who supplies him with raw materials and undertakes the marketing of his finished product.

So long as the worker is either a slave or a serf there is no reason to suppose that the transition from a subsistence to an exchange economy brings with it an improvement in his material standard of life. In the case of the free worker, however, it is impossible to generalize. For his standard of living obviously depends on the level of the wages which he is paid and on the regularity of the employment which he obtains.

## DIVERSITY AND INCREASING WEALTH

The major characteristics of an exchange economy are, therefore, two. On the one hand, it leads to an increased diversity of occupational groups, income levels, and social classes; a diversity which is reflected in the old nursery jingle:—

> Tinker, tailor, soldier, sailor,
> Rich man, poor man, beggar man, thief.

In a subsistence economy none of those categories exists save in embryo; in an exchange economy each becomes clearly defined. On the other hand,

there is an increasing output of wealth which, although it is reflected primarily in the development of an upper class far more numerous and prosperous than any subsistence economy can possibly show, tends to percolate downwards through the ranks of society until, in some cases, it raises the standard of living of even the lowest.

### WEAKENING THE FORCE OF CUSTOM

Exchange economies, however, also possess a third characteristic of great importance. It has already been seen that a prominent feature of subsistence economies is the degree to which both the methods of production and the social relationships within them are determined by custom. But the division of labour inevitably implies change. When a man specializes in one particular branch of production instead of seeking to satisfy all his own needs directly, he invariably tends to change the methods of production which he uses. He necessarily changes also the routine of his daily life and his relationship to his fellows.

The diversity of occupational groups, income levels and social classes which have been mentioned comes about only as a result of change. Consequently, since change and custom are incompatible, the growth of an exchange economy necessarily means the weakening of the force of custom. That process is usually slow and often painful. But, by and large, exchange economies tend to be individualist economies. In them the individual gradually becomes increasingly free: increasingly free to choose his occupation from an ever widening range; or free to starve if his choice of occupation should prove to be unsuccessful.

### TRANSITION TO CAPITALISM

Like subsistence economies, however, exchange economies contain within themselves the seeds of their own transformation, although it may well be that those seeds fail to germinate. Earlier in this chapter it was suggested that a fundamental change occurs in the nature of an exchange economy when it begins to employ methods of production that require both a high degree of technical skill and elaborate forms of capital equipment. As fixed capital and complicated techniques come to play a more important part within it, a simple exchange economy becomes a capitalist economy. Nor is it difficult to advance theoretical reasons why that transformation should take place.

Division of labour almost inevitably tends to encourage the invention of machinery and the increase in wealth which normally follows the division of labour must obviously facilitate the accumulation of capital assets. Yet, although history can show many examples of exchange economies even in the remote past, it is only within the past hundred and fifty years or so

that any have been transformed into capitalist economies. That transformation began in Western Europe, particularly in Great Britain, and opened a new chapter in the story of mankind.

## CAPITALIST ECONOMIES

Why the great exchange economies of the past, such as that of ancient Rome, never developed into capitalist economies is one of the most fascinating puzzles in history. But the major reasons why the exchange economies of eighteenth-century Europe grew into the capitalist economies of the nineteenth are clear enough. An outstanding feature of the eighteenth century was the growth both of the population of Europe itself and of the trade between Europe, on the one hand, and America and Asia on the other. That growth implied an increased demand for the products of agriculture and industry, and that demand was met by an increase in output. In many cases the desired supplies were obtained without any change in the existing methods of production. The growing population provided ample labour, and a greater number of men, working with the old methods, were able to keep the market furnished with what it needed.

### OLD METHODS INADEQUATE

But, nevertheless, it was found that in some cases the old methods proved inadequate, for the increase in production raised problems which they could not solve. In those cases the business world turned to the scientists, who were, as has been seen, themselves the product of the division of labour, and between them they devised new methods that were eventually to transform the whole of society.

Thus, in England, by the end of the seventeenth century the demand for coal and other minerals had become so great that it could be met only by mining at greater depths. The successful operation of deeper mines depended upon the contrivance of some effective method of pumping them clear of water. The result was the first application of steam power to production.

By the early eighteenth century the growing demand for iron had become so great that it could be met only by using some fuel other than wood, of which supplies were rapidly dwindling, for the smelting of the ore and the fining of the pig. The result was a revolution in metallurgical technique which, by permitting the use of coal in those processes, opened a new phase in the history of the heavy industries. By the middle of the eighteenth century the increasing volume of internal trade led to a breakdown of the old system of transport by means of small carts on badly made roads. The result was the growth of civil engineering and the appearance, in turn, of better roads, of canals, and finally of railways.

Such changes obviously made necessary an unprecedented degree of

capital investment, for deeper mines, larger furnaces, better roads and the new railways were all expensive undertakings. It has already been seen, however, that the growth of wealth which occurs within an exchange economy makes the accumulation of capital possible. The fact, moreover, that such wealth is unequally distributed makes the accumulation of capital comparatively easy. The earliest sources of capital are almost invariably the rents of the landlords and the profits of the merchants. In fact, in all but the simplest of exchange economies, capital already plays a rôle of some importance.

*Technological Change*

As soon as markets become more than local, and as soon as a class of wage-earners appears, capital must be used to bring raw materials to the artisans, to pay the wages of the worker, and to take the finished products to the distant consumer. Its major rôle, however, is that of working capital. Fixed capital, in the form of the instruments by means of which production is carried on, is still sufficiently simple to absorb but a small proportion of a community's resources and to be owned, in the overwhelming majority of cases, by those who operate it. The turning point in the development of an exchange economy comes when technological change makes both possible and profitable forms of fixed capital—elaborate machinery, factory buildings, railways, steamships — which absorb a substantial proportion of the community's resources, and which can no longer be either owned or operated by the individual handicraftsman. That is the stage at which a capitalist economy, in the usual meaning of that term, begins to appear.

*Production for Sale*

The European economies of the nineteenth century were, of course, "free" capitalist economies. That is to say, the capital equipment which was their outstanding characteristic was owned by private individuals or groups of individuals, and its creation and use was determined by those individuals. And it is clear that, viewed from one angle, a capitalist economy is but an exchange economy writ large. In it, production for sale becomes not merely important but almost universal. Themselves the result of the division of labour, technological changes carry that division still further. By creating new processes and subdividing old ones they increase the specialization between individuals. By reducing the costs of transport they increase the specialization between regions. Consequently, all the results of the division of labour already apparent in an exchange economy become far more marked in a capitalist system.

The occupational structure, for example, becomes increasingly complex. Industry grows in relative importance, especially as improved methods of agriculture and transport increase the number of those whom the output of a single farmer can feed. Trade grows in volume, and those employed in

the carriage and distribution of goods grow in number. The provision of credit and of the various means of making payments becomes a function of ever greater significance. The provision of services—military and political, scientific and legal, medical and educational, administrative and recreational —becomes ever more important. In the last census for England and Wales, in 1931, nearly 40 per cent of the occupied population was engaged in industry, more than 20 per cent in trade and transport, more than 10 per cent in the provision of services other than those of a domestic nature.

### EXTREMES OF POVERTY AND WEALTH

That increase in the division of labour, combined with the changes in capital equipment and technical methods of which it is the result, inevitably leads to a vast expansion of production. As in simple exchange economies, no doubt, that expansion is at first reflected above all in the growth in number and prosperity of the upper classes; whereas exchange economies produce rich men, capitalist economies produce millionaires. "It is one of the most melancholy features in the social state of the country," said Mr. Gladstone in 1843, "that while there is a decrease in the consuming powers of the people and an increase in the privations and distress of the labouring and operative classes, there is at the same time a constant accumulation of wealth in the upper classes and a constant increase of capital." Nor is that fact difficult to explain. Even more than in simple exchange economies, one of the first results of the increased production of wealth under capitalism tends to be a spectacular increase in the population which that wealth has to maintain. For not only does that wealth make it possible to keep more people supplied with the basic necessities of life, but the growth of scientific knowledge to which it is largely due penetrates the field of medicine and reduces the death rate from disease. Between 1801 and 1851, when capitalism was taking root in Great Britain, the population doubled.

The implications of such a growth are obvious. Since labour is one of the basic factors of production, an increase in its supply is usually followed by an increase in the national income. But when it increases rapidly in a community in which the supply of land is limited and the supply of capital is still comparatively small, two results tend to follow. In the first place, the average productivity of labour tends to remain low, for much of it is either left unemployed or put to work on inferior land or with inferior tools. For example, although weaving was mechanized in the early years of the nineteenth century, for something like a generation thousands of Englishmen continued to work at handlooms on which they could produce no more than their fathers had done before them. Under such circumstances it may well be that the national income grows only slightly more rapidly than the population and that the average income per head of population rises only

slowly. In the second place, when the supply of labour increases rapidly the bargaining power of the owners of land and capital is strengthened, and the proportion of the national income which they take in the form of rent, profits and interest is high.

Moreover, all questions of population growth and inequalities of income distribution apart, the increased flow of consumer goods, by which the standard of living of the average man is determined and which the use of improved capital equipment makes possible, appears only after the capital equipment has been created. In the years during which a large proportion of a community's resources are devoted to the initial creation of such equipment there is no obvious reason why the general standard of living should rise—a fact that is illustrated as clearly by the experience of communist Russia in the twenties and thirties of this century as by the experience of individualist England in the twenties and thirties of the last.

In the later phases of capitalist development, however, the story tends to change. As capital equipment increases, as the spread of birth control checks the rate of population growth, and as the workers become organized in trade unions and political parties, both the output and the bargaining power of labour are increased, real wages rise, and social services are developed to mitigate or abolish the worst forms of poverty. By comparison with simple exchange economies, and even more by comparison with subsistence economies, advanced capitalist economies show a higher level of wealth in all social classes.

### BOOMS AND DEPRESSIONS

But against that higher level of wealth there has to be offset a greater measure of insecurity. On the one hand, capitalism introduces a new and significant form of the division of labour. In exchange economies specialization occurs both between individuals and between regions. One man ploughs while another weaves; one region grows food while another builds ships. But in capitalist economies there occurs another division—that between man and the machine. Like all other forms of specialization it leads to an increase in productivity; but the technological unemployment which occurs when the line of division is redrawn and the machine takes over functions previously performed by man introduces a new element of instability into life.

On the other hand, although the growth of wealth in a capitalist economy is often rapid it is invariably irregular. For one of the most clearly marked characteristics of such an economy is the fact that it is subject to a succession of booms and depressions which give a clear and repetitive rhythm to the whole process of production. The causes of the so-called "trade cycle" are still in dispute and any discussion of them here would be out of place. But the consequences of that cycle are profound. For not only does it aggravate

the insecurity of the individual and elevate unemployment into a major social problem; attempts to remedy it have led to measures so drastic that they threaten to bring free capitalist economies to an end.

Moreover, in a capitalist economy, not only does change occur in many forms but it tends to occur at great speed and with bewildering frequency. In a subsistence economy change, though it may take place, is so slow as to be barely perceptible; in exchange economies it is seldom fast; but in capitalist economies it is both rapid and continuous. Technological progress, by ever creating new occupations and rendering others obsolete, continually redraws the lines of the division of labour as between individuals.

The reduction of the costs of transport and, by virtue of the greater markets which it demands and the more abundant raw materials which it requires, the constant expansion of output unite continually to redraw the lines of the division of labour as between regions. Increasing wealth leads to constant changes in social habits. The increasing complexity and volume of capital equipment calls for newer forms of financial and industrial organization to bring it into being.

## CLASS STRUCTURE UNDER CAPITALISM

"The bourgeois," wrote Karl Marx, "cannot exist without constantly revolutionizing the instruments of production, and thereby the relations of production, and with them the whole relations of society. Conservation of the old modes of production in unaltered form was, on the contrary, the first condition of existence for all earlier industrial classes. Constant revolutionizing of production, uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation distinguish the bourgeois epoch from all earlier ones." One result of this is, no doubt, a growth in the income of the community. Another is a decline in the security of the individual.

Above all, the most characteristic feature of a capitalist economy is its class structure. In those fields of production in which fixed capital plays a dominant rôle the small independent producer—the typical member of a simple exchange economy—inevitably tends to disappear. He may remain the norm in agriculture, for in agriculture fixed capital plays a comparatively minor part. In retail trade and in the provision of such services as accommodation, refreshments or garage facilities a small man may hope to retain his independence, for elaborate equipment is not essential to the performance of his functions. But even in those fields his position is far from secure, and in most branches of industry and transport technical methods requiring for their application large quantities of fixed capital doom the small producer to extinction. The factory takes the place of the workshop; the railway takes the place of the horsedrawn cart. In 1931, of the twenty-one million people gainfully occupied in Great Britain, nearly nineteen million were

working for either salaries or wages. Of the fourteen million occupied other than in trade, agriculture and personal services, only 3 per cent were employers, only 3 per cent were working on their own account, and 94 per cent were employees.

In a capitalist economy, that is to say, the average person is a wage- or salary-earner. To say that, is not, of course, to say that he is necessarily poor by comparison with the typical member of subsistence and simple exchange economies. As has been seen, the contrary is more often true. But his status as a wage-earner almost inevitably gives him a new outlook on economic affairs. In a simple exchange economy class divisions may well be both bitter and deep, but they are not identical with the division between those who own capital and those who do not. The artisan and peasant may rage against the landlord, the merchant and the moneylender; but they are themselves owners of the equipment which they use. The major cleavage, therefore, comes between those who own land and liquid capital on the one hand and those who own fixed capital on the other; the struggle to which it leads is essentially a struggle over the distribution of the national income.

### "HAVES" AND "HAVE-NOTS"

In a capitalist economy, however, the major cleavage comes between those who own both fixed and working capital and those who own neither. Inevitably, the consequent struggle is also largely concerned with the division of the national income and is largely fought in terms of wages, taxation and social services. But in addition, and since the use to which capital is put necessarily determines the whole tempo and pattern of economic activity, there arises the question whether or no that use should be left to the discretion of the minority by whom the mass of capital is owned. Increasingly, the answer of wage-earners tends to be no. Beginning with a demand that the free use of capital should be curbed by factory and other restrictive legislation, proceeding to the demand that the State should divert capital to uses—education, water-supply, the provision of hospitals—which private enterprise finds unprofitable, they tend more and more to insist that the State should assume the control, or even ownership, of capital as a whole in order to obviate the crises which privately-owned capital engenders and to equalize still further the distribution of wealth.

## COLLECTIVIST AND PLANNED ECONOMIES

Earlier in this chapter it was suggested that, when a society as a whole acquires control over, or ownership of, its capital resources, a new type of economy—a collectivist economy—comes into being. In describing such an economy, however, the historian is obviously at a serious disadvantage. To generalize about subsistence, exchange and capitalist economies is a

comparatively simple task, for they exist or have existed in sufficient numbers for it to be possible to separate the features common to all from the accidents of time and place peculiar to each. Collectivist economies, however, present a more difficult problem. On the one hand, not only are they few in number but, with the exception of the U.S.S.R., they have been established only in the last few years. On the other hand, they have emerged not from mature capitalist economies but from economies in which capitalism was for the most part only half-grown.

The ideas which inspire them have, it is true, been drawn from the experience of mature capitalist systems. But those ideas have as yet been applied on any large scale only in societies where capitalism was only partly developed. The experiences of such collectivist economies are profoundly illuminating, but the problems upon which they throw most light are those of building up, under collectivist control, an economy using capital and scientific discoveries rather than those concerned with changing from private to public ownership.

Since production in collectivist economies that are highly capitalized will be primarily for the purpose of exchange, they will, like all exchange economies, be characterized by the division of labour and by a wide diversity of occupations. Since they will make use of both elaborate capital equipment and scientific technology, they will, like capitalist economies, be characterized by their high output and by the rapidity with which changes occur within them. Fundamentally, it would seem, the distinguishing feature of a collectivist economy will lie less in the methods of production which it uses than in the solution which it offers to the problems of income distribution and economic security. In a free capitalist economy, the solution of those problems is left to the operation of the price mechanism. Capital equipment is created and used according to the capitalist's expectation of profit. Labour is left to flow into those occupations where its expectations of reward are highest, and is left unemployed and unrewarded when the price at which it is offered promises no profit to the employer. A man's income is determined by the price at which he can sell the use of his labour or his capital. The basic problem of a collectivized economy will be either to create an environment in which the price mechanism will operate with better results or to substitute a better mechanism for it. Later chapters will no doubt suggest an answer, but the actual solution, if needed, must be described by future historians.

## KEY TO STUDY OF HISTORY

Granted, therefore, the possibility of distinguishing between four broad categories of economic systems, what purposes does such a classification serve? If it is used with caution, and if there is constantly borne in mind the fact that the dividing lines between the different categories are not clear-cut, it provides a useful key to the study of history. The classification of past

societies according to the economic categories into which they fall is of enormous assistance in obtaining any real understanding of them. For, once a historian knows the economic category to which a society belongs, he can deduce the major problems which its members had to face and by which the pattern of their lives was largely determined. Moreover, at least in the case of Europe, one of the main themes of history is the story of how each country has progressed from a subsistence to an exchange economy, and then from an exchange to a free capitalist economy.

The application of those categories to the modern world, however, is a more complicated matter. At the one extreme there is a group of nations—those of North America and Europe, Russia, Japan, Australia, New Zealand and the Argentine—whose life has obviously been profoundly influenced by the use of elaborate capital equipment and scientific methods of production. It is true that, as between those countries, there are profound differences in the intensity of capital investment and in the national income per head of population. The west of Europe is more highly capitalized than the east; North America is more highly capitalized than the Argentine or Japan. But, by and large, these are the economicaliy advanced areas of the world and, at least before the last war, their standard of living was generally higher than that enjoyed elsewhere. Today rather more than a quarter of their people live under a collectivist regime; rather less than a quarter live in free capitalist economies; approximately one half live under a capitalism that is partly controlled and partly free. Together they probably contain about 40 per cent of the world's population.

At the other extreme there still exist, in the more remote parts of the world, societies whose existence has scarcely been affected by either capital or science. Some of those societies, such as the Eskimos of America, the aborigines of Australia and the nomadic tribes of Siberia, are to be found within the national boundaries of the advanced countries already mentioned. But for the most part the subsistence and simple exchange economies of the modern world are scattered through Asia, Africa and South America. Since men living in such economies seldom collect statistics, it is difficult to estimate their number, but they probably do not amount to more than 20 per cent of the world population and may well amount to considerably less.

## DUAL ECONOMIES

An outstanding feature of the twentieth century, however, is the number of countries which contain distinct, although related, economies within them. In reporting on the contemporary situation in Palestine the United Nations Special Committee wrote: "Although the total population of Palestine is less than two millions its economic life presents the complex phenomenon of two distinct economies—one Jewish and one Arab—clearly involved

with one another and yet in essential features separate. . . . The occupational structure of the Jewish population is similar to that of some homogeneous industrialized communities, while that of the Arabs corresponds more clearly to a subsistence type of agricultural society." Nor is that duality peculiar to Palestine. Most countries in Asia and South America contain capitalized industries, mines or plantations on the one hand and large populations engaged in subsistence, or simple exchange, agriculture on the other. South Africa contains both the subsistence and simple exchange economies of the native reserves and the highly capitalistic economies of the Rand and the Cape. In fact, countries with mixed economies probably account for nearly half the population of the modern world.

Obviously, if the different economies within such countries were rigidly separated from each other, the fact of their co-existence would mean no more than that political and economic frontiers do not necessarily coincide. The student could assign each economy to its appropriate category and ignore the political ties between them, as was in fact done earlier in this chapter in the case of Australia. But countries such as Australia, where the two societies which it contains are scarcely influenced by each other, are rare. More usual is the situation which the United Nations Commissioners found in Palestine where the two economies, although distinct, were "clearly involved with each other." The African negro tends to divide his time between the simple economy of the reserves and the capitalist economy of the mines. The primitive peasant of Azerbaijan wanders into and out of the employment of the Anglo-Iranian Oil Company. The simple peasant of Malaya imitates the plantation owner and adds rubber to the crops which he grows for his own subsistence and so becomes linked to the outside capitalist world. In a dual economy men tend to lead a dual existence.

## NO PARALLEL DEVELOPMENT

It is, of course, tempting to argue that the mixed economies to be found in so many countries today are merely signs that those countries are in a state of transition. It has already been suggested that, when a society evolves from one type of economy to another, it will, for a considerable period, show the characteristic features of both. And it is no doubt true that some countries are today in the process of transformation from simple exchange economies into capitalist economies. But the experience of the last fifty years affords little support to the theory that half of the world is now passing through the same transition that the other half passed through in the nineteenth century.

It has already been suggested earlier in this chapter that the study of history does not reveal any universal and inevitable path of economic progress. Some societies have never advanced beyond a subsistence economy. Although

many exchange economies have existed in the past, it was not until less than two hundred years ago that the first free capitalist economies appeared. Since then, the spread of capitalism has been both wide and rapid. But it has spread very largely as a result of the importation, by the countries concerned, of ideas, capital and labour from Western Europe. In some cases, as for example in the case of North America, that importation has been so thorough that a fully capitalist society has emerged as a result.

But often the process has been very selective. European or, later, American capital and technical skill have been imported to develop the production of those raw materials which the European and American markets require, but have done little or nothing to develop the other branches of economic life in the importing country. Foreign capital has developed the oil wells of Iraq, the copper mines of Rhodesia and the sisal and coffee plantations of Kenya; but it has done little or nothing to stimulate the general development of industry and agriculture in those countries.

*The Colonial Problem*

Such dual economies constitute, in fact, a new type of economic system created in the twentieth century in those countries where conditions do not favour any general development of capitalist or collectivist production. The most characteristic feature of that system is the fantastic diversity of income levels, methods of production and forms of economic organization contained within it. As the history of recent years had made clear, that diversity is a fertile breeding ground for social and political discontent. One of the major problems of the modern world is, in fact, that of the integration of dual economies. It is the basic problem which confronts every imperial power. It is a problem upon which Russian experience in absorbing simple economies into a collectivist system may well throw light.

## *Test Yourself*

1. What justification, if any, is there for the romantic view that simple societies are idyllic?
2. What main characteristic would you select as an infallible sign that a subsistence economy had become a simple exchange economy?
3. What advantages and disadvantages result from an increase in the division of labour?
4. What justification is there for believing that social progress is virtually impossible so long as population increase is entirely uncontrolled?

*Answers will be found at the end of the book.*

CHAPTER V

# THE SHAPE OF THINGS UNDER CAPITALISM

THE economic system of capitalism rests upon three indispensable foundations. These are, first, recognition and effective enforcement of the claim to private property in the means of production; secondly, the carrying on of industries and services under the control of private owners for their own profit; and thirdly, the availability of manpower for hire. The capitalist system can be said to prevail wherever economic activity is carried on mainly under the control of owners of capital, by the use of hired labour, and with the protection of the State.

The capitalist system did not come into existence suddenly, or win its predominance at a single blow. It developed by gradual stages out of earlier forms of productive activity, and had already advanced a considerable way before its character was transformed by technical discoveries which required for their effective use the aggregation of capital into large masses and the employment of large bodies of workers in single establishments making use of mechanical power. Such establishments had existed here and there at a much earlier stage of capitalist development; but the great change known as the Industrial Revolution immensely increased their numbers and their significance in relation to the economic system as a whole.

## PRIVATE OWNERSHIP OF PRODUCTION RESOURCES

Capitalism, in its more advanced forms, rests primarily on the unified control of large amounts of capital by big business firms and on the dependence of a large section of the people on wage-employment. In this chapter, we are concerned, not with the stages by which capitalism has grown to its modern stature, but with capitalism as it exists today. Its essential features are everywhere the same, though its secondary forms vary a good deal from country to country. In every country that can be called capitalist, in the modern sense of the term, the following conditions exist:

(1) The State recognizes, and the law courts enforce, rights of private ownership as applying not only to things for personal use, but also to things which are mainly or solely useful for producing other things.

(2) The ownership of the means of production is to a considerable extent

in the hands of private corporations or companies, so that the individual owns not a thing, but a share in a number of things which are the collective property of a corporation or company.

(3) The great majority of those who own such shares regard them simply as claims to share in the incomes arising out of the corporate activities of the bodies concerned, and take no effective part in deciding or controlling those activities.

(4) The effective control of the corporations or companies rests with a quite small number of persons, who are in some cases the principal shareholders, but in others are operating largely with capital which they do not own; in many instances the same individuals have a controlling influence over a number of separate corporations or companies, and these bodies are closely interlocked one with another.

(5) The separate corporations or companies, even when they are not financially interlocked, or controlled by the same individuals, tend to group themselves into larger aggregates, such as cartels, trade associations, and other types of combine, with a view to exerting monopolistic power by the collective control of prices or of marketing conditions or of output, and to putting pressure on the State to adopt economic policies which conform with their interests.

### MONOPOLIES AND SMALL FIRMS

(6) Large-scale corporate organization, and also monopolistic combination, exists not only for the carrying-on of productive operations, but also for commercial and financial purposes. In the sphere of production there are many holding companies which do not directly organize any productive activities, but hold the financial power over a number of productive concerns. There are also great banks and other purely financial institutions which deal, not in goods or services, but in money and credit. The larger the scale of operations, the greater is the part played in the working of the capitalist system by the financier, as distinct from the productive entrepreneur.

(7) Side by side with the giant businesses, combines, banks and financial agencies which dominate modern capitalism, a large amount of business continues to be carried on by quite small firms, in which the functions of ownership and management are still combined, as they were to a much greater extent in the earlier stages of capitalist development. Large-scale capitalism does not crush out the small business—or, rather, though it is continually crushing out such businesses, it does not prevent new ones from growing up. Indeed, it makes extensive use of small firms as its agents and for subsidiary tasks; but to an ever-growing extent the effective control of

economic policy under capitalism rests with the large concerns and combines, and the smaller firms have very little say.

(8) Whereas, in small-scale business, ownership and management are largely combined, in big business they are to a great extent separated. The typical big business has (*a*) a large body of shareholders, most of whom play no part in its control; (*b*) a controlling group of entrepreneurs, who appoint themselves or their nominees as directors, and direct policy, but do not for the most part engage in the day-to-day management; and (*c*) a body of salaried managers, who may in some cases be also directors or large shareholders, but are in the majority of cases employees, with no large ownership of shares in the businesses which they conduct.

### COLLECTIVE BARGAINING

(9) The class of salaried managers shades into that of technicians and administrators of inferior grade and the number of persons employed in such capacities grows larger, both absolutely and relatively, as the technical and administrative complexities of business organization increase.

(10) These large concerns employ vast numbers of manual and clerical workers; and, though small businesses show no sign of dying out, the proportion of the total number of workers employed in large businesses tends continually to increase.

(11) These workers, unless they are forcibly prevented, combine in trade unions for the defence of their common interests. Such combinations begin among the skilled manual workers, but are subsequently extended both to less skilled manual workers and to clerical and professional workers. Trade unions tend, moreover, to unite into wider bodies representing many different occupations, and to establish rights of collective bargaining about wages and conditions of work, and also to bring pressure to bear on the State to legislate in their members' interests. They are today also insisting upon the right of the workers to be consulted by the employers and by the State in the formulation of economic policies.

### RANDOM PRODUCTION

(12) Most goods and services are produced with a view to sale at prices which will yield to the firms in control of production a profit over and above their costs of production, and firms and associations are left to decide what and how much to produce in accordance with their expectations of profit from producing this or that, or more or less of the various commodities they are in a position to make

(13) Decisions to produce this or that, or more or less, are also decisions to employ this or that kind of labour, and to employ more or less labour, subject to the possibilities of altering the methods of production in such a way as to vary the kinds or the amounts of labour used in conjunction with other factors of production—e.g. land, or machinery—in turning out any given output of goods or services.

### SUPREMACY OF CAPITALISM

At the beginning of the present century, capitalism was a world-wide system. It ruled the roost in every country that had any pretensions to being economically advanced; and its power penetrated and subdued the less advanced countries to an ever-increasing extent. Capitalism was under challenge, even then; for a world-wide socialist movement was already in being as its critic and antagonist. But socialism was in those days only a theory and a movement: it had nowhere won power, or had a chance of demonstrating its effects. Most people—even most working-class people—took the capitalist system for granted, or at any rate regarded it as likely to last their time. Few expected that socialism, as an alternative system, or even a mixed system including a considerable socialist element, would speedily be established in any country. Most socialist and labour parties, even if they advocated socialism in theory, were in a position to press in practice only for social reforms inside the capitalist order.

### CASE FOR COMPETITIVE CAPITALISM

Those who favour capitalism argue quite correctly that under this system there has been during the past two hundred years an enormous increase in the productive power of the advanced industrial countries, accompanied by a great improvement in the standards of living of their peoples. They admit that there exist under capitalism, as there existed under earlier economic systems, very great disparities of wealth and income, and that even in the most advanced capitalist countries serious poverty still remains upon a large scale. But they contend that the fortunes which accrue to the successful capitalists, so far from making the poor poorer, are means of improving their condition, because the capitalists, in seeking continually improved methods of production, are always enlarging the total supply of goods and can prosper only by finding wider and wider markets for them. These markets for the mass-produced commodities of modern industry can be found only among the great body of consumers; and in catering for their wants, the capitalists, it is said, enrich not only themselves, but their employees (higher productivity leads to higher wages) and those who buy their wares (cheaper production means lower prices and larger consuming power).

That there have been under capitalism great increases of wealth and

productivity in the advanced countries, no one in his senses will deny. The direct cause of these increases has not been, however, the particular economic system under which they have been achieved, but the growth of knowledge. The Industrial Revolution was primarily a revolution in productive technique; and the increase in productivity ever since has been mainly a matter of the scope permitted to applied science and applied mathematics, aided by the plain common sense of many improvers with no scientific pretensions. The advocates of capitalism claim that these discoveries and improvements in the applied arts would not have been made without the stimulus of profits under the system of private enterprise. They cannot claim that capitalism was directly the cause of the advance in productive technique; but they do claim that it provided the most effective means for its use, and that it built on the foundations laid by scientific discovery the edifice of modern industrialism.

### EARLY ADVOCATES OF CONTROL

Up to a point, this claim is historically correct; for private, profit-seeking enterprise was the means of breaking down a great many traditional barriers in the way of improved methods of production, and at the time of the Industrial Revolution and for a considerable period afterwards there was no other practicable way of bringing this about. There were idealists, such as Robert Owen, who saw the evils of competitive capitalism and put forward grand projects for putting the new forces of production under collective social control in the interests of the whole people; but their projects inevitably failed, because there was not sufficient power for carrying them into effect.

Control of the State was still in the hands of an aristocracy which for the most part neither understood nor welcomed the new forces and had, in any case, scant sympathy for the claims of the common people; the only real challenge to this aristocracy came from the class of "self-made" men who embodied the spirit of private, profit-seeking enterprise.

### ARISTOCRAT AND CAPITALIST COMBINE

The working classes might kick against the pricks of the new industrial discipline; but they and the few middle-class or upper-class idealists who rallied to their side were much too weak to win control of the powerful new forces.

The State, which they sought to capture under the banner of the People's Charter, was beyond their grasp; and from 1832 the old aristocracy and the new capitalist class were in alliance against them. The only alternative systems open were on the one hand the old traditional system of squirearchy in the village and handicraft in the town, and on the other the new system

of capitalist exploitation based on the power of coal and steam. The rising capitalist class, which was intent on sweeping away the obstacles impeding its progress, was in no mind to build up any new system of planning or of social control. It saw boundless opportunities ahead of it, if only each individual capitalist were allowed a free hand to develop his own business; and it regarded every form of public intervention that went beyond the protection of the rights of capitalist property owners, as being an attempt to check the increase of wealth.

### CAPITALISM IN AMERICA

This was the mood of British capitalism through most of the nineteenth century; and to a large extent the same mood continues to exist in America even today. The Americans, despite their distressing experience of mass unemployment in the 1930s, have still, on the whole, the feeling that there are boundless opportunities waiting to be exploited, and that the individual way of exploiting them, with a view to profit, is the natural and even the democratic way. There are, of course, many more Americans now than there were twenty years ago who question, or even deny, the validity of this attitude; but the deniers and questioners are still in a minority, even in the working class.

Nor is the reason for this far to seek. The American continent is still a vast reservoir of unexploited resources. The technical possibilities of increasing production still further are immense; and the actual increase that has occurred during the war years has largely wiped out the memory of the extraordinary collapse of the 1930s. Then, no doubt, something went badly wrong, and for a time Americans in the mass began to doubt the advantages of a private enterprise system that was failing to deliver the goods. But the experience of adversity, though bitter, was short; and world war rescued the American economy from the decline into which it had fallen and enabled it to make an unprecedented advance at a time when nearly every great country outside the Americas was undergoing deep impoverishment. The Americans—or enough of them to dominate the situation—recovered their optimism and returned to their traditional attitude of belief in private enterprise and in the almighty dollar.

Later on, British capitalists, as they were faced with the increasing competition of foreign manufacturers, gradually gave up their faith in Free Trade—and in doing so knocked away the foundations from under the Liberal Party. But, because their form of the private enterprise doctrine had been worked out mainly in relation to foreign trade, they were less successful than the American capitalists in opposing the growth of measures pressed for by the working classes for the protection of labour conditions; and the British workers, on their side, had the stronger reasons for pressing

for such measures because the relative abundance of labour made it harder for them to secure tolerable conditions without the aid of the State.

In the third great capitalist country of the later nineteenth century—Germany—conditions were different from either of those so far discussed. In Germany two processes—the development of capitalist enterprise and the building of a consolidated Empire under Prussian leadership—were clearly interlinked. This made German capitalism very much the *protégé* of the German Government, and prevented the German capitalist class from developing any philosophy of *laissez-faire*. It led not only to increasing tariff protectionism, but also to the positive encouragement of cartels and business associations as instruments of State policy; and it led also to measures of social legislation—the so-called Bismarckian State Socialism—designed to keep labour unrest and hostility to capitalism in check. It is broadly true that German capitalism, though it developed very powerful instruments of its own, such as I.G. Farben and the great steel and coal combines, never was a system of private enterprise in any full sense. Long before the Nazis, the German capitalist had been taught to regard himself as an agent of German national and imperial policy, and had been accustomed in all matters of high policy to work in close accordance with the requirements of German power politics.

Thus capitalism, despite an underlying unity, has meant something rather different in the three countries which were until recently the unquestioned leaders in world economic development. To the British capitalist it meant for a long time mainly Free Trade, and as it ceased to mean this, it acquired no clearly definable new meaning, except, as we shall see in a moment, in relation to overseas economic expansion. To the American capitalist it meant mainly freedom from interference with the processes of production and distribution at home; whereas to the German capitalist it meant, almost from the outset, a partnership with the State in the interests of military power and economic rivalry with the British and American systems.

## ECONOMIC IMPERIALISM

In Great Britain, Free Trade ceased to be a sufficient capitalist philosophy in proportion as the British manufacturers ceased to possess a *de facto* monopoly of the world market and found themselves faced with the powerful competition of other capitalist countries. Some of them turned to Protectionism as an answer; but this could be of no help to those whose dependence was on export markets, at any rate unless it could be combined with a positive policy of overseas expansion. The answer which made the widest appeal to capitalist interests was economic imperialism, by which is meant a policy of British capitalist expansion, supported by the State, in search of raw materials, of concessions, and of markets overseas. Of course,

Great Britain was not alone in pursuing this policy, which in the latter part of the nineteenth century became characteristic of all the advanced European capitalist countries—of France and Holland, as well as of Germany. Great Britain, however, was in a position to pursue it upon the largest scale, having the greatest undeveloped resources in empire territories, the greatest power to export capital for the development of such resources, and the greatest skill and experience in both the government and the exploitation of dependent territories.

### EXPLOITATION OF BACKWARD COUNTRIES

The capitalist system, as it meant three different things in Great Britain, in the United States, and in Germany, meant yet a fourth—very much more different—in its application to undeveloped countries. For, broadly speaking, the capitalists of the imperialist countries never set out to develop the all-round resources of a backward country, but only to exploit those resources which they could turn to serve their own ends. Usually, what they mainly wanted from such countries was an increased supply of materials for use in their own industries, or for sale, if there was a surplus, on the world market. Primarily, therefore, they developed mining enterprises under large joint stock concerns and plantations using large quantities of native or imported cheap labour, and, where it was necessary to leave the native producers in possession, merchanting enterprises which monopolized the market for native produce and compelled the natives to sell on unfavourable terms.

Whereas in the capitalist home countries capitalism was everywhere, if not the cause, at any rate the instrument, of a great increase in wealth—some of which (more or less, according to the scarcity or abundance of labour) filtered down to the working classes—the capitalist record in the exploitation of the undeveloped countries is much more chequered, and provides not even a plausible argument in support of the theory of the beneficence of private enterprise. The features of this exploitation were, on the one hand, the enormous tribute levied on the dependent countries in the form of profits, interest and salaries of white officials and skilled workmen, and on the other a destruction of the traditional basis of living of the native peoples without the provision of any alternative—for the recruiting of native labour for the white man's mines and plantations broke up the economy of the village and tribal societies without bringing to them any means of advancement towards higher standards of productivity. Where the natives were left to produce the goods the white man wanted, the effects were usually less bad, even where the native producers were forced to sell on unfavourable terms. But they were often bad enough, even though there is no way of measuring the gains and losses in accurate terms.

What was done to the peoples of dependent territories was done also to a less extent in countries which were politically independent. Such economic development as took place in south-eastern Europe and in the Near and Middle East was also lopsided and done to suit the interests of the foreign investors rather than of the peoples on whose territories the investments of capital were made. Doubtless the richer classes in these countries usually secured considerable pickings; but in general the development of highly capitalized sectors of the economies of such countries as Persia, Egypt, or Yugoslavia did nothing to improve the standards of living of the main body of their inhabitants, or to teach them the advanced techniques of production which they needed for the balanced development of their ways of life.

In striking the balance sheet of private enterprise, it is necessary to take full account of what it has been responsible for abroad as well as at home, and not to forget that some part of the increased wealth which has been transmitted under it to the working classes in the advanced countries has been extracted from the exploitation of the ill-paid labour of the colonial and other less advanced peoples at the cost of a wholesale destruction of their traditional social and economic institutions. It can be argued that this destruction is not to be regretted; and perhaps it would not have mattered if the foreign capitalists had put into the hands of the native peoples the means to the adoption of higher standards and ways of living. But, save here and there, they have not done so, and there is accordingly a heavy, though inassessable, entry on the debit side as against the credits of capitalist achievements at home.

## SELF-INTEREST THE GUIDE

It is, however, hardly to be expected that the peoples of the advanced countries will attach any great weight to this factor in making up their own minds what sort of economic system they prefer. The backward countries are far away; and home difficulties press hard enough on the workers in every country to leave them with only a secondary attention to bestow on other people's troubles. The wage-earner in England, Holland or America is barely, if at all, conscious that any part of his income is derived from tribute levied on men and women who live in much deeper poverty than falls to his lot; and he has enough on his hands in standing up to his own exploiters without concerning himself with other people's troubles—which, in any case, he lacks the power to remedy. For, though the workers in the advanced countries share to some extent in the benefits of the higher productivity arising from technical progress, enough troubles beset them to centre the main part of their sympathies at home.

If things worked out neatly in accordance with the textbook rules of the capitalist game, the pressure of competition under private enterprise

would be steadily cheapening commodities to the consumer's benefit, and though improved technical methods would be continually displacing workers from employment, expanding demand would be as speedily re-absorbing them, so that no one would be long out of work. Full employment would be assured, because capitalists would be competing to find labourers to help them in coping with the rising demand for goods and services; and whether money wages rose or fell, real wages would be bound to increase as total production reached higher levels under the pressure of capitalist competition.

### RECURRING CRISES

In practice, under the capitalist system, things worked out in a very different way. Although on the whole real wages did tend to rise and the conditions of labour to improve, the advances were made, not steadily or evenly for all sections of the working class, but by jerks and to the accompaniment of severe reversals of fortune for particular bodies of workers. Under private enterprise production advanced, not continuously from year to year, but subject to recurrent economic crises, in the course of which great masses of people were thrown out of employment or suffered serious losses of earning power and considerable groups of workers were reduced to sheer destitution.

Even if the recoveries which followed upon these crises in every case carried production well beyond its previous peak and, on the average, brought with them an improvement in social conditions, nevertheless the ups and downs of economic activity involved a large section of the working class in continual insecurity; and each crisis presented the paradox of a failure, not of productive power, but of effective demand for goods and services which the productive apparatus was well able to provide.

This tendency to recurrent crises involving widespread unemployment and distress has been called the "Achilles heel" of modern capitalist enterprise. But capitalism has two heels; and, over and above the unemployment due to cyclical depression, there appeared in the present century a deeper malady in the shape of a deficiency of demand, in relation to productive power, that did not disappear even at times when, by the tests of profits and of national income, the capitalist economy enjoyed high prosperity.

### SLOWING RATE OF DEVELOPMENT

This second malady of private enterprise revealed itself plainly only after the First World War. Its existence had been presumed much sooner by many successive critics of capitalism, from Sismondi and the pioneers of British socialism after the Napoleonic Wars, through Marx and Engels —as they observed the crises of the mid-nineteenth century—to the leaders of socialism in the 1880s, who mistook the "Great Depression" of those

days for the onset of capitalism's final decline. The recovery of capitalist production and trade in the last decade of the nineteenth century and in the years of the new century up to the First World War appeared to confound these critics and to demonstrate that there was still plenty of life in the capitalist system. But after 1918 the heralds of disaster saw reason to renew their prophecies. No doubt, over the world as a whole, production was again advancing within a few years of the immediate postwar slump; but the main advances of the 1920s were in the United States, in Latin America, and in the Far East, and the old capitalist countries of Europe were hard put to it to hold their own. It was always a moot point how far the continued economic difficulties of Western Europe were to be attributed to the decline of capitalism and how far to the dislocations set up by the war; but it was an undeniable fact that all over Western Europe the pace of economic development had been slowed down, and severe unemployment had become, not merely epidemic, but a permanent characteristic of the working of the capitalist economy.

## COMPETITION OR MONOPOLY

Whatever the causes, capitalism in Europe after the First World War largely lost its impetus to expansion and turned more and more to restrictive monopoly as an instrument for the protection of its interests. The war had given everywhere a great stimulus to monopolistic organization: trusts, combines, cartels and trade associations spread rapidly from one industry to another, and directed their energies to the maintenance of prices, to the concerted limitation of output, and, wherever they could, to the restriction of new entrants into production. The most serious aspect of this policy was not the exaction of monopoly prices in itself, but rather the notable failure to keep the methods of production progressive and up-to-date. Great Britain, which had been the leader in devising more efficient ways of production, fell seriously behind in one industry after another. This was at any rate partly because firms which were able with the aid of monopolistic combination to earn satisfactory profits with their existing plants and techniques saw no sufficient reason to adopt new methods, or to risk large capital expenditures by adventuring into new processes. Of course, it is not suggested that *no* improvements were made, or that *all* British firms behaved in this way; but it is unquestionable that there was *on the average* a really serious falling away.

The case for capitalism is admitted by responsible advocates to depend largely on the assumption that the incentive of profit will be strong enough to induce firms continually to improve their methods of production. It used to be argued that they would be driven to do this by competitive necessity, under the penalty of being put out of business. But where firms,

instead of competing one with another, prefer to combine in order to regulate the market, this necessity—at any rate, in part—disappears. In part, it may still continue, to the extent to which the combined firms have to meet the competition of imported foreign products, or are competing in export markets with the producers of other countries. But the force of foreign competition in the home market can be reduced, or even eliminated, by tariffs or other protective measures; and competition for export trade can be restricted by international agreements between national combines to share out the available markets on non-competitive terms. The growth of tariffs and of other restrictions on imports after 1931 greatly added to the strength of monopoly in Great Britain; and ever since 1918 there has been a widespread development of international cartels—so much so that in some fields they have almost superseded tariffs as the instruments for regulating imports.

### PRICE FIXING ARRANGEMENTS

Cartels and associations, national and international, though they have extended to only a part of the industrial field, have had a notable effect in reducing the pressure on firms to seek steadily to reduce their costs; and the still more widespread development of trade associations for regulating the conditions of sale in the home market has led to a widening of the margins between factory costs and the prices charged to the final buyers. The notion of a "fair" margin, usually defined as a margin wide enough to allow the less efficient traders to make "reasonable" profits, has gained a powerful hold on the minds of producers and traders alike; and its effect is, by keeping prices high enough to achieve this on the basis of the existing output, to put obstacles in the way of the expansion of demand, and thus to give apparent justification to the maintenance of the existing prices. Proposals to cut prices are resisted on the ground that they will not allow a "fair margin" to be earned; but in fact the only way of expanding turnover is to cut the price, and to look to the maintenance of total earnings from a narrower margin upon a larger sale.

When capitalism turns thus restrictive in its operations, the main part of the case for it clearly goes by the board. It must not be inferred, however, that the industries which are least in the hands of monopolistic combines are necessarily the most efficient. On the contrary, where monopoly takes the form not merely of concerted regulation of output, prices, or conditions of sale by associations made up of firms which retain their separateness as producers, but of close integration of production itself, very great economies of production can often be achieved by standardization of processes, by specialization of factories to a particular kind of output, and by unified organization of marketing and of research. Monopoly is much less disastrous

where it leads to thoroughgoing amalgamation of firms than where it takes the form of market regulation alone. No doubt, the great unified concerns are prone to exact monopoly profits and to prefer safe returns on a limited turnover to dangerous adventures; but even so, they may be in a position to achieve such technical economies as render their monopoly prices lower than those which would exist under a cartel arrangement, or even under conditions of unrestricted competition.

The competitive system worked, and still works, best where no great economy is to be got by producing on a very large scale. Where small or moderate-sized plants can achieve high technical efficiency, the spur of competition will in many cases induce them to keep their methods up-to-date. Where, however, the scale of production needed for high efficiency is very large, the existence of a number of competing units may stand in the way of progress; for none of them may be able to afford the heavy capital expenditure involved in modernization, and new competitors may hesitate to enter the market when they know that the existing producers will hang on by every means in their power. For example, in the Lancashire cotton industry, between the wars, many firms kept on year after year at a loss, rather than go out of business; and the preparedness of such firms to cut prices in order to keep in being made it difficult to raise the capital needed for building new, more efficient mills, or for modernizing mills already in existence. Of course, this "weak selling" by firms at the margin of efficiency benefited in the short run those who bought their goods at a low price. Nevertheless, their low price was often high in relation to the price at which the goods could have been produced with really up-to-date equipment and methods.

### LIMITATIONS OF PRIVATE ENTERPRISE

Of course, this charge could not be advanced against *all* British industries—much less against all British firms. There was, however, enough inefficiency in competitive industries, and enough restrictive monopoly in industries which had taken steps to limit competition, to invalidate the case in favour of either competitive or monopolistic private enterprise. Save in exceptional instances, neither of these forms of capitalism was either giving the consumers reasonable service or carrying on business on terms which could make possible the full employment of the manpower or the other productive resources that were available for use.

The case against capitalism, as it existed in Great Britain in 1939, before the war had made the ordinary criteria temporarily inapplicable, thus rested on two points. In the first place, British capitalism had shown its utter inability to prevent heavy unemployment from recurring in periods of economic depression; and, in the second place, it had failed, even in periods of relative prosperity, either to eliminate serious unemployment or

to keep its technical methods up-to-date, and it had sought to maintain its profits, in face of this double failure, by more and more extensive resort to restrictive trade arrangements, both at home and internationally.

The type of capitalism which operates in America, however, can claim that, despite the prevalence of large-scale monopoly in certain fields, it has developed highly advanced technical methods and procured a high standard of life for a large part of the American people, though by no means for all, even in times of boom. Economically, the Achilles heel of American capitalism is also its tendency to vast speculative excesses and to an economic instability which plunges the people from the heights of prosperity into an abyss of insecurity at a moment's notice. Therewith American capitalism, with all its relative success on the material plane, connotes extreme economic inequalities and a ruthless subjection of humanity to the processes of profit-making. Man becomes the servant of the machine: wealth is worshipped as a god. The spirit of equality is indeed paraded in political life, but is denied real existence by the brutal repressiveness of the possessors of economic authority.

It is not enough, however, to damn capitalism. If men are to be induced to abolish it in preference to an alternative system, they must be shown positively that the alternative that is offered to them is likely to work better.

## *Test Yourself*

1. Describe the most important surface features of capitalist economies.
2. What in your opinion are the reasons for the continued widespread belief in the possibilities of capitalism in the United States of America?
3. (*a*) What are (i) the most attractive, (ii) the most objectionable, features of capitalism in your opinion?

   (*b*) How far in your opinion are the advantages and disadvantages of capitalism likely to exist in other types of economic systems?

*Answers will be found at the end of the book.*

CHAPTER VI

# THE CONVENTIONAL THEORY OF CAPITALISM

IF WE can, by studying the facts of resource-utilization in the past, construct a picture of how changes occurred through the ages—if, in other words, we can arrive at a valid theory of economic development—we can then understand, not only how the economic life of various parts of the world is organized, but also how it has come to be organized as it is. Nor is this all. If we can supplement our theory of the manner in which resource-utilization works from day to day with a valid theory of economic development, we can then form an idea of the direction in which resource-utilization may be expected to develop in future; and this knowledge can serve as a guide to us when we try to improve the working of the economic system.

It is clear, then, that if we had an adequate theory of economic development, we would be in a position to say:

(1) how resource-utilization works in the various parts of the world;
(2) how it came to be what it is in those parts of the world;
(3) how it may be expected to change; and
(4) which of the different ways of organizing resource-utilization is most effective, and what are the defects of each.

These are the most important questions economists try to answer and we shall come back to them again and again in what follows.

## FACTS ARE MISSING

It is probably true to say that we have not got together even the majority of those facts about resources and their utilization which it would be necessary for us to have studied before we could have a valid theory of resource-utilization and economic development in the capitalist countries. So it is not yet possible in the present state of our knowledge to give a straightforward account of the facts of capitalism, past and present, together with an explanation of them. The conventional textbooks on economics do claim quite confidently to provide such an account of the workings of capitalism, but quite recent developments in economics have led many economists to think that the traditional accounts of how capitalism works may be fundamentally mistaken.

It is, perhaps, a telling sign of the unsettled state of economic science

that there are enormous differences of opinion among students of the subject on just what are the characteristic features of capitalism. Consequently, different experts take a different view of when, for example, "capitalist economic development" may be said to have begun. These differences of opinion are, at bottom, reflections of differences and uncertainties as to how capitalism works and has worked, so that one cannot get over the difficulty presented by the unsettled state of economics by just "describing the facts." Which facts is one to describe and where is one to start?

According to E. Heckscher, the eminent Swedish economic historian, capitalism is as old as history, that is, thousands of years old, since capital has always been used. The famous German historical school and also some American economic historians go almost as far as Heckscher in identifying capitalism with the profit motive and with commercial activity. Capitalism, on this view, exists whenever and wherever there is commerce for profit, so that nearly all periods of history could be said to have been capitalist to some degree.

Some economists, on the other hand, appear to deny that "capitalism" can be significantly distinguished at all. "This term" (capitalism), says Mr. Dobb in his *Studies in the Development of Capitalism*, "is not found in Gide . . . Marshall, Seligman or Cassel" (all authors of standard works on economics or economic history) . . . "In other treatises . . . there is some discussion of capitalism, but the concept is subsequently rejected. . . . Neither Palgrave's *Dictionary of Political Economy* nor the *Dictionnaire de l'Economie Politique* includes the term capitalism."

Professor Schumpeter, an American authority on economic development, occupies an intermediate position between these extreme views; or rather, perhaps, he seems to agree with all the views held on this matter. He says, on the one hand: "We might well wonder whether it is quite correct to look upon capitalism as a social form . . . (in its own right) . . . or in fact as anything else but the last stage of the decomposition of . . . feudalism," and so sympathizes with those who avoid using the word "capitalism." However, he goes on: "On the whole, I am inclined to believe that its peculiarities . . . make (it) a type." "Capitalist evolution," he says, "first of all destroyed . . . the arrangements of the feudal world. . . ."

## HOW OLD IS CAPITALISM?

That would make capitalism about 500 years old, say. But then, when it comes to measuring the performance of capitalism, Professor Schumpeter takes and measures only what has happened in the Western world in the last 100 years or so, and ignores the earlier 400 years of what, on his own view, was also capitalism. The standard textbooks and, I suppose, the larger part of the general public, in English-speaking countries at any rate, would

agree that capitalism should be reckoned as dating from the "Industrial Revolution" of the second half of the eighteenth century (which would make it about 200 years old). They would probably agree, too, that its performance should be measured over the last 100–150 years, by which time the "new system" had got properly under way (see p. 190). Mr. Dobb himself, regarding the matter from a Marxist point of view, finds that the opening phase of capitalism in England occurred in the latter half of the sixteenth century and the early seventeenth century, that is, about 350 years ago.

One cannot make a choice between these different starting points for describing capitalism unless one has a clear picture, a definite theory, of how capitalism grew and how it works.

Moreover, the choice and grouping of those facts which are selected for description because they are thought to be the ones that really matter—this, too, must depend on one's mental picture, one's theory, of what has happened.

If one cannot be certain of just what is the right explanation, the right theory or picture of capitalist economic development, then one cannot choose and group the facts with which to describe and explain the past and present workings of the capitalist economic system.

## A DEVELOPING PICTURE

The picture of the working of capitalism which has become traditional in English-speaking countries in the 150 years or so since the days of Adam Smith and Ricardo is today everywhere in question, and modern developments show this traditional view to have fundamental defects.

On the other hand, there has not yet been time to develop a new picture in sufficient detail to enable one to offer a clear alternative to the traditional view which is still found in our textbooks and is widely taught. In this situation, the best way to tackle the matter is, first, to set out this traditional picture of capitalist resource-utilization, together with the main factual evidence which has been held to bear it out, and then to show why this traditional view is no longer regarded as acceptable.

The new picture of capitalist economic development that is beginning to take shape in the minds of modern economists is a very different picture from the traditional view. This difference between the new economics and the old is of great general interest, even although the new views have not taken final shape, and general agreement among economists is not yet in sight. For, as we shall see, the issues involved are of very great importance.

If one looks into the major textbooks on economic theory, one does not find in them any detailed survey of the facts as regards economic resources and their organization for production and consumption, followed by a theory accounting for these facts. This is not due, in any direct way, to a

lack of a proper scientific temper among the authors of our textbooks. They know very well that economic theory must be based on economic facts.

They claim, however, that for practical purposes we can get a sufficient grasp of the main workings of resource-utilization in a private enterprise economy to answer our four basic questions on page 157 merely by considering a few general facts, which everybody can take for granted in a capitalist economy.

## THE MARKET SYSTEM

These facts are simply the existence in private enterprise economies of markets, in which both productive resources (land, labour, capital and knowledge) and commodities made by employing these resources can be freely bought and sold for money by individuals and firms.

Now the central proposition put forward in the textbooks is that, so long as these markets are allowed to function properly, the working of resource-utilization will, in general, be as effective as it can be made to be. (Economists have a technical word for such a state of affairs: they say that when markets are functioning properly, resource-utilization is optimal.)

If this textbook view that properly functioning markets lead to the best possible utilization of resources is valid, it would be a waste of time to consider facts other than those which bear on the conditions necessary for the proper functioning of markets—and this is, in fact, the attitude adopted by the authors of most of the textbooks of economics.

### THEORY OF MARKETS

What, then, is this textbook view which has been the basis of traditional economic analysis in the English-speaking world ever since its formulation by Adam Smith, 170 years ago?

In a recent book, *Income: An Introduction to Economics*, Professor Pigou has summarized it in the following terms:

> "Under the sway of competition, resources will be turned to producing different things in such a way that the last unit of resources devoted to any one thing satisfies a money demand equal to that satisfied by the last (that is, the least wanted) unit devoted to any other thing. For if this were not so, it would pay to shift units away from things that satisfy a smaller, to things that satisfy a larger, money demand. . . . Where people are equally rich . . . we may presume in a general way that a shilling means much the same for all of them. . . . It follows that, if free competition causes resources to be so allocated that the least wanted units of all of them satisfy equal money demands, they must also yield equal amounts of satisfaction. That is to say, any interference by the State with the arrangement that free competition tends to bring about would diminish

the aggregate satisfaction enjoyed by, and so the aggregate welfare of, the community as a whole."

The fact that people are not equally rich in reality, does not affect the principle of the argument, which is designed to show how the system of markets, in itself, does lead to a "best possible" (optimal) result, relatively to any given distribution of wealth and income.

How is "the sway of competition" supposed to bring this best possible result about? It does so, it is held, by ensuring that three things are achieved simultaneously by the free play of markets:

(1) All resources wanted by the community are voluntarily mobilized for production.

(2) All these resources are then employed in the various branches of production in a way which satisfies the wants of freely choosing consumers to the greatest possible extent allowed by the amount of resources which are available.

(3) All resources obtain rewards which are equal to the money valuation placed by the community upon their contribution to the welfare of the community.

All this happens without any individual or agency having to take a view of the wants of the community on the one hand, and of the resources at the disposal of society on the other hand, in order to bring about the mobilization, the proper distribution and the rewarding of resources.

### DUAL NATURE OF MARKETS

How, then, is the market system supposed to achieve all this? There are two main groups of markets in a private-enterprise economy: (*a*) the markets for the resources, or "factors of production," and (*b*) the markets for the goods which the resources are made to produce. The two groups of markets are inter-connected: what happens in one reacts in the other. This is illustrated in a diagram in the Study Guide.

The first of the achievements listed above, that all resources wanted by the community are voluntarily mobilized for production, is held to result directly from the nature of markets (places where things are exchanged).

For it is open to all owners of resources to refuse to exchange the use of the factors of production which they control against the money to be got for them in the markets for resources. Their owners can, alternatively, either use them themselves directly for their own use, without exchanging them against money, or they can leave them unused altogether. If the owner of a factor of production decides to exchange it against money in the market for resources, this shows that he finds this more attractive to him than either of the two alternatives mentioned.

But this can only mean that the terms on which he can sell the services of

his resources on the market lead to a better utilization of them, from his own point of view (that is, to a fuller satisfaction of his wants), than he could achieve without entering the market for resources. The money payment obtained in the market by the owner of resources is his means of securing this fuller satisfaction of his wants; but indirectly, since it is not money, but what money can buy that satisfies wants. On this view, the suppliers of resources on the markets for resources appear there only in order to reappear as consumers of resources on the markets for finished goods. The supply of one's own resources is, in other words, merely a roundabout demand for the use of other people's resources, and this is true of everyone entering the markets. It, therefore, works both ways: the supply of other people's resources is a roundabout demand for one's own resources.

### RELATIVE VALUE OF RESOURCES

The amount of other people's resources one's own will exchange for depends on the price one's resources will fetch in the markets for factors of production. This price is, as we shall presently see, so fixed as a result of the workings of the markets that it is equal to the value to the rest of the community of the services rendered by one's resources when turned into goods that others buy. If this value is nil, one's resources are not wanted, and one will not be able to sell in the market for resources, or to buy in the market for goods made with other people's resources. Thus, all wanted resources will be utilized for production through the markets, except those the value of which to the community is less than their direct value to their owner. This is just as it should be, since the owner of resources is himself also a member of the community, and so (1) is achieved (see p. 161).

### ENTERPRISE

In practice, all this would lead, in the circumstances of advanced private enterprise economies, to most resources being offered for sale in the markets for factors of production, because of the superior effectiveness of production on a large scale, with division of labour, compared to production on a basis of individual, or family, self-sufficiency. See also page 169.

There is, however, one important group of factors of production, that of enterprise, or, if you like, of "business resource," the owners of which appear not as the sellers, but as the buyers of other resources in the markets for factors of production.[1] These factors also act as the sellers of commodities.

However, they also buy commodities with the rewards of their contribution to production. It is, we find, the activity of this group of factors of

[1] Business ability is sometimes offered for sale as well, but we may classify the sale of this with the sale of other kinds of knowledge and labour.

production which provides the key to the characteristic features of the market economy of private enterprise, and we must see how it is held to work if we are to understand how the best possible distribution of resources among the various branches of production, and the exact rewarding of factors in proportion to contributions made [that is, (2) and (3), page 161], are supposed to be attained in a properly functioning market economy.

In traditional economics, the word "equilibrium" is used to describe a state of economic affairs which, when once reached, would be held on to by the individual or group interest concerned, because it would represent a position in which the individual or group could not better the utilization of his (its) resources, so long as conditions remained unchanged. Now, in a private-enterprise economy it is not the business of anyone to take a view of the resources of the community as a whole, and to see to their best possible utilization.

The equilibrium state of the economy considered as a whole is held to emerge only as a by-product from the attempts of owners of resources to make for themselves, and themselves alone, the most of the resources they control.

The economy as a whole must be pictured as attaining a resultant equilibrium, when the individual owners of resources have themselves all reached positions of equilibrium (that is, a utilization of their resources on which they cannot improve), in the following three spheres:

(*i*) in their capacity as buyers of commodities in the market for goods;
(*ii*) in their capacity as sellers of productive resources in the market for factors of production;
(*iii*) in their capacity as owners of business-resources, as sellers of commodities and buyers of factors of production.

### WHO RUNS CAPITALISM?

The owners of business-resources are clearly in a key position in the private-enterprise economy. It is their businesses we rely on to provide us with the goods we wish to buy with our earnings, and our earnings themselves depend on the rates of pay we can obtain from them. They are the agents of resource-utilization in capitalist economies. (We may here ignore the fact that the State is a large employer and provider of goods in most capitalist countries today.) But, according to the textbook picture of the working of the private-enterprise economy, it is not they, but the consumers, the whole mass of the population, who are really the sovereigns of the economic system. The employer may appear to dominate, but, in fact, we are told he is, by virtue of his position in the system of competitive markets, our most diligent servant.

How so? Well, consumers are free to spend their money on whatever they please (in a "normal" peace-time economy, of course), and the condi-

tion of "equilibrium" (or making the most of what he has) for every consumer is that the satisfaction derived from each of the last units of money spent on a number of commodities shall be the same. (This must be so, because if it were not, the consumer could gain more satisfaction by switching units of spending, from those lines of expenditure where he gets less satisfaction, to those where he gets more, and before he had done this his spending would not be "in equilibrium.") This is true of every consumer taken singly, and, if we follow Professor Pigou in supposing for the moment that money incomes are equally distributed, we can then take it that when every consumer in the market has so adjusted his expenditure that he cannot increase his satisfaction from it, then the aggregate satisfaction of the community is as large as it could possibly be. Consumer spending, it is held, in turn dictates and ultimately determines, through the search for equilibrium of the owners of both hired and hiring (or business) resources, both how resources are used and how they are paid.

The equilibrium of owners of resources, as sellers of resources in the markets for factors of production, requires that they should so dispose of their resources that these should yield the greatest money return, allowance being made for incidental advantages and disadvantages to the owner.

### LIMITS TO BUSINESS MAN'S FREEDOM

This is the point at which the business man's activities seem to play an important role. His aim also is to make the best possible return on the resources which he controls, and he will have succeeded (and his firm will be in equilibrium) when his profits are at a maximum. In competitive market conditions, however, no business man has any freedom, by himself, in fixing either the cost per unit of resources, which he will pay for the factors of production which he employs, or the price per unit at which he will be able to sell his product.

The price of any given type of productive resource to any particular business man (i.e. its cost to him) will be what is being paid for this type of resource by other business men in the same industry, and (if the factor of production in question is used in other industries also) by business men in other industries as well. This means that, in equilibrium, the price of each unit of *any* one kind of productive resource must be the same in all the uses in which it is employed, no matter in what industry.

But this price, under competitive conditions, must then be so fixed that it will measure the most valuable of the various contributions to consumers' welfare that can be made by each factor. It is the movement of resources into those employments in which they are of most value to society, resulting from the search of the owners of resources after a maximum return for themselves, which secures this. (For details see Chapter III, pages 83-90.)

This, then, is how the market system is supposed to achieve (2) on page 161 and also, at the same time, that part of (3) which has to do with the remuneration of hired resources. For if, in equilibrium, the owners of resources in their capacity as consumers distribute their earnings from the sale of the resources they control in such a way that their satisfactions could not be made greater, and if at the same time the organization of the resources they contribute to production is such that they cannot be made to satisfy a larger money demand than they are in fact satisfying, then the effectiveness of resource-utilization cannot be improved.

It is the action of business men in the markets for factors of production and in the markets for goods that, under the pressure of competition, produces this result.

### PROFITS AND EFFICIENT PRODUCTION

Business men, as a group, have to pay hired resources what these are worth to society, and, as a result, to use them only where they are most wanted. The same pressure of competition also ensures, it is held, that business men use the best methods of production that are available.

For business men cannot, under competitive conditions, increase their profits, either by lowering the unit cost of productive resources to themselves or by raising the selling prices of the goods they make. This means that the search for higher profits, which is the concern of the business man, must be concentrated on a continuous search for more efficient and economical methods of utilization of resources than those which are already generally employed in the industry.

The argument runs that if a business man succeeds, by his own invention, or by making use of a new advance in science, in lowering his costs of production per unit of output (without, of course, lowering the payments he must make for the resources he uses), he can make largest profits under competitive conditions by passing on the benefits of the improvement to the public in the shape of the lower prices he can now charge for his products.

### THE PRICE-COST SYSTEM

This, however, leads to a transfer of custom to his firm from competing firms and, after a short time, the pressure of competition will force other, less successful, business men to adopt the same methods of production, so far as they can.

In this way the general level of industrial efficiency is maintained at the highest practicable pitch by competition. On the other hand, there will at any moment of time usually be some known methods of producing particular commodities which are more effective technically than those that it pays to use. But technical effectiveness is not the same as good resource-

utilization. Although a lorry powered by a racing-car engine might lead to quicker milk deliveries than a horse-drawn van, it is usually better to use the horse-drawn van, because the extra cost of the engine is more than the extra gain from quick deliveries. It is the price-cost system, and that alone, it is said, that can guide us as to what technical possibilities can be utilized in production with advantage.

Competition secures that business men must reward the productive resources to the full extent which the value of the contribution to production of those resources represents in the judgment of consumers. It also secures that profits, the reward of the business men themselves, are also no more than the value to consumers of the business men's own contribution to production.

The business man's earnings—his profits—are the difference between the price he charges for each unit of the goods he sells and his costs for each unit (his costs being the payments he must make to the owners of the productive resources he employs), multiplied by the number of units of the commodity which he is able to dispose of in the markets.

### HOW IS PROFIT FIXED?

The question is: how is this difference between the cost of hired resources and the price of the finished product fixed? Under competitive conditions the business man has only a limited power of influencing it, because, on the one hand, the amounts he must pay for the hired resources are, as we have seen, fixed for him by competition in the markets for resources, and because, on the other hand, competition in the market for finished goods means that no seller can charge more than anyone else does for a commodity without losing all his customers.

In a competitive situation any one firm's output is a very small part of the whole of the output of that particular commodity; in other words, of the output of the "industry" of which it is a part. And it is for this reason that the business man can be pictured to have at his disposal any amount of hired factors he wants at the prices for resources fixed by the market, and to sell any amount of his output at the market price for his goods.

It follows directly from this situation that no business man can make his profit any larger than what his contribution to the value of output is, in real terms. For the first condition of any individual business man's making any profits is that he should be able to effect sales at all, and under competitive conditions he will not in fact be able to make sales unless his activities are indispensable for increasing the production of the whole industry of which he is part, up to a point which is necessary if consumers' wants are to be satisfied in an economical way.

We are commonly so impressed nowadays with, on the one hand, arguments against private enterprise and attacks on "spivs," and, on the other

hand, with the spectacle of the growth of large-scale enterprise organized in monopolies, cartels and nationalized industries, that we can hardly imagine conditions in which it would be necessary to increase the number of business men in an industry in order to increase its production. But the traditional argument of economists is concerned with a world in which markets are, for the most part at least, "working properly," that is, in a competitive fashion.[1] In such a world, business men's activity benefits output in the following way: The business man's job is a highly skilled one, which would have to be performed in some way or other in any conceivable system of economic organization; he has to co-ordinate productive resources, and see that they are applied in the right direction and amounts to correspond with every change in the pattern of consumers' wants and with each new advance in methods of production made available by science. Those who perform work of this sort must obviously be remunerated. Moreover, in the private-enterprise system, this work is performed by individual owners of wealth (or by their paid nominees) without the certainty of any return whatsoever, and at the risk of the total loss of their resources, if they are worsted in the struggles and hazards of competitive business. For this reason, profits, taken together over the whole field of business, must be high enough to make the shouldering of such risks appear worth while, as well as to provide remuneration for the actual work involved in being in business. But, next comes the question, what will these profits be?

## LIMITS TO EXPANSION

As the size of a business grows there comes a point after which the difficulties of co-ordinating productive resources and the financial risks borne by the owners tend to grow. This fact sets the limit to the size of firms in a competitive industry and at the same time determines the profits earned. Because of the increasing difficulty of co-ordinating the hired factors employed by any firm in a competitive industry, the additional cost to the firm of producing additional units of output beyond a certain point also grows, although the cost of the hired factors remains constant.

Since, in order to make his profits as large as possible, every business man in any industry will push the output of his firm right up to the point at which the value of an additional unit of output produced is no longer as large as the value of what the additional resources he could employ are able to produce

[1] This concentration on the case of competitive markets is normally defended against the attacks of those who argue that this is not true to the facts of widespread monopoly and imperfect competition by saying (1) that the importance of competitive conditions in the world's markets is, as a matter of fact, greater than that of non-competitive conditions, and (2) that most existing monopolies are the artificial creations of the State, of the law and of the operation of sinister pressure groups, all of which should be restrained so that competitive conditions can be restored.

in other people's employment—for their cost to the business man, as we have seen, measures this—it follows that no business man in any industry can ever get hold of any resources and make a profit, unless he is able to make better use of them than would others in the industry.

In competitive conditions, the profits of any business are, therefore, an exact measure of the value put by consumers on the business man's activity.

Since, under competitive conditions, entry into the ranks of business men is free to all, this means that the general level of profits will be as low as it is possible for it to be, given the amount of business capacity available. Indeed, it is often argued that, on the average, profits are negative, because many men of business ability work in the hope of gain which never materializes, so that much of their work is, in effect, given freely to society. Also, business men, in search of the highest rewards they can get, will distribute themselves among the various industries in such a way as to make the profits of any given type of business ability the same in every industry; thus business ability itself (like all other resources) will be distributed among various branches of production in a way which secures the greatest advantage to society, and thus achievement (2) on page 161 is completely attained.

Also, in this way, achievement (3) in the list set out on page 161 is attained by the market system, when it is working "properly," in respect of hiring (or employing) as of hired (or employed) resources.

### CONSUMER DICTATORSHIP

The price of any and every commodity is thus made up of the costs of obtaining the services of the various productive resources (including enterprise) necessary for making exactly that amount of each commodity which the community desires to buy. And these costs are themselves nothing but a reflection of the desire of consumers for the services of these resources in alternative uses, expressed through the market in money terms. Thus, as has been said already, it is the community of consumers which is held to be the real sovereign, the real dictator of what happens in the market economy of private enterprise. The various elements in the prices of goods—the wages of labour, the rent of land, interest on wealth, profit of enterprise—are all what they are because, in a given state of supply of resources, the preferences of consumers are what they are. And these preferences are also reflected in the difference between the price of one commodity as compared with that of another, that is, in the fact that pianos cost more than chairs, aeroplanes more than bicycles, gramophones more than loaves of bread.

Another, most important, virtue of the market system, so conceived, is that its three achievements which we have distinguished tend to be continuously maintained in the face of changing world circumstances. Changes in the tastes and preferences of consumers as well as changes in available

resources of land, labour, capital or knowledge are all instantly expressed in changes in the prices of goods and of resources, that is, in rents, wages, interest and profits; and this in turn leads to a rearrangement of production, always in accordance, ultimately, with the wishes of consumers as expressed by their demands in the markets for goods.

### STIMULUS TO DIVISION OF LABOUR

Finally, we must take more express account than we have so far done of yet another important by-product of the market system, which is much applauded by the traditional economists. This is the gain in the productive effectiveness of resources resulting from the division of labour fostered by the market system. An individual will, as stated (see pages 161-162), use his resources for satisfying his wants through the markets rather than by way of direct production for his own use, whenever the money value put by the market on those resources is larger than that of his product when producing directly for his own use. Production with exchange through the markets increases the output of a given mass of original productive resources in two main ways, compared with a situation in which no markets exist. In the first place they produce such services as they are relatively best fitted by nature to produce; this enables special skills to be used as fully as the extent of social needs (as expressed in the markets) allows. If there were no markets for concert-pianists, Solomon would have to grow his own food and we all of us would have to make our own music. In the second place, apart from natural differences in ability to produce different things, specialization and exchange would still make output bigger by increasing skills acquired through practice by concentration on a narrower range of tasks. Both these ways of increasing output are given the greatest possible scope, it is claimed, by the working of the market system, in which the use of money enables owners of resources to concentrate on providing services for other people on a whole-time basis. These owners may themselves have no use whatsoever for what it pays them best to produce, and the buyers of their services may provide none of the things which are wanted by these owners. The market, it is held, enables a complete, co-operative pooling of resources to occur on a basis of maximum socially profitable specialization. These advantages of specialized production will clearly have larger scope the larger the amount of resources pooled in this way, or, in other words, the larger the extent of the market.

### LIMITS TO A FREE MARKET

The extent of the market is a very important fact in the whole picture of things as the traditional economist sees it. For it is this that sets the limits within which the advantages of the market-system can be achieved. So far, for the sake of simplicity, we have assumed that we need consider only one

market, in which productive resources are pooled, and in which they get distributed among the various branches of industry. But now we must recognize the fact that there are all sorts of obstacles to the movement and wide use of productive resources and also to the movement and influence exerted by consumers. This, in fact, results in there being not one, but very many markets for resources and goods throughout the world, and indeed, even within a single country or area. The effect of these obstacles to movement is to dam up the area of operation of the price-mechanism into a large number of separate geographical or other divisions. The market-system is thus broken up into a very large number of separate markets.

The extent of a market can be defined, therefore, as the largest area within which no unjustifiable inequality in the price of any particular commodity or factor of production can continue for any length of time. As we have seen (see pages 164-165), it will always be in the interest of both buyers and sellers of factors to move resources or themselves from where these are cheap to where they are dear, and the same is true of buyers and sellers of finished commodities. Consequently, if we see that resources or commodities of the same sort have different prices in different places, we know that the market is limited by difficulties of movement, as between these places.

This can be illustrated by an example from actual conditions which is of very great practical importance. The following table, compiled by Professor J. H. Richardson, shows differences in the hourly earnings of workers in a selected group of skilled occupations in January, 1930, as between different countries:

COMPARATIVE HOURLY EARNINGS

| | *Wages (cents per hour) January, 1930* | | *Wages (cents per hour) January, 1930* |
|---|---|---|---|
| U.S.A. | 89 | Czechoslovakia | 22 |
| Canada | 70 | France | 19 |
| Australia | 59 | Austria | 18 |
| Denmark | 42 | Poland | 18 |
| Sweden | 41 | Italy | 17 |
| Great Britain | 36 | Spain | 17 |
| Irish Free State | 36 | Yugoslavia | 13 |
| Germany | 30 | Estonia | 11 |
| Switzerland | 30 | Portugal | 11 |
| Holland | 29 | | |

It is obvious that, if the market for skilled labour were not broken up by obstacles to movement, the state of affairs reflected by these figures

could not last for any length of time. For there is no reason to suppose that there is any marked difference in the ability of the skilled workers whose wages are shown here, at all comparable to the differences in their wages. The workers of the U.S.A., Canada and Australia, who earn the highest wages, are indeed themselves mostly emigrants from, and descendants of emigrants from, the very same European countries in which wages are so much lower. Therefore, if there were not obstacles to movement breaking up the labour-market, the self-interest of workers would lead them to move to the U.S.A., Canada, etc.—so long as wages there remained higher than in their own countries. This movement would also be encouraged by the employers in the high-wage countries, because their interest is to buy productive resources at the cheapest possible rates. They would, therefore, want to tempt the low-paid craftsmen away from their own countries by offering them higher wages than they were getting there. And this would go on as long as there remained any difference at all between the wages of craftsmen of the same ability in different countries.

## OBSTACLES TO MOVEMENT OF RESOURCES

What are the obstacles to movement which prevent the equalization of wages of craftsmen of equal ability in different parts of the world? It is customary to divide these obstacles into two groups: (1) "natural" economic obstacles and (2) "artificial" economic obstacles. "Natural" economic obstacles are those bars to movement which cannot be avoided at a particular time, while "artificial" obstacles are those which are the result of regulations and arrangements which, being man-made, could also be undone.

### *Cost of Moving*

The most typical "natural" economic obstacles to the movement of workers are transport costs. The existence of these means that the money gain to be had from moving to higher-wage areas is balanced by a money loss due to the cost of moving there. This obstacle is, of course, the more serious the higher the cost of transport, and even if, over a period of time, the difference in wages would repay the once-and-for-all cost of moving, the cost will be prohibitive if the worker wishing to move has not enough savings or credit to draw on. There may also be other financial losses which hamper movement, such as losses in connexion with moving house, or in connexion with changing one's membership of clubs, and so on.

### *Reluctance to Face Unknown Conditions*

In addition to such obstacles as can be expressed in terms of £. s. d., there are other obstacles of economic importance, which are of a more intangible sort, but which are very definite nevertheless. Examples are the reluctance to break with friends and family or to leave familiar surroundings, and the

difficulty of fitting oneself into a new environment, where customs and perhaps the language spoken may be entirely unfamiliar. And, of course, there is a very obvious obstacle to movement in unemployment. When there is unemployment all over the world there is very little incentive to move to a high-wage area from a low-wage area, because of the strong fear that, on arrival, one may find oneself unemployed. However, unemployment is itself regarded as an artificial thing in the traditional view of economics. This important cause of immobility must, therefore, be left for later discussion.

Transport (and insurance) costs are also the most important "natural" obstacles to the movement of finished goods. There are corresponding "natural" economic obstacles which hamper the mobility of capital and knowledge. There are, for example, differences in the price of capital, i.e., in the rate of interest, in different parts of the world (see table below),

INTEREST RATES
IN VARIOUS PARTS OF THE WORLD IN 1938
*According to the United Nations Monthly Bulletin of Statistics, May, 1947*

| | *Three-month loans (Treasury Bills) per cent per annum* | | *Three-month loans (Treasury Bills) per cent per annum* |
|---|---|---|---|
| U.S.A. .. .. .. | 0·05 | India .. .. .. | 1·33 |
| Canada .. .. | 0·59 | Australia .. .. | 1·75 |
| U.K. .. .. .. | 0·61 | Argentina .. .. | 2·39 |
| South Africa .. .. | 0·75 | | |

and also in the premium that knowledge and enterprise can command in different places. For example, while the ratio of the value of unskilled to skilled wages was about $\frac{7}{10}$ to $\frac{8}{10}$ in countries with a highly developed educational system before the Second World War, in Japan and China skilled workers earned 2 to 3 times the unskilled wage. Land is, by its nature, a completely immobile factor of production, and the rent of land must be expected to be different in different places.

### ARTIFICIAL OBSTACLES THE MAIN EVIL

"Artificial" obstacles to mobility have a most important place in the traditional economists' picture of the development and working of the capitalist economic system. In their eyes artificial obstacles to the mobility of persons, of movable resources and of goods, are in general to blame for most of the avoidable poverty of the world and for all of the political conflict and war that can truly be put down to economic causes. What is the origin of these artificial obstacles to mobility, which traditional economists regard as being so wasteful and pernicious in their effects? The answer is: selfish sectional interest, folly and shortsightedness of one kind or another. This

traditional, liberal, Western view of the science of economics has been, and is still, that the most important practical task of economists is to use their knowledge and influence to eliminate the unnecessary poverty and armed conflict which are caused by such artificial obstacles.

### OBSTACLES AND LIVING STANDARDS

How, on this view, does sinister sectional interest and ignorance lead to artificial obstacles to movement, and why do these obstacles spell poverty and war? Let us first consider the "artificial" obstacles to the movement of labour. Facts show that the larger, generally, the amount of land, capital and knowledge in relation to population in any area of the world[1], the larger tends to be the productivity of labour there, and also its reward in terms of real income. In other words, the smaller the supply of labour relatively to other factors of production, the higher the standard of life.

Tables on pages 174 and 175 show the relation between the amount of arable land per head and of capital per head on the one hand, and productivity (in agriculture) and average living standards on the other hand. I know of no satisfactory indications of the amount of knowledge per head, but it seems clear that this tends to be highest in the countries with high figures of capital and land per head. Where a large amount of land per head is associated with small productivity[2] this is due to a scarcity of knowledge and capital, and where on a relatively small amount of land high standards are nevertheless attained, this is due to an abundance of knowledge and capital[3]. Generally, however, the countries with most land per head have also most capital per head and most knowledge per head, and this accounts for the higher general standards of living in them and the high real wages of their workers compared with those at the bottom of the scale. (We may quite accurately speak of "have" and "have-not" countries in this sense. There is also evidence to show that the relative share of labour in national incomes is higher in "have" than in "have-not" countries.)

This is, after all, only what one would expect. The more assistance labour gets from other factors of production, natural or man-made, the higher its productivity is likely to be, and the other way round: the larger the number of people working with the assistance of a given amount of other resources, the smaller, after a point, the average productivity of each person will tend to be. In the technical language of economics, this generalization is called the "law of diminishing returns." It is applicable to relative variations of the amount of any factor of production, not only labour. This reverse

[1] It is customary to divide all resources into the four large groups of land, labour, capital and knowledge, and this is sufficient for our present purpose, but much finer divisions are possible and necessary for some purposes.

[2] These cases are printed in italics in the table on page 175.

[3] These cases are printed in bold type in the table on page 175.

side of the medal can be illustrated by some interesting estimates made by Professor Griffith Taylor. This economic geographer has estimated the size of the populations which certain rich, sparsely populated areas could, so far as the supply of land is concerned, support at a standard of living equal to the average of that of Europe. Figures illustrating this will be found in the table on page 176.

We see that, in all the sparsely populated "have" countries (with the possible exception of Siberia) the increase in population, i.e. in the supply of labour, would eventually lead[1] to a fall in the average standard of life, at any rate after a point, because of diminishing returns from the land.[2]

CAPITAL (excluding Land and National Debts) PER HEAD OF WORKING POPULATION AND LIVING STANDARDS (1913)
(In terms of International Units)[3]

| *Country* | *Capital Head* | *Real Income/Head of Working Population per 48-hour week* |
|---|---|---|
| U.S.A. .. .. .. .. | 5160 | 1191 |
| Argentina .. .. .. | 4680 | (800) estimated |
| Canada .. .. .. | 4590 | 1061 |
| Australia .. .. .. | 4100 | 742 |
| Britain .. .. .. .. | 3590 | 966 |
| Germany .. .. .. | 3130 | 704 |
| France .. .. .. .. | 3060 | 629 |
| Sweden .. .. .. | 2680 | 474 |
| Belgium .. .. .. | 2190 | 470 |
| Austria .. .. .. | 1580 | 452 |
| Spain .. .. .. .. | 1435 | 408 |
| Italy .. .. .. .. | 1430 | 328 |
| Hungary .. .. .. | 1110 | 220 |
| Japan .. .. .. .. | 460 | 128 |

Source: Colin Clark, *The Conditions of Economic Progress*, p. 389.

At the same time it is also quite clear that, if migration to the "have" countries were free, very large numbers of people would move there from the congested parts of the world in order to improve their lot. Here, clearly, there is a source of potential conflict which is of the first importance. If large-scale immigration into the "have" countries is permitted, there is a tendency for the average standard of life in these countries to fall (see table

[1] At a fixed level of technical knowledge.
[2] Although Professor Griffith Taylor estimates that the 1935 population of 11 million in Canada, for example, could grow to 50 million without diminishing returns setting in.
[3] "International units" are defined as the amount of goods and services which one dollar would purchase in the U.S.A. over the average of the period 1925-34.

on page 176). If immigration is not allowed excluded populations are bound to resent this. But there is not only conflict, there is also waste, from a world point of view, since world output would be higher if migration resulted in the application of more labour to resources at points where it is more productive and less at points where it is less productive. The danger of conflict as well as the waste resulting from artificial restrictions on mobility will be larger, the larger the disparity of conditions as between "have" and "have-not" countries, and the greater the potential movement that is

LAND PER HEAD OF POPULATION AND LIVING STANDARDS

| *Country* | *Males occupied in Agriculture per* 1,000 *hectares arable and pasture land* | *Total population density per sq. kilometre of arable land*[3] (1938) | *Agricultural productivity per head* (*I.U.*) | *National Real Income per Head* (*I.U.*) |
|---|---|---|---|---|
| Australia[2] .. | 7 | 57 | 1524 | 980 |
| Argentina .. | 7 | 53 | 1233 | 1000 |
| New Zealand .. | 20 | | 2444 | 1202 |
| Uruguay[2] .. | 23 | | 1000 | 600–700 |
| U.S.A.[2] .. | 25 | 92 | 661 | 1381 |
| Canada[2] .. | 35 | 45 | 618 | 1337 |
| U.S.S.R. .. | 64 | | *88* | 320 |
| Great Britain .. | 70 | 195 (U.K.) | 475 | 1069 |
| Estonia .. | 79 | | *268* | 341 |
| France .. | 134 | 203 | 415 | 684 |
| Denmark .. | 146 | 139 | **642** | 680 |
| Germany .. | 162 | 345 | 490 | 646 |
| Switzerland .. | 166 | | 433 | 1018 |
| Czechoslovakia | 205 | | 287 | 455 |
| Poland .. | 206 | 190 | 195 | 352 |
| Holland .. | 235 | 884 | **579** | 855 |
| Belgium .. | 388 | 817 | **394** | 600 |
| Japan .. .. | 868 | 1205 | 120 | 300–400 |
| China .. .. | | | 46 | under 200 |

Source: C. Clark, *Conditions of Economic Progress*, p. 246, p. 178, pp. 40 and 54.

[1] It is Professor Benham's view that even such now very sparsely populated countries as Canada and Australia might have higher standards of living if their populations were smaller. (See *Economics*, 1945 ed., p. 338.)

[2] Area of pasture not recorded because not exactly defined. Assumed to be five times the area of arable land (the ratio found in Argentina and New Zealand) in Australia, Canada and Uruguay. In U.S.A. crops and pasture are assumed to cover one-half of the total area of the country.

[3] The figures of this column are quoted by Dr. E. M. Patterson, *Introduction to World Economics*, p. 139. Arable population density is defined as population/cultivated area plus fallow land.

frustrated by the restrictions. We may get some idea of the size of this problem, by comparing the table on this page with the table on page 177. This shows what large numbers of people are at present living at very low standards of income. For the most part, the poorest parts of the world are also the most congested. Moreover, the pressure to move set up by this disparity in conditions is increasing all the time because of the falling tendency of the birthrate in the "have" countries, and the falling tendency of the deathrate in the "have not" countries.

"POSSIBLE" POPULATIONS AT EUROPEAN AVERAGE 1925–34 STANDARD OF LIVING (= 350 I.U. Approx.) COMPARED WITH ACTUAL POPULATIONS

| *Country* | *"Possible" population at European average standard*[1] *(millions)* | *Actual population (millions)* | *Actual standard of life (I.U.)* |
|---|---|---|---|
| Europe .. .. | 500 | 500 | 400 |
| Canada.. .. | 100 | 11 | 1337 |
| U.S.A. .. .. | 500 | 128 | 1381 |
| Argentina .. | 100 | 12·5 | 1000 app. |
| Australia .. | 60 | 7 | 980 |
| Siberia .. .. | 200 | 12 | ? |
| South Africa .. | 80 | 2·0 (Whites only)[2] | over 1000 |
| Total .. | 1540 | 672·5 | |
| World population around 1930 | —— | 2,095 | —— |

Similar wastes and conflicts arise within a country when members of a craft-union or a profession artificially limit the number of entrants to their ranks, in order to enhance or maintain the average remuneration earned by members of the group over the level that it would reach in the absence of restriction. This can be, and is, done in a number of ways: by apprenticeship regulations, demarcation agreements, professional registration fees, and so on. Such restrictions also lead to waste, it is said, since they artificially force

[1] The figures are from the quotation of Griffith Taylor's results in E. M. Patterson, *Introduction To World Economics*, p. 44, and C. Clark, pp. 55 and 41.

The calculations clearly must assume the state of knowledge in general and of agricultural technique in particular to be fixed. It is probably assumed also that the imaginary immigrants would be as well-equipped as the native populations of the "have" countries.

[2] The total population of South Africa is 9·5 millions and if the native population were taken into account in this table the standard of life figure for South Africa would fall to 276.

the excluded people to work at jobs which are of less value to consumers than the ones they would be capable of undertaking. Here, as in the case of restrictions on migration, selfish sectional interests are allowed to damage

WORLD POPULATIONS AND INCOMES

| *Income/Head of occupied population (I.U.)* | *Actual populations (millions)*[1] | *Griffith Taylor's populations (see p. 176)* |
|---|---|---|
| over 1250 | 139 | |
| 1000–1250 | 65 | |
| 700–1000 | 18 | |
| 600–700 | 130 | |
| 500–600 | 39 | |
| 400–500 | 72 | |
| (350–400)[2] | (225)[2] | |
| Total: over 350 | 688 | 1540 |
| (300–350)[2] | (226)[2] | |
| 200–300 | 68 | |
| under 200 | 1113 | |
| Total: under 350 | 1407 | 555 |
| Grand Total | 2095 | 2095 |

the general interest of society, but whereas in the case of restrictions on migration the authority imposing restrictions is the State and the conflicts and resentments which result may run on national lines and lead to war, craft and professional restrictions will not have quite so calamitous consequences.

Liberal economists argue against all artificial restrictions, but the folly and danger of trade restrictions has traditionally been the main target of their criticisms.

To the traditional economist, all international trade under private enterprise conditions is necessarily a sign, not only of its profitability to the individual traders immediately concerned in it in the different countries, but also of it being to the mutual benefit of the countries themselves. If this is true, it follows that artificial obstacles to trade, like tariffs, quotas, exchange controls, etc., are wasteful, and true economy requires Free Trade.

The traditional theory of trade, and the case for Free Trade, which is

[1] From C. Clark: *The Conditions of Economic Progress*, p. 57.
[2] The figure of 451 million people in the 300–400 I.U. income range (as given by Mr. Clark) has been divided here.

built on it, rests on two main pillars. Firstly, on the general theory of optimal resource-utilization in a properly working market system (pages 161–169), and, secondly, on a theory of money which allows those economists who hold it to regard international trade in modern conditions as being analogous, for purposes of analysis, to barter, or other forms of exchange between individuals.

What is said is this: just as there is really no need for anyone to take a general view of the mobilization, utilization and rewarding of resources in the productive process in a competitive market economy, since this will—as if directed by the "invisible hand" of which Adam Smith spoke—of itself work out in a way on which even an all-knowing, all-powerful and benevolent providing authority (if such existed) could not improve, so in the field of trade and other exchange relations between different national economies, the same is true: freedom for market-forces leads to the same result in the trade of a country as would follow from the purposeful actions of an enlightened, all-powerful and superlatively efficient authority taking a view of how a country can enrich itself by means of suitable exchanges.

Now, if it were true that unrestricted trade works out in a way that is analogous to barter, it would then certainly be true *(i)* that all trade must necessarily be in the mutual interests of the nations taking part in it; (*ii*) that all artificial obstacles to trade must lead to unnecessary impoverishment and (*iii*) that all concern with what is called the "balance of payments" (i.e. with the payments arising out of trade and other dealings with foreign countries) is both unnecessary and foolish.

### CONDITIONS IN WHICH TRADE ARISES

All this is easily seen to be true in the case of actual barter. In regard to (*i*), in barter conditions trade arises as a consciously planned act on the part of a person taking a view of the relative advantage to himself of satisfying his various wants, either by his working directly for himself (or using his resources for the direct satisfaction of his own wants), or by the alternative course of getting others to supply him in exchange for his own services to them.

Since this must hold true for both parties to all trade under barter, it follows directly from the nature of trade under such conditions that all trade that does take place is a sign that mutually satisfactory beneficial exchanges are going on. The conditions in which trade will then occur are stated in the so-called "law of comparative costs." Trade cannot arise except when "comparative costs," that is, the relative costs of different goods, to the producer, differ for the trading parties, and when "comparative costs" do differ, trade is for that reason mutually advantageous for the parties to the exchange. All exchange and division of labour is based on this important

principle, according to the traditional view, and just as one of the main ways in which the market-system is held to lead to good resource-utilization is by the encouragement it gives to exchanges and the division of labour, so in the field of international exchanges all growth of trade is welcomed as a sign of the growth of international division of labour.

We shall look at (*ii*) presently, but as regards (*iii*) it is clear that if the comparison with barter were strictly applicable, then the balance of payments with foreign countries could never give any trouble, and all interference with trade (which we have seen is always regarded as beneficial), on this account, must be foolish. In barter conditions[1] the decision to get goods from someone means that a decision has been made that goods of equivalent value can be given in exchange to mutual advantage. There could in these conditions be no problem for a country of balancing its payments, on account of trade, since the total value of exports planned by any country would naturally not be more, and could certainly not be less, than the total value of imports it was desired to obtain.

### INTERNATIONAL LENDING AND BORROWING

On the other hand, if two countries agreed upon arranging a loan between themselves on a barter basis, the very decision to lend would be the decision to arrange for an export-surplus at present in exchange for interest in the shape of a larger import-surplus in the future; and conversely, the decision to borrow would be nothing but a decision to utilize an import-surplus at present in such a way as to make it yield more than the interest that will be payable in future in the form of an export-surplus. Note that it follows from this that, just as all balanced trade is a symptom of mutually beneficial exchanges on barter assumptions, so all unbalanced trade is then also necessarily a sign of mutually beneficial international borrowing and lending, and of the interest payments arising out of them. For no export-surplus could arise on this basis, unless it was judged by the lending country that the investment abroad of the amount of resources corresponding to the surplus of exports could not be made to yield so high a real return if employed at home as the yield to be expected from abroad. And, of course, unless the obverse of this was the opinion of the borrowing country also, the loan would not be arranged.

It is apparent then, that, whether trade is balanced or not, under barter conditions there can be no ground for worry about the balance of payments and no justification, therefore, for restricting trade on account of this balance, in order to make it "more favourable" or "less unfavourable." These expressions have in fact no meaning under barter conditions.

[1] Such as would exist in the foreign transactions of socialist countries, or in the dealings of individual producers exchanging goods for goods among themselves.

Now the traditional economists were not, of course, forgetful of the fact that in all modern commerce, both domestic and foreign, goods are sold for money, not for other goods, and that, in the words of Ricardo, the father of the traditional theory of trade (who lived more than 150 years ago, but whose views are held to this day), "every transaction in commerce is an independent transaction," there being no direct balancing of payments for goods imported (or exported) by means of goods exported (or imported). All purchases and sales are made, in the first instance, against money payments, by innumerable private individuals engaged in foreign trade, and in lending and borrowing, without any reference being made by any of them to what other traders do, or to the total balance of payments of their countries.

The traditional economists realized, therefore, that in point of fact in a private-enterprise economy a monetary mechanism is required to keep exports equal to imports and, in the case when lending and borrowing transactions are occurring, to equate the balance of trade with the balance of lending, in terms of money, Nevertheless, they still believed that, to quote Ricardo once more: "A trade of barter . . . (is what) all commerce, both foreign and domestic, really is."

### TRADITIONAL THEORY OF MONEY

The key to this attitude lies in the traditional theory of money. On this theory, the quantity of money in any country was held to act directly on the level of prices and wages. An inflow of the precious metals used as international money to balance any possible gap in international receipts and payments was held to cause rises in prices and wages in the receiving country, and a corresponding fall in prices and wages in the country in which its outflow originates, owing to a deficiency in payments over receipts. Thus an automatic mechanism for restoring the balance of payments was held to exist, for the movement of precious metals would go on until lower prices sufficiently stimulated the exports of countries with deficits in their balance of payments and/or at the same time higher prices sufficiently checked the exports of countries with surpluses in their balance of payments.[1]

Since the precious metals may be regarded as a commodity whose price is fixed in all countries employing the same currency standard, it can be shown, on this theory of the mechanism of the exchanges, that the course of trade is not significantly different under unco-ordinated private enterprise and under barter conditions. For there is either a balance in the balance of

[1] This mechanism of the exchanges was held to be equally suitable for correcting gaps in the balance of payments whatever the many possible causes of their origin in a private-enterprise economy—a shift in taste from home goods to foreign goods, for example, or from home securities to foreign securities, or a relative fall in costs abroad due to greater technical progress there, or any other cause.

payments, or not. If there is not, then that is a sign that the general price-level of commodities is out of line in different countries. Gold or other precious metals will then be exported from the country in which its comparative cost is low (i.e. from where there is relatively too much of it in relation to goods, and prices are consequently relatively high) until, by a process of reorganization of production, the balance of payments is made to balance once more, and the movement of gold ceases. When this has happened, wages and prices in each country will be such that the absolute prices of those commodities the production of which is carried on under greatest comparative advantage will appear cheapest to customers abroad. The commodities exchanged under conditions of unco-ordinated private enterprise will then be the same as those which would have been bartered if trade had been conducted on that basis, in accordance with the law of comparative costs (and not on the basis of absolute competitive prices as in fact happens)—and the balance of payments will balance.

### THE BALANCE OF PAYMENTS FOLLY

On this view of the mechanism of the exchanges, unrestricted international trade is always, therefore, carried on in accordance with comparative costs, just as if someone was taking a view, as under barter conditions, of the relative advantage of the use of national resources for trade as against the direct employment of these resources in home production for satisfying home consumption.

If this theory were valid, it would follow from it (and here we can deal with point (*ii*) from page 178) that the unbroken record, in history, of continuous government interference with trade, and the anxious attention paid in most countries and at most times, by economists, statesmen, and journalists, to the state of the balance of payments, is evidence either of folly amounting to an extraordinary perversity in otherwise far-sighted men of public spirit or, simply, of the workings of pressure groups striving for sectional gains against the public interest. (This is how economists of the traditional sort do in fact regard all "protectionists" and "mercantilists"—people who advocate tariffs and control of production and trade policy with a view to securing a balance of payments showing a surplus.)

For tariffs keep out imports of certain kinds by artificially raising the cost of transport, as it were, to the tariff-imposing country of the goods affected by the tariff. From the point of view of the tariff-imposing country as a whole this must, on the traditional view, lead to wasteful, irrational shifting of production, since it will result in an artificially produced alteration of the comparative costs of production. The volume of trade diminishes, the efficiency of production falls throughout the world, the international division of labour is less than it might be and all the countries concerned suffer from

the diminution in the scope of mutually beneficial exchanges on the basis of comparative costs.

Similarly, on this view, since, as the philosopher Hume had said almost 200 years ago, "the greater or less plenty of money is of no consequence, since the prices of commodities are always proportioned to the plenty of money," the mercantilists' preoccupation with the balance of payments is equally irrational and harmful. Money is merely the shadow of wealth, and not its substance.

It is not ignorance alone, however, that is held responsible for trade restrictions, although ignorance is thought to be a necessary condition of society tolerating the wastes and, as we shall see, the conflicts, that may flow from them. The pressure in favour of tariff legislation generally comes from selfish sectional interests which stand to lose from the readjustments that would be forced on business men and workers alike in branches of industry which, if they were to be exposed to foreign competition, would find themselves unable to compete in the open market.

### SECTIONAL INTERESTS

The very fact that an industry is unable to compete with cheaper products from abroad shows, on this view, that the resources employed in it would be better employed in other branches of industry. For inability to compete means that costs are higher than competitive prices in an industry; and that, from a social point of view, it would be desirable that resources should be transferred from the unprofitable industry to other ones. Now, in the long run, most labour, capital and knowledge are mobile (in the sense that they can be turned to alternative uses), but much land is not. And in the short run, labour, capital and skill specialized in certain branches of industry will possibly stand to lose a great deal by the necessity of moving to other industries. The representatives of the threatened interests will, therefore, generally try to obtain legislation in their own favour (and, on the traditional view, against the interest of the community). This, by diminishing or excluding foreign competition, will enable the threatened home industry to carry on making profits. They may well succeed in this, if the general public is not enlightened and vigorous enough to defend the general free trade interest of the country against the protectionist interest of particular groups.

It is the stock complaint of the textbooks that, on the one hand, the public is not generally enlightened in economic matters, and, on the other hand, the enlightened sections of it are unable to mobilize the widely dispersed consumer interests, which stand to lose by protectionist legislation, against the misleading propaganda about "foreigners stealing our markets" (coupled with concentrated pressure on politicians) of the well-organized branches of the threatened industries. This kind of restrictionism, although it hurts the

country practising it as well as the foreign country whose products are excluded, can itself lead to international conflict, quite apart from the question of the waste it may involve. For example, as Dr. A. Lewis has recently pointed out (*Economic Problems of the Present Day*, p. 72), "the reason the Americans gave for making war on Japan in 1854 was that the Japanese were refusing to trade."

### THE WAY TO WAR

But, it has been argued (notably by Lionel Robbins), there is a more indirect way in which restrictionism is very likely to lead to war among nations. While trade restrictions can never, it is said, benefit a country which imposes them on itself, they can benefit a country which imposes them on others, in its own favour. A stronger country which is able to force a weaker country to restrict its trade with others, but not with the coercing country, could get goods from the weak country more cheaply—and perhaps sell its own goods to it at a higher price—than it otherwise could. This "improvement in the terms of trade," as economists call it, may make this restrictive policy quite profitable to the country enforcing it and may, therefore, tempt it to extend its frontiers so as to annex the weaker area. It should be noted how such a policy benefits the home country as compared with ordinary trade restriction imposed on the home country by itself. Imports are not excluded; they are made cheaper and, presumably, encouraged. And in so far as exports are stimulated and their price raised, the value of this to the home country is precisely that it enables more imports to be got from abroad for less exports given in exchange. Generally speaking, no restrictive practices within the home country could attain all this.

Corresponding to this possible source of gain to one strong country, there is a potential danger of loss to other countries. For, in the case of countries which rely heavily on foreign trade and internationally specialized production, exclusion from markets with which they are already trading may result in drastic reductions in their living standards, or great losses of potential gains, or both. If, therefore, a danger of this kind of exclusion exists, the fear of it alone is capable of inducing countries to engage in a competitive scramble for subject territories, so as to forestall the danger of exclusion, even if no single strong country covets the additional gains that might accrue from such a policy of exclusion. Moreover, the policy of exclusion may be followed, not as a national policy, but in order to favour special interests. In either case, the effect is the same.

Thus, whereas simple trade restrictions will never, on the traditional view, benefit any area as a whole, and can, therefore, only be pushed through by special interests in the face of public ignorance or apathy, there may be a national interest in imposing restrictions on other subject territories and a

corresponding national interest everywhere in preventing others from acquiring an extension of territory.

The same is true of the effect of the fear of exclusion in regard to migration. So long as there is no fear of exclusion, it is a matter of indifference, it is said, economically speaking, how large one's country is. But if there is a danger of exclusion, the larger the territories one's country controls, the better.

Such are the economic causes of international conflict on the textbook view. Lionel Robbins, one of the most notable of those English economists who hold this view, regards this kind of indirectly induced fear of loss as the origin of that "new imperialism" of Great Britain and Germany in the late nineteenth century, which eventually led to the First World War; and he also points to the various disabilities specially imposed on Japanese trade and migration later on as a major cause of the military aggression of that country in the period between the two World Wars.

It is well known that, during the inter-war years, trade barriers have been raised progressively everywhere.

Restrictions on migration have also been becoming much more severe of late. For example, whereas in the early years of this century the U.S.A. had absorbed as many as 1½ million immigrants in a single year, present estimates of the future size of the U.S.A. population are being worked out on the supposition that in the next fifty years immigration will be limited to the figure of 100,000 immigrants a year.

Once the danger of war arises in these ways in modern economies, through a mixture of fear, confusion and error interacting with sectional and national interests, the position goes from bad to worse, on the traditional view. For then military considerations are added to the economic ones in making it seem essential in the eyes of the statesmen of each individual country that they should jockey for power, secure communications and sources of potential war materials, and so on, by extending the national territory and influence as much as possible. In this atmosphere wars are bred.

### BASIS OF ECONOMIC IMPERIALISM

What the traditional economist seizes on in all this is that, if there were no fear of economic loss through exclusion from trade and migration, there would be no national economic incentive for national rivalry in the quest for territory and military power in the first place. If trade and migration are free, national boundaries do not matter. Consequently, there are two ways in which the economist can help to do away with the economic causes of war. The first is by education. "Where public opinion has been better informed," says Professor Robbins, "and where standards of politics and administration have been high, there restrictionism has been relatively mild. . . ." But education in itself cannot be sufficient if any fear of exclusion, any danger of

selfish sectional or national action, remains; for in this case success in the game of power politics becomes a national interest in every country, no matter how enlightened their public and government may be. For this reason, economists of the traditional persuasion are inclined to favour the replacement of national sovereignty in the economic field by a federation—ultimately of the world. This would cut away the ground from under sectional interests, remove the temptations and fears of exclusive arrangements in trade and migration, and allow the long-run harmony of interest of all in operating a freely functioning market-system to reassert itself.

### OTHER RESTRICTIONS

There are two more types of artificial restriction to which wastes (though not wars) are ascribed by economists of the traditional school. (1) There are restrictions on entry into particular branches of industry which may lead to monopoly—that is, all sales are concentrated into the hands of one seller. This may lead to restriction and waste of a certain kind. (2) There are disguised restrictions on the movement of people having lower incomes into well-paid posts requiring expensive training—disguised, since, apart from the expense, there is no actual bar to such movement. In this way the posts requiring most skill tend to be reserved for people born into the wealthier classes. There is no reason to suppose that this numerically small class of people has more than a proportionately small part of the best talent within its ranks, hence, from a social point of view, an unequal distribution of occupational opportunity leads to waste of ability as well as making some services unduly expensive. Many traditional economists say they look favourably on anti-monopoly legislation and on redistribution of wealth by taxation.

The traditional economist, always anxious to answer the socialist critics of the market system, emphasizes that it is not the market system itself, but sectional interest, which prevents its proper working, that is responsible, ultimately, for the international economic friction that arises from economic nationalism in trade and migration, and for the avoidable part of the poverty of the world. And the sectional interest responsible for the restrictions of economic nationalism is, it is said, quite as often a labour interest as a business man's interest. "It is notorious," says Professor Robbins (*The Economic Causes of War*, p. 93), "that, in such countries as the United States of America and Australia, groups of trade unionists have been at least as zealous as groups of capitalists in promoting measures of trade restriction" —and also restrictions on migration. Indeed, traditional economists who are international liberals claim that they are really more "progressive," more on the side of equal opportunity for all, than those socialists who, attacking only the inequality of opportunity in their own capitalist societies, oppose freedom of migration and trade. "It is possible that, in the very short

run, a general expropriation of property and sharing out of the proceeds might raise the wealth immediately available to the average proletarian. On a world scale the amount available for redistribution per head would be small. The more important sources for levelling up the lower incomes would be the high work incomes of the west!" (Robbins: *The Economic Basis of Class Conflict and Other Essays*, p. 26). The basis for this statement is that there are only very few rich people, comparatively speaking, in every capitalist country; in other words, the social distribution of income has the shape of a pyramid, with a relatively broad base, while at the same time the working-class living standards differ a great deal between the western and eastern hemispheres (see tables on pages 177 and 194).

## THE UPSHOT OF THIS THEORY

We now have a general view of the textbook picture of resource-utilization under the private-enterprise system, and we can now see how the textbooks answer the four central questions posed on page 157 for economic theory.

(1) How does resource-utilization work?

The answer to this question runs, in the first instance, in terms of a general description of the ideal market-system. This is how Professor Robbins puts it in summary form:

"Here on the one side are the hundreds of millions of consumers who constitute the population of the planet. On the other side are the self-same people with their various aptitudes and opportunities as producers and the mechanical and natural resources which are available. What are the essentials of an organization which shall bring it about that these productive powers are used in such a way as to satisfy as fully as possible the various wants of the citizens? Clearly two things are necessary. Firstly, we need an apparatus which will register the strength of demand and the relative capacity of the different instruments of production to satisfy it. Secondly, we need institutions of decentralized initiative operating in such a way as to involve a continuous tendency to apply productive resources at the point of highest return. We need to know the demands of the consumers and the relative effectiveness of different ways of satisfying them: and we need an organization of production which will bring it about that no resources can be devoted to produce any but the highest return without loss falling on those responsible for controlling them. . . . The essentials of such an organization are provided by the free market and the institution of private property. A free market prices both products and the factors of production which produce them. It rewards, with higher gains, transfers to lines of production where production is more urgently needed. It punishes, with loss and reduction of income, continuance of production when the factors of production involved

can produce a higher return elsewhere. The institutions of private property provide for decentralized initiative: and this initiative in turn creates the market as an organizing principle. Given their power to demand, which springs from the past value of their services and their property, the citizens exercise through the market continuous control over the future disposal of their work and their resources. The citizen, as producer, is not compelled by physical or legal coercion to put his services and his property to the uses in which they produce most in value terms. But if he chooses to refrain from doing so, his own power to consume in the future is curtailed to the extent of his refusal. As consumer the citizen buys in the cheapest market. As producer he sells in the dearest. In this way the maximum division of labour which is compatible with given tastes and given techniques is continuously enforced. In this way the inhabitants of the most diverse parts, as producers, co-operate in an organization which is tending continually to make their range of effective choice, as consumers, as wide as is compatible with an absence of arbitrary curtailment in their favour of the range of choice of their fellows." (Robbins: *Economic Planning and International Order.*)

This is how resource-utilization works, it is said, under private enterprise where care is taken to see that the conditions necessary for the proper functioning of markets is fulfilled. This is a general answer. In any particular actual case in real life the working of an economic system, or a part of it, can be approached with this general theory of resource-utilization in mind, and practical tests can always be devised in order to see how the situation corresponds to the picture presented in the textbooks.

### ALLOWING THE SYSTEM TO WORK

Since the theory tells us that when the market-system is working properly, its performance cannot be bettered, the answer to Question 4 on page 157—Which of the different ways of organizing resource-utilization now in existence in various parts of the world is most effective, and what, if any, are the defects of each way of utilizing resources?—the answer to this, in general, follows automatically from the answer given to Question 1. The private-enterprise system must be the best, when, that is, it is allowed to work properly. The main practical problem in this matter of choosing economic systems appears to the traditional economist to be to make people see just how, and how well, the market-system does work. For, those economists find, people show an extraordinary amount of opposition to the private-enterprise system, and are very critical of it.

Since, for most economists who hold the traditional view, it goes almost without saying that the private-enterprise system is the best conceivable one, the textbooks contain no really serious discussion of alternative methods.

Some economists, it is true, while adhering to the traditional view, yet look forward to a new, consciously regulated, socialist form of resource-utilization.

Thus, Professor Alfred Marshall, an outstanding figure among British economists of two and three generations ago, wrote this in his *Principles of Economics*: ". . . by the aid of the telegraph and the printing press, of representative government and trade associations (Marshall means trade unions) it is possible for the people to think out for themselves the solution of their own problems. The growth of knowledge and self-reliance has given them that true self-controlling freedom, which enables them to impose of their own free will restraints on their own actions; and the problems of collective production, collective ownership and collective consumption are entering on a new phase. . . . It is true that human nature can be modified: new ideals, new opportunities and new methods of action may, as history shows, alter it very much, even in a few generations. . . . Thus gradually we may attain to an order of social life, in which the common good overrules individual caprice, even more than it did in the early ages before the sway of individualism had begun."

This, however, is all that Marshall had to say on an alternative to the private-enterprise system. He thought of this alternative as superior, not necessarily technically, but in a moral sense, and the passage quoted is tucked away in an appendix to his standard textbook on economics. Even some present-day advocates of socialism think so much on similar lines that they go so far as to suggest that socialism is quite compatible with retaining private enterprise and the market system.

## SILENCE ON PAST AND FUTURE

Others, again, regard the smoothly functioning competitive economy of the past as "socially defensible," but think rather on the lines of Marshall's forecast that people no longer want it, and that we must, therefore, look around for a new system (not necessarily technically superior to the old) which will correspond to the new, non-competitive institutions that are now in favour.

Thus, on the one hand, the liberal economist of the traditional school laments "the stupid theorizing of the man in the street" and tries to educate him to know better, while the socialist economist with traditional leanings accepts this "theorizing" of the people, but continues also to accept at least the theoretical validity of traditional economics. It is not, therefore, surprising that no effective challenge has come from this quarter to the textbook writers' exclusive preoccupation with the analysis of the market-system.

Nor is there a discussion at any length in the textbooks of the two further central questions of economics on page 157. Question 2 is: "How did

resource-utilization come to be what it is all over the world?" And Question 3: "How may we expect resource-utilization to change in future?"

Neglect of these topics in the textbooks also (as the neglect of Question 4) can easily be seen to be due to the character of the answer which is given to Question 1. For, after all, the main purpose of a book on economics is to explain how resource-utilization works and also to show how it could be improved.

If it already works so well that it cannot be improved, the question of how it worked in the past and how it is likely to work in the future cannot be of much interest. For, if things are as good as they can possibly be, then we have nothing positive to learn from the past; and we know what the future should look like, in general terms, unless, indeed, we are foolish enough to go tinkering with the market-system. The main thing to do, therefore, will be to keep demonstrating the excellence of the existing system to the "stupid man in the street," who will go on being dissatisfied with it.

Apart from a sentimental interest in tracing the fumblings and gropings of humanity in the past up to the point at which the glories of the existing system were evolved,[1] the main practical use actually made of economic history in economic theory is to use it to reinforce the theoretical argument in favour of the private-enterprise system (1) by showing that its emergence has coincided with economic progress and (2) by suggesting that, in so far as we fail to maintain the market-system, in proper order, we are heading back towards the bad old conditions of the days gone by.

## IS PRIVATE ENTERPRISE A PLAN?

Writing in the depressed, confused years of the 1930s, and anxious to show that the market-system is not to be blamed for the troubles of the time, this is what Professor Robbins says:

"It is . . . wrong to regard the proposals of international liberalism as involving no plan. It would be equally wrong to regard them as a plan which has even yet been realized.[2] Much of the order which exists even at the present owes its origin to private enterprise and the market. . . . But . . . the world today is not predominantly liberal. It is nationalist and interventionist, and the continual succession of political and economic catastrophes which this involves gives what market mechanism exists a task which no mechanism can perform. It is not liberal institutions but the absence of such institutions

[1] In Professor F. Benham's introductory textbook on economics, for example, nine pages out of 480 are devoted to the history of economic development and to the progress made since the rise of the free private-enterprise system in Britain 100–150 years ago. Marshall's survey of the history of resource-utilization is entitled "The Growth of Free Industry and Enterprise," and is tucked away in an appendix of 33 pages in the 860 pages of the *Principles*.

[2] That is, completely.

which is responsible for the chaos of today. Indeed, if we preserve a sense of perspective, the conspicuous fact that emerges from any historical survey is radically different from what the reactionaries—both fascist and communist —endeavour to make us believe. International liberalism is not a plan that has been tried and failed. It is a plan that has never yet had a full chance. The chaos of today is not something new. It is a relapse to what hitherto has been the normal condition of the human race. The difference between the economic organization of today and the economic organization of the past is great. But it is a difference of scale and technical process and potentialities for world-wide disaster. The principles have been the same. They have been sectional, monopolist, restrictionist. The results, too, have been similar. There has been poverty and insecurity. There was little freedom of enterprise before the nineteenth century. There were closed corporations, State monopolies, restrictions on movement, sectional trade agreements, prohibitions, tariffs. . . .

### THE RISE AND FALL OF FREE MARKETS

"Only in the middle of the eighteenth century did men begin even to conceive of a world in which privilege to restrict should be restricted and in which the disposition of resources should obey, not the demands of producers for monopoly, but the demands of consumers for wealth. For a short time it seemed as if this dream might be realized. When Adam Smith wrote *The Wealth of Nations* it seemed to him that to expect the establishment of complete freedom of trade was as absurd as to expect that an Oceania or Utopia should ever be established in it. But the power of ideas, operating in a milieu of favourable political accidents, was stronger than even he suspected. In thirty years he had made converts of the great majority of educated Englishmen. By the middle of the nineteenth century, the Corn Laws had been repealed, restrictions on movement abolished and what to all intents and purposes were the beginnings of a liberal economic system established in Great Britain.

"The influence of these changes was not confined to Great Britain. The internal policy of the U.S.A. . . . was predominantly liberal. And for a brief period indeed it seemed as if the countries of the European mainland would develop similar institutions. From the 'forties to the 'seventies of the nineteenth century the trend of legislation almost everywhere was liberal. Tariffs were lowered. Personal unfreedom was abolished. Enterprise was freed. Monopolies were dissolved. International division of labour was extended. And the consequential increase in wealth was spectacular.

"But reaction was not long in asserting itself. From the 'seventies onwards the tide began to flow in the opposite direction. In Central and Eastern Europe the ideas of international liberalism had never taken firm root.

". . . The failure of the '48 and the unification of Germany by Blood and Iron created an atmosphere in which the principles of mercantilism (see p. 342) were once more respectable. . . . The systems of List and Schmoller took the place of the system of Smith and Ricardo. Neither the socialists on the left nor the conservatives on the right, each only the representatives of special interests, ever grasped the view that co-operation without regulation from the centre could be anything but chaos. The re-imposition of the iron and steel duties by Bismarck at the end of the 'seventies, and his explicit adoption of the principles of imperialism, were the death-knell of liberalism in Germany. The practice of the totalitarian Third Reich (was) only the practice of Bismarckian Germany writ large.

### NATIONALIST REVIVAL

"There were other influences tending in the same direction. In its origins, socialism, equally with liberalism, was rationalist and utilitarian. It rested on the belief, clearly susceptible of reasonable discussion, that there was a technique of economic organization superior to a system of free enterprise. But early efforts to demonstrate this were not successful; and the attempt was soon abandoned. With the decline of the French Utopians socialism relapsed into the messianic mysticism of Marxian determinism; or it allied itself with the special interests of trade-union restrictionism. Its propaganda, although professedly international, had the effect of weakening belief in the free market and strengthening the movement for the revival of national controls. It thus played directly into the hands of the reaction. The nationalist reactionaries well knew how to steal the thunder of the socialists and present it in a 'more human,' 'more practicable' form.

"Nor must the mistakes of the liberal reformers be left out of the picture here. There is no doubt that the early liberals had not thought out completely the implications of their position. They were weak on the problem of associations, and they did not really grasp the problem of national sovereignties.

"But when all this is taken into account, it is the nationalist reaction which must claim the main credit for arresting the liberal revolution. The claim of Hitler to have saved Europe from Marx and Lenin may be dubious. But Bismarck certainly 'saved' us from Cobden and Adam Smith. In the history of the last sixty years it is the influence of German thought and German policy which has been dominant. The existence, at the centre of European civilization, of a Power whose statesmen and thinkers openly rejected liberalism and regarded the atavistic ideals of imperialism as the be-all and end-all of policy exercised an influence which it is difficult to exaggerate. It gave the tone to thought and legislation even in countries where liberalism persisted. British imperialism was made in Germany, and the paternalism of the official

Liberal party in Great Britain was modelled on Bismarck's 'Social State.' It dominated foreign policy. It accentuated national divisions and international alliances. And in the end it brought about the great war in which liberal institutions began to founder and in whose aftermath they have been nearly swept away.

"International liberalism is not a plan which has been tried and failed. It is a plan which has never been carried through—a revolution crushed by reaction ere it had time to be fully tested."[1]

### MARX AND CAPITALIST ACHIEVEMENT

We shall have to return to this account of the history of economic development presently. For the moment, we may note that even such an uncompromising critic of the capitalist system as Marx has painted the achievements of this system in glowing colours. In the "Communist Manifesto," he says this of the rise of capitalism:

"From the serfs of the Middle Ages sprang the chartered burghers of the earliest towns. From these burgesses the first elements of the bourgeoisie were developed.

"The discovery of America, the rounding of the Cape, opened up fresh ground for the rising bourgeoisie. The East-Indian and Chinese markets, the colonization of America, trade with the colonies, the increase in the means of exchange and in commodities generally, gave to commerce, to navigation, to industry, an impulse never before known, and thereby, to (this) revolutionary element in the tottering feudal society, a rapid development.

"The feudal system of industry, in which industrial production was monopolized by closed guilds, now no longer sufficed for the growing wants of the new markets. The manufacturing system took its place. The guild-masters were pushed aside by the manufacturing middle class; division of labour between the different corporate guilds vanished in the face of division of labour in each single workshop.

"Meantime the markets kept ever growing, the demand ever rising. Even manufacture no longer sufficed. Thereupon, steam and machinery revolutionized industrial production. The place of manufacture was taken by the giant, modern industry. . . .

"Modern industry has established the world market, for which the discovery of America paved the way. This market has given an immense development to commerce, to navigation, to communication by land. This development has, in its turn, reacted on the extension of industry; and in proportion as industry, commerce, navigation, railways extended, in the same proportion the bourgeoisie developed, increased its capital. . . .

"The bourgeoisie, historically, has played a most revolutionary part. . .

[1] Robbins: *Economic Planning and International Order*, pp. 232–8.

". . . It has been the first to show what man's activity can bring about. It has accomplished wonders far surpassing Egyptian pyramids, Roman aqueducts, and Gothic cathedrals; it has conducted expeditions that put in the shade all former exoduses of nations and crusades. . . .

"The bourgeoisie has through its exploitation of the world market given a cosmopolitan character to production and consumption in every country . . . it has drawn from under the feet of industry the national ground on which it stood . . . industries no longer work up indigenous raw material, but raw material (is) drawn from the remotest zones; industries whose products are consumed, not only at home, but in every quarter of the globe. In place of the old wants, satisfied by the production of the country, we find new wants, requiring for their satisfaction the products of distant lands and climes. In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal interdependence of nations. . . .

"The bourgeoisie, by the rapid improvement of all instruments of production, by the immensely facilitated means of communication, draws all, even the most barbarian, nations into civilization. . . .

". . . It has created enormous cities, has greatly increased the urban population as compared with the rural. . . .

". . . During its rule of scarce one hundred years, (it) has created more massive and more colossal productive forces than have all preceding generations together. Subjection of nature's forces to man, machinery, application of chemistry to industry and agriculture, steam navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalization of rivers, whole populations conjured out of the ground—what earlier century had even a presentiment that such productive forces slumbered in the lap of social labour?"

### THE FACTS IN SUPPORT

Now let us see how the facts bear all this out. The table on page 194 shows figures of pre-1939 living standards, based on calculations of national income in various countries.

These facts certainly look as if they supported the traditional argument in favour of the private-enterprise system. The countries at the top of the list, in which people lived in most comfort before the war, are, in fact, the countries in which the market system has been most developed. If we look at a map showing these differences of living standards, we see that the highest standards are found in Western Europe and the continents of America, Australia and parts of South Africa—that is, the "New World" developed by Western Europeans—and as Professor Robbins insists, it is in those parts of the world that the liberal, private-enterprise market economy has

## POPULATIONS (1935) AND STANDARDS OF LIVING (1925–34)

(standards expressed as real incomes per head of occupied population)

| | *I.U* | *Population (million)* |
|---|---|---|
| U.S.A. | 1381 | 128 |
| Canada | 1337 | 11 |
| New Zealand | 1202 | 1½ |
| Great Britain | 1069 | 47 |
| Switzerland | 1018 | 4 |
| Argentina[1] | 1000 | 12 |
| Australia | 980 | 7 |
| Netherlands | 855 | 8½ |
| Eire | 707 | 3 |
| France | 684 | 42 |
| Denmark | 680 | 4 |
| Sweden | 653 | 6 |
| Germany | 646 | 67½ |
| Belgium | 600 | 7½ |
| Norway | 539 | 3 |
| Austria | 511 | 7 |
| Chile,[1] Spain[1] | 500–600 | 4½, 25 |
| Czechoslovakia | 455 | 15 |
| Brazil[1] | 400–500 | 41½ |
| Greece | 397 | 7 |
| Finland | 380 | 3½ |
| Hungary | 359 | 9 |
| Japan | 353 | 70 |
| Poland | 352 | 34 |
| Latvia | 345 | 2 |
| Italy | 343 | 42½ |
| Estonia | 341 | 1 |
| Yugoslavia | 330 | 15 |
| U.S.S.R.[2] | 320 | 173 |
| Portugal[1] | 300–400 | 7 |
| Rest of America[1] | 300–400 | 64 |
| Egypt | 300–350 | 15½ |
| South Africa | 276 | 9½ |
| Bulgaria | 259 | 6 |
| Rumania | 243 | 19 |
| Lithuania | 207 | 2½ |
| British India[1] | 200 | 370½ |
| China, Dutch Indies, rest of Asia, Africa and Oceania[1] | under 200 | 741 |

Source: C. Clark: *The Conditions of Economic Progress*, pp. 41, 54.

[1] Approximate.

[2] It has been objected that Mr. Colin Clark's figures, quoted above, are not valid in that the U.S.S.R figures should be much more favourable, relatively, but it has not been possible to check this either way.

been given a chance to work. The countries lower on the list have never seen a full development of this type of economy, and the U.S.S.R., the socialist sixth of the world, is low down on the list. What is more, the striking progress made in the west of Europe and in the New World as compared with the rest of the world did not occur until the market system got its freedom in the west. Great Britain was the pioneer of free markets. We are told by the best authorities that on the available evidence, before she freed her foreign trade in the 1840s, just over one hundred years ago, the real income-a-head of the mass of the people in Great Britain had shown no increase at all for a very long time. On the contrary—the standard of living in 1840 was lower, it is thought, than it had been in 1688, and in 1688 it was lower than it had been from 1400 to 1600. But after the repeal of the Corn Laws stagnation and retrogression ended, and progress was rapid. Here are the figures that tell this tale:

THE IMPROVEMENT OF THE BRITISH STANDARD OF LIVING, 1688–1937

| *Year* | (1) *Income produced per head of occupied population, in £s per annum of 1930 purchasing power* | (2) *Same, in International Units* | (3) *Approximate average hours worked per week* |
|---|---|---|---|
| 1688 | 69 | 378 | 65 |
| (1800[1]) | 22 | 121 | — |
| (1847[1]) | 35 | 193 | — |
| 1860–9 | 116 | 638 | 59 |
| 1870–6 | 119 | 651 | 57 |
| 1877–85 | 142 | 777 | 54 |
| 1886–93 | 155 | 849 | 54 |
| 1894–1903 | 176 | 964 | 54 |
| 1904–10 | 182 | 999 | 53 |
| 1911–12 | 193 | 1057 | 53 |
| 1913 | 195 | 1071 | 53 |
| 1924 | 186 | 1020 | 48 |
| 1932 | 181 | 932 | 48 |
| 1937 | 233 | 1275 | 48 |

Source: C. Clark: *Conditions of Economic Progress*, pp. 83–4.

Similar progress was made in a number of other countries, after 1850. It is practically certain that, if we had the figures for earlier periods for these countries we would find that in them also, as in Britain, there was

[1] This figure is approximate (1800 was a war year).

stagnation and poverty for the masses of their populations for hundreds and hundreds of years before the spectacular improvements of the nineteenth century occurred. Moreover, these improvements were shared by a rapidly growing population (see Table on this page). It is common these days in the west to speak of "Asiatics" in a tone of disparagement, but it seems clear that before these very recent improvements occurred, standards of living in Europe could hardly have been generally higher than they were in the ancient civilizations of the East. Indeed, it must be said that the East was civilized and enormously wealthy according to the standards of early times when

ESTIMATE OF WORLD POPULATION, 1650–1933

| *Continent* | (1650) | (1750) | (1800) | (1850) | (1900) | (1933) |
|---|---|---|---|---|---|---|
| | NUMBERS (MILLIONS) | | | | | |
| Europe | 100 | 140 | 187 | 266 | 401 | 519 |
| North America | 1 | 1·3 | 5·7 | 26 | 81 | 137 |
| Central and South America | 12 | 11·1 | 18·9 | 33 | 63 | 125 |
| Oceania | 2 | 2 | 2 | 2 | 6 | 10 |
| Africa | 100 | 95 | 90 | 95 | 120 | 145 |
| Asia | 330 | 479 | 602 | 789 | 937 | 1121 |
| World Total | 545 | 728 | 906 | 1171 | 1608 | 2057 |
| | PERCENTAGE DISTRIBUTION | | | | | |
| Europe | 18·3 | 19·2 | 20·7 | 22·7 | 24·9 | 25·2 |
| North America | 0·2 | 0·1 | 0·7 | 2·3 | 5·1 | 6·7 |
| Central and South America | 2·2 | 1·5 | 2·1 | 2·8 | 3·9 | 6·1 |
| Oceania | 0·4 | 0·3 | 0·2 | 0·2 | 0·4 | 0·5 |
| Africa | 18·3 | 13·1 | 9·9 | 8·1 | 7·4 | 7·0 |
| Asia | 60·6 | 65·8 | 66·4 | 63·9 | 58·3 | 54·5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

Central and Western and Northern Europe were barbaric and backward (with the Americas and Oceania nowhere in the picture, so to speak) for the greater part of history, and this accounts for the fact that Asiatics form such a large proportion of world population, while the relative advance in numbers of Europeans coincides in point of time with the period of their recent rise to world leadership.

This evidence in favour of the private-enterprise system is impressive, so far as it goes. Can we not then conclude that the logic of the textbook theory is confirmed by the facts? Can we not, therefore, rest satisfied with

the manner in which traditional economic science answers the four central problems with which we are concerned? Many, perhaps most, economists in Britain, in the U.S.A. and elsewhere, many of them of the highest ability and integrity and of great repute, would say that we can, and indeed, even socialists, as well as politically liberal and conservative economists accept this theory.

Moreover, this traditional view of economics is not only widespread, it is also very influential. It is not only what is taught to students day in and day out in the universities, technical colleges and schools of the western world, and drummed in various forms into the ears of the readers of the daily and weekly press, it is also the theoretical basis on which the business man justifies his daily actions (if he is driven to do so), and it is in the light of this broad view that the economic experts of many of the most powerful governments of the world advise them on action in the field of national and international economic and social policy. The lives of all of us are influenced by the power of those who act in conformity with these views. Thus, many international economic arrangements and institutions—like the Bretton Woods Agreement, the Washington Loan Agreement, the International Trade Organization, the World Bank, and others, which have recently been agreed on and set up, or are being set up, by many governments (including the Government of Britain)—are fundamentally based on the doctrines here outlined. So far as its purely economic aspect is concerned, the European Recovery Programme, popularly known as the "Marshall Plan," is also based on these doctrines. "The ultimate objective that the countries concerned seek to attain is to restore a satisfactory equilibrium in the European economic structure . . ." says the Report of the Paris Conference on European Economic Co-operation. A knowledge of traditional economic theory is clearly needed if one is to grasp what the authors of this report mean by "restoring equilibrium."

## FUNDAMENTAL DOUBTS

Readers were warned at the beginning of this chapter that an increasing number of economists are finding themselves unable to accept the traditional picture of capitalist resource-utilization. The cornerstone of their objections to that picture is the recent advance in economics which grew out of the experiences of unemployment in the ten years or so prior to 1939. The late Lord Keynes and others have demonstrated that the fundamental and elementary requirement of a sane system of resource-utilization, namely, that it must, as a matter of course, make use of all available resources wanted by the community, is not, and in fact cannot be, fulfilled by the workings of the market-and-price mechanism of the private-enterprise system. Yet the voluntary mobilization of all wanted resources is one of the major achieve-

ments claimed for the market system by traditional theory. The next two chapters will show on what grounds many modern economists reject this claim. What we must notice here is that, if there really is this basic flaw in the market system, then the whole elaborate argument in its favour collapses.

But the whole picture given us by customary theory is held by its critics to be misleading. For example, the rewards allotted by the system to the various factors of production bear no relation whatever to the social worth of their respective contributions, so that the costs and prices by which production is said to be co-ordinated are really no more than misleading signposts; they bear the legend: "To the maximum welfare of the consuming public," but in actuality they point the way to a chaos of clashing self-interest and frustration.

Correspondingly, the facts which have been held to bear out the traditional theory are given a quite different interpretation by some modern economists, as we shall see in Chapter VIII. Indeed, those economists call for a more intensive search for and study of the real facts of resource-utilization, past and present; for in their view the story which runs merely in terms of markets and prices is superficial and does not supply an adequate answer to any of the main questions which economic science may be properly required to clarify. In fact, they declare roundly that a complete break is needed both from the content and the method of traditional economics.

## *Test Yourself*

1. Explain why there are in the standard textbooks on Economics no detailed descriptions of how resources are utilized for production.
2. Explain the significance of "mobility" in traditional economic analysis.
3. What, fundamentally, do economists mean by the notion of "cost"?
4. How is the activity of business men pictured in textbooks on Economics?

*Answers will be found at the end of the book.*

## CHAPTER VII

# DOES CAPITALISM GIVE FULL PRODUCTION?

NO ONE denies the facts concerning the considerable material progress which has been associated with capitalism in the past two hundred years or so, but a growing number of economists are coming to the conclusion that the account of capitalist economic development which traditional economics gives is fundamentally a wrong interpretation of those facts.

In order to grasp the nature of the dissenting modern economists' view of the workings of capitalism we may, perhaps, contrast the traditional view of what the performance of capitalism is like with the modern view as it is now emerging. This "modern" view is founded on the revolutionary break with traditional economic analysis due mainly to the work and influence of the late Lord Keynes, the outstanding British economist of our own generation.[1] But, as we shall see presently, while on the one hand Keynes's theory has yet to be developed in relation to many of the most important fundamental problems of economics, so that the completion of a comprehensive "modern" theory of economics is a thing for which we must look to the future, it is also becoming clear, on the other hand, that such old-time critics of traditional economic analysis as the British J. A. Hobson, writing fifty years ago, and Marx and Engels, writing a hundred years ago, had anticipated much of the theory towards which, it seems, modern economists are now struggling. In what follows, we are mainly concerned with the "modern" view, but something will also be said on the relation of this view to strictly Marxian theory.[2]

The traditional view of the performance of capitalism is, as we have seen in Chapter VI, based mainly on the progress made in the years after 1850 in certain parts of the world, particularly in Great Britain and Western Europe and in the New World overseas. The rapid growth of output, the rising standards of living, are regarded as the consequence of the freedom

[1] Mr. Kalecki, a Polish economist now working in the United States, independently worked out the fundamentals of the modern theory at roughly the same time as Keynes. Kalecki also helped to develop what is now generally called the Keynesian theory.

[2] Readers interested in the relations of modern economics in its present stage of development to Marxian economics should consult the following two books: Joan Robinson, *An Essay on Marxian Economics*; and P. M. Sweeny, *The Theory of Capitalist Development*.

given to private-enterprise capitalism in this period. The comparative absence of major wars between the great Powers, going hand in hand with an extension of free international trade, international specialization, and freedom of migration—this also is regarded as the natural consequence of allowing the market system to function freely. The lack of similar progress before 1850 and the increasing economic difficulties of the period from 1918 to 1939, as well as the growing political tensions leading to both World Wars—these, on the other hand, are put down to economic and political interference with free capitalist development. Correspondingly, the period between 1850 and 1913 is usually taken to indicate in a rough way what the normal performance of free capitalist economic development may be taken to be.

Thus, on this basis, it has been suggested by Professor Schumpeter, the leading American authority on the history of capitalist economic development, that the 2 per cent (compound) rate of growth of net output which had taken place in the United States of America between 1830–1930 should be regarded as the measure of the normal rate of growth of output of the capitalist system.

It is this view of historical experience, together with the demonstrations of traditional theory that the market-system leads to the ideal use of resources, which still dominate the outlook of many economists.

## CAPITALISM AND UNEMPLOYMENT

An increasing number of modern economists, however, take a different view of both the present and the past of capitalism. They do not, to begin with, agree with the old theory that the market-system can automatically lead to the best possible use of resources. But while they may be generally in agreement up to this point, they are not unanimous on the question of just how wasteful the performance of capitalism is likely to be in this respect.

Many Keynesian economists take a view which, following Keynes, Lord Beveridge has done much to popularize, notably in his *Full Employment in a Free Society.*

He writes: ". . . the central weakness of the unplanned market economy of the past (was) its failure to generate sufficient steady demand for its products. . . ." and "Mass unemployment and the fear of unemployment (have), next to war, been the greatest evils of modern times."

Now if this estimate of the wastes of unplanned private enterprise is right, it does not really amount to very much of a condemnation of capitalism. For, as Mr. Colin Clark has shown, the absorption of the unemployed in production (while, of course, it makes a vast difference to the happiness of society at any time) would not, in fact, have made much difference, by itself, to living standards in most countries in the very years of 1925–34 during

which the rapid growth of unemployment stimulated Keynes to work out the modern theory of employment.

The following table from Colin Clark's work shows the facts of this matter:

AVERAGE INCOME PER HEAD OF WORKING POPULATION IN INTERNATIONAL UNITS, 1925–34

| *Country* | (1) *Employed and unemployed taken together* | (2) *Approximate estimate for value if all unemployed had been at work* |
|---|---|---|
| U.S.A. .. .. .. .. .. | 1368 | 1550 |
| Canada .. .. .. .. .. | 1337 | 1440 |
| New Zealand .. .. .. .. | 1202 | 1280 |
| Australia .. .. .. .. .. | 980 | 1090 |
| Great Britain .. .. .. .. | 1069 | 1210 |
| Sweden .. .. .. .. .. | 653 | 700 |
| France .. .. .. .. .. | 694 | 720 |
| Germany .. .. .. .. .. | 646 | 750 |
| Norway .. .. .. .. .. | 539 | 590 |
| Austria .. .. .. .. .. | 511 | 570 |
| Czechoslovakia .. .. .. .. | 455 | 480 |
| Italy .. .. .. .. .. | 343 | 360 |

"The age of plenty will still be a long while in coming . . . even if preventable unemployment were eliminated . . . it would only make a small contribution towards the much greater productive problem of raising the real incomes of the bulk of the world's population to anything like a civilized standard," says Mr. Clark.

If this were all that the modern criticisms of the traditional view amount to in practice, they would not amount to much. They would certainly not, in themselves, provide a justification for scrapping the capitalist system. After all, a machine that works with 90 per cent efficiency without any attention to it being necessary is a pretty good machine. And if such a machine can be made to work at nearly 100 per cent efficiency with only some slight attention of a sort which requires no structural alterations in it, so much the better for the machine. This, in fact, was Keynes's own view of what his theory amounted to in practice, and it is this view that is advocated by Lord Beveridge, and by many, perhaps most, of those economists who call themselves "Keynesians."

"I see no reason to suppose," said Keynes, "that the existing system seriously misemploys the factors of production which are in use. . . ."

There are, however, a number of modern economists, some of them "Keynesians," some of them socialists, some Marxists, who hold that

Keynes failed to see that very much more is at fault with the market-system than can be read off from the unemployment percentages. These economists deny that the statistics of registered unemployment are necessarily a good indication of the under-utilization of productive capacity; and they also deny, therefore, that the potential output of a community equals no more than its actual output plus a percentage proportional to the amount of unemployment, as Keynes, Mr. Colin Clark and Lord Beveridge suggest.

". . . the output-capacity of the community . . . is . . . the estimated value of its output when all its man-power is fully employed," says Lord Beveridge.[1]

But why should one accept this? The facts simply do not bear out the view of traditional theory, which Keynes continued to uphold, that the existing system does not seriously misemploy the factors of production when they are not unemployed. This was pointed out with great force in Britain by J. A. Hobson (whom Keynes himself acclaimed as an important anticipator of his own line of thought),[2] more than twenty years ago.

## PRODUCTION BELOW CAPACITY

"The amount of recorded unemployment during periods of trade depression is a very inadequate measure," wrote Hobson, "of the waste due to a knowledge on the part of employers and workers that their productive capacity is normally in excess of their market . . . this limitation of the market, operative in most industries at most times, keeps the productive power of the economic system functioning far below its full capacity. The fear of unemployment is constantly before the workers, and exercises a depressing influence upon their output. It is largely responsible for ca' canny, organized or customary, in many trade unions, and for the similar tactics of employers in trade combines or associations. The industrial system works normally at low gear, lest high productivity should precipitate a crisis, display overproduction, and herald in a period of trade-depression." It is this low productivity, as compared with potential output, that Hobson regards as "the central defect of our system."[3] He quotes the Fifth Report of the Industrial Fatigue Research Board as saying:

"It seems probable that if all the iron and steel works in this country adopted the most efficient methods, they could, on an average, improve their output by something between 50 and 100 per cent." He adds that.

[1] *Full Employment in a Free Society*, p. 137, and the corresponding statistical calculation on p. 139.

[2] For Keynes's tribute to Hobson, see the *General Theory of Employment, Interest and Money*, pp. 364–71. It is also related in these pages how Hobson was victimized for his views and prevented, by the economists in authority in educational life, from teaching what now is widely accepted.

[3] J. A. Hobson: *The Evolution of Modern Capitalism*, p. 475.

"the huge waste of coal in almost all its uses is too well known to need specific evidence."

Hobson then goes on to emphasize the fact that this sort of waste and inefficiency in production is not at all peculiar to Britain. "Economic students in Britain," he says, "are so accustomed to hear reference to the high productivity of American labour and machine production that it will surprise them to learn the grave testimony borne by American business men and economists to the wasteful working of American businesses . . . Mr. Stuart Chase's general estimate of the economic waste in the . . . working of America's economic system (in the prosperous 1920s) is given as approximately 50 per cent of the total available labour power."

There is ample evidence of unnecessarily low productivity in industry in our own days as well. Thus, in the U.S.A. during the recent war, the real national output was raised by at least 50 per cent between 1939 and 1944, although the numbers of the employed civilian labour force rose only by 17 per cent, and although the true total of manpower must have risen by much less than this 17 per cent—if indeed it rose at all—since it is natural that a large proportion of the most active and resourceful young men were withdrawn from industry for the armed forces.[1]

In a recent leading article a writer in the *Manchester Guardian* clearly expressed how completely the traditional textbook view of economics—that we need not publicly concern ourselves in detail with the productivity or efficiency of employed resources—had, until quite recently, dominated thought in Britain, and how completely economists had been basing their judgments in regard to this question, not on a detailed study of the facts of industrial life, but on a theory which they had not verified. He said:

"That our standard of living depends on the effectiveness of our work —on how much each man in industry produces—was not brought home to most of us until the war. Before then the obvious way to greater prosperity was to give work to the unemployed. We are only beginning to understand productivity, to measure differences in it, and to assess their causes."[2]

### DEEP-SEATED DISEASE

As a matter of fact, the present preoccupation of the British Government and of economists with efficiency and productivity is obviously due to their gradual realization, quite recently, well after the end of the war, that the deep economic crisis of Britain is connected with more fundamental diseases in its economic structure than is revealed by the unemployment figures.

The British post-war inquiries into industrial productivity have produced

[1] These figures are taken from Professor A. J. Brown's essay on "The United States' War Effort, 1939–44," in his book, *Applied Economics*, p. 55.

[2] *Manchester Guardian*, 9 December, 1947.

an accumulation of evidence against the traditional and Keynes-Beveridge theoretical view concerning the efficiency of resource-utilization under private enterprise. (See pages 160 and 201.)

Thus, for example, Sir Henry Tizard, head of the British Government's Committee on Industrial Productivity, has told M.P.s that if British industry would adopt its actual more scientific methods it could aim at a production-target 50 per cent above the present output within two years. Yet, according to the textbooks, private enterprise is forced by the workings of the market system always to use all the science that can be used with advantage.

Again, the various working-party reports have shown that there are very wide, and unnecessarily wide, variations in the efficiency of different firms within a number of important industries, so that great gains could result if the performance of less efficient production units was brought up to the level of the more efficient.

But, quite apart from this. there is often no reason to be satisfied even with the performance of some of the best production-units. The recently issued Musgrave report on re-deployment of labour in one of the most up-to-date and well-run mills in the Lancashire cotton industry reveals that it was possible, by carefully planned reorganization, to increase output per man by 39 per cent and wages earned by 30 per cent[1] at the same time as lowering labour cost by 10 per cent in an important productive unit, with the agreement of all workers concerned.

Yet no one need have been surprised by these post-war findings concerning the inefficiency of production in the most advanced private enterprise countries. In *The Social Function of Science*, published in 1939, Professor J. D. Bernal, F.R.S., a physicist and a Marxist, discusses the state of science and of its application to human wellbeing—a remarkable study which should be read and re-read by every economist and made compulsory reading for students of economics.

### TECHNICAL PROGRESS

All economists admit that the main way in which the real income of a community can be made to increase is by the progress of technique properly applied, and the basis of technical progress is, of course, the progress of science. But the economists, basing their attitude on their logical demonstration that the application of science can be left to the working of markets (see pages 165 and 166), and therefore ignoring the crucial problem of what determines the speed and amount of scientific progress, have failed to study the facts of what, on their own admission, is the most important factor in economic progress.

"The fact is," says Bernal, "that the application of science is so much taken

[1] Presumably for given work.

for granted that the way in which it works has never been seriously looked into. Most scientists as well as laymen are content with the official myth that that part of the work of the pure scientists which may have human utility is immediately taken up by enterprising inventors and business men, and thus, in the cheapest and most commodious way possible, put at the disposal of the public. Any serious acquaintance with the past or present state of science and industry will show that this myth is untrue in every point, but just what is the truth is something more difficult to find out. . . . No one knows,[1] for instance, how many scientists there are in any country, except perhaps in the U.S.S.R., and how much is spent on them and by whom. What they are doing should be ascertainable, as it appears in 30,000 odd scientific periodicals, but nowhere is it possible to find how and why they do it."

By means of some research and guesswork, Bernal made a rough estimate of the total amount of money spent on research of all kinds (including defence) in Britain in 1934, and compared it with the figures for other countries.

His results are as shown in the following table:

INVESTMENT IN RESEARCH IN VARIOUS COUNTRIES[2]

| *Year* | *Country* | *Amount £ million* | *Per cent of the National Income* |
|---|---|---|---|
| 1934 | Great Britain | 4 | 0·1 |
| 1939 | U.S.A. | 75[3] | 0·6 |
| 1930 | Germany | 4 | 0·13–0·17 |
| 1934 | U.S.S.R. | 36[4] | 0·8 |

It is certainly hard to see why Britain should have spent less on developing science than the other countries in the table, in proportion to her national income, since not only the richer U.S.A. but also the poorer Germany and U.S.S.R. spent more, proportionately.

Moreover, before the war, Britain made less use of her native scientific talents than any other great power. The table on this page illustrates this.

[1] That is, in 1938. Since then the war-time conscription of scientists has provided the facts in this respect.

[2] Bernal, *The Social Function of Science*.

[3] Estimated.

[4] On p. 224 of his book, Bernal puts the 1934 science budget of the U.S.S.R. at £45 million, i.e. 1 per cent of the Soviet national income, not 0·8 as given above. However, the expenditure on research may be less than the science budget figure for various reasons, so I have included the smaller figure of the two given by him.

Bernal brings out the pitiful scale of the pre-war spending on research by pointing out that it represented, in 1934, 3 per cent of outlay on tobacco, 2 per cent of that on drink, and 1 per cent of that on gambling. Expenditure on patent medicine advertisements alone, at £2·8 million, was more than the combined outlay of Government and industry on non-war research.

Now, what is the reason for this neglect of one of the prime agents of human progress? Surely, such expenditure would be on a large scale in any sensible economic system, in view of the large, tangible returns investment in it has yielded in the past. Bernal has calculated that Government figures showing the return in annual savings against total expenditure on applied research, including research on many other problems besides those to which the savings referred, showed an annual average return on money invested of 800 per cent per annum. Outlay on fundamental research is certainly more profitable in the long run, but this return is slow in appearing and is so widespread that it is hard to check. "However," says Bernal, "our present system of production is not able to take full advantage of this immense profitability of science. . . ." And he follows up this assertion with an explanation of how the development and application of science works out in a modern private-enterprise economy.

It may be that only a working scientist of wide social sympathies could have had the opportunities for making such an analysis; but it is at least arguable that, if economists had not been paralysed by the tyranny exerted

NUMBERS AND PERCENTAGES OF STUDENTS BEFORE THE SECOND WORLD WAR

| (1) *Country* | (2) *No. of Students (full-time)* | (3) *Estimated population aged 19–21, as nearly as possible at the same time as Col. (1) (millions)* | (4) *Col. (2) as percentage of Col. (3)* |
|---|---|---|---|
| England & Wales (1936) | 40,465 | 2·1 | 1·9 |
| Scotland (1936) .. .. | 10,064 | 0·26 | 3·8 |
| Germany (1936) [1] .. | 67,082 | 3·0 | 2·2 |
| ,, (1932) [1] .. | 116,154 | 3·0 | 3·9 |
| France (1932) .. .. | 82,655 | 1·9 | 4·3 |
| U.S.S.R. (1936) .. .. | 524,800 | 10·0 | 5·2 |
| U.S.A. (1932) .. .. | 989,757 | 6·6 | 15·0 |

In weighing these figures, it should be kept in mind that even this small student body was very wastefully selected. Because of the educational inequality resulting from inequality of income, only about one in five, i.e. 20 per cent, of the boys and girls who have intelligence equal to that of the best half of the University students, actually reach(ed) the Universities This was shown in the Barlow Report.

[1] Note the drop in student numbers under the Nazis.

over their minds by traditional economic theory, they would have been the obvious people to do the job. Let us listen then to a lesson in economics given by a physicist:

"The very success of science is enough," says Bernal, "to mask from the eyes of the public, and even from those of scientists themselves, the waste of effort in achieving these successes. The scientist does his work, science advances, applications and inventions follow in its train. All this is seen; what is not seen is that the rate of advance could be maintained with far less waste of time and intelligence.

"Although we are accustomed to think of the present as a period of increasingly important applications of science, it is probable that, compared with what might be effected with the knowledge and men available, the application of science is much less satisfactory than at any time in the past three hundred years.

". . . To a large extent . . . the industry of the country, and even more so its agriculture, is carried on by a large number of small and virtually independent units. Now for scientific research to be of any value in application, a certain minimum of time and money must always be expended. . . . But the research may not be successful or it may require the further expenditure of a similar sum . . . before it becomes so. . . . The probability of its not being successful is non-insurable and can be covered only by enlarging the amount of the research done and consequently the expense, which may well be beyond the resources of the small firm. Effectively . . . the risk of unsuccessful research is sufficient to (prevent) the great majority of commercial firms of small capacity from undertaking any research whatever. The fluctuations . . . of . . . trade . . . make this much worse. . . .

### PREMIUM ON SECRECY

"Another consideration is that, even if research is successfully completed and leads to a marked reduction of costs, this reduction will only show itself in increased profits for the firm undertaking the research if the results are kept secret and if a sufficient number of other firms do not undertake similar research successfully and thus lower the price of the product. Even if a patent is applied for, royalties on it, quite apart from the risks of litigation, may not amount to what is considered a sufficient return on the original outlay. All this tends to discourage firms from undertaking research, and puts a premium on secret, and consequently on inefficient, research if they do so. The position is even worse in agriculture. Here, for research to have any value it must be undertaken on a very large and expensive scale, and the risks of failure are also considerably greater. Consequently, practically no farmers ever engage in research, and only the wealthiest landowners occasionally do so. It was in order to remedy these necessary evils of small-

scale industry that the Research Associations and Agricultural Stations were set up by the Government. But . . . they only cover about half of the industries, those already the most progressive, and consequently they are able to be of assistance only to a minority of firms . . . it is clear that the system of competitive industry is one which under present conditions most effectively retards technical progress. Under monopoly conditions,[1] on the other hand, the risks of research have practically disappeared, but to a large extent so also has the incentive. Scientific research becomes, under these conditions, only one of a number of means of increasing profits,[2] and not necessarily a very important one. . . . A further difficulty . . . under monopoly conditions is the large scale of undertakings and the consequent danger of heavy capital losses through obsolescence. . . .[3] The reaction to (this) danger has been . . . to check the development of science . . . (this) takes two forms: the stifling of existing invention and the checking of new invention by restricting research."

### NO ROOM FOR CO-OPERATIVE RESEARCH

There remains competition between monopolized industries. This, in Bernal's opinion, "acts sometimes in favour of, and sometimes against, the effective application of scientific research." Bernal quotes the revealing testimony in 1927 of a former vice-president and director of research of a leading firm in the American automobile industry: "Bankers regard research as most dangerous and a thing that makes banking hazardous. . . ."

"The failure," continues Bernal, "for economic reasons, of either large or small firms to make adequate use of scientific research has led in many countries to the development of governmental industrial research. . . . It has, however, been extremely difficult to raise money for such co-operative research. This has been . . . mainly because the chief competitive value of research[4] is lost if carried out in this way. . . . Competitive advantage is almost completely eliminated. . . . The incompatibility of the present economic system with any research carried out in the public interest is shown by the extreme difficulty which has been experienced in persuading industries to take up such research, as witnessed in almost every report of the Department of Scientific and Industrial Research. For political as well as economic reasons there is also on the part of governments an extreme reluctance to take any active part in research on the application of science. . . . The

[1] That is to say, where a large firm, presumably with considerable amounts of money to spend, dominates an industry.

[2] A monopoly can also make profits by restricting output—which is not possible under competitive conditions.

[3] That is, old plant becoming valueless as a result of technical progress before it is worn out.

[4] Which is the reason for its existence from the business point of view.

general principle is laid down that in no circumstances, outside . . . wartime, should government departments compete in production with industrial enterprise. . . .[1] Thus, governmental scientific research is not, outside the U.S.S.R., capable of providing the stimulation towards the new application of science or the rational control and direction of such applications as there are."

Bernal also has a great deal to say on the failure of the present system to use the resources of university science effectively in the general interest, and ends by giving this estimate of the waste in the use of what little financial support there is for science:

"It is extremely difficult to estimate the extent of the damage done to the progress of science by the organizational inefficiency of which we have spoken. . . . To put it in figures, the average efficiency cannot be much greater than 50 per cent and may be as little as 10 per cent."

### SCIENCE DISTORTED

But science is not only starved and disorganized, it is also distorted and made to serve trivial purposes by the workings of the profit economy.

"The whole trend of application, and with it the whole trend of scientific research, is distorted by the nature of the effective demand characteristic of our present economic system. From the point of view of human welfare, there is an altogether undue weight placed on production goods and heavy industry and very little on consumers' goods and general welfare.[2] Even where such research is done its effect is often (degraded) by commercial considerations."

### SHODDY GOODS

"The main tendency of production of consumption goods . . . is that of producing articles which, on account of various superficial attractions, lend themselves most suitably to selling, rather than of the most durable and economical kind. They must also wear out as quickly as possible in order to prevent a saturation of the market and to establish replacement production at the highest possible figure. Scientific research in industry is actually being directed mainly to producing shoddy and easily sold articles."

Bernal's general conclusion is this: "The obstacles to the achievement of plenty are real enough, but they are political and (due to the) economic (organization of society). . . . (They are) not technical obstacles."

This conclusion has also been voiced lately by a group of members of the

[1] Under nationalization this principle may now be in process of modification

[2] This distortion was no doubt righted in part during the war, when the socialistic measures of rationing, control of shipping and utility production of consumers' goods gave a great stimulus to finding good and economical methods of producing food and other consumers' goods

Association of Scientific Workers: ". . . the potential applications of science are, on a world scale, so great that world-wide freedom from want and disease could in fact be achieved within a hundred years. The benefits that science could bring have for long been in advance of the uses which society has made of them."[1]

All this is very different stuff from Colin Clark's judgment that, "the age of plenty will still be a long while in coming. . . ."

### WHAT MAY BE POSSIBLE

Together with such evidence as that of Hobson, of Tizard, of the Musgrave experiment, and of the Working Parties, it leads some economists to take a more critical attitude towards both the current and past performance of capitalism, a more hopeful attitude towards what may be possible, and a correspondingly more radical attitude towards the question of the amount of economic planning that is required than that of Keynes or Beveridge.

This last group of economists, then, holds that "full employment" cannot be regarded as the achievement of "full resource-utilization" or "full production," either in the present or in the past.

In his *Full Employment in a Free Society*, Lord Beveridge says this:

"The governing fact in all industrial societies is technical progress, raising productivity per head by an average which for Britain is commonly estimated at 3 per cent a year for manufacturing alone, and at 1½ per cent for industry as a whole, including services and distribution. Increased productivity per head mathematically involves either increased consumption per head, or idleness, which must be taken either in the form of leisure or of unemployment. In other words, *the fundamental problem* of a progressive society *is to distribute* the results of the progress among the citizens . . . ." (my italics).

But this, the post-Keynesian economists[2] would argue, is unduly complacent. What reason have we to think that this rate of progress of technique of 3 per cent in manufacturing and 1½ per cent in general is the best attainable?[3] In the light of what has been said above, it can hardly be maintained that the problems of the speed, the amount and the direction and character

[1] *Science and The Nation*, Penguin Books, 1947.

[2] This name has been applied to those Keynesian economists who, while working on lines laid down by Keynes, have pressed on to a more critical view of the private-enterprise system than was held by Keynes, and it will be used here in what follows.

[3] In the U.S.A., between 1870 and 1930, the rate of growth of productivity due to technical progress has been estimated at 4·3 per cent in manufacturing, and at 3·7 per cent in industry generally, as compared with 3 per cent and 1½ per cent in Britain. This in itself shows that there is no magic in the British figures – they set no standard which cannot be improved, and there is no reason to suppose that the higher American figures themselves do set such a standard of perfection. Indeed, the very fact that the rate of progress is different in manufacturing and in industry in general in both Great Britain and the U.S.A. seems to show that something may well be wrong somewhere – for it is hard to see a justification for such differences between different branches of industry

of technical progress in production are satisfactorily solved by the private-enterprise system. It is clear, moreover, that the importance of asking this question about the satisfactoriness or otherwise of technical progress is even greater in the poorer, the so-called "backward," countries than in the wealthier Western world. It is in these poorer countries in particular that nothing much can be hoped for from a mere increase in spending and the consequent reduction in unemployment, which is all that Keynes and Beveridge have to offer.

If, as the facts described in the foregoing pages seem to suggest, the private-enterprise system fails to make the best use of resources, whether or not there happens to be full employment, the importance of this for practical policy is even greater in the "backward" parts of the world than elsewhere. This is so, partly because, being poorer, these parts of the world need every ounce of output more than the "have" countries of the West, and partly because it may be expected that, being relatively backward in technique, and having made little progress in the past, the gains to be reaped from taking a view of their position and planning their development in a thoroughgoing fashion are likely to be comparatively far more substantial than in countries which have been able to progress some way under the private-enterprise system.

By now the reader will begin to see that the main divisions of opinion among economists are very similar to the main divisions in world politics today. We have already glanced at three important trends of thought among economists:

(1) The "traditional" view holds that the best results will generally come if private enterprise is allowed to "get on with it." This is the general view which is enshrined in the notion of the "American way of life" and is championed by the policies of the government of the U.S.A.

(2) The original Keynesian view finds fault with the traditional view for not giving a satisfactory account of the unemployment that the capitalist system is always producing, but nevertheless agrees that if unemployment can be eliminated the private-enterprise system is best. This may be said to be the general British view, as expressed in the White Paper on Full Employment, to which all the major political parties in the Coalition Government subscribed during the war. Politically, this view is used as a support for a middle-of-the-road policy as between unrestricted private enterprise on the American pattern, and thoroughgoing planning on the Soviet pattern. It plumps for establishing certain general controls over private enterprise (these are sometimes called "global" controls), but at the same time seeks to avoid detailed planning, and interference with the detailed organization of production. In this way, it is thought, planning can be made compatible with freedom and the benefits of the market-system obtained without its

disadvantages. This is the so-called "Third Way," which is held in many quarters to be the system best suited to Britain's way of life.

(3) Then there is what might be called the post-Keynesian view. This is also based on the work of Keynes, but rejects the traditional view more completely than the original Keynesian view. It suggests that the only way forward for the world is by detailed, thoroughgoing planning.

The post-Keynesian view discards the traditional theory in all its essential conclusions and reproaches the original Keynesians for not seeing the true meaning of their own views. For, on the post-Keynesian view, Keynes's analysis is necessary, not only for an understanding of the minor problem of unemployment, but also for seeing how the fundamental facts of scientific and technical progress, capital accumulation, land-utilization, and industrial organization are determined.

Thus, on this view, Keynes's work, instead of merely providing a recipe for rescuing the private-enterprise system from its own contradictions, which is what Keynes intended it to do, actually forms the basis of an economic analysis of far greater importance. It leads towards something like the economics of the Gosplan.[1]

It is most important to understand that the conflict between the conclusions of the original Keynesian view and the post-Keynesian view does not lie in any direct clash of theories. The difference only arises because Keynes stopped his work at a certain depth, as it were.

It may well be found that the new post-Keynesian analysis will confirm some of the things that Marxists have been saying for the past hundred years, while on other points Marxian analysis may have to be revised in the light of post-Keynesian theory.

[1] The name of the Russian State economic planning institution, which formulates and supervises the fulfilment of the detailed production schemes which are the basis of the Russian method of central economic planning. See Chapter IX.

## *Test Yourself*

1. How far, in your opinion, could productive efficiency be raised in the industry in which you are engaged? If there is room for improvements, what do you think has prevented their being made?
2. The table on page 205 shows that, in the 1930s, the extent to which scientific research was supported financially in the four largest industrial powers showed the following order: (1) U.S.S.R., (2) U.S.A., (3) Germany, (4) Great Britain How would you explain this?
3. Does free competition favour or hinder technical progress in industry? Give reasons for your view.

*Answers will be found at the end of the book.*

CHAPTER VIII

# TOWARDS A NEW THEORY OF CAPITALISM

WE MUST now examine the character of the Keynesian theory itself, for unless we do we cannot understand the modern view of the past and future of the capitalist economy.

The revolutionary character of Keynes's theory is due to the fact that it completely destroys the very foundation of the traditional theory of economics.

It denies outright that the private-enterprise system is capable of performing the elementary requirement of a sensible economy, namely, that it should make the most efficient use of all needed resources that are available. We have seen how traditional economists proved to their own satisfaction that voluntary mobilization of all wanted resources was an achievement of the market system (see pages 161–2). J. A. Hobson, writing as a heretic in *Physiology of Industry* sixty years ago, had already seen the error in this:

"We are . . . brought to the conclusion," he wrote, "that the basis on which all economic teaching since Adam Smith has stood, viz., that the quantity annually produced is determined by the aggregates of Natural Agents, Capital, and Labour available, is erroneous, and that, on the contrary, the quantity produced, while it can never exceed the limits imposed by these aggregates, may be, and actually is, reduced far below this maximum . . . in the normal state of modern industrial communities, consumption limits production and not production consumption." This is exactly what modern economics teaches us.

On the traditional view, as we have seen, all avoidable waste in the private-enterprise economy, once such a system has come into existence, is due to restrictions of the freedom of business activity and any brake upon the mobility of resources.

The spectacular progress of recent times is supposed to be due to the extra stimulus given by the rise of "economic freedom," to the growth and proper distribution of capital, to the division of labour, to the application of knowledge and to the rational use of land and other natural resources compared with what these would have been in the absence of economic freedom. It is the increased supply of resources, other than labour, made available

by the improvements of resource utilization resulting from economic freedom which is supposed to account for the success of unfettered capitalism.

Economic liberalism, it is said, by removing all obstacles in the way of the application of technique in industry, and by giving the fullest freedom to the disposition of resources of the individual capitalist, gives the greatest encouragement to economic progress.

The modern Keynesian view of all these matters is very different. The growth of output, the Keynesian agrees, should depend on the growth of available resources and their rational use. But the private-enterprise system, in itself, and as a normal rule, cannot make direct use either of invention or of thrift to improve the productive equipment of the population; so that the whole story of the emergence and spread of such an inherently defective economic system and the undeniable fact that, as we have seen (pages 193–6), it has actually coincided over part of its existence with a vast growth of output and productive power, becomes a gigantic, strange, historical puzzle.

In the modern view, neither the deliberate adoption of the ideas of Adam Smith nor the policy of unrestricted private enterprise itself can be said to be the true cause of that growth of output, rising standard of life and growing use of science and accumulation of capital that have taken place in the past hundred to two hundred years. Rather, all these things (including the system of ideas of Adam Smith and his followers) are looked upon as the results of a set of complicated underlying causes of a quite different character. These causes still require to be set out in detail, as no one has so far carried out the research work which would be necessary in order to obtain a thorough explanation of them.

### A GIGANTIC BOOM

The performance of capitalism in the past hundred to two hundred years is not "normal" but highly puzzling and abnormal in the eyes of the post-Keynesian economists. This manner of looking at nineteenth-century capitalist experience seems also to be affecting the outlook of some other economists, who are not themselves in the advanced Keynesian camp now, but who would not, but for the influence of Keynesian ideas, be questioning whether or not the great material progress of the nineteenth century was caused by the free development of capitalism. Professor Hicks, for example, in a footnote at the very end of his book, *Value and Capital* (1939), says significantly: "One cannot repress the thought that perhaps the whole Industrial Revolution of the last two hundred years has been nothing else but a vast secular boom. . . ."

But this amounts to saying that the nineteenth-century experience of

capitalism—that part of its record which in the past has in fact been a comparatively good one in terms of progress in living standards—was not, as Professor Robbins, Schumpeter and all the other traditional economists teach us, "normal" to capitalism at all, and that the causes of the exceptional advance in material and technical performance in the period must be discovered separately, and cannot be credited to the nature of capitalism itself.

There is also this very important consideration: if nineteenth-century experience was "normal" to capitalism we can expect capitalism to repeat its performance in the future, unless exceptionally unfavourable new circumstances arise. But if it is to be ascribed to "a vast secular boom," then the future may, for all we know, hold much worse than anything that capitalism has been able to accomplish in the past. It becomes very important to know, therefore, (*a*) what the "normal" performance of capitalism is like, (*b*) what was the basis of the "abnormal" nineteenth-century experience and (*c*) what grounds there may be for expecting the "abnormally" favourable performance to continue into the future.

## AN AMERICAN VIEW

This is the general way in which the post-Keynesians look at the matter. Schumpeter, who (see page 200) takes as his yardstick of the normal performance of the capitalist system the observed rate of increase in output in the U.S.A. between 1830 and 1930, admits in a very recent book (*Capitalism, Socialism and Democracy*) that this nineteenth-century performance of capitalism cannot, without further investigation, be accepted as the natural result of capitalism. Looking to the future of capitalism, he says:

"Before we can discuss the chance of capitalism repeating its past performance, we must evidently try to find out in what sense the observed rate of increase in output really measures that past performance (i.e. of capitalism). No doubt, the period that furnished our data (1830–1930) was one of comparatively unfettered capitalism. But this fact does not in itself provide a sufficient link between the performance and the capitalist engine. In order to believe that this was more than coincidence, we must satisfy ourselves, first, that there is an understandable relation between the capitalist order and the observed rate of increase in output; second, that given such a relation, the rate of increase was actually due to it and not to particularly favourable conditions which had nothing to do with capitalism. These two problems must be solved before the problem of a 'repetition of performance' can arise at all. The third point then reduces to the question whether there is any reason why the capitalist engine should . . . fail to go on as it did in the past."

Such a critical way of going about the analysis of capitalism is quite a new development in academic economics. But while Schumpeter can see

no reason to suppose that there was anything exceptional in the nineteenth-century performance and estimates that "our own time is somewhere between the disabilities of earlier stages in capitalist evolution and the abilities of the system in full maturity," the Keynesian (and, one should add, the Marxian) view of the matter is very different.

According to the Keynesian view, the condition of the private-enterprise system, of capitalism, if left to itself, in the absence of outside disturbances (that is, artificial restrictions, etc.) would be one of chronic stagnation. As Lord Beveridge put it:

"The Keynesian analysis leads to the conclusion that, even apart from cyclical depression, that is, slump and unemployment due to the trade cycle, there may be chronic or nearly chronic deficiency in the total demand for labour, with full employment a rare, fleeting accident."

The Marxist view of this matter is much the same as the Keynesian. As Mr. Dobb has recently put it in his *Studies in the Development of Capitalism*, ". . . It is only in exceptional periods, when markets and profit opportunities are expanding in an unusual degree, that the chronic fear of increase of products and of productive capacity which this system seems to nurture is held in check, and its native tendency towards restrictive policies, born of this fear, is in abeyance."

It is along these lines, therefore, that we must search for the clues to the puzzle of Western progress since the Industrial Revolution and also for the clues to the puzzle mentioned earlier in this book: namely, why didn't the commercial systems of earlier ages—that of Rome, for example—develop into a fully-fledged capitalist system such as we know today?

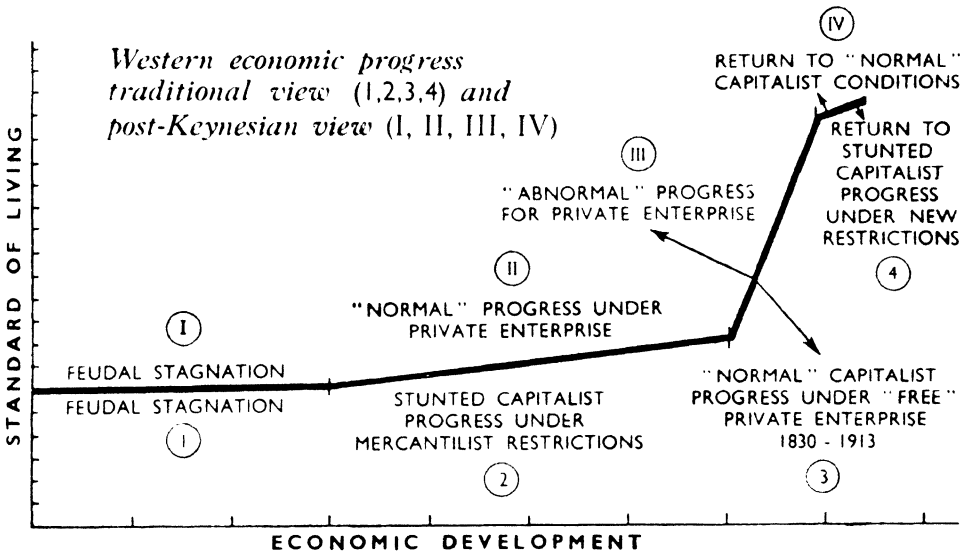
## THE RIDDLE OF ECONOMIC HISTORY

The central problem of world economic development is to find the explanation of the manner in which stagnant subsistence economies are in some places transformed in the course of time into "exchange" or "commercial" economies using comparatively little science and machinery, and the explanation of how some of these are in turn transformed into fully-fledged capitalist or collectivist economies, based on the large-scale use of machinery and the progressive application and development of science.

It is, indeed, essential to see capitalist economic development against the historical background of the stationary, undeveloping subsistence economies and the stagnant exchange economies out of which it grew. For the modern view that capitalism has a constant tendency towards stagnation and restriction of output does not mean that capitalism has as a matter of fact ever been completely stagnant. Compared with the earlier, feudal, subsistence economy, capitalism has always been a force for change and economic development; and it may well have been, historically, a necessary stage in

the progress of mankind. The modern view is merely that rational progress is not in the nature of the capitalist system, even at the best of times and in the most favourable circumstances for its working. The system has, in fact, somehow, by devious ways, led to a release of vast achievements and energies and opened a prospect towards even vaster human progress; but at the same time the inherent defects of the system have, on the one hand, constantly been driving society back into an unnecessary stagnation and, on the other hand, given rise to social conflicts which endanger the prospects of future progress and even the maintenance of the past achievements of mankind.

TWO VIEWS OF CAPITALIST DEVELOPMENT




Capitalism has led to economic development, in so far as it has promoted the growth of science and the growth of capital equipment, such as roads, canals, machines, buildings and so on, which aid man in his struggle to wrest a good living from nature. The Keynesian theory enables us to see that the growth of both science and capital, as it takes place as a by-product of the private-enterprise system, is irrational, inadequate and indefensible from a social point of view. For, while scientific and technical progress, together with capital accumulation, are the main factors in raising output per head of population and the standard of living in any economic system, the private-enterprise system cannot normally make provision for either. The amount of technical progress and the rate of accumulation of productive equipment would, in a sensible economic system, both depend on the ability, real output capacity and thriftiness of the community in relation to the real needs of the community. But in a private-enterprise economy there is no

social organization capable of promoting a sensible encouragement of scientific and technical progress and of thrift in relation to real needs. Both technical advances and thrift lead, in a private-enterprise economy, to unemployment, and not to any increase of output, and they may well lead to an actual fall in output. It is for this reason that the historically observed increase in output, in capital accumulation and in the use of science under the private-enterprise system, has the character of a historical puzzle.

### THRIFT AND THE STANDARD OF LIVING

The failure of the private-enterprise system to make use of available productive resources can be most clearly seen in the influence that thriftiness has on economic development in such a system. If there were a sensible social arrangement for making use of the resources that can be released from meeting the requirements of the community for food, clothing, and so on, the difference between output capacity and consumption needs would be available for adding to the stock of productive equipment (by machines, roads, factories, etc.). Such additions to productive equipment are what economists call "investment."

The increased productive equipment would enlarge future output capacity, and in this way a progressive rise in the standard of living could take place. The more thrifty the population would be in a sensibly organized economy, the more rapidly the standard of living would rise. In a private-enterprise system the more thrifty the community is, the less the rate of additions to the productive equipment of the community will tend to be.

How can this be? The answer is that the social arrangements for translating thriftiness into productive equipment for the community (as indeed all the other arrangements for making the best use of resources) are the opposite of sensible in a private-enterprise economy. The people responsible for ordering productive equipment in the private-enterprise system are the business men, who are concerned strictly only with their profits from new investment (the money return from using their wealth, in this particular way—ordering new capital equipment) and who need never bother their heads at all about the need of the community for productive equipment. Now the profitability of adding to the existing amount of productive equipment falls when people become more thrifty, because the sales of consumption goods fall. Productive equipment is used either directly for facilitating the production of consumption goods or indirectly for making other productive equipment ultimately designed to help produce consumption goods. Evidently, then, if sales of consumption goods fall off because thriftiness has increased, the money earned by owners of existing productive equipment will fall off, too, and for those in search of profits the attractiveness of ordering new productive equipment will become less, and not more.

The result of an increase in thriftiness in a private-enterprise economy will be simply to diminish the total of spending (or of effective demand, as Keynesian economists call the money demand which counts in the shops as distinct from the real need which people feel). The fall in total spending will in turn lead to unemployment. Thus an increase in thriftiness in a capitalist economy causes less instead of more capital equipment to be created, and increases the number of unemployed into the bargain.

This absurd result, can, of course, only occur because of the chaotic free-for-all character of the private-enterprise system. It cannot occur in a system in which a responsible view is taken of what use society is making of its resources. We have seen that the traditional economists argue that through the working of the price system all available wanted resources will in fact tend to be used under the private-enterprise system, as if someone were taking a view of the use of resources. Unemployment of wanted available resources is not possible, in other words, because all supply of resources in the markets for resources is conceived as merely an indirect way of demanding the services of other people's resources.

### SAY'S LAW

This view of the traditional economists has been called "Say's Law," after the early nineteenth-century French economist, J. B. Say. "Supply creates its own demand," he said. Say's Law holds, according to the traditional view, not only when people spend all of their earnings on consumption goods, but also when they save some of it. Mr. A. Lewis, in *Economic Problems of the Present Day*, has recently put this traditional view in this way: "Savings are just another form of spending, being money used to buy not bread and shoes, but machines and factories."

Of course, the traditional economists realize that, in itself, saving is not spending, either on bread and shoes, or on machines and factories; but they thought that increased thriftiness increases the total flow of savings on to the markets for accumulated wealth, the capital markets, that it there cheapens the price of capital construction (the rate of interest at which business men can borrow). It does this sufficiently to cause business men to use the resources released from the consumption-goods industries for adding to the stock of productive equipment. In this way employment is unaffected by an increase in thriftiness and leads only to a rearrangement of present production as between consumption goods and equipment (i.e. investment goods) and thus to an increase in future output and capital per head of population. All-round unemployment can only arise, on the traditional view, if the rate of wages is set at an artificially high level, through trade union or state intervention in the labour market.

Keynes showed that this argument, which is indispensable for any defence

of the private-enterprise system, is erroneous, and his view is now generally accepted, except by a diminishing minority of economists. It can be shown by following Keynes's analysis of how increased thriftiness destroys sales (and therefore profits and wage-incomes) in a spiral of falling incomes and spending, that total saving for the community as a whole is unaltered, at best, when thriftiness, that is, the desire to save, increases. There is no increase at all in actual saving, only a fall in employment and incomes, so that there can be no fall in the rate of interest as a result of increased volume of saving, such as the traditional economists count on for causing an increase in productive investment by business men. In fact, the total volume of additions to real productive equipment will tend to fall, because the fall in sales and incomes consequent on a rise in the desire to save will depress the profitability to business men of already existing equipment.

### CHRONIC STAGNATION

Keynes's disproof of Say's law not only demonstrates the inability of the private-enterprise system to arrange sensibly for a growth of output and a rise in living standards by way of using the thriftiness of the population to promote the accumulation of equipment, but it also shows that the private-enterprise system normally tends, as Lord Beveridge says, to "chronic deficiency in the total demand for labour" (and he might have added, in the use by man of all other productive resources also) "with full employment a rare fleeting accident." In other words, private enterprise always threatens stagnation, and production under the private-enterprise system has no relation whatever to the needs and real output-capacity of the community.

If the real output-capacity of the community is such that, at the level of employment and real incomes which would exist if there were full employment, people would be saving, for family and other reasons, a certain positive amount (taking all individuals in the community together), then we know that, if full employment is to continue to exist, business men must keep up a flow of orders for new equipment to make up the difference between the output-capacity of the community at full employment and the consumption-expenditure of the public at that level of employment. If the rate of orders for new equipment is at any time insufficient to fill the gap between consumption and output-capacity at full employment, then there will be less than full employment, no matter how large the output-capacity of the community, and no matter how keenly the unemployed wish to work.

Thus, whatever other purposes may be achieved by the construction of capital goods in a private-enterprise economy, it is also required for the purpose of maintaining the level of employment at the height at which willing workers can find jobs, and to maintain the standard of living. This

would not be so in a sensible economic system. In a sensible economy, when resources are released from the work of adding to productive equipment, they will naturally become available for raising the standard of current consumption. But in a capitalist system there is a fall and not a rise in current real consumption when capital construction is slowed up. The resources released from adding to equipment are not absorbed in raising the standard of consumption, because there is no social mechanism for arranging this. What happens is that, as the earning and spending of incomes previously earned in the construction-goods industries falls, consumption falls also, and it falls by even more than the amount by which spending out of incomes in the construction-goods industries fell in the first place, because the resulting original fall in sales in the consumption-goods industries leads to a further spiral of declining spending within the consumption-goods industries also. Thus the crazy logic of the capitalist system decrees not that the only way to have a bigger cake tomorrow is to refrain from eating the ingredients of it today, but on the contrary, that even to have a cake at all we must eat it fast and keep on eating it. Yet under capitalism, capital accumulation is always bringing itself to an end.

We have seen that, in order to maintain a given amount of employment at a level of income at which the community as a whole saves a positive amount, it is necessary for the business men to keep ordering new equipment at a corresponding rate. But, as time goes on, the given amount of consumer spending corresponding to this level of income is spread over an increasing output of consumption goods which will be turned out by the increasing amount of capital equipment as it becomes installed. That, however, evidently will reduce the rate of profit per unit of equipment, if the business men do keep up the rate of orders for new equipment. When the rate of profit declines, business men curtail their orders for new equipment, and this in turn reduces incomes and, eventually, consumption.

### THE STAGNATION LEVEL OF OUTPUT

The lower limit towards which output is always tending to fall in the private-enterprise economy is that stagnation level of it at which the income of the community is so low that there is no net positive saving in the community for all of its members taken together and no new equipment is being added to the existing capital equipment, other than what would be sufficient to offset wear and tear. At this low level of income the position will be stabilized, because the rate of spending will be sufficient to buy all the output. But there will, of course, be no progress and no rise in living standards at this level of output, and the actual level of output will fall short of the real output-capacity of the community by an amount depending on the difference between output-capacity and output corresponding to

consumption at that level of income which corresponds to zero saving.

People generally save more the larger their incomes are, so that the larger the output-capacity of the community, the larger will be the waste of resources corresponding to the state of stagnation towards which the capitalist system is always being driven by its internal contradictions. However much output-capacity might increase, actual output will always be tending to be riveted to that low level at which people are reduced to being unable to save.

### SCIENCE LEADS TO DIMINISHED OUTPUT

By similar reasoning, it can also be seen that the private-enterprise system is fundamentally ill-adapted to making use of whatever scientific and technical advances may emerge under this system. For, while much scientific progress and most technical advances increase the potential output-capacity of available resources, the actual output will not, generally, increase as a result of them in a private-enterprise system, and it may in fact tend to diminish.

This is so because, again, there is no social arrangement, no mechanism in the private-enterprise system, which will marry the output-capacity of the community to the needs of its members. When a firm makes use of a new technique, it does so in order to cut its costs. But the costs of the firm are its outlay on hiring resources, and they are, therefore, from another aspect the incomes of the owners of resources employed by the firm. There is thus a fall in incomes to some members of the community exactly equal to the gain to some other people which results even if the innovating firm reduces the prices of its products as its costs fall. The fall in spending of the first group of people will very likely be larger than the increased spending of the second group of people and, if this happens, total incomes and output will fall and unemployment will rise. All that will tend to happen will be that the gap between actual output and potential output will be enlarged. It is true that, for a time, in favourable circumstances, technical innovation may, as Keynes and Kalecki have stressed, lead to a rise in the total rate of spending of business men on new types of capital equipment, and in this way, through causing an increase in spending throughout the economy, technical progress may lead to some increase in output so long as this stimulus lasts.

This, however, merely serves to underline the patent absurdity inherent in the system itself. For the progress of technique should raise current consumption and standards of living in a sensible economy by diminishing the amount of resources that needs to be set aside for improving and enlarging productive equipment and making them free for use in producing consumption goods. Partly also, the community might choose to do less work and enjoy more leisure than could previously be afforded. In the private-

enterprise system, however, current consumption increases precisely through the increase in employment and income due to the fillip to capital accumulation which results as the accidental by-product of innovation. As soon as this special stimulus becomes exhausted, the standard of living relapses to the stagnation-level which corresponds to zero saving, unless it so happens that the rate of innovation obliges by continuing at a level which will induce business men to order the increasing amounts of equipment required to keep the expanding output-capacity of the economy fully employed—and this in spite of the growing community saving at full-employment income levels.

And there is, of course, no ground whatever for supposing that the rate of innovation will oblige in this way.

*Capitalism Unprogressive*

We have now seen, in very brief outline, what is the theoretical basis of the Keynesian view concerning the normality of stagnation under capitalism. It is based on the demonstration that this system can make no sensible use of either thrift or science, which would be the basis of economic progress in any sensible economy. It is in the light of this theory that the Keynesians reject the traditional textbook view that capitalism is necessarily associated with economic progress.

## THE EVIDENCE

Let us now look at some of the facts which Keynesians claim bear out their view. The tables on pages 224 and 225 illustrate: (i) the stagnation of living standards; (ii) the decline in business men's orders for capital equipment; (iii) the increase in unemployment; since, say, 1900 in a number of important capitalist countries, which, on the Keynesian view, have marked, together with other symptoms, the re-emergence of the stagnation characteristic of the nature of the private-enterprise system.

It must be said, in considering the evidence showing that output-per-head tended to stagnate in advanced capitalist countries in the half-century since 1900 (except, significantly, in wartime, when, under the pressure of "uneconomic" war expenditure, potential output-capacity is fully used), that this output-per-head has in many countries been maintained at a stable level in the face of a gradually shortening working week, reckoned in terms of hours worked.

*Are People Satisfied?*

It will be asked: might it not be arguable, then, from this that both the stationary tendency of output-per-head and the falling proportion of saving (i.e. of capital construction) that we have also noticed are both due to the fact that, in these advanced capitalist countries the standard of living has reached a level satisfactory to their populations? Might it not be that

## THE GROWTH OF STAGNATION IN LIVING STANDARDS IN SIX LEADING CAPITALIST COUNTRIES SINCE ABOUT 1900

| U.S.A. | | GREAT BRITAIN | |
|---|---|---|---|
| *Year* | *Real Income $ per head, 1925–34 values, I.U.s* | *Year* | *Real Income £ per head, 1930 values* |
| 1850 | 787 | 1860–9 | 116 |
| 1870 | 959 | — | — |
| 1900 | 1388 | — | — |
| — | — | 1904–10 | 182 |
| 1910 | 1379 | — | — |
| 1920 | 1319 | 1913 | 195 |
| — | — | 1924 | 186 |
| 1930 | 1446 | 1930 | 202 |
| 1931 | 1201 | 1931 | 184 |
| 1932 | 926 | 1932 | 181 |
| 1933 | 968 | 1933 | 188 |
| 1934 | 1119 | 1934 | 199 |
| 1935 | 1188 | 1935 | 209 |
| 1936 | 1355 | 1936 | 219 |
| 1937 | 1407 | 1937 | 233 |

| GERMANY | | FRANCE | | CANADA | | HOLLAND | |
|---|---|---|---|---|---|---|---|
| *Year* | *Real Income per head, I.U.s* | *Year* | *Real Income per head, I.U.s* | *Year* | *Real Income per head, I.U.s* | *Year* | *Real Income per head, I.U.s* |
| 1854[1] | 420 | 1850–9 | 382 | — | — | — | — |
| 1877[1] | 632 | 1870–9 | 597 | — | — | — | — |
| 1894[1] | | | | | | | |
| 1903[1] | 808 | 1900–9 | 814 | 1903 | 1317 | — | — |
| 1913[1] | 881 | — | — | 1911 | 1182 | 1913 | 975 |
| 1913[2] | 957 | 1920 | 565 | 1920 | 1570 | — | — |
| 1930[2] | 714 | 1930 | 740 | 1930 | 1371 | 1930 | 943 |
| 1933[2] | 684 | 1931 | 748 | 1931 | 1171 | 1931 | 848 |
| — | — | 1932 | 695 | 1932 | 1054 | 1932 | 775 |
| — | — | 1933 | 700 | 1933 | 1057 | 1933 | 721 |
| — | — | 1934 | 667 | 1934 | 1197 | 1934 | 662 |
| — | — | — | -- | 1935 | 1229 | — | — |
| — | — | — | -- | 1936 | 1297 | — | — |
| — | — | 1937 | 512 | — | — | — | — |

[1] Old boundaries. [2] New boundaries.

These figures and those on page 225 are from *The Conditions of Economic Progress*, by Colin Clark.

# RATE OF SAVING AND UNEMPLOYMENT

## PROPORTIONS OF NATIONAL INCOME SAVED[1]

*(Per Cent)*

| *Year* | *U.S.A.* | *G.B.* | *Germany* | *France* |
|---|---|---|---|---|
| 1860–9 | — | 16.6 | — | — |
| 1870–9 | — | — | — | — |
| 1890–1900 | — | — | — | — |
| 1900–10 | 14·3 | 12·2 | 19·1 | 9·0 |
| 1919–24 | 12·2 | 8·1 | — | — |
| 1925–30 | 10·9 | 7·6 | 7·7 | 11·2[3] |
| 1934–37 | 5·0 | 7·0 | 11·8[2] | — |

[1] No figures are available to demonstrate the trend of savings in Canada and Holland, but there is reason to think that the Canadian figures show a downward trend similar to the American.

[2] This rise is due to rearmament under the Nazis.

[3] This rise is connected with abnormal monetary conditions.

## PROPORTION OF POPULATION INVOLUNTARILY UNEMPLOYED AND AVAILABLE FOR WORK

| U.S.A. | | G.B.[1] | | GERMANY[2] | |
|---|---|---|---|---|---|
| *Year* | *Per cent* | *Year* | *Per cent* | *Year* | *Per cent* |
| 1850 | 4 | 1860–1914 (average) | 6 (approx.) | — | — |
| 1870 | 4 | — | — | — | — |
| 1900 | 7 | — | — | — | — |
| 1910 | 5 | — | — | — | — |
| — | — | — | — | 1913 | 1·4 |
| 1920 | 5 | 1919–1939 (average) | 14 (approx.) | 1926 | 14·2 |
| 1930 | 8 | — | — | 1930 | 18·8 |
| 1931 | 16 | — | — | 1931 | 26·8 |
| 1932 | 24 | — | — | 1932 | 34·0 |
| 1933 | 24 | — | — | 1933 | 31·3[3] |
| 1934 | 20 | — | — | 1934 | 22·4 |
| 1935 | 20 | — | — | 1935 | 19·3 |
| 1936 | 17 | — | — | 1936 | 14·7 |
| 1937 | 17 | — | — | 1937 | 9·5 |
| — | — | — | — | 1938 | 4·7 |

[1] See A. C. Pigou: *Income.*

[2] Excluding unemployment of people occupiable in agriculture.

[3] From here onwards rearmament under the Nazis reduced unemployment.

N.B.—The trend towards increased involuntary unemployment after 1900 or so was quite definitely world-wide, and not peculiar to any country.

they are easing up on the provision which they make for further enlargement of their future output-capacity, by way of saving and capital-construction, and taking out the benefits of past capital-construction, and of increasing output-per-head due to technical progress, in the shape of the higher standard of living that comes from having more leisure?

This argument will not bear examination, however. For one thing, average living standards vary considerably among the advanced capitalist countries (Mr. Colin Clark reckons the German and French at about half of that of America), and it would be strange indeed if their populations decided simultaneously in point of time (round about 1900), that at those very different standards of living they were each satisfied with the standard they had reached and could now lean back and take a rest.

## INHERENT CONTRADICTIONS

But the conclusive refutation of the view, that the stabilization of output-per-head was a matter of choice and not of imposed stagnation, is contained in the figures in the second table on page 225 showing the growth of involuntary unemployment in the advanced capitalist countries. This shows the truth of the matter. What has been happening in the advanced capitalist countries is just what Keynesian theory says always threatens to happen. Actual output cannot increase, in spite of the tendency of potential output to grow with technical progress, because the system is unable by its inherent contradictions to provide for the absorption of its own potential output, which is wasted, as a rule, in growing unemployment.

Mr. Colin Clark comments thus on his figures in connexion with the U.S.A. experience:

"One is almost tempted to say that there appears to be some powerful force holding down or even reducing the standard of living actually attained. . . . Many economists would be inclined to say on (theoretical) grounds that a stage of development may be reached where a strong tendency to save . . . may permanently prevent a rise in average real income. If it is possible for such situations to occur, America from 1900 to 1937 certainly looks like an example of one."

### *Shorter Hours*

It is, in fact, likely that the connexion between stagnation of output and shorter hours was that the workers pressed for shorter hours after a point, at least in part because of mounting unemployment—to make labour more scarce, and not just because they wanted more leisure.

Thus, we are driven to ask: why did all go well in the nineteenth century? Why was there not stagnation and unemployment then in the capitalist countries? Why were the fruits of saving and technical innovation not

wasted then also? Before sketching the Keynesian answer to these questions, it is worth while noticing one or two further points in connexion with the shape of events since 1900.

It is sometimes said that the fall in savings and in the rate of additions to capital equipment in recent times has been due to the growth of redistributive taxation. The theory formulated by Keynes enables us to ignore this argument, as being the reverse of the truth. Actual additions to capital equipment, that is, actual savings, are, as we have seen, discouraged, not encouraged, by a strong desire to save in the capitalist system.

### INCOME REDISTRIBUTION AND SAVING

It is true that, given the thriftiness of individuals, a redistribution of incomes from rich individuals to poor individuals will tend to increase the amount spent and diminish the amount saved, out of a given total income. If the private-enterprise economy were always working to full output-capacity, then it would be true that the more unequal the distribution of income, the larger the amount saved and used for adding to output-capacity would be. However, in a situation in which, as in the advanced capitalist countries after 1900, there is chronic stagnation of output and increasing unemployment due to insufficient spending, the effect of a redistribution of income which reduces the amount saved out of a given income actually leads, precisely because it gives rise to more spending, to larger incomes, larger output and more capital construction and saving than would otherwise occur.

These considerations in themselves make the good record of the nineteenth century in the matter of capital-accumulation and full employment appear even more puzzling. For it is generally supposed that the Victorians were very thrifty people. And there was certainly not much redistributive taxation in the nineteenth century. Given the thriftiness of individuals and the amount of redistribution through taxation, the amount of saving that people will wish to perform out of a given amount of income will be larger, the more unequally incomes are distributed between individuals, since a richer individual will save more than a poorer one. Now the distribution of income in a private-enterprise economy will depend both directly and indirectly on the distribution of the ownership of wealth (or, in Marxian terms, on the economic and social relations arising from the prevailing system of ownership of the means of production).

### EMERGENCE OF PROLETARIAT IN BRITAIN

As can be seen at a glance from the table on page 228, the recent course of development of capitalism in Britain has been associated with a vast increase in the degree of inequality of social status, as a result of the forcible expropriation of the independent peasantry in the course of the

Enclosure Acts of the eighteenth and early nineteenth centuries and the ruin of the independent craftsmen resulting partly from the same cause and partly from the competition of factory-production based on machinery and steam-power. The change in social status went with a change in economic

CHANGES IN THE SOCIAL STRUCTURE OF BRITAIN

(From W. F. Oakeshott, *Commerce and Society*)

| | *Per cent* |
|---|---|
| *Late Seventeenth Century* | |
| Employers .. .. .. | 14 |
| Employees .. .. .. | 34 |
| Independents .. .. .. | 52 |
| | 100 |
| *Mid-Twentieth Century* | |
| Employers .. .. .. | 4 |
| Employees .. .. .. | 90 |
| Independents .. .. .. | 6 |
| | 100 |

status. The new proletariat of the towns had become paupers. They had nothing to sell but their labour power, while the enclosing landlords made vast gains in wealth and income. It follows from the Keynesian theory that some extraordinary outside stimulus to sales must have been operating over this period, for otherwise the vast redistribution of wealth and therefore of income in the direction of greater inequality would have led to a big drop in spending and utter stagnation in the British economy.

The progress that occurred in the nineteenth century must have occurred in spite of the thriftiness of the Victorians, not because of it.

## THE FALLACY OF WAGE CUTS

Then again, the traditional economists still argue to this day that the unemployment of recent years was due to the rigidity of wages caused by trade union opposition to wage cuts, so that general unemployment is regarded as an artificially created problem and not something in the nature of the private-enterprise system. But, as Lord Beveridge says, "the Keynesian analysis . . . destroys the assumption . . . that wage rates could be so adjusted as to abolish unemployment . . . and the inference that in any given situation employment could be increased directly by a general reduction of money wages." Wage cuts cannot in themselves prevent unemployment, for the cause is insufficient spending, and wage cuts lead to less spending.

Again, it is well known that workers are often opposed to technical change, and they have been much blamed for holding up economic progress by their obstruction. But, we now see, they have been quite right in their attitude,

since the general tendency of technical progress under capitalism is not to increase output, but to diminish employment.

Finally, we must take account of the stock argument of the traditional economists (see pages 190-2) that what went wrong after 1870 or so was the reversal of the policy of Free Trade which had been adopted in the 1840s. This, it is said, was the main factor in causing the economic stagnation of twentieth-century capitalism, both by wasting the fruits of the international division of labour, and by leading to political friction and two world wars. Things went wrong, it is said, when twentieth-century capitalism degenerated into an unnatural "neo-mercantilism"; into a modern version, that is, of the restrictions of the days before Adam Smith's ideas had triumphed.

### FEAR OF FOREIGN IMPORTS

This judgment also appears to be fundamentally mistaken on the Keynesian view of economic development. The fear of competition from imports and the desire to push exports, which were characteristic of mercantilist policy everywhere throughout the centuries until 1850, appear very reasonable so soon as the false assumptions of Say's Law are forgotten. Once it is seen that the private-enterprise system is always exposed to a chronic danger of stagnation, it is quite sensible to try to push exports abroad; because sales abroad are not substitutes for sales at home; they are substitutes for unemployment at home. Just as capital construction at home is not at the expense of consumption, but actually serves to maintain consumption by giving more employment, so exports are not what they would be in a rational economic system, namely, goods lost to current home consumption; they are sales which are necessary to generate spending which, in turn, will sustain the profitability of home production, and therefore the incomes which must be earned if there is to be home consumption. One of the conditions of having any cake at all at home is that people abroad should eat some of it. Such is the logic of trade under capitalism.

It follows by similar reasoning that, except for expenditure on raw materials not procurable at home, imports are not what they would be in a sensible economy, namely, advantageous purchases from abroad for which it is worth giving up some home production in exchange in the shape of exports, but constitute a threat to the home standard of living. For money spent on imports instead of on home goods means a leakage of spending power to foreigners; and this, by causing a whole spiral of falling incomes at home, involves a drop in the amount of home consumption, which will generally be much larger than the value of imports brought in from abroad.

It is, therefore, entirely natural that capitalist economic systems should so regulate their trade that they should all generally try to restrict imports and push exports. Now, since the exports of one country are the imports

of another, it is evident that trade under private-enterprise conditions generally has the character of economic warfare, and in such warfare, so long as the contending powers are equally matched, there can be no significant volume of trade. What trade there is under these conditions will normally take the shape of a jealously guarded complementary trade between a dominant power and its colonial possessions or satellites. In the course of such trade the unsaleable surplus products of the dominant and technically superior country are sold for as much as possible in a more or less monopolized colonial market; and the colonial incomes which make it possible are derived either from the supply to the dominant trading power, for direct use or resale, of precious metals, scarce raw materials, and luxuries or necessities unobtainable at home or, sometimes, and before 1800 not exceptionally, from the sale of slaves.

There is no division of labour in the textbook sense (see pages 178-9) in trade relations of this kind, except the sort that exists between masters and servants. It is of the essence of such a system that it is unfree and one-sided in advantages conferred as between the partners to it, and exclusive in character as between rival dominant powers. It is natural, also, that the quest for markets and profitable colonial possessions and dependencies should involve the rival powers in perpetual conflict with one another as well as with their several colonies and other satellites.

### WARFARE NORMAL TO CAPITALISM

Once again, therefore, regarding the matter from the modern view, there is nothing unnatural or extraordinary about the international economic warfare of the twentieth century and the shooting wars in which it has twice resulted within the lifetime of one generation. It is quite correct for traditional economists to say that we are now living in an age of neo-mercantilism. Where they are profoundly wrong is in thinking that we have ever lived and traded under a system which has been anything other than neo-mercantilist. The trade policy appropriate to capitalism must always be the irrational one of mercantilism in some form or other.

It is for this reason then that, in the field of developments in the international sphere, as in the sphere of stagnation at home, the modern period will be regarded as a return to the normal limitations of performance characteristic of the private-enterprise system on the modern view.

### TRADE, WAR AND SCIENCE

There was, however, a most important way in which trade led to progress in economic development during the opening stages of western capitalism. But the trade that did this was not free, nor peaceful, nor concerned with the division of labour. It was in the centuries of mercantilist commercial

capitalism, with all its wars and much-maligned regulations, that certain special developments in Western Europe gave rise to the growth of modern science. Trade and war were the parents of modern science in Western Europe, and in the special conditions of this part of the world they led to the growth, for the first time in human history, of systematic experimental science. It was in the five hundred years or so that led up to the Industrial Revolution that mercantilist commercial capitalism ushered in the rise of the nation-states of Western Europe. What had been a barbarous and under-populated part of the globe was transformed, by the interaction of trade, war and a peculiar situation which resulted in the birth of experimental science in this previously backward part of the world, into a group of states whose power could not be challenged by any political grouping outside it. The significant and interesting problem that this part of the history of capitalism poses is not the one that the traditional economists raise. Why did the mercantilist never hit on the idea of freeing all economic activity and trade from regulation? Why was there no Adam Smith, no Peel, no Gladstone, to "restrict the privilege to restrict"? On the modern view of the matter such fault-finding is quite out of place. Generally speaking, within the inevitable limitations imposed on them by the whole economic and social character of mercantile capitalism, the economic statesmen of the time were supremely successful.

They, at any rate, mostly knew what they were doing, which it seems can hardly be said of the economic statesmen of the traditional economists' golden age—the nineteenth century. It is the success, not the failure, of mercantilism which requires explanation. The historical puzzle of the mercantilist period is how the countries of Western Europe could, in the space of a few centuries, rise to a position of world leadership from a position which can only be described as one of backwardness.

## BIRTH OF EXPERIMENTAL SCIENCE

The key with which one may answer this puzzle undoubtedly lies in the special Western European conditions which made this part of the world, and not the splendid and ancient civilizations of the East, the cradle of modern experimental science. For it was the scientific and technical superiority of the states of Western and South-western Europe that enabled now one and now another of them to take the lead in tapping the wealth of the world through pillage, trade, or subjugation by conquest. In their successive periods of ascendancy, Spain and Portugal, France, Holland and England had, as a rule, to fight seriously only against one another for the spoils of dividing and redividing their conquests in treasure, profitable trading stations and colonies, whether these were the ancient empires of thickly settled India and South-east Asia, or the sparsely settled continents of the Americas.

In traditional economics, the question of what it is that determines the

rate of progress of science was left unexplored. The importance of scientific and technical progress for economic development was, of course, admitted, but it was thought that in the nature of the case, the speed and direction of fundamental discovery, of finding out about the unknown, must itself be unknowable. If this were in fact so, we would have to regard the fact that modern (experimental) science was first born in Europe either as an accident or as a sign of the special genius of the Europeans. Thanks, however, to the recent work of such historians as Hessen, Crowther, Farrington, and Gordon Childe, and scientists such as Bernal and Haldane, we now know that the history of science can be rationally explained by examining the interactions between the economic and social circumstances which help or hinder science, and the progress of the logic of science considered in itself.

*Scientific Superiority Not Inherent*

There is no evidence to warrant the belief that men today are more curious or more gifted with scientific insight than at any time in recorded history; nor is there any reason to suppose that there are important natural differences between the peoples in different parts of the world in this respect. Variations in the rate of progress of science in the course of history can generally be pinned down to, and explained by, economic and social circumstances.

This new work on the economic interpretation of the history of science is still in its infancy, but roughly the following tentative explanation has been advanced for the puzzle of why modern science was born in Europe. It appears that, paradoxically, it was the very poverty of Europe on the one hand, and the social humility connected with her adherence to Christianity on the other hand, that provided the special conditions in which experimental science could arise in response to the requirements of trade and war, and thus make Europe the wealthiest and proudest continent of the world. Modern science is based on a combination of systematic observation, reasoning, and experiment, and the growth of science is impossible without all three of these elements in scientific work. Farrington, Crowther and others have shown how, in the ancient civilizations of Babylon, Egypt and Greece, great capacity for exact observation coupled with brilliant speculative ability failed again and again to lead to the full development of science, because of the economic and social obstacles which the institution of slavery put in the way of the growth of the experimental side of scientific investigation.

*The Handmaiden of Wealth and Power*

It was as true in ancient times as throughout history to our own day that science was bound to serve the interests of the ruling classes of society, as the condition for being allowed to exist, and the amount of financial encouragement it received was proportional to its usefulness to these ruling

classes. At all times this has tended to distort the direction of development of science and has pushed it towards channels where, as in the arts of war and commerce particularly, it could contribute directly to the enhancing of the power and wealth of the ruling classes of society. In the slave economies on which the most advanced civilizations of the East were based, however, not only the direction, but also the basic method of science was limited by the social system. Manual labour, being performed by slaves, was everywhere regarded as an inferior and disreputable occupation for the privileged and leisured classes. Learning and the cultivation of knowledge were the preserve of gentlemen, and of scribes, teachers, artists, and priests, who were regarded as superior, at any rate to slaves. So long as the social stigma attached to manual labour was not broken down, little progress was made in the basic sciences of physics and chemistry, which require manual work in connexion with measurements of objects, and the progress of which had, as a matter of fact, to start for the most part from a close systematic study of the methods of traditional crafts and industries which had been experimentally discovered throughout the ages by craftsmen and were handed down from generation to generation by traditional precept and example.

## SLAVERY AND SCIENCE INCOMPATIBLE

Slavery also hampered the growth of science in another most important way. The very successes in social and military organization which were achieved on the basis of slavery meant that, so long as the supply of man-power was plentiful, there was no apparent need, from the point of view of the ruling class, for the development of non-human, natural or mechanical forces of production, either for war purposes or for increasing the wealth of the ruling classes.

Because of this double check to its growth, experimental science could not develop in slave societies. Their intellectual brilliance was exhausted in speculative feats which waxed and waned and were forgotten in the welter of the rise and fall of the empires of the East and the Middle East.

It was this deadlock that was broken in Europe during the Renaissance, which ended the feudal stagnation following on the decline of the Roman Empire. Here the demands of commerce and war could not be fed by ample reserves of slave manpower. Europe, whose rulers were once more introduced during the Crusades to the luxuries of the civilizations of the East for the first time since the collapse of the Roman Empire, was, because of her back-wardness and the simplicity of her economy, relatively thinly populated.

### *Ingenuity Released*

As the ruling classes developed a desire for luxury and riches, in the absence of the military manpower that could bring these benefits within their reach, ingenuity, as Bernal says, "was at a premium." He continues:

"At first this ingenuity was the natural ingenuity of the craftsman or millwright. The small mining company wanted to raise ore and pump water without having to take any new partners or pay ruinous wages for hired miners; and simply had to invent machines to do the work. But later, when feudal or merchant princes became the owners of mines, foundries and ships, they naturally turned to the educated men, to the artists and professors of mathematics for help; or rather the latter, seizing their chance, offered their services. . . . The great technical developments of south Germany and north Italy in the fifteenth century, where the bases of mechanical industry, capitalist economics and modern science are all to be found, were largely due to the concentrated war demand for guns and precious metals."

### INFLUENCE OF CHRISTIANITY

The advance of experimental science was thus stimulated by the absence of large quantities of slave-labour in Europe, and it was, further, not hampered so fatally as it had been in the East by social prejudice. The Christian doctrine of the brotherhood of man and its praise of the humble craftsman's occupations established the good repute of manual labour; and scientists were thus able to study the techniques and problems of production at first hand without loss of face. This was the origin of the rise to predominance of Western science and technique, which at the beginning of the Renaissance was on the same traditional level as that of the ancient Eastern civilizations from which indeed Europeans had learnt what they knew.

The advance of mercantilist capitalism in the West was thereafter determined up to the Industrial Revolution by the varying fortunes of commerce and war, in which the superiority of Europeans as against the rest of the world was by now established. Spurred on to find better trade routes to the East, they struck out on their great voyages of discovery and found, towards the West, to their great disappointment at the time, only America, a vast, sparsely-settled continent which, although it afforded some magnificent loot to the Spaniards and some rich mines of precious metals, was almost useless for trading purposes, as it did not possess the great riches in spices and manufactured luxuries which could be obtained in the East.

### SCIENCE COMES INTO ITS OWN

Science had proved her worth in brilliantly solving problems posed by the new demands of navigation; and as the prizes of commerce with the East grew, rapid progress was made, after the discovery of gunpowder, with metallurgy and chemistry. Governments vied with one another in encouraging science. Careful attention was paid to the state of manufactures, since, for the countries not in possession of mines, an excess of exports over imports was one way (besides piracy and war) of obtaining wealth, since the

balance would be settled in gold. The increased expenditure made possible by the discoveries of American mines and hoards and the expenditures on wars all stimulated industry and commerce; but these expenditures tended to occur in bursts, the exhaustion of which brought falling prices, discouragement to enterprise, unemployment. Mercantilist regulations were aimed at the achievement of maximum military and economic power, and with this end in view taxation, trade, industry and labour conditions were carefully regulated, together with the use made of science.

### PRIVILEGED RESTRICTIONISM

Eventually, a considerable science of Political Arithmetic and Economics grew up in this process of realistic State regulation of enterprise, in which the State and merchant interests—the latter organized in monopolies and companies of various kinds—co-operated closely. The economic and social arrangements of feudal Christendom, together with its ideals, were gradually dissolved in the process. The old social ideal of stability and subsistence economy, graduated according to rank, was gradually replaced, not without much conflict and heart-searching and controversy, by the increasing dominance of the money-making motive. But progress was always limited by the restricted conditions which this capitalism involved. The profits of commerce were handsome, but they were limited, of necessity, to the comparatively small luxury traffic that was all that could be profitably allowed in view of the need for protecting basic home production and employment everywhere; and these profits tended to go into a very few pockets.

### AN AGE OF CONFLICT

War, with its companion distresses and economic exactions, was incessant, and the threat of economic stagnation, which was ever present, became the cause of growing social problems as the old social bonds were gradually loosened. The number of the property-less proletariat in town and country tended to grow as commercial opportunities and technical improvements led to the dispossession in some places, and even to reduction to serfdom in others, of small owners or holders of land. Religious dissent and the conflicts arising out of it mingled with these economic and social changes, and complicated them. Conflicts appeared at every level, between national and regional interests, between small capitalists and large, between town and country and between different industries.

### GROWING DISCONTENT

The folly, greed or ambition of kings and courts sometimes exceeded what their subjects could bear and the growing rationalism which the progress of science and learning encouraged led to growing discontent with old social

arrangements and new social ills. The English Revolution of 1688, the Revolt of the American Colonies in 1763 and the French Revolution of 1789 were only the major landmarks in this widespread and long continuing social unrest. What, then, were the great changes that led to the vast expansion that occurred in the economic horizons of the Western world soon after the turn of the nineteenth century?

## THE NINETEENTH-CENTURY "BOOM"

The explanation of the "secular boom" of the nineteenth century cannot be simple. The traditional economists' simple view that it followed automatically from removing the mercantilist fetters on competitive private enterprise looks rather like a fairy-tale, in the light of modern theory.

The problem may, perhaps, best be approached by attempting to find new answers to these two questions: (i) Why did Great Britain abandon just at the time at which she did, about the years 1840–50, the well-tried system of mercantilist regulation which had been the instrument by which she and all the other Western European countries grew to state-hood and to economic predominance after the long centuries of medieval stagnation?

(ii) Why did the abandonment of mercantilist regulation lead to such an extraordinary expansion as compared with Western capitalism's previous normal rate of progress under mercantilist regulation; and why did this nineteenth-century progress turn out to be temporary, the slowing up occurring markedly after 1900 and coinciding with the re-emergence of modern forms of mercantilist, state-regulated capitalism? As has been said before, no one has yet done the detailed research necessary for giving a considered, and confidently scientific, detailed answer to this question. For what it is worth, however, here is my own guess at the outline of the Keynesian theorists' answer which I think will be found eventually to emerge.

The key elements in the eventual answer to these questions will, almost certainly be grouped around three sets of facts: (1) the economic and military weakness of the native populations of North and South America and Oceania and the vast size and natural wealth of the areas that were held so lightly occupied by their "native" populations; (2) the technical, and therefore military and economic, strength built up through centuries of mercantile capitalist trade and war and struggle for power by the more densely settled and territorially small Western European countries in general, and the commanding technical position among them of Great Britain in particular; and (3) the balance of social and political forces in the various Western European countries, and the peculiarities of this balance in Great Britain in the early nineteenth century.

Given these special circumstances, it is possible to see how a situation

could arise in which it became politically necessary and economically attractive, for Great Britain in particular, to abandon the traditional mercantilist system of regulation and to embark on her experiment of "free trade" and free, competitive capitalism. It was the conjunction of these special circumstances which seems to have been the real underlying cause of Britain's embracing a liberal commercial policy. It will come to be seen—as the modern theory is developed—that this liberal policy was not (and is not) in itself, and in general, a sensible policy; that it was not the liberal policy that led to expansion and economic progress, but rather that both the expansion and the liberal policy were together caused by something like the three sets of underlying factors which have just been distinguished.

*Expansion not due to Liberalism*

As soon, therefore, as these special (and also necessarily temporary) circumstances no longer continued to dominate the situation, the extraordinary expansion of capitalist production came to an end. Liberal policies also vanished, because the special circumstances vanished. It was not the abandonment of liberal ideas and policies, but the exhaustion of the stimulus given to expansion by necessarily temporary circumstances, that brought capitalism in the West back to its normal pre-nineteenth-century stagnation, its normal mercantilistic regulations, and its normal open international and domestic economic conflicts.

The continuation of liberal policies, it will be found, then, could have done nothing to sustain the abnormal expansion when the abnormal circumstances had passed away. Also, the fact that in some places, for example in Germany, liberal ideas and policies never took proper root at all, was not, it is likely to be found, because in such countries people were incapable of grasping the validity of the ideas of Adam Smith, or were too wickedly nationalistic to want peaceful world-wide progress, as Professor Robbins suggests (see pages 190-1), but simply because the special circumstances which drove Britain to the course she took did not operate in most other countries.

*"Liberal" Colonialism*

It should be obvious that it is wrong to think of the liberal episode of nineteenth-century capitalism as involving any departure at all, even temporarily, from the fundamentally aggressive, self-regarding, warlike character of straightforward mercantilist capitalism and colonial development.

Liberalism is usually spoken of as the antithesis of warlike imperialism. It is held up by its textbook champions as a method of economic co-operation between nations, giving equal opportunities to large and small, weak and strong. But the most elementary examination of what happened, in fact, under nineteenth-century liberal capitalism, from its first inception, shows

that one of its outstanding features was precisely that it involved the conquest and annexation by force of arms of the whole continent of North America from its native inhabitants, the Indians; of the continent of Australia and New Zealand from its native inhabitants, the Australian aborigines and the New Zealand Maoris; and of the sub-continent of South Africa from its native inhabitants, the negroes of South Africa. It is true that these conquests did not, in general, involve the use of large forces in organized warfare on a considerable scale. But that was merely due to the weakness of the native societies.

Small groups of European "pioneers," armed with the superior techniques and weapons developed during the mercantilist phase of capitalism, were able to overawe these natives by force, whenever the "civilizing influences" (as the Europeans thought of them) of traders could not induce them peacefully to make way for the white man. For reasons to be explained in a moment, this weakness of the native societies of three large continents—their failure to develop in time those techniques, at least, which would have enabled them to settle their lands as densely as the Chinese, Japanese, or East-Indians[1] had done in theirs—was, in fact, an indispensable condition for the expansion that is usually credited simply to the policy of liberalism. If these continents had been better settled by their natives, there could never have been a "secular boom," an abnormal period of rapid progress, in the nineteenth century.[2] The point to remember here, however, is merely that the period of liberal capitalism was quite as much a period of continuous wars as were the more obviously warlike centuries of straightforward mercantilism.

## SIDESTEPPING WAR

It is true, of course, that there were very few major conflicts between large powers in the hundred years 1815–1913. But this was largely due to the economic safety valve provided by the general expansion into the "new world" of Western capitalism. If there had not been easy conquests and easy expansion in the New World, there would have been no economic expansion and there would have been hard fighting in Western Europe, and liberalism would have been neither here nor there. To some extent, also, the long peace of the nineteenth century rested on the overwhelming strength of the British Navy and on Britain's interest in maintaining peace among the Great Powers. But this brings us from the first to the second set of special facts which I have distinguished.

The crucial event in ushering in the nineteenth-century boom was Britain's

[1] Who were, by this time, also backward as compared with the Europeans, in possession of their brand-new experimental science techniques.

[2] It could, I think, be shown also that liberal ideas could not have developed without the existence of these "empty" continents, but this cannot be done here.

revolutionary departure from standard mercantilist practice when her Corn Laws were repealed. It is common knowledge that the leaders of the agitation for the repeal of the Corn Laws were the confident representatives of the new British manufacturing interests. Britain had emerged from the Napoleonic wars as the most militarily powerful and technically advanced mercantilist nation in the world, and her manufacturing classes had nothing to fear from foreign competition.[1] Their profits were, however, limited and threatened by the chronic deficiency of purchasing power, emphasized and made worse by the cessation of war expenditures after Waterloo.

### FEAR OF REVOLUTION

Years of falling prices and unemployment were accompanied by grave social unrest. Britain had just fought revolutionary France, and her ruling classes reacted to the growing discontent and political organization of the working classes with a savage repression which was the measure of their fear of the spread of revolutionary ideas to Britain. For Britain, a way out of this dangerous stagnation was available, but only on account of her military and industrial superiority. She could, and did, use her position to expand her foreign markets, without at first having to make any real change in the nationalist, mercantilist character of the basis of her economic system. She was able to do this by turning herself into the champion of movements for "freedom" and "independence" in the colonies and dependencies throughout the world of rival but weaker powers' mercantilist systems abroad. This was the basis of Canning's Tory-Liberal foreign policy in the 1820s and of Grey's and Palmerston's continuation of it under the Whigs in the 1830s in South America, Belgium, Greece and elsewhere.

### LIBERAL MERCANTILISM

Quite clearly, liberalism had in this period the character of an aggressive commercial mercantilism, resting on superior industrial and military power, whatever its superficial aspect of idealism may have been. The radical break with established mercantilist practice came only when the insufficiency of the new foreign markets acquired in this way led the rising manufacturing class to push further their demand for freeing trade by turning to attack the British landowners' monopoly of the home market in corn. In the 1830s, when, as G. M. Trevelyan says, "economic misery, pauperism, starvation and class injustice had brought society to the verge of dissolution,"[2] the middle-class manufacturing interest learnt how it could make use of the pressures and fears generated by working-class discontents to gain for itself political representation. The passage of the Reform Bill of 1832 ended the

[1] The reader should acquaint himself with the reasons why Britain had emerged industrially and militarily supreme at the turn of the nineteenth century.

[2] G. M. Trevelyan: *British History in the XIXth Century and After*, p. 230

big landowners' and merchants' monopoly of Parliament, and led to the political representation of the urban middle-class interest, largely because of the general fear of the ruling classes that the alternative would be revolution.

### THE CHEAP FOOD CRY

But political reform could do nothing to diminish the economic misery of the masses of the people, and the combined forces of the working class and the middle class were again brought to bear against the landed interest. The manufacturing interests, with the City of London in support, organized the Anti-Corn-Law League in order to open yet further markets for British manufacturers and also to lower the cost of labour. They attracted the working classes to their banner by means of their cry for cheap food. The manufacturers counted on a larger home market as foreign corn came in at cheap prices, since, in so far as wages did not fall in proportion to the cost of food, there would be more spending on manufactures. In so far as wages did fall, foreign sales of manufactures would be encouraged by lower costs, and the volume of exports would in any case increase, it was thought, as foreigners became able to buy more goods with the proceeds of their exports of food to England.

It was this pressure to export and the confidence (born of industrial superiority) that British exports would rise as foreign ability to pay grew that was at the back of the whole movement. But confidence in Britain's military superiority, particularly in her naval predominance, was also an indispensable element in the situation. For, to allow the displacement to foreign countries of the food-producing basis of Britain's national economy was a revolutionary departure from sound mercantilist tradition, which could not have been contemplated without an assurance (born of naval superiority) that continuity of supplies of food could be safeguarded.

### REVOLUTION AVERTED

There were, in addition, certain peculiarities in the balance of the social class forces of Britain which must also be reckoned as an indispensable condition for the break in traditional mercantile policy which was ushered in by the repeal of the Corn Laws in 1846. Both the political weakness of landed interest and the political strength of the middle-class manufacturing interest were circumstances in the situation which were peculiar to Britain. In the absence of these peculiar circumstances, the alliance of City financiers, northern manufacturers and proletariat could not have carried the day against the established political power of the landed interest, and the new policy could not have been adopted.

The political weakness comparatively of the landed interest in nineteenth-century Britain was due to the very strength of this class during the earlier

centuries of mercantile capitalist development. The power and greed of the larger landlords had led, in the course of the enclosure movement, to the disappearance of the previously numerous yeomen and small peasant class so that when the landowners' monopoly of the home market was eventually challenged, this challenge could be issued in the name and the interests of the overwhelming majority of the population, while the forces opposed to the change could be denounced as being members of a numerically small privileged class. G. M. Trevelyan and C. R. Fay have both pointed out that if there had been no drastic enclosure movement, or if the land had been won back by the peasants, as it had been in France, for example, during the Revolution, there might well have been insufficient support in Britain for the agitation in favour of Free Trade.

## REPEAL OF THE CORN LAWS

Given this peculiar conjunction of circumstances, it is possible to see how the abnormal phase of liberal capitalist expansion could occur on the basis of Free Trade in nineteenth-century Britain. The repeal of the Corn Laws touched off a long-period, secular boom, by a kind of chain reaction, as it were. The very possibility, as well as the size and length, of this boom depended on the large extent and natural wealth of the lightly settled areas of the New World.

Until the repeal of the British Corn Laws the settlement of North America by white people was comparatively sluggish and not significantly reinforced by immigration. The rate of movement of settlement westwards was slow and was partly governed by the fortunes of the staple colonial exports of cotton and tobacco (which continued, in spite of the political independence of the United States, to be the basis of her economy, so long as Britain continued her mercantilist trade policy), and partly by the pressure of the natural growth of the population, which caused a slowly enlarging area to be cleared for subsistence farming by land-hungry westward migrants.

The United States could not have become the Great Power she now is so long as the horizons of her economy remained limited to cotton and tobacco and subsistence farming. But the fortunes of the United States were made for her by the victory of the British manufacturers, in alliance with the proletariat and the City, over the British landlords. For the repeal of the Corn Laws turned food-production for export to Great Britain into a magnificent cash-crop, and this turned the westward movement of migration from a distress movement in search of subsistence into a vast movement in search of profit. The rate of immigration in the United States increased tenfold, the value of U.S. exports three- to five-fold at one stroke, as the Corn Laws were repealed. The value of land in North America, and for similar reasons also in the other lightly settled parts of the world, soared. It is

important to realize clearly that the vast size of the areas available for individualistic conquest over their primitive native populations was a crucial factor in these developments. Why could food-production for the British market be conducted more cheaply thousands of miles away overseas in North and South America and in Australia and New Zealand in such a way as to give the overseas farmer a higher standard of living than was enjoyed by the British farmer (so that people were attracted overseas)?

### PRODIGAL USE OF LAND

The reason why food could be grown cheaply for export to Britain in these places was not because the farming was technically better. (It was usually worse than in Britain or anywhere else in Europe and to this day overseas yields of crops per acre are far below European yields. Nor was the land generally more fertile or otherwise suitable, acre for acre.) The overseas countries were, and are, cheap producers only because their lands were vast and cheap to conquer so that the white man who took up farming could, while farming extensively—that is, badly, in terms of the use made of the land—still make a good living for himself on account of the ease with which large holdings could be appropriated. Indeed, the New World lands had to be several times the size of the European lands if they were to replace European production on any significant scale. Clearly, also, some form of cheap long-distance transportation was necessary for the exploitation of all the favourable factors enumerated. Such a technique was at hand in the newly perfected steam-railway, a British invention—and itself a product of the pressures that moulded the industrial fortunes of Britain.

### BOOM CONDITIONS DUE TO COLONIAL EXPLOITATION

The basis of the great temporary success of the Free Trade experiment lay in the fact that the vast new overseas developments of transport and other industries which were made a paying proposition overnight by the victory of the Anti-Corn-Law League in Britain, led to a world-wide boom of long duration. This boom continued so long as new lands remained available for sufficiently easy acquisition by small groups of Europeans to make their extensive cultivation and development for a distant market a paying proposition. It was this process that came to an end in the early part of the twentieth century. So long as it lasted, the overseas development boom gave a prosperity in several ways to Western Europe (and to Great Britain in particular) which Europe could never have enjoyed but for the overseas developments.

The overseas investment boom induced by throwing open the British home market to imports led to a British and European export and home investment boom, which in turn made the British and European market a better one for overseas produce. This further encouraged the overseas

development, and so the process went on in a widening circle of expanding sales. There was stable employment in making exports of construction-goods and manufactures for the boundless markets overseas, and home capital construction and consumption rose with the growths of exports.

It is sometimes said that Britain was foolish to allow so much of her capital construction capacity to be utilized for the equipment of the New World with railways, harbours and factories. It is implied that, if less equipment had gone abroad, more equipment would have become available at home. But it is just this kind of misconception of nineteenth-century history that the Keynesian advance in economics has enabled us to get rid of. If there had not been all the special circumstances which made for the geographical expansion of the primary base of Western European, and particularly British, production, and if there had been no profit in equipping the New World, there would have been less, not more, equipment produced and retained in Western Europe and in Britain itself. In fact, later on, when exports slackened at the end of this " New World " boom, after the year 1900, home investment also experienced a falling-off.

### WHY LIVING STANDARDS ROSE

The standard of living in Western Europe was thus able to rise for three-quarters of a century, because the normal stagnation of capitalism was broken for a time by the prolonged investment boom which resulted from a peculiar state of the geo-political situation. The rapid growth of population did not lead to land and food shortage, because of the outlet provided for migration by the vast spaces of the New World, and because of the cheap imports of food which flowed over from there. Thrift, instead of causing damage to progress, was realized in this period in capital accumulation. Technical progress was given scope and, particularly in the New World, where labour was generally scarce, it was for the first time in history generally welcomed by all classes of society as the main source of material progress. No wonder, then, that the new economic policy of liberalism came to be regarded, in Britain at any rate, as the last word in economic statesmanship.

It is also easy to see, however, in the light of Keynesian theory, why liberalism could not be generally acceptable elsewhere than in Britain (and some other smaller Western European countries which became economic satellites of Britain in the nineteenth century). The reason why free importation led to prosperity in Britain in the nineteenth century was that she was the industrial leader of the world and, for two generations at least, reaped the benefits from the overseas developments to which her own policy had given rise, in the shape of a prosperous export trade and the proceeds of her foreign lending. Other European countries could only "muscle in" on this British export boom here and there. If they had admitted the cheap food of overseas

origin, they would have added to British exports, not their own, and the results for themselves would have been merely unemployment and, indeed, quite soon less imports, not more—since there would have been no way for them to pay for overseas supplies. Further, in countries like France and Germany, the landed interest was, for historical reasons, much stronger relatively to the middle-class exporting interests, so that political as well as economic obstacles militated against a free trade policy on British lines in these countries. Also, a displacement of the food-producing basis of their national economies was in any case out of the question, since this would have meant for comparatively weak naval powers a policy of military suicide in time of war. For this reason Germany and a number of other European countries never really changed the traditional mercantilist character of their economic policies at all. In these countries it has always been comparatively easy to see that the *laissez-faire* system (or the "Manchester" system, as it came to be called) was not the cause of the nineteenth-century progress of Britain, but the result of her sixteenth- to eighteenth-century progress and her unique, special opportunities and circumstances.

## LIBERAL ILLUSION EXPOSED

This lesson had in the end to be learned by Britain herself. As the profitable settlement of the New World drew to a close, the bottom fell out of the secular boom which had maintained Britain's prosperity in the nineteenth century. Exports began to stagnate, home investment followed it, and chronic large-scale unemployment began to appear. The abandonment of Free Trade policy and the re-emergence of tariffs, Imperial Preference and other traditional devices of mercantile capitalism followed immediately. Although the traditional economists continued to preach that these new mercantilist policies were a relapse into economic illiteracy—that they involved the sacrifice of the international division of labour, capital accumulation and technical progress—the practical men, statesmen and industrialists, paid no attention to them. And in the modern view, within the framework of what is possible under capitalism, the practical men were right. Economic liberalism, they saw, is not and never has been what the textbook picture of it is. It is not and never has been the underlying cause of material progress; it has only been noteworthy as the peculiar form temporarily taken by the development of mercantile capitalism in the West.

## CONCLUSION

Summing up, then, we have seen in a broad way that the major questions posed for economic science can no longer be answered in the manner of the traditional textbook economics. There the competitive market system is held to bring about automatically an almost perfect system of resource-

utilization, and present differences in living standards as between highly developed capitalist countries and the rest of the world, as well as the history of economic development, are held to bear this out.

The modern view, however, regards the competitive market system as inherently defective. According to its exponents, present differences in living standards do not reflect the true relative merits of different systems of resource-utilization, but are the result of a unique historical development arising from geographical, political and technical, as well as narrowly economic, factors, all of which will need to be analysed in detail before the history of economic development and also the current working of resource-utilization in the various parts of the world can be properly understood.

## DIFFERENCES WHICH DIVIDE

It is also likely that, when this comprehensive new picture becomes available, it will throw much light on the nature and causes of the political and ideological differences which divide the world today, and have divided it in the past. The development of the trade union movement in Britain, for example, or the explanation of the widely different degree of development of trade unionism, say, in Great Britain and the U.S.A., as well as differences in political institutions and attitudes in different parts of the world, may become quite easily intelligible when the modern picture of economic development is completed.

Thus it has been suggested on page 244 that, if the modern view of the history of capitalist development is right, past differences in the dominant economic philosophies of Great Britain and Germany, for example, can be explained fairly simply.

In a broadcast talk (see *The Listener*, 26 June, 1947) Professor Herbert Butterfield said this:

> "I am not clear that any historian has yet fathomed that mysterious historical necessity which has made states expand and states decline. . . . It is curious that in this technological age so much should depend on the science of human relations, the one which we are content to leave as the most wooden of all the sciences at the present day. But if there is something wrong in the way that nations think of their destiny and their rights under the sun; and if there are hurdles which obstruct co-operation between peoples, then, so far as a change of heart or a change of thinking can improve the situation, it is a case of going deeper into the whole drama of human history."

The modern theory of economic development should provide much of what Professor Butterfield calls for. But the modern view of capitalist economic development appears to contain also a serious warning. For it suggests that the "liberal" phase of capitalism was due to peculiar nine-

teenth-century circumstances which seem already to have passed away, so that the *relatively* peaceful, free and prosperous period of capitalism may be over. This book contains no economic analysis of Fascism, but that system may well represent the modern equivalent of the aggressive, militaristic national mercantilisms and imperialisms which, as we have seen, are really in the modern view the "normal" social framework for capitalist economic systems.

The main practical difference between the traditional and modern economists' attitudes to economic development is that the latter reject the possibility of relying on the free price-mechanism and the private-enterprise system for bringing about sensible economic progress. What seems to be required is that the community should somehow arrange to *take a detailed view* of its real needs and real resources so as to make the best provision it can for its members—rather as a family does on a small scale.

The next chapter describes, in outline, some economic systems in which this is, in fact, attempted.

## *Test Yourself*

1. How is the level of employment determined in a private-enterprise economy?
2. How would you account for international differences in living standards?
3. In the light of modern economic analysis what branches of knowledge, in your view, besides the logic of traditional economics, are needed to make a good modern economist?
4. What hope is there, in your opinion, for peace in our lifetime, on the modern view of political economy?

*Answers will be found at the end of the book.*

CHAPTER IX

# ECONOMIC PLANNING AND PLANNED ECONOMIES

ECONOMIC planning is a much-used and abused notion. The term is employed in different senses by different people; and people who use it in any of these senses are frequently unclear as to its economic purpose and significance. The opponents of economic planning declare that it is an attempt to do more clumsily, and in a bureaucratic and authoritarian manner, what is done under capitalism by the mechanism of a free market.

How such a mechanism operates has been explained in earlier chapters; profitability is the guide as to what shall be produced and in what quantities; and the demand expressed on the market, acting on market prices and hence on the profits open to business men, ultimately determines, at least in theory, how labour and resources are distributed between different industries and how much of various commodities is produced.

These opponents of planning will admit that this "automatic" mechanism of a free market has faults: in particular, they admit that it is distorted by inequality of incomes, which means that the wants of the rich have a more powerful economic pull in the market than the wants of the poor, and the market demand which influences production expresses the power of the purse rather than social need. But they argue that such defects can be remedied by introducing certain minor adjustments into the traditional system—a few taxes here and a few subsidies there, to discourage some sorts of production and encourage others—and not by scrapping it and replacing it by something different. Even many socialists have advocated that planning should be kept down to a minimum and that as much as possible of the economic mechanism of capitalism (i.e. the "automatic" regulation of production by price-movements on a free market) should be preserved in a socialist state.

These socialists have argued that the abolition of monopoly (with its power of restricting output in the interests of higher prices and higher profits) and a reduction in the inequality of incomes, as a result of transferring land and capital from private hands into public ownership, constitute the essential advantages of socialism over capitalism: this rather than the wholesale introduction of the mechanism of planning into the national economy.

## ECONOMIC PLANNING AND PLANNED ECONOMIES

A first essential of any informed discussion of the matter must be to consider what is the precise nature of planning as an economic mechanism, and what is the economic function that it performs.

In the first place it is clear that economic planning represents the introduction as an economic motive force of certain social purposes: purposes which are different from, and opposed to, those which actuate private business men and captains of industry in their quest of maximum profit. Economic theory in the past has tried to demonstrate that the pursuit by each man of his own self-interest in his economic affairs results, "unconsciously" and without intention, in the good of all being served. The magic by which this was supposed to be achieved was the force of competition, compelling producers to be efficient in order to survive and continually to cheapen prices to consumers in order to keep a foothold in the market in the course of their mutual rivalry. Adam Smith (who has sometimes been termed the father of political economy) in a famous phrase spoke figuratively of an "unseen hand" of economic law which brought it about that the aggregate of men's actions yielded a result which no individual had designed or willed. But economists in recent years have multiplied proofs that this supposed rule of economic harmony under an individualistic market system does not exist in reality (apart from the distorting effect of unequal incomes on demand).

### SOCIAL EFFECTS OF ECONOMIC DECISIONS

On reflection it soon becomes clear that there are numerous considerations, of vital importance for society as a whole, which are not embraced at all in the calculations of individual business men and the so-called "captains of industry."

The latter, in deciding what to produce, how much, and how to produce it, only take account of effects of their actions which impinge upon their own field, which touch the frontiers of their own firms and consequently appear as items in their own balance sheets. But this omits all effects of their decisions which fall outside these narrow frontiers, whether they be effects upon other firms and industries or effects upon society at large (e.g. effects of smoke fumes from a factory upon the health of the neighbourhood or effects of bad conditions of work and low wages upon the physique and morale of a whole generation of workers). In other words, a large part of what appears as "costs" or "benefits" to industry as a whole or to society as a whole is omitted from the calculation of costs and gains upon which the capitalist entrepreneur bases his decisions. Moreover, the classical theory of the beneficent "unseen hand" was only intended to apply to conditions of "perfect competition"; and it admittedly breaks down in the world of private monopoly and "imperfect competition" which confronts us today. In such a world, profit is the reward of, and a motive to, restriction

and the creation of scarcity: it is certainly not a badge of service to society.

Hence, in place of the business motive of restricting production and productive capacity in order to keep up prices and profits, planning introduces a quite different motive, imbued with the interests of a larger whole. As Professor E. H. Carr has well put it in an interesting booklet on the U.S.S.R. (*The Soviet Impact on the Western World*, pages 32, 41–42), "Planning for the first time entails a view of the national economy as a whole. . . . Planning presupposes that the interest of the community has to be predetermined by a decision, in the formulation of which individuals and their interests play a part, though governmental authority is required to bring them into harmony. . . . Planning can be maintained only if it is directed to social purposes sufficiently strong to provide an accepted standard of values and to claim loyalty and self-sacrifice from its citizens for their attainment."

## MOULDING CONSUMERS' WANTS

To this extent a planned system depends upon the formulation, by or on behalf of the community, of a certain social policy, embodying a certain order of priority in the ends which economic activity is to serve. Some, but by no means all, of these priorities are of a kind which could be decided by the familiar process which has been described as "consumers' voting" on a market—by consumers distributing their expenditure between different commodities that are offered to them (at various prices) in the shops, and so expressing their preferences in terms of the relative quantities of these various things which they buy. Many of these priorities, however, are not of the kind that can be decided in this way, for a variety of reasons: because human wants and the means of satisfying them are often complex rather than simple; because many wants are the result of social convention; and because individuals are not always rational in their choices. Moreover, in a market people can only choose between things that are available in the market; and, in order to be available for choice, these things must first of all have been put into production. Here, with regard to new commodities and new varieties, the initiative necessarily lies with the producers under any system; and to a large extent it must always be the line of development taken by production which moulds the wants of the consumers, as these develop from the simple to the more complex—which "educates" the consumer, in the modern advertiser's phrase. As the author of a modern economics text-book has aptly said, "To substitute one assortment of goods and services for another may do far less for the people's welfare than the setting of new social standards or the direction of their energies into new and more acceptable channels. . . . Many of our wants are shaped by the very system of production which exists to supply them" (A. Cairncross, *Introduction to Economics*). This does not mean that the registration of consumers' demand

in purchases at various prices on a retail market cannot and should not be one of the indices by which priorities are determined in a planned economy. But it means that such an index cannot alone decide the social priorities to which planning is geared.

But economic planning is not only a means of enthroning social interests as governor of the economic system ("production for use instead of for profit," according to the well-worn slogan). In theory, at least, it is arguable that this might be done by introducing a series of government controls into a private-enterprise type of system, even if there are strong practical reasons for thinking that such a State-controlled capitalism would not be workable for very long. In theory the State could encourage the production of some things by subsidies to the manufacturers of them and prohibit the production of other things or discourage them by the imposition of taxes; it could control prices and profit margins and interest rates; and it could even allot output quotas to different industries and firms or become a large-scale wholesaling organization (as in wartime) and regulate production by distributing orders between firms.

### COLLECTIVE OWNERSHIP AND CO-ORDINATION

State intervention of this nature is the kind of thing which some people have had in mind when they have spoken of "planned capitalism" or "State capitalism." But it seems fairly clear that the supersession of private interests by social interests could not proceed very far along these lines without generating such a conflict between the two as to make the compromise between them highly unstable and to necessitate a revolution in the ownership of industry itself and the direct conduct and planning of production by the community (cf. the remarks on this point of Professor Oskar Lange in his treatise *On the Economic Theory of Socialism*).

In addition to imposing a set of social purposes or ends as regulator of the economic system, planning is a mechanism for co-ordinating economic decisions—decisions about the amount of building activity to be undertaken at any particular time, the amount of coal and steel, of textiles and of wheat to be produced. Clearly, if all these different activities in the economic system get too much "out of step," there will be serious hold-ups and jams; and a plan is a method of taking a combined decision about all such matters so that all the separate parts harmonize or fit together. Such co-ordination, if it is to be complete, cannot possibly operate at all effectively unless the system of individual ownership is replaced by community ownership or collective ownership in some form, since only then can the State directly dispose of land and buildings and industrial plant and capital equipment. As Professor Robbins has said, "planning involves control, and central control excludes the right of individual disposal." This mechanism of

co-ordination through a plan introduces a novel mode of regulation such as is entirely absent from unplanned systems, and is in fact excluded by the very nature of the latter. It is an attempt to co-ordinate the various decisions that are being made about production in advance, to secure internal coherence or "fit" between the various constituent parts of the plan before any action is taken upon it—before a start is made on putting things into production or running up some new factory or power-station or laying a new road or railway line.

In so far as it is successful in achieving this object, it can avoid those wasteful fluctuations to which an unplanned market system is prone—fluctuations of price and output and investment, which are precisely the mechanism through and by means of which in a market system adjustments occur, and which are frequently self-perpetuating in character and not merely transitory and passing. (If all economic processes were timeless, this would not be so, and the difference between adjustment made prior to production and adjustment effected as a result of the market mechanism would disappear. But, in fact, time lags, and often very substantial time lags, are involved in all economic decisions about output and investment, decisions which, once made, cannot be reversed for some time.) This co-ordination is effected both over the whole range of industry and over time. The plan attempts to gear the output programme of the steel industry to the output programme of all the industries which make use of steel, the output of building materials to the building programme, the wages bill of the country to the output of consumer goods flowing into the shops and the prices of these goods. It also adjusts its plans for new industrial plants, as regards size, location and technical type, to its plans and estimates of future development.

### FORECAST AND ADJUSTMENT

The most wisely constructed plan cannot, of course, foresee everything, even over the space of five, ten or fifteen years, which is likely to be the full extent of the time horizon of any planning that aims at being both detailed and exact. Even if the data which the planners have before them are full and accurate, there are bound to be "unforeseeables"—not only the incalculable effect of weather on harvest and, in a country such as Britain, the conditions of trade with other countries, but also the ever-variable human factor. Hence a plan can never be more than an approximation, a kind of blueprint for production which will need to be adjusted in the course of operation to the actual conditions as they are found to prevail. But, despite this, the amount that can be known and forecast will be very much greater than under an individualist system. In the latter each economic unit (each firm or factory) is an individual atom, which takes its decisions about output and about investment (e.g. whether to expand its plant and to install new machinery)

in ignorance of what all the other individual atoms are planning to do. True, each business will try to make guesses about what is happening, and probably will happen, in other parts of the economic system, guesses which sometimes may be near the mark. But experience abundantly shows that these blind guesses are frequently very wide of the mark, and that they result in extensive fluctuations of economic activity and in extensive waste of capital equipment and manpower. Such fluctuations and wastage it is the purpose of economic planning to avoid.

Not only does planning afford a mechanism for securing a smoother and less wasteful path of development, but it also creates a possibility of undertaking types of development which would be scarcely possible—at least, extremely unlikely—without it. This applies particularly to those large-scale and discontinuous changes in the structure and pattern of the economic system such as happen when revolutionary changes in industrial technique occur. There are certain types of change which demand that action in the required direction should take place at numerous points simultaneously—like the advance of an army on a particular front—and not separately and serially one by one. If there is no co-ordination or agreement, then the change will not occur, except by coincidence or the accidental intervention of some influence from outside. No individual economic unit will feel confident enough to face the risk involved in taking the initiative. Yet, if action were to be taken in unison, it might be to the ultimate benefit of each and all. Examples of this type of change are the shift of an industry, together with its subsidiary industries, transport facilities, labour supplies and the social amenities necessary for the latter, to a new location in some other part of the country; a transfer of industry from an obsolete technique or form of power to an entirely new one; or the transformation of a region which was previously agricultural and economically backward into a balanced economy, by introducing modern industrial techniques and an urbanized population. Planned co-ordination of the constituent elements so that they shall complement one another—so that each part of the process shall gear in smoothly with the rest, instead of obstructing it—is a crucial necessity in such complex changes.

## FORMS OF ECONOMIC PLANNING

Planning may vary considerably both in breadth and depth, according to the scope or range of economic decisions that it embraces and the degree of detail which it contains. The plan may cover only certain sectors of production, as did Government control and direction in Britain in wartime, leaving other sectors outside its scope. It could, conceivably, deal only with investment and construction (and hence the number and types of plants and their current maintenance), leaving the output which each plant may choose

to produce to be decided by the plant managements themselves; or it could deal only with the allocation of raw materials (as often happens in wartime), leaving the products into which these materials were fashioned to the discretion of each firm. In a country where only a part of industry was nationalized, the economic plan might apply only to the nationalized sector; or it might have a binding character on the nationalized sector only, and have mainly the significance of estimates, or at most of guiding "targets," for the non-nationalized sector. For example, the Polish Economic Plan for 1946–49 is given the force of "legal acts" for all State institutions; but for the private sector and the co-operative sector of the country's economic system it establishes merely the guiding principles on which their policies are to be based and sets limits within which freedom of action can be exercised.

### CONTROL BY QUOTA

Again, a plan may concern itself only with allotting broad quotas between industries or sections of an industry, whether these quotas refer to raw material allocations or finished production. The way these quotas are shared out between different plants in the industry may then be left to the industry itself to determine. This, of course, represents a fairly loose form of control and co-ordination, and one which lays itself open to a good deal of evasion. On the other hand, the plan may go into considerably more detail than this, stipulating the output programme for each factory, including the quantities of each of the main types or varieties of products, working out the costing of this programme (and hence the amount of materials and manpower each factory will need) and, on the basis of this, fixing the selling price of the product. It may even stipulate the organization or centre to which delivery of the completed product is to be made.

Many economists, in discussing the problems of a socialist economy, have advocated that the taking of main decisions governing output and investment should be left to the managers of industry on their own initiative, in much the same way as these decisions are made under a system of private enterprise. The managers of State industry, of course, would no longer aim to make monopoly profits. But they would be instructed to make their receipts cover their costs—or alternatively to produce up to the point where the value of extra output equalled *marginal* cost (see page 269)—and left to regulate their production policies with this end in view. This implies that some kind of market mechanism (i.e. not only a retail market for final consumer goods, but a market for everything, including land and capital), similar to that which exists under a system of private enterprise, would be preserved, and that the managers of industrial plants would freely buy their materials and sell their products, and even bid for loans from a State bank or State investment trust, in competition with one another. Into this

debate, which exercised academic economists in the 1930s, we cannot enter here. What is important for us to note at present is that such a mechanism would essentially imply a large amount of decentralization of decisions about production, and consequently a fairly drastic limitation of the central co-ordination provided by planning. The latter would presumably be limited to fixing an overall figure for the total amount to be invested (i.e. the amount of constructional activity to be undertaken), and perhaps assigning certain general "targets" and also fixing certain general limits to this or that sector. But the detailed decisions about such things as the output of a particular plant and of a particular product, the number and type of new factories to be built in a particular industry and place, would be left to be taken at lower levels by the managers of plants and industries, according to various market (or accounting) indices, and to the financial rules laid down.

### IMPORTANCE OF FLEXIBILITY

But even in a system that was much more centralized than this—where, for example, the detailed forms of investment were decided by the central planning body and detailed output quotas for each product and each factory were laid down in the general plan—there would still be a great deal that would depend on the initiative of people at the lower levels of industry and of other branches of economic life. We have said that the most wisely conceived plan cannot foresee everything. Hence room must be allowed for adjustment and adaptation as the actual execution of the plan proceeds. The plan must be flexible and allow "room for manoeuvre," as must the strategic plan of an army; and in such manoeuvring in face of unforeseen eventualities the independent initiative of the smaller units in the economic field is of prime importance. Moreover, the carrying out of any plan depends in very large part on the human factor; and in practice this means the willing co-operation and creative initiative of managers and workers.

*Workers' Place in the Picture*

Therefore an essential element in any planned economy is an identification of the interests of all the individuals and groups concerned with the general objectives of the plan. This means, in the first place, that everyone understands these objectives and where he fits in—that everyone "sees the picture and his place in the picture," as they said in the army: better still, that everyone should play some part, however small, in contributing to the making of the plan. In other words, the plan needs to be popularized and widely discussed and to have propaganda made about it; and representatives of the workers must be associated with the management of economic affairs at various levels so that they may have an active responsibility for what is done. Secondly, it means that the general system of obligations and

imperatives, of which the plan consists, must be blended with a system of inducements, devised in such a way that managements and workers alike have an individual interest in fulfilling the objectives of the plan and even of improving on them. This is where the financial mechanism of a planned economy has its essential importance; and, as we shall see later, a solution of this problem of combining planned co-ordination from the centre with initiative from below by means of an appropriate financial mechanism has been a major preoccupation of those responsible for planning in the Russian Soviet economic system.

*"Steering" of Manpower*

One aspect of this has special importance, if only because it has been the occasion of a good deal of misconception. An economic plan might conceivably be so comprehensive as to embrace not only the disposition of constructional work and of production, but also the disposition of human beings themselves. Such a system would imply compulsory direction of labour as well as compulsory direction of things. In wartime most governments have adopted this as part of the general conscription of manpower; and such direction may take a variety of forms, involving different degrees of rigour. But in peacetime this is rare, and would scarcely be tolerated except as a temporary measure in an emergency. Instead, inducements are relied upon to attract manpower in the directions where it is most needed. There is certainly nothing inconsistent in having planned direction of *things* combined with free choice of occupation, in having the non-human factors of production controlled while human beings are free to choose their jobs. It is true that if certain targets are laid down in a plan they can only be achieved if the manpower is available to carry them out. In this sense, manpower must figure as a crucial quantity in any plan. But the quantities of manpower that are written into the plan, and are indeed crucial to it, will have the character of estimates, not of obligatory directions. However, the plan can help to safeguard these estimates—to ensure that they are borne out in actuality—if it also plans an appropriate system of inducements (whether these inducements take the form of money incentives, conditions of work, additional privileges, training facilities, propaganda or a mixture of all these) in order to steer the country's manpower in directions which are consistent with the output plan.

## PLANNING CONSUMPTION

It is also possible to imagine a planning system which would plan consumption as well as the production and distribution of goods. All goods might be allocated among consumers directly according to plan by a system of universal rations, with or without monetary payment. Such a system

would, however, have numerous disadvantages: it would be cumbersome to operate; it would inevitably be subject to a lot of evasion; and, since individual tastes vary, the enjoyment which people would derive from a given quantity of goods would be diminished by a uniform ration. Such a system would almost of necessity have to be one where either everyone could help himself to as much as he wanted, or everyone got the same ration. Either of these would be inconsistent with any system of varied work inducements, of giving workers different wages according to the amount and kind of work they did. As we have seen, if there were to be free choice of occupation, some system of variable wage inducements would almost certainly be necessary. These wage inducements would lose their flavour if the recipients of them were not free to spend them as they pleased. Consequently, it is usual in a planned economy to have free consumers' choice as well as free workers' choice of occupation.

This implies a retail market of the familiar kind, which is free in the sense that consumers are free to spend their money in the shops as they please, distributing their purchases between different things according to their own tastes and according to the prices at which various goods are offered for sale. In turn, the prices of these goods will necessarily be influenced by consumers' demand relatively to the current supply of them, if there are not to be shop shortages and queues as symptoms of unsatisfied demand, or accumulating stocks on the shelves as symptoms of excess supply.

## "TOTAL" AND "DEMOCRATIC" PLANNING

We have said that economic planning may differ considerably in different cases according to the range of decisions which it embraces and the degree of detail into which it enters within any particular branch of economic activity. Some people have used the term "total" planning to refer to those cases where control over economic life through the mechanism of a plan is most comprehensive and most thorough. But its use in this connexion seems to be unfortunate, because of the association of the term "totalitarian" with something very different—with Fascist regimes, where "planning," in the sense in which we have been speaking of it, was no more than partial, although the framing and execution of policy were conducted in a highly authoritarian manner. Private ownership of land and capital, for example, continued to be the basis of the economy of Nazi Germany, and in such things as steel allocation in wartime the controls in Germany were much looser, and more subject to evasion, than wartime controls in Britain, even while labour was subjected to strict regimentation. When, by contrast, "democratic planning" is spoken of, the term is used in a variety of senses. Some people seem to mean by it that planning is combined with free consumers' choice and free choice of occupation. We have seen that there is no

reason why planning should not be democratic in this sense and at the same time as comprehensive and detailed as is Soviet planning. Yet others seem to use it to refer to that rather attenuated sort of planning which allows the social purposes that inspire policy and steer production to be determined entirely by market indices—as by an "automatic" mechanism. But the only fundamental sense in which one can speak of a planned economy as being democratic or undemocratic relates to the extent to which the policy on which plans are built—those social purposes of which we have spoken—is decided by, and in the interests of, the community as a whole. It is a matter of the governmental apparatus from which plans originate and by which they are confirmed, and has nothing to do with the scope and detail of planning which we have been discussing.

## PLANNING IN "MIXED ECONOMIES"

If we look around the world today, we see quite a wide variety of types and stages of planning. The most complete example is the U.S.S.R. (about which we shall speak in detail presently), which has developed a planned economy on the basis of collective or socialist ownership of the means of production. But there are examples in other countries of a less thoroughgoing type of planning based on some kind of "mixed" economy, which includes elements of both State enterprise and private enterprise. The most important factor in the differences between these different cases is the extent to which industry and other branches of economic life are nationalized or the extent to which they are run on traditional capitalist lines by private owners and individual firms.

In a modern war governments are generally forced by necessity to introduce a large amount of interference with the economic system. The Government in Britain had extensive powers over production through its control of allocation of scarce raw materials, through systems of licensing (often operated, however, through bodies representative of the trade, as with the Steel Control); and it also had powers to concentrate production in non-essential industries upon certain factories and to close down others, powers which were, again, operated through bodies representative of the trade concerned. But the most important way in which the "steering" of the productive system was exercised by the Government was through the distribution of orders from the supply departments responsible for the needs of the services. In wartime a very substantial sector of industry was working, not for the ordinary market, but for the direct order of Government departments. By controlling the distribution of these orders (and with them the necessary priorities for materials, labour supply, etc.) the State held a very important lever for directing economic activity in the directions that the needs of war demanded. In addition, investment was strictly controlled,

as were also import and export of goods through foreign exchange controls and licensing of imports.

In a number of European countries since the war—in the so-called "new democracies"—economic planning on an extensive scale has been introduced. In these countries considerable sections of industry have come into the hands of the State (largely through nationalization of property operated by German companies or owned by "collaborators" and emigrés). The extent to which this has happened in different countries varies, but in all of them there is, in addition, also a substantial sector of privately owned medium- and small-scale industry, while agriculture remains predominantly in the hands of small individual peasant farmers.

### PLANNING IN CZECHOSLOVAKIA

In the course of 1946 the Government of Czechoslovakia issued a Two Year Plan designed "to raise the production of capital and consumer goods above pre-war level in order to achieve an appropriate rise in the standard of living of the population"; and this was followed a year and a half later by a Five Year Plan. The guiding aim of the Two Year Plan was to raise production by the end of 1948 to 10 per cent above the pre-war level, despite the "considerable loss of labour caused by the transfer of Germans and Hungarians," and "to concentrate the main effort on those branches of industry which are of paramount importance," such as mining, iron and steel, electrical power (especially in Slovakia which is the more backward part of the country), and upon certain key branches of engineering, chemicals and the clothing industry.

*Production Targets*

The essential purpose of the Plan was reconstruction (which was the reason why two years, and not a longer period, was chosen as its term); and the 20 per cent of national income which it devoted to investment was chiefly directed towards making good wartime arrears of repair and replacement of capital equipment. It has been described by an economic writer who was concerned with its preparation as being "essentially a set of production targets, mutually correlated and co-ordinated by a number of 'material balances,' i.e. balances of raw materials, coal, manpower, etc."; although "productivity of labour, costing, marketing, finance, etc., are not and could not have been part of the Plan in that detailed and scientifically elaborated way in which they form part of a Soviet Five Year Plan." This description has been quoted from Dr. J. Goldmann's book, *Czechoslovakia: Test Case of Nationalization*, Prague, 1947, p. 36.

In the industrialized Czech regions of Czechoslovakia the nationalized sector of industry covered (1947) two-thirds (measured in terms of employ-

ment). But about a half of the occupied population of the country as a whole was employed in agriculture, which was for the most part in the hands of individual peasant farmers. In certain industries, such as mining, iron and steel and electrical power, nationalization was virtually 100 per cent. In other industries, such as chemicals, woodworking, engineering, clothing and textiles, it embraced only the larger works; while the printing and building trades were preponderantly in the hands of private entrepreneurs.

*Industrial Federations*

It is of special interest to note that, as an instrument of planning, there were to be formed national federations in each industry, covering both nationalized and private enterprises. "Through these bodies the appropriate State authorities," it has been officially stated, "will be able to direct whole industrial sectors according to plan, to bring the interests of the nationalized and non-nationalized parts of the industry into harmony and to fit them into the overall State Plan, without interfering with healthy competition between them" (Mr. K. Gottwald, the Prime Minister, before the National Constituent Assembly in Prague, July 8th ,1946). A National Banking Council was established to give "unified direction" to both nationalized and non-nationalized banks; and specialization of banks took place between those concerned with short-term credit and those concerned in financing capital construction, and also their specialization according to branches of production. Investment was also planned; it was to be financed by grants from public funds, supplemented from the reserve funds of individual firms and from bank credits. "The balance between the total supply and demand of consumer goods," it was stated, "will be achieved by a reasonable price and taxation policy—if necessary, by floating a national loan."

*How the Plan Works*

The method of constructing the Plan was that sectional plans for the various industries were worked out by the central boards in charge of the nationalized sector of the industry and by the industrial associations of the private firms in the industry. These were then co-ordinated at a national all-industry level by a State Planning Office and a Central Planning Commission composed of the economic experts of the four political parties which composed the government. But while the Plan was fairly comprehensive in its scope, there were a number of respects in which it was much less thorough-going than were the Soviet Plans. The range of products and of product varieties which it covered was considerably more limited. Moreover, it confined itself to production, and did not cover finance and prices.

In industry, each management made its own arrangements regarding credits, purchase of raw materials, engagement of staff and marketing; and it was not subject to credit assignments defined by the plan or to "wage

limits" (defining its expenditure on wages) as is the case with planning in the Soviet Union.

The explanatory memorandum on the Two Year Plan Bill spoke as follows: "Although the Plan is worked out in considerable detail, it does not embrace all branches of our industry. Certain of these are subject to indirect planning through a system which will allocate labour, raw materials and industrial credits on a basis of carefully calculated priority. The Central Planning Office, in preparing the Plan, took as their starting-point the 'bottlenecks' of industry, which hinder the full exploitation of the existing means of production."

## RECONSTRUCTION IN POLAND

Poland is a country where the nationalized sector of industry (other than handicraft industry) comprises some four-fifths of the whole (measured in terms of employment) at the time of writing (1947). This proportion is intended to be about three-quarters in 1949 according to the new Plan.

But there is a large sector of private handicraft industry, in which are occupied nearly half as many persons as in factory industry (a proportion which it is expected will increase over the next few years); while more than a half of the total of occupied persons are employed in agriculture, the overwhelming majority of them as individual peasant farmers. Here also a National Economic Plan has recently been prepared and adopted, covering the period 1946 to 1949. According to this, it is planned to invest one-fifth of the national income in economic reconstruction, and by this means to raise the national income to 16 per cent above the pre-war level. In the first two years of the Plan investment is designed to be used so as to yield the quickest possible returns in an increased flow of consumer goods. But in the third and fourth years "increasing stress" will be laid upon extending the productive capacity of industries making capital goods (machinery, etc.), since this is a necessary condition of any further enlargement of the productive capacity of those industries catering for the consumer, as well as of improvements in the transport system. "The extent of the production of producer goods should be determined by the requirements for the production of consumer goods and the requirements of the export trades."

### *Criteria for Investment*

It is of interest to note that the criteria by which investment in an industrial plant is to be decided include "the productivity of the investment (relation of investment to the increase in production)" and "the speed of productive effects (the increase of production over a given period)." This Plan is described as "embracing all detailed plans, as well as setting up guiding principles for all branches and sectors of the national economy."

As we have seen, it is binding on the nationalized sector and has the character of targets for the private sector; while the co-operatives are asked to work out their own plans within the framework of the general plan.

In Hungary (where mining and a large part of power supply are nationalized, and heavy industry has been subjected to State control) a three-year economic plan was drawn up and issued by two of the parties in the Government coalition (the Socialists and the Communists), and the Minister of Finance proceeded to announce in a budget speech that production and trade must be planned and controlled. Since then a Three Year Plan has been adopted by the Government, extending from August, 1947, to July, 1950; which aims at raising employment in industry and mining by some 25 per cent above pre-war level and at reconstructing agriculture. Yet again in Yugoslavia, where industry is particularly backward and three-quarters of the population are agricultural, a Five Year Plan was adopted in April, 1947, to cover the period 1947 to 1951. Special emphasis is here being placed upon the development of electrical power; and the very ambitious targets which this plan proposes include the investment of between a quarter and a third of the national income in each of the years of the quinquennium, and the raising of industrial production by 1951 to nearly five times the pre-war level and the national income per head of the population to 81 per cent above the pre-war level.

## BRITAIN CONTINUES CONTROLS

Britain emerged from the war with substantial arrears of capital repairs and replacement (postponed during the war years) to make good, with bombed cities to be rebuilt, and with a problem of expanding her exports to foreign markets in order to purchase essential imports of foodstuffs and raw materials which, for several reasons, now required a larger quantity of exports to be given in return for them than before. Moreover, British industry had much leeway to make up in re-equipment and modernization, which had fallen seriously behind in the years between the wars.

The post-war years were occupied with the immense task of demobilizing men and women from the armed forces and transferring them to peacetime occupations, and of manning up peacetime industries producing for the home market and for export as fast as war production was tapered off or closed down. In face of continued shortages in these years of essential requirements, many of the wartime controls were continued. Building was subject to control by licence, leading raw materials for industry were rationed out by allocations between various industries under the control of the Board of Trade, while import and export were also subject to Government control. Coal-mining, transport and power supply were nationalized (along with the Bank of England). But the major part of the economic system has

continued to rest on private enterprise; and since industry reverted to working for the ordinary market, instead of to Government order (as so large a sector of it did in wartime), the State has to this extent possessed—at least, during the two years immediately following the war—less power of steering production than it possessed in wartime. While the sector of economic life that is directly subject to the State is much smaller than it is in the case of most of the "new democracies" on the continent of Europe, of which we have spoken above, fairly extensive controls over economic activity are nevertheless exercised by the Government, even if most of these controls act upon production indirectly rather than directly.

### INDIRECT CONTROL

These controls over the economic life of the nation were described in a Government White Paper (*Economic Survey for 1947*) as follows: "Over an important part of the national economy, the Government can exercise direct influence. . . . The policies of the socialized industries and services have a substantial effect upon the whole economy and are ultimately subject to Government control. The Government's fiscal policy can exert indirect influence over the course of production. There are now a large number of direct controls, the purpose of which is to allocate scarce resources of all kinds between the various applicants for their use—rationing, raw material controls, building licensing, production controls, import licensing, capital issues control, etc. Other controls again, such as price control, influence the course of production by limiting profit margins. . . . But the controls cannot by themselves bring about very rapid changes or make very fine adjustments in the economic structure. To do this they would have to be much more detailed in their application and more drastic in their scope. . . . Events can be directed in the way that is desired in the national interest only if the Government, both sides of industry and the people accept the objectives and then work together to achieve the end."

### MANPOWER AND PRIORITIES

In the early part of 1947 a series of targets for the coming year was issued, based on a series of economic budgets "prepared by a central staff, working with representatives of the Government Departments concerned under an Official Committee."

The crux of these budgets was a manpower budget consisting of an estimate of the manpower available and its distribution. In the attempt to make these various budgets balance—to equate available resources with requirements—a tentative series of priorities was adopted. But the targets remained for the most part pointers or guiding lines for the various industries to follow, rather than an operative plan. Subsequently, however, the Govern-

ment instituted an economic planning staff and a Planning Council under a Cabinet Minister (Mr. Herbert Morrison), with the intention that this planning staff and council should prepare a more long-term plan.

## PLANNING IN A SOCIALIZED ECONOMY

The planning system which has grown up in the U.S.S.R. deserves special attention as the most complete and matured example of planning that history offers us. Moreover, it is the only example of planning on the basis of a completely socialized economy. For the first ten years of the Soviet regime the economic system there also represented a "mixed economy' although since the days of the civil war all industry was socialized, except quite small-scale industry and a few enterprises leased to foreign *concessionaires*. Handicraft industry, a good deal of trade, especially retail trade, and almost the whole of agriculture constituted a sector of private enterprise, even if predominantly of a small-scale, worker-owner type. In such circumstances global planning of the economic system as a whole met with serious difficulties and could have no more than limited efficacy. Industry, to which alone a production plan could have a direct application, was but weakly developed. The State could influence the development of peasant agriculture only indirectly through the system of market prices (and also through taxation): by making the price-ratio between industrial goods sold to the village and agricultural products purchased from the village such as to induce peasant farmers to produce and market crops in the required amounts.

### PROPERTY IN SOVIET RUSSIA

As a result, however, of the changes effected between 1928 and 1938 by the First and Second Five Year Plans for Economic Construction, an economic basis was laid for a much more comprehensive and firmer type of planning, of which both the framework and the technique were developed in these years. As a result of this decade of great construction, during which rather more than a quarter of the national income was devoted to capital investment, the relative weight of industry in the economic system of the country was greatly enlarged, while at the same time a revolution was effected in the economic basis of agriculture, which was transformed in the main from individual peasant farming to collective (or co-operative) farming. By the closing years of the pre-war decade private enterprise had shrunk to an insignificant proportion of the economic system. Private traders, whether wholesale or retail, had virtually disappeared. Individual peasant farmers or individual handicraft workers together composed less than 6 per cent of the occupied population; while nine-tenths of farming was organized in collective farms. More than a half of all occupied persons consisted of co-operative producers of some kind, whether members of

collective farms or of industrial co-operatives; and nearly one-third of all occupied persons were employed in some branch of State activity. It is of interest to note that the new Soviet Constitution of 1936, which was designed to take account of the economic and social changes of these years, explicitly referred to "the socialist system of economy" as "the dominant form of economy in the U.S.S.R." Two leading forms of "socialist property" were recognized. It could have the form "either of State property (the wealth of the people) or the form of co-operative and collective property (the property of separate collective farms, property of co-operative associations)." Alongside it, private property in means of production was recognized if this was of the owner-worker type: "the law allows small-scale private enterprise of individual peasants and handicraftsmen, based on their personal labour, provided there is no exploitation of the labour of others." As for private property in durable objects of consumption and of personal use, this was also legally recognized: "the right of personal property of citizens in the income from their work and in their savings, in their dwelling house, household articles and utensils and articles of personal use and comfort, as well as the right of personal property of citizens, is protected by law."

### ORGANIZATION OF INDUSTRY

The fact that the economic system is collectivized in such a high degree makes the operation of a planned economy very much easier than it is in any of the types of "mixed economy." One can say, indeed, that the transfer of the bulk of the means of production (land and capital) into socialist property is an essential condition for the comprehensive and detailed form of planning which developed in the U.S.S.R. in the decade before the war. So far as industry is concerned, all of it except quite small-scale local and handicraft industry is owned and managed by the State, and its activities are closely controlled by the general economic plan in the ways which we shall presently describe. The administration of such industry is in the hands of a variety of ministries covering specific branches of industry, individual factories sometimes being grouped together into bodies called trusts, which in turn are connected with the central ministry, sometimes being directly subordinated to the ministry without any intermediate link. Heavy industry is the most highly centralized, being directed by ministries attached to the Government in Moscow. Such industry is organized for the most part in large units—that is to say, there is a high degree of concentration of production.

Moreover, it supplies things for the use of other industries and not for the retail market: for the most part it is supplying things like machine tools, the orders for which are controlled directly by the general investment, or construction, plan. Most light industry, however, producing goods for sale to the ordinary consumer, is directed by ministries attached to the govern-

ments of the various constituent republics which compose the Union. Small-scale industry, serving a local market and utilizing local supplies of raw materials, is much more decentralized. Much of this industry is co-operative in type, making its own supply contracts with various organizations, and its activities are co-ordinated by ministries of local industries attached to each republic. In recent years this type of industry has received special encouragement to show independent initiative in supplying consumer goods to local markets and in adapting itself to local needs; and in the making of production plans as well as in carrying them out the initiative apparently rests very largely with these local bodies.

*The Collective Farms*

In the case of agriculture, nine-tenths of the farming area is now covered by collective or co-operative farms, which hold their land on perpetual usage-right, subject to certain statutes defining their rights and obligations. Chief among their obligations is the delivery of a certain quota of produce to the State, which is fixed according to the area and fertility of the land; this produce being paid for, but at official prices which are much below the market price. From the point of view of the State this affords a virtual guarantee (short of crop failures due to the weather) of a certain minimum supply of agricultural produce on which the plan for each year can be based. The surplus produce of the farm above these obligatory deliveries is at the disposal of the farm to distribute among its members or to sell on the market (e.g. in the local "collective farm market," as it is termed). The remaining tenth of farming land is covered by State farms, owned and managed by a Government department as is State industry, and also the quite unimportant remnants of the old individual peasant farms.

*Gosplan*

The planning machinery is concerned with the preparation of economic plans and with supervising the carrying of them into practice, but it is not concerned with the actual work of economic administration or management. Planning bodies act as "progress officers" (to use the term which became familiar in war production in Britain), watching over the progress of production programmes; but they do not possess executive powers, and are not concerned—at any rate in any detail—with the way in which these programmes are operated. At the apex of this planning machinery stands the famous Gosplan, or State Planning Commission of the U.S.S.R. This is attached, as a permanent commission, to the Council of Ministers (equivalent to the Cabinet in Britain), upon which the president of the commission has a seat by virtue of his office.

In each of the republics which make up the Union there is also a Gosplan attached to the government of the republic; and there are planning sections

attached to local government bodies at the regional and provincial and borough levels and also to the administrative bodies which run industry, both at the national level for a whole industry and at the factory level. These planning departments are subordinated to the respective governmental bodies to which they are attached, and, in a sense, they interpret the points of view of these governmental bodies at lower levels. But since 1938 the Gosplan of the Union government has had the power of appointing regional planning representatives of its own, who act independently of the local planning departments of which we have just been speaking. The intention of this is to introduce an additional measure of central co-ordination in supervising the plan in operation, as in an army representatives of the staff supervise the development of operations in the field, while at the same time being separate from the actual unit commanders. One can say, in fact, that the recent tendency in industrial administration has been for responsibility for operative decisions of management to be pushed further down, at or close to the factory level; while at the same time the staff-work of the planning machinery, which is responsible for maintaining co-ordination and keeping different branches of production "in step," has received greater emphasis and has grown in importance.

### CONSTRUCTING THE PLAN

It must not be thought that the whole initiative in constructing the Plan for any given period comes from the top and moves downward. The economic plans that are worked out are not purely the creation of a central office in Moscow. The process of constructing the plan for a certain period is a complex procedure which starts with the issue from the top of certain general directives and guiding lines. These directives embody the general purposes which the plan is intended by the Government to fulfil: they express the policy in terms of which the plan is to be built. This rough sketch, or sort of "tailor's dummy," then passes down to the planning sections at the various lower levels, as far as the locality and the factory. At these lower levels the plan is then worked out in greater detail, with full knowledge of the local situation. It then travels back by the same route to the centre; and at the centre the final work of co-ordination and synthesis is done. It is then presented to the Government; and when approved by the Government it has the character of a programme which, like the orders of the day issued by the high command of an army, is binding upon all State-owned units.

These plans, which are to be thought of primarily as a complex of production programmes, are sketched over different periods of time. Within the larger framework of the well-known Five Year Plans (which are intended to define the general targets to which shorter term operational plans are to be geared) there are annual plans, and within them quarterly plans,

representing detailed operational plans which adapt the general targets to the actual situation as it develops from year to year and from quarter to quarter. The production plan embraces the output programme of each line of production, with considerable detail as to types and qualities of each commodity. In the construction plan are included all the proposed constructional projects of the period, with details as to their character and their cost—new factories and plants whose construction is to be launched, plant extensions or reconstructions, and so forth. The financial plan embraces the whole of the production plan in its monetary aspect—the value of the input and output in any industry, credit transactions between banking organizations and industrial or trading bodies, and the relation between the value of consumer goods to be placed upon the market and the purchasing-power in the hands of consumers.

### CHECKS AND INDUCEMENTS

We have seen earlier how important it is that there should be flexibility in the actual operation of an economic plan, to allow for unforeseen eventualities, and that the initiative of the smaller economic units should be harnessed in such a way as to be used consistently with the general purposes of the plan. Otherwise sectional interests may get the bit between their teeth and act in ways which disrupt the plan and cause maladjustment and economic wastage. It is in this connexion that Soviet planners have worked out an elaborate system of financial checks, which plays a very important part in keeping industrial managements "within the shafts" of the plan, while at the same time giving them the maximum inducement to use their initiative to fulfil as efficiently as possible the programme laid down for them. In doing so, this system of financial checks also penalizes industrial managements for inefficiency or for any action (e.g. restricting production) that is contrary to the social interest. It is impossible here to describe this mechanism in detail, and no more than a summary and approximate account of how it works will be attempted. A fuller description of the operation of this system is contained in Chapter 14 of a recent book by the present writer, *Soviet Economic Development Since 1917.*

### STATE BOOK-KEEPING

We have said that among the things provided for in the financial plan is the amount of credit to be granted to any factory or enterprise to enable it to fulfil its production programme. This is based on a detailed calculation of what that production programme will cost—a cost which has first to be expressed in *real* terms (i.e. in so many man-hours of labour, so much raw materials, so much wear and tear of machinery and tools, etc.) and is then translated into money terms. This cost will have to be incurred by the factory

some time—probably several months—in advance of the completion of the finished product. In a socialist economy where different industries and factories are simply different branches of the State, this problem of "paying" for the costs, whether of raw materials or wages, in advance of delivery of the final product is in a sense merely a matter of State book-keeping. It is, however, something more than a mere book-keeping problem, since it is a matter of controlling the extent to which factories or enterprises draw upon the community's available stocks of materials and labour-power, so that these are used in the most economical way and to the ends which the plan has in view. In other words, these financial arrangements are a mechanism of control as well as a book-keeping record.

### THE STATE BANK

All economic enterprises in the U.S.S.R. keep current accounts with the State Bank. When delivery is made of any product to an enterprise (whether this be a factory or a distributive organization), this enterprise is debited in the books of the bank to an equivalent amount. At the same time the enterprise which has delivered the goods is credited with the value of what it has supplied. A factory, therefore, which has to take delivery of raw materials some time before it can make delivery of its own completed product will need either to possess a balance of its own with the bank (against which the bank can debit the raw materials) or else to be given a temporary credit advance by the bank to bridge the interval between delivery of raw material and completion of the factory's product. What applies to payments for raw materials applies also to payment of wages to its workers.

Soviet financial arrangements provide that the "normal" needs of an enterprise for financing wage payments and raw material purchases shall be met out of its own resources of working capital (which are accumulated partly out of any profits it may make from time to time and partly from capital grants from the Government). Financial needs in excess of normal (e.g. for the seasons of the year when its needs are above the average) are met by bank credits, the amount of which is expressly stipulated with reference to each enterprise in the credit plan, which is a section of the financial plan.

*Supervision of Factory Programmes*

The amount of this credit (as also of any capital grants to an enterprise to augment the working capital at its disposal) is determined on the basis of the detailed costing of the output programme of which we have spoken. By means of it the bank is able to keep a check on the way in which each enterprise is carrying out its programme. Firstly, the bank is required to see that credits provided for in the credit plan are drawn upon by a factory solely for the purpose for which it was earmarked in the Plan: that if, for

example, a credit has been provided for purchasing a given kind of raw material or to meet the current wage bill, it must not be used for any other purpose, such as purchase of office equipment or to assist the manufacture of goods not provided for in the plan. Secondly, the bank has an easy way of detecting if the programme is not being fulfilled according to schedule, and hence of intervening to see what is wrong, since, if a factory is behind its production target, the credit advances which the bank has made to it will not be repaid according to time-table; and the debt of that factory in the books of the bank will tend to grow, instead of being periodically liquidated as the factory completes and delivers goods to some other factory or to some wholesale organization. The bank is then in a position to draw the attention of the planning authorities to the hitch, or to intervene directly and to find out what is going wrong.

*"Discipline of the Rouble"*

If it can be shown that the hitch is due to some factor outside the control of the factory's management (e.g. transport delays), the bank has the power (a strictly limited power) of granting a supplementary or "unplanned" credit to tide over the difficulty; it can also do so on certain other occasions when unforeseen eventualities require some departure from the provisions of the original plan, once these departures have been sanctioned by the planning authorities. In this way some flexibility is provided for, but a flexibility subject to control via these financial relations between the banking system and industry. The "discipline of the rouble" and "strict economic accounting" are phrases which one finds repeatedly emphasized in Soviet economic literature and in official economic pronouncements.

*Planned Cost Plus Planned Profits*

Detailed costing of an output programme forms the basis not only of the credit plan, but also of the selling price of the final product—just as it also plays a crucial part in the making of the production plan in establishing those links (or "balances," as they are termed) between different sections of the plan, which must be maintained if different lines of production are to be successfully geared to one another. The selling price of a factory's product is arrived at by adding on to its "planned cost" a certain margin of "planned profit." This gives the price at which the factory will be credited in the books of the bank for its goods when it has made final delivery of them. This price, be it noted, is fixed by the plan in advance of production. It cannot be altered by anything the factory does: for example, it cannot be raised by the factory's holding back goods from the market or restricting production (as private concerns may do in a capitalist system where some element of monopoly is present or competition is imperfect). This price for the factory or enterprise has to be taken as a predetermined datum. From this follows

a consequence of some importance. It means that if the planned output programme for a factory is not fulfilled, either as regards quantity or efficiency of production, this factory will realize less than its planned profit. If its actual costs come out higher than the target cost set for it in its plan (e.g. if it uses more man-hours of labour and more fuel and materials to produce a certain output than the plan allowed for), the difference between what it is actually paid for its production ( = selling-price × quantity of output) and the total expenses incurred in that production will be considerably narrowed, and may even become negative.

*Disposal of Surplus Profit*

Conversely, if for some reason or other the factory is successful in fulfilling its programme at a lower cost than was planned, it will be left with a larger margin of profit than the planned profit. Of any such profit a substantial part is left at the disposal of the factory or enterprise (the remainder being compulsorily taken in taxation or placed to reserve) and can be used for a variety of named purposes beneficial to the personnel of the factory (e.g. bonuses, improved welfare facilities, housing for the employees of the factory). In other words, part of the effect of extra efficiency in production is allowed to go to the workers of the factory in question; while part of it goes to the benefit of the community as a whole, to enable the productive power of industry at large, and hence the flow of goods produced in some future planning period, to be expanded.

*Incentive*

The significance of profit in these circumstances is, therefore, a very special one. It is a result of being more efficient than the plan provided for, and hence acts as a collective incentive to any economic unit, encouraging it to "beat the plan" with regard to efficiency. Unlike profit in a capitalist economy, it cannot be an inducement to restriction of output and it does not act as a regulator of what is produced, since both prices and the production programme are fixed by the plan and are not determined by the action of the individual economic unit. What does depend upon the individual economic unit is the efficiency with which the programme is carried out, and hence the level of cost; and here the financial arrangements provide each industrial unit with a financial incentive to fulfil its programme at the minimum cost.

### FIXING RETAIL PRICES

Analogous financial arrangements apply to the distributive organizations, both wholesale and retail. A "planned cost" of their activities in handling a certain volume of goods is assigned to them, to which is added a small margin of "planned profit." From these two items, added on to the price at which the goods are received from the factory, is built up the final selling

price. There is, however, a further very important quantity which is added in before the final price of a commodity is arrived at: namely, the turnover tax, equivalent to the purchase tax in Great Britain.

### SUPPLY AND DEMAND

It will be clear that the final retail price at which consumers' goods pass over shop counters into the shopping-baskets of consumers is a market price, in the sense that it must depend upon the state of the market—upon how much a thing is in demand, compared with the state of its supply. If the price is too low, relatively to the state of demand, the commodity in question will sell so rapidly that the shelves in the shops will be emptied of it: there will be those shop shortages and queues with which people in Britain have grown familiar during the war. Conversely, if the price is too high, there will be insufficient purchases to clear the shelves, and unsold stocks will accumulate. Equilibrium or balance in the retail market—that is, the absence of either shop shortages or accumulating stocks of unsaleables—requires that retail prices shall be "just right," and neither too high nor too low.

### THE TURNOVER TAX

Is there any reason why this "just right" price in the retail market should be the same as the sum of the "planned costs" (plus planned profit-margin) involved in producing a commodity and bringing it to the shop where it is finally sold? The answer is that there is no such reason. On the contrary, when any substantial proportion of the labour force of society is being employed on constructional work, in adding to the productive equipment of the economic system, and not on the current production (directly or indirectly) of consumers' goods, there is likely to be a gap between these two sets of prices—planned cost prices and retail market price. The gap could be bridged, of course, either by additional direct taxation (that is, reducing people's spending power) or saving equivalent to the amount of the wage bill incurred in the constructional work. The turnover tax is a means of doing this by diverting the amount of the difference between the two sets of prices into the State exchequer, instead of allowing it to accrue as profit to trading or industrial organizations; and on the revenue side of the budget it occupies a very important place.

The retail prices of which we have spoken are controlled prices, just as the prices of necessities in Britain have been since 1939. But the control price for each commodity will have to be adjusted from time to time, according to the degree in which it is in short supply relatively to the demand. Another way of looking at the turnover tax is, therefore, as a convenient means of building up the cost price of goods to the controlled retail price, and adjusting the latter by variable rates of tax on different things. The ordinary

consumer has, of course, free choice between the commodities available in the shops for him to buy: he can distribute his income as he pleases (and save some of it for the future if he wishes) between various goods. Hence, the preferences of consumers between various goods find expression in the retail market. They find expression in the relative prices of different goods, as we have described, and in the volume of sales at those prices. Hence, quantitative indices of what consumers are wanting are available to the Soviet economy to no less an extent than in any other type of economic system —indices which can, with advantage, be compared with the costs involved in producing these commodities.

### PLANNING AND CONSUMERS' PREFERENCES

The question that is usually asked by economists is whether or not such indices play a part in determining the production plan itself: whether the planners in drawing up the latter are influenced by what the retailer tells them about consumers' desires. We do not know of any precise evidence that would enable one to answer this question with a dogmatic affirmative. But the indications are that planning is so influenced, even if the indices which the retail market provides may not be the only factors (and quite rightly so) of which the planners take account in arriving at their decisions. It has to be borne in mind that throughout most of the pre-war decade Soviet planning was primarily occupied with major questions of what we might call economic strategy—questions of the rate of investment and construction, the location of industry, the degree of standardization of products and the relative rates of growth of industry and agriculture. These are questions which cannot in any economic system be decided by any simple appeal to indices of demand on a retail market: they are basic policy decisions that must be taken on the basis of a variety of considerations which cannot be reduced to any simple numerical form. These larger decisions dominated and circumscribed more particular decisions about how many boots and shoes, or perambulators or radio sets, or chairs and tables to produce.

### RAISING THE STANDARD OF LIFE

Moreover, even within the sphere of production of consumer goods, the primary consideration throughout most of the decade was that of producing a sufficiency of certain main necessities of life and minor comforts, in order to raise the standard of life of the mass of the population. Here no very complex problem of choice was involved, any more than there has been in Britain in the immediate post-war years in deciding how many houses to build and how quickly to step up the production of utility clothing. Towards the end of the decade, as the standard of life rose, the question of adapting production to consumers' tastes became more important and

began to receive an increasing amount of attention. One indication of this was the growing emphasis placed on local industries, and their adaptation to local requirements, of which we have spoken. Another indication was the attention paid to various methods of studying demand. Had not the needs of rearmament and the war intervened, there can be little doubt that this aspect of planning, in relation to consumer goods industries, would have occupied a much more prominent place; and we shall probably see it doing so in the years to come, once reconstruction is complete.

## IS SOVIET EXPERIENCE A GUIDE?

It has been said that the experience of planning in the U.S.S.R. can prove very little, in the sense of scientific proof, about the potentialities of planning, because so much of what happened in that country in the ten or fifteen years before the recent war was the result of special conditions peculiar to that country. This is to some extent true both of its achievements and of its difficulties. The latter, for example, were largely due to the economic backwardness which was inherited from the old regime, and to the isolation of the country, politically and economically, in the midst of a more or less hostile capitalist world. Nevertheless, the experience of Soviet planning affords us strong *prima facie* indication, at least, as to the kind of achievements of which a planned economy is capable.

### *Rapid Industrialization*

From 1927 to 1939 a rate of economic progress was maintained which is without precedent. The country had been transformed from a backward and predominantly agricultural economy to a country with a developed industry, in particular a heavy industry and machine-making industry of advanced modern technique, capable of supplying the sinews of a modern mechanized war of unparalleled severity and magnitude. And this had been achieved without the stimulus of loans of capital from abroad such as had fostered previous attempts at rapid industrialization. The indication is that planning provides a mechanism for achieving large-scale changes in the economy as a whole—what one may describe as bold strategical moves—where such changes would hardly be possible (at least, highly unlikely) in an unplanned system in which each of the economic atoms composing it acted independently of the rest.

### *Smoother Development*

The Soviet experience also suggests that a planned economy is capable of a smoother, as well as a more rapid, *tempo* of development. Partly, this may be because it has rid itself of those restrictive tendencies which inhere in a situation of imperfect competition or monopoly when profit maximization is the keynote of economic decision. Also it is capable of operating at full

capacity of technical equipment and of manpower, without that chronic margin of unused productive power and unemployed reserve of labour that has characterized capitalist economies hitherto. But there is the further consideration of great importance to which we have already referred—its ability to co-ordinate economic development so that different lines of production are geared together in their development, instead of each of them framing its own policy independently on the basis of expectations or guesses as to what the movements of market prices (and hence the profitability of this or that development) will be.

*Allowing for Error*

This is not to say, of course, that planners may not make mistakes. Until they have learned their job, they may make serious ones, which involve waste because resources are misdirected and are not used to maximum advantage.

Moreover, there will always remain those events that cannot be foreseen, however wise the planners may be; and for this reason, as we have said, plans can never be more than an approximation to reality, and the operation of them will need to have flexibility so that the plan in action can be adapted to the situation as this unfolds. It has sometimes been argued, however, that the mistakes that a planned economy makes are likely to be greater than the sum of all the individual mistakes made by independent economic units in an unplanned private-enterprise economy. The reason given for this statement is that when a large number of separate economic units independently make mistakes at random, many of these mistakes will cancel out because they are likely to be in opposite directions. Hence, it is suggested, the aggregate of these mistakes is likely to be smaller than when a single planning body takes a large-scale decision covering the whole economy of the State in a single comprehensive plan.

*Guessing Under "Free" Enterprise*

But this argument does not hold water for at least two reasons. Firstly, the assumption that the mistakes of individual firms in an unplanned economy will largely cancel out is a dubious one. Experience suggests that the guesses made by business men when they take decisions about output and investment are largely influenced by prevailing moods (sometimes of optimism, at other times of pessimism and excessive caution) which spread over the business world with the well-known force and irrationality of crowd psychology. In fact, to a large extent these individual mistakes at any one time seem largely to reinforce one another, since the expectations of each individual are influenced by the expectations of other individuals in the same direction. Secondly, when economic decisions are taken separately by a large number of individuals, each of whom can see clearly only what is happening in his immediate neighbourhood, the uncertainty to which all these decisions are

subject will be greater than if they are taken in a single co-ordinated decision, based on a vision of the whole field instead of only on glimpses of particular bits of the field, and the chance that mistakes will be made will be greater.

### RAISING INDUSTRIAL MORALE

There is one further matter which is worthy of remark in connexion with the results and possibilities of a planned economy. It concerns the human factor, and is a matter of what one may term industrial morale. It is also relevant to the question whether trade unions will have different functions in this new type of economic system from their traditional functions under capitalism.

The conclusion seems quite clearly to emerge, both from Soviet experience and from the experience of other countries, that a system such as we have been describing cannot operate successfully without a high degree of identity of interest among all members of the community, an identity of interest that is both real and is consciously felt. We cannot enter into a discussion here as to whether such a common interest can ever be complete in any type of community—as to whether or not it may always be true that any one section of the community (e.g. the workers in a particular industry) can benefit itself by action to the detriment of the rest of the community.

### SHARING THE FRUITS OF EFFORT

What is at any rate clear is that this common interest will be much greater in a society which is homogeneous in its social composition, in the sense that there are no longer different social classes depending for their livelihood on quite different sources of income. To give a concrete example: where there is no private ownership of land and capital and everyone's income is derived from work in some form, it will be evident that when workers increase production they are benefiting themselves as consumers (either in the present or in the future) by making more goods available. There may be disputes as to how different groups of workers, in different industries or grades, should share in the fruits of greater productive effort. But at least there will not be the paralysing suspicion that the fruit will be enjoyed, not by those who bear the effort of producing it, but by a class enjoying income rights disproportionate to productive contribution.

*Planning for the People*

In presenting the French plan for national recovery, which bore his name, M. Monnet declared that reconstruction was "not only a state of things, but a state of spirit." And of the Czechoslovak plan it has been said that the plan "grew into reality because it became the property of those who at the coalface, at the workbench, or wherever else, have to carry it out.

Large sections of the working people started to think in terms of the plan; . . . (they) were identifying themselves with the requirements of the plan" (J. Goldmann, *Czechoslovakia: Test Case of Nationalization*, page 56). It is in developing such a consciousness that a close identification of representatives of the actual workers with the conduct and planning of production at all levels is such a vital necessity.

### COMMON RESPONSIBILITY

There is no doubt that in the U.S.S.R. a new attitude towards production on the part of workers and trade unions, based on a sense of working for themselves and not for someone else, has played a much more important role than is generally appreciated. This is not to say that the new attitude came overnight—far from it. A sense of responsibility for the efficiency with which production was carried on and a readiness to subordinate sectional interests (e.g. as regards wage policy) to the needs of the economic system as a whole were only fully accepted by the trade unions in the early 1930s and only bore full fruit in the famous Stakhanovite movement in 1935. Without these a whole series of problems is likely to arise—problems arising from the pull of sectional attitudes in relation to price policy and problems connected with the distribution of manpower and the fulfilment of plans—which can scarcely be solved without compulsion. But if a consciousness of common interest and common responsibility is present, there seems to be no ground for the fear that economic planning may not be able to run in harness with individual freedom in choice of occupation, and central co-ordination of economic activity with initiative from below.

## *Test Yourself*

1. What are the main arguments in favour of economic planning, and what are the arguments most commonly raised against it?
2. What is the place of private property in a socialist economy such as that of the U.S.S.R.?
3. It is sometimes said that a socialist economy of a thoroughly planned type must abandon the use of the "price-mechanism." Do you agree? Give reasons for your view.

*Answers will be found at the end of the book.*

CHAPTER X

# TO PLAN OR NOT TO PLAN?

VERY broadly, there are today three main ways of organizing the economic side of the social system in advanced countries. The first of these is capitalism, sometimes called private enterprise, and lauded by its upholders as the method of economic freedom. The second is socialism, based on public enterprise and involving the planned organization of production and distribution in accordance with conceptions of social benefit. The third is a mixed system, in which public and private enterprise share the economic field with a more limited form of planning extending over both. Until recently there was also a fourth system, fascism, under which the conduct of industries and services was left mainly in private hands, with the State exercising dictatorial power to ensure the compliance of industry with its demands and to keep the working classes in entire subjection to its own, and the employers', will.

We are, of course, considering these three systems for the time being simply as *economic* systems, and not in relation to their non-economic aspects, which are also of the greatest importance. Thus, I have just referred to fascism quite dispassionately as an alternative *economic* system, though if we were speaking of it as a whole it would be impossible to do so dispassionately, because of the detestable perversion of morality on which it rests. Similarly, we shall discuss socialism and capitalism simply as economic systems, and leave out of account the non-economic differences between the various form of capitalism and between such various forms of socialism as, for example, communism and social-democracy.

## DEGREES OF PLANNING

Three out of these four systems involve a large measure of public planning. The socialist system is the most completely planned; for where the State owns all the main industries and services and makes itself responsible for their efficient conduct there is bound to be something in the nature of a general plan covering both production and the distribution of incomes. The fascist system also was highly planned; but as its essential purposes were militaristic rather than economic, it planned those sections which were most closely related to war-making more completely than the rest. What are now commonly called "mixed systems" admit of many varieties and degrees of planning and leaving things unplanned; but they include, at

any rate, both a fully-planned sector and some substantial element of more general planning designed to ensure the full utilization of economic resources and their direction into the right uses. Only the system of private-enterprise capitalism is planless, and is praised by its upholders for being without a plan; for, in their view, things will work out best when motives of economic self-interest are allowed to take their course with the minimum of public interference. Some public intervention there has always to be, even in the least-planned societies; and, at the other extreme, not even the most totalitarian State can plan everything.

Up to a point, all systems are mixed systems; but there is a valid enough distinction between the private-enterprise capitalist system, in which planning is the exception, and the socialist and fascist systems, in which planning is the rule. Mixed systems, in the sense in which the phrase is used in this chapter, lie nearer to the fully-planned types than to private-enterprise capitalism, because their planning, though limited in scope, is designed to effect a distribution of economic resources and benefits broadly in accordance with public need or national interest, however understood.

## PLANNING FOR SOCIAL WELFARE

To say that a particular economic system is "planned" tells something about its methods, but nothing about its purposes. It is possible to plan for very different ends. Thus, fascist planning had the purpose of making the States which adopted it powerful enough in war to prey upon their neighbours and to steal their goods and even enslave their people; and the fascist planners cared nothing for social and economic welfare, even among their own peoples, where such things stood in the way of their militaristic aims. They planned for guns in preference to butter, and for butter only to the extent that it, too, was an essential instrument of war. In contrast with this, socialist planning and such planning as is done under the mixed systems which I have in mind are done primarily in the cause of social welfare. Their essential purpose is to make the peoples who live under them better off, and to ensure that production and distribution are alike organized with this in view. Of course, even fascists prefer to make their own peoples well-off as far as they can do so without at all interfering with their military purposes: so that even fascist planning can have a secondary welfare element. Correspondingly, socialist planners may feel the need to divert large resources to war preparation, if they feel their countries to be threatened with attack.

## SOCIALISM BECOMES A REALITY

The First World War brought about immense dislocation of the world's economic life. Before it ended, socialism had come to power over a vast country. and therewith had become an actuality to be reckoned with by

millions of people in other countries who had never thought seriously about it before. But the country which was first won for socialism was not, as most socialists had expected it would be, one of the most advanced homes of capitalism. On the contrary, it was a backward country, in which capitalism had never been fully established—a country mainly of peasants, ruled until the Revolution by a notoriously evil and inefficient autocracy, and very short both of skilled workmen and, even more, of competent technicians, administrators and managerial experts. Socialism won the day in Russia for two reasons, neither of which would have availed in the absence of the other. The first of these reasons was that the ill-organized economic system of Tsarist Russia utterly collapsed and disintegrated under the strain of modern war: the second was that among the Russian socialists there were leaders, or at any rate a leader, bold and self-confident enough to seize the chance when it came, and, under immense difficulties, to set to work building up the socialist system as the only practicable alternative to sheer chaos and dissolution.

### CAPITALISM ON THE DEFENSIVE

The Soviet Revolution of 1917 broke the world monopoly of capitalism. Thereafter it was no longer possible to assert convincingly that socialism was only a dream.

It was still possible, of course, to dislike socialism strongly, and to denounce the particular form which it had taken in the country in which it had achieved power; and for a time it remained possible to predict that it was bound speedily to collapse. But the very fact that a socialist system existed made an immense difference to the way in which people thought about capitalism, which, in face of the Russian Revolution, lost its halo of inevitability and was forced for a time on to the defensive over a large part of Europe. For a little while after the German collapse of 1918, it looked as if the world revolution hoped for by the Bolshevik leaders might be actually upon its way; but outside Russia the forces of capitalism were strong enough to hold the revolution in check. In the victorious countries there had been no such economic collapse as had befallen Tsarist Russia; and in Germany fear of blockade and famine combined with divisions in the socialist ranks to block any attempt to construct a socialist system. Nevertheless, the continuing existence of socialism in Russia, despite all the efforts of capitalism to compass its overthrow, converted the socialist ideal from a mere Utopian notion into a practical possibility for millions of people all over the world, and meant that, as never before, the practicability of choice between alternative economic systems presented itself to the minds, not merely of a few idealists, but of ordinary men and women.

Ever since 1917 the world-wide debate about the foundations of the

economic life of society has gone on without cessation. It has not, however, been a simple debate between the advocates of capitalism and of socialism; for it has not been simply between these two that men have been called upon to choose, nor has the choice presented itself everywhere in the same form.

On the socialist side there have been sharp disagreements over the merits and over the applicability of the kind of socialism that emerged from the Russian Revolution; and many socialists have argued that, even if no other kind could have been set up in Russia under the circumstances, the system that has been consolidated there under communist control is quite inapplicable to the needs and conditions of more advanced and civilized countries. It has been contended that, where democratic parliamentary institutions exist and the people are in a position to influence the course of events by constitutional means, neither the need nor the possibility is present for a catastrophic revolution of the Soviet type, and socialism can come only as the result of a series of piecemeal changes and not all at once.

This gradualist or evolutionary conception of socialist policy involves the idea of a transitional mixed system, in which elements of socialism and of capitalism must exist for a time side by side, the socialist sector being enlarged by stages until it covers either the whole economy or at least all the key points in it, so that the economic system becomes predominantly socialist even as it came to be gradually capitalist when, in one country of Europe after another, the rising capitalist class pushed its way by stages to the control of the essential forces of society.

## SOCIAL DEMOCRACY

This gradualist kind of socialism is usually called by its advocates liberal socialism or social democracy, and is contrasted with socialism of the communist kind, not only because it is designed to come into being by stages, but also because it is meant to be established and operated by parliamentary means and with the greatest possible element of consent. The establishment of socialism in the Soviet Union was accomplished in a way that involved the complete destruction of the old economic and political order and the creation of a new set of institutions designed to guarantee that those who stood for the new order of things should remain permanently in power.

It carried with it an entire liquidation of the old governing classes and of the sources of their power in the control of the resources of production. This clearly could not be achieved at a blow except by dictatorial methods. These methods included the drastic suppression of all opposition forces and the creation of a highly authoritarian economic and political regime.

The liberal socialists contend that no such uprooting of established institu-

tions is necessary, or even possible, in societies already at a higher stage of social and cultural evolution and in possession of the habit of introducing changes by discussion and of institutions capable of being adapted to the requirements of democratic evolution. Accordingly, socialism presents itself to them, not as a complete alternative system to be created after the total overthrow of capitalism, but rather as a programme of successive changes worked out in such a way as to lay firm foundations for the new society and to begin the actual building of it without disturbing more than is necessary of the old.

It is clear, however, that, even if the transition to socialism can be made gradually, it is not possible to make it merely by applying socialization here and there to particular industries or services, in such a way as to leave unaffected those parts of the economy which have not been directly socialized.

### NATIONALIZATION NOT SOCIALISM

The mere socialization of a limited number of industries and services is not socialism, or necessarily even an instalment of it; for it would be fully possible for such industries and services to be conducted, though under social ownership, in a capitalistic way. There are, indeed, plenty of examples of such forms of public enterprise in societies which remain capitalistic in every essential feature.

It was not imagined that Great Britain became a socialist country when Conservative governments set up the Central Electricity Board and the London Passenger Transport Board; nor did the United States when it established the Tennessee Valley Authority. State-owned railways and banks have existed in many capitalist countries without implying any move in the direction of socialism.

Such a move can be said to have occurred only where the State, not merely takes certain services into public ownership, but sets out to use its control of them for the purpose of bending the economy as a whole towards greater social and economic equality and the elimination of class-differences —that is to say, towards socialism and as instruments of a socialist form of planning which must extend beyond the socialized sector and exert at least a general control over the distribution of economic resources in every part of the economy.

### PUBLIC OR PRIVATE ENTERPRISE

To plan, or not to plan? That is the question. The advocates of capitalism —or of private enterprise, as most of them prefer to call it—argue that we shall all get our needs best satisfied if, instead of arranging collectively what to produce and how to distribute the product, we leave individuals, or groups

of individuals, to organize production under the stimulus of the hope of profit, and allow the distribution of income to be settled by the higgling of the market, or rather of several markets—the market for finished, that is, consumer, goods, the market for capital equipment, the money market, and, last but not least in importance, the market for labour.

### COLLECTIVE DECISIONS

On the other side, the advocates of public enterprise and of economic planning argue that under the conditions of today the best results will be got by taking the essential industries and services into public ownership and control, and by making the use of economic resources, including manpower, a matter of collective decision under the authority of the people as a whole.

It has been argued that under the conditions prevailing today planning is necessary, above all for such a country as Great Britain, which has to face large adjustments in its economy in order to deal with the changed situation into which it has emerged as the outcome of two successive world wars.

It has been urged, furthermore, that the kind of planning that is called for, both in Great Britain and in other countries, is democratic planning, that is, planning designed above all else to secure the welfare of ordinary men and women by their consent and with their active co-operation. We must plan, not for the sake of planning, but for plenty and against want; and that means planning for high total production, for the right kinds of production, and for the distribution that will conduce most to the general wellbeing .

## PROBLEMS OF A PLANNED ECONOMY

The purposes we must have before us are clear; but there are serious pitfalls in the way. The working of a planned economy involves five main problems, all of them difficult and all of them calling for a rightly based political and social structure as well as for a right conception of the ends to be served. These five problems are the following:—

(1) the problem of democratic control;

(2) the problem of flexible and humane administration, which can also be described as the problem of avoiding bureaucracy;

(3) the problem of incentives;

(4) the problem of priorities—that is, of deciding how best to arrange for the allocation of resources to various types of production and service when reliance is no longer placed on the planless "freedom" (or anarchy) of the capitalist "market economy";

(5) the problem of international collaboration, that is, of planning with other countries and not—more than we are sheerly driven to—against them.

Let us consider these problems and the best ways of dealing with each.

### (1) PROBLEM OF DEMOCRATIC CONTROL

The first danger inherent in any system of planning is that the persons who are put in charge of the planning may get it into their heads that they alone know what is best for the people, and may attempt to plan, and to get their plans carried into effect, on authoritarian lines. The love of power is present in most men of ability and is a special affliction of the capable, organizing type of mind. It is not in itself evil: indeed, up to a point it is impossible to do without it. But there are two ways of possessing and using power.

One way is that of the autocrat, who makes up his own mind what he wants and then tries to drive it through regardless of the need for getting the willing collaboration of those who have to carry it out. The other is the way of collaboration, in which the planners, before making their decisions, consult to the fullest possible extent those on whom they must rely to work the plan when it is made, and seek, wherever possible, both solutions and methods which will enlist their enthusiastic co-operation, not merely their obedience.

This second sort of planning involves a readiness on the part of the planners to take account of the views and attitudes of those whose work is being planned and to modify their plans in the light of criticism and advice from those who will have to carry them into detailed effect. It therefore involves a large amount of decentralization and of devolution of responsibility.

Under this type of planning, plans are made not by only a few people at the centre, but as the outcome of countless suggestions and proposals emanating from the various groups through which they are to be put into execution.

The autocratically-minded planner is rather apt to regard most of this consultation as an irritating waste of time, and to feel that he knows so much better than the people he is asked to consult (because he sees the whole, whereas each of them sees only a part) that it is not worth while to consult them, at any rate as more than a matter of form.

This sort of planning by authority is not always unworkable. It can, under certain conditions and under the command of really able and ruthless men, yield remarkable results. It is, however, entirely inconsistent with democracy, and when it is attempted among a democratically-minded people it is bound to fail unless the planners are powerful enough to terrorize the people

into obedience. It can work in a democratically-minded country only if democracy is overthrown by force and the rule of armed force and secret police is put in its place. The more democratically minded the people are, the harder is it to hold them in subjection, even by these means; and the probable outcome of the attempt to plan autocratically in a democratically-minded country is the speedy overthrow of the planners.

*Co-operative Leadership*

Fortunately, the desire for power which is certain to be present in many of those who are good at planning need not take this autocratic form. As great, or greater, satisfaction can be got by those in whom the love of power is not a disease but a natural outcome of the sense of high capacity, out of the collaborative type of planning, in which the planners are not masters but leaders who recognize the human claims and desires of those with whom they are called upon to work, and are in fact working under conditions of responsibility, in the sense that they will lose their jobs unless they succeed in satisfying, not only their "superiors," but also those whom they are set to lead.

Democratic planning involves that the "planned" community shall be able, by one means or another, to get rid of planners who fail in the art of co-operative leadership. The sense of leading a team, with the goodwill of its members and with the architectural function of putting together their several contributions, in consultation with them, individually as well as collectively, to make a comprehensive plan, is the good democratic form of the will to power; and the planners who are wanted in a democratic society are those who understand the art of consultation and of persuading and guiding instead of issuing arbitrary orders.

*Planning at Every Level*

The achievement of this kind of planning requires not only the right sort of men at the top, but also the right machinery. It cannot be achieved merely by establishing a central planning organization—essential though such an organization is.

It necessarily involves the existence of machinery for planning at every level and in every compartment of the economy at each level. It means that there must be regional and local, as well as national, organizations for planning; that each industry must have its own planning machinery; and that in each industry there must be continuous planning at every level, down to the individual factory or department, and down to consultation with the individual worker as well as with his representatives.

Let us try to see how a national economic plan for Great Britain would be made in accordance with this democratic principle. To begin with, there would be at the centre a responsible committee of ministers at the head of

the main economic departments, with at least one minister free from departmental duties and in a position to give most of his attention to the tasks of central co-ordination. Under this minister and in close touch with this committee there would be a staff of professional planners, made up not only of economists and administrators but also of scientists and technicians of high ability, whose job it would be both to keep the ministers fully supplied with the right information and to think up projects to lay before them. In close connexion with this central planning office there would be regional offices, staffed by men of similar qualifications to the preceding, organized so that everyone would get experience of both central and regional work.

Staffs of these regional offices would be continually consulting the most representative groups in their several regions and gathering in projects and suggestions from them, and these projects and suggestions would be transmitted to the centre. They would also be continually receiving from the centre proposals or notions to be tried out in consultation with the various groups in their regions, and would be reporting back to the centre on the results of these consultations.

*Machinery for Consultation*

Next, there would be in the central office someone whose particular task it would be to keep in touch with a particular industry or service, to listen to, discuss and transmit suggestions or projects emanating from the industry and to consult the industry about proposals or notions emanating from other industries or services or from the planners themselves. Each industry would be required to devise its own machinery for planning and consultation, so as to ensure both its own ability to make and amend plans and projects and the thorough discussion within it at every level of the plans put before it from the centre.

Under these conditions an industry would be able quite often to make its own plan and to secure its endorsement by the national planning authority. Sometimes—the more often the better—the function of the central body would be little more than the making of a general framework and the co-ordination of detailed plans made locally or by particular industrial groups.

*Intervention from Centre*

In other cases—where, for example, an industry was in a mess, or failed for any reason to make sensible and realistic plans of its own, or where, say, local jealousies prevented effective local or regional planning—the central authority would have to assume a more positive role and to plan for those who failed to plan properly for themselves; but, even so, it would be of the utmost importance to consult to the fullest possible extent and to miss no chance of enlisting the co-operation of the defaulters.

Plans, in the sense in which we are using the term, would of course be

primarily plans of production—defining the quantities to be produced, the amounts of labour, new machinery, and new buildings needed for their production, and the costs of these various requisites. The initial plans would set out from the existing equipment and levels of cost, would include proposals for reducing excessive costs where they were found to exist, and would propose any necessary expansions, contractions, or consolidations in the industry concerned.

Following the initial plans each successive plan would start from what had been accomplished under its predecessor; and as planners acquired more experience and plans became better co-ordinated, greater boldnesss would become practicable both in measures for reducing costs and in transferring resources from one use to another. More and more of the sectional planning could be delegated to industrial or regional agencies as the central plan came to be better understood; but never, at any point, would the plan have to be made "from scratch"—it would be always an adaptation of something that existed already.

*National Economic Plan*

A national economic plan made in this way would be a mixed product of many different plans drawn up and discussed at various levels and over wider or narrower fields of action. It would not be the planners' plan but the nation's, and would be felt not as something imposed from above, but as the outcome of a collaborative endeavour for which all the executants, in their several spheres, would have a sense of direct responsibility. This is, in fact, how the present National Coal Plan in Britain is being made.

Such planning is really democratic and for no other kind of planning can the claim to be democratic be fairly advanced. For democracy is not assured simply by putting power into the hands of men who are supposed to be responsible to the whole people, but only by diffusing it as well, so that a great many persons and groups consciously share in it and have the sense of working together to get the plan rightly made and understandingly implemented in action.

*Initial Difficulties*

Inevitably, this democratic planning will take time to bring into full operation. The first real plan is bound to embody no more than an approximation to what is wanted; for the individuals and groups that are called upon to collaborate with the government planners will not easily find their right places in the plan, until they have had some experience.

The making of the initial plan is bound to be difficult and to involve many mistakes and failures in co-operation; but when it comes to the second plan it will be a matter not of starting again from the beginning, but of modifying and improving upon what has already been done. At this stage,

the full process of consultation, of referring back and forth between the centre, the localities and the separate industries and services, will begin to work more smoothly; and the collaborating groups, knowing better what is expected of them, will be able to make their contributions to better effect and to diminish the need for centralized planning, except for the general principles on which the plan is to be based.

*Delegation of Powers*

Obviously, planning of this diffused and co-operative type is not possible except where the supply of skill and intelligence is large and the capacity for associative action highly developed. The Russians' greatest difficulty in their earlier plans was (and to some extent the problem remains today) the acute shortage of trained and competent people on both the technical and the administrative side. The need to economize to the utmost in the use of such persons made unavoidable a degree of centralization which was bad for the economy and set up a great deal of irritation among those whose affairs were being planned. As the supply of technicians and administrators was enlarged, the Russians did a good deal towards decentralizing their planning machinery and giving greater powers to regional bodies and to the representative organizations of each of the separate industries.

*Give and Take*

In Great Britain, where the initial supply of skilled and trained technicians and administrators is so much larger, and where there are large reserves of trained competence to be drawn upon among the skilled manual workers, it should be practicable to set about planning from the very outset in a much more democratic way. It should be possible to ensure that planning shall be, recognizably and completely, a two-way process, with plans and projects, like the angels, ascending and descending—and becoming modified all the time in their ascent and descent through national, regional and local bodies, both general and particular—and that such plans are brought by this give-and-take process into better conformity both with practical possibilities and with what the people want and are ready to help in doing with a will.

### (2) PROBLEM OF BUREAUCRACY

The second danger that attends planning is the growth of bureaucracy. By bureaucracy we mean the passing of real power from the responsible persons to whom it has been entrusted by the people into the hands of salaried officials, and its exercise by these officials without any effective democratic control.

That this is a very real danger no one who has knowledge of the working of large-scale organizations is likely to deny. Bureaucracy is not, as some people appear to suppose, a thing that appears only in the public services:

it is a characteristic feature of all large and complex organizations where no special measures are taken to prevent it. A railway company, or even a university, can be quite as bureaucratic as a government department, and we tend to associate bureaucracy with the public services only because it is there most dangerous, being heavily armed with coercive, and even, in effect, with law-making, power.

*The Civil Service*

In the ordinary working of the Civil Service machine bureaucratic tendencies are very apt to develop, for two main reasons. In the first place, civil servants are mostly appointed for life, and there has been hitherto very little movement out of the Civil Service and very little chance, under normal conditions, for outsiders to enter it at all high up the scale of promotion. This has tended to make the higher civil servants into a caste and to cause them to stick closely together in their dealings both with ministers, who are supposed to be their masters, and with the general public, which they are supposed to serve.

The tendency has been further encouraged by the proximity of the government offices one to another and to a limited group of social clubs in which the leading civil servants regularly forgather, by their largely common educational background, and by the very success of the measures which have been taken to ensure their entire freedom from corruption. The British Civil Service is exceedingly honest, according to a high code of conduct which has become traditional with it. Getting no pickings and conscious of its virtuous behaviour, it is apt to hold itself entitled to stand closely as a body for the privileges which compensate it for these inhibitions. In general, its members try to give diligent and conscientious service, and, being highly intelligent and carefully selected, up to a point they succeed. They insist, however, on serving in their own way and in accordance with their own traditions; and these include a meticulousness in working to regular rules which often annoys the public when the rules fail to cover particular cases.

*Tendency to "Play Safe"*

The civil servant is apt to fear above all else being "caught out"—especially by a question in Parliament. This causes him to disgorge information unwillingly, for fear of giving some member of the public a handle, and to stick closely, whenever he can, to forms and precedents in order to keep on the safe side. He is also afraid of the lawyers, who, given the chance, are apt to make judicial decisions which upset his carefully devised administrative plans; and, where he can, he will often try to keep the lawyers from meddling by taking what are in effect judicial powers into his own hands. Such assumptions of power are of course in form usually made by ministers, who become responsible for making Statutory Rules and Orders and for the

proceedings of "administrative justice" inside their departments. But the reality of power more often rests in such matters with the permanent officials than with the ministers in whose names they act.

This is bound to happen, because nowadays government departments have to deal with so wide a range of questions requiring detailed knowledge that no minister can be fully aware of more than a tithe of the things that are being done in his name. It happens the more because civil servants remain, whereas ministers come and go, not only with the alternation of parties, but with the chopping and changing of offices during the life of a single government.

The highly placed civil servant, watching, as he does, the advent and departure of a series of ministers who necessarily know much less about the working of his department than he knows himself, would not be human if he did not often pit his wits and knowledge against a minister's inexperience in order to get his own way. Nor would he be a good civil servant if he wholly avoided doing this; for it is inevitably a part of his function to preserve administrative continuity and to hold back ministers from doing things which he feels may get his department into a mess.

*Routine and Fixity of Mind*

This continuity of office in high positions by civil servants, as against the transitoriness of most ministerial tenures, is the second reason for the development of bureaucratic tendencies. The more complex administrative procedures become, the more this continuity increases both the "fixed mindedness" of those who have charge of the machine and the power of the permanent officials as against the minister. A minister who has his Cabinet colleagues and his party behind him can no doubt always carry a point of major policy against his permanent official, unless he be more than usually feeble; but there is no similar assurance of his ability to prevail on points in which his party is not particularly interested or in matters which can be represented as involving rather administrative routines than questions of political policy.

These routines, however, breed delays in action, lack of vitality in facing new situations, and quite often a formidably wooden, indeed, if not stubborn, resistance to change, even when change is overdue.

*A Supervisory Service*

Until quite recently, the main jobs of most of the government departments, and accordingly of the civil servants attached to them, were in a broad sense supervisory rather than managerial. The Government did not run any large number of services requiring big staffs: the Post Office was much the largest, followed by the Admiralty dockyards and by the Customs and Inland Revenue services. Then came the establishment of the widely distri-

buted system of employment exchanges; but outside these fields the Civil Service continued in the main to be engaged not so much in doing things as in exercising various kinds of supervision and regulation of the doing of things by others—by local authorities, by business concerns, by colonial administrations, and so on. In most of these fields bureaucracy, even if it existed, did not constitute more than a source of irritation; it was often annoying, but it did not often do really serious harm.

*The New Civil Service*

As soon, however, as the province of the Civil Service began to extend to the positive controlling of a considerable number of important industries and services, a quite new situation arose. The somewhat rigid methods, designed primarily to prevent corruption and to secure equal treatment of particular cases under precise rules, which had been well enough adapted to the older functions of government departments, were found badly wanting in the flexibility, the initiative, and the attention to human reactions needed for the successful conduct of large enterprises. In discharging these new functions bureaucracy got worse, not because civil servants changed their natures, but because they attempted to apply a traditional technique to conditions with which it had not been designed to deal, and also because the immense additional burden of duties caused them to formulate rules faster than they themselves—much less the public—were able to digest the substance of the matters the rules had to provide for.

*Public Corporations*

Attempts were made to cope, in some matters, with this changed situation by placing certain large services which had been brought under public control in the hands not of government departments of the regular type, but of *ad hoc* boards or corporations modelled partly on the Civil Service tradition and partly on the methods of private business.

These "hybrid" boards or corporations—the B.B.C., the Central Electricity Board, the London Passenger Transport Board, the Assistance Board, and a number of others, up to the National Coal Board of 1946 and the new bodies proposed in 1947 for transport and other services—differed considerably one from another; but, especially when their task was the direct conduct of a large-scale business enterprise, they were set free from that Treasury control which is the key to the Civil Service system, and were left to evolve their own methods to fit their varying problems.

To the extent to which they developed bureaucratic tendencies, these were more closely akin to the bureaucracy of large-scale commercial enterprises, such as banks or railways, than to Civil Service bureaucracy; and the problems of democratic control which arose in them were of a different order. It appears to be almost generally agreed that for the conduct

of large socialized industries and services this method of administration through semi-autonomous public boards or corporations is preferable to the Civil Service method, though the right ways of providing for government control over such bodies has not yet been worked out, and there are still wide differences of view about the amount of independence that ought to be allowed them, as well as about the share in control that ought to be conceded to their workers.

This difference of view arises, indeed, chiefly between the advocates and the opponents of planning. The latter, where they recognize the necessity of placing a service or industry in public hands, usually wish the body that is put in charge of it to be as nearly as possible like a private business corporation, and to be as little as possible subject to any political control.

*Government Control*

The advocates of planning, on the other hand, necessarily stress the need to make all public corporations subject to the co-ordinating control of the Government through its general planning machinery, and therefore insist that the corporations shall obey government orders in matters of high policy, however fully they may be protected against interference in the day-to-day management of their affairs.

As soon as the question arises of instituting any general system of economic planning, it has to be considered whether the machinery needed for it had better be based on the Civil Service tradition, or on the precedents set by the special corporations created in recent years, or on neither of these. On the one hand, general planning must clearly be political, because it involves the taking of decisions about the use of manpower and other productive resources that are of concern to every citizen and must clearly be made by the Government itself, or under the Government's responsibility. On the other hand, the decisions that have to be taken necessarily rest largely on technical considerations which neither Cabinet ministers nor ordinary civil servants can be expected fully to understand.

*Need for Specialists and Technicians*

From these two points it seems to follow (*a*) that the composition of the staff of full-time planners cannot be at all like that of the traditional Civil Service, and (*b*) that these planners cannot be given the same sort of autonomy as is practicable when a board or corporation is entrusted with the management of a particular industry or service. The planners must be civil servants, in the sense that they must act directly under the orders of ministers, but they must not be like the general run of civil servants, in the sense that they must consist mainly of experts—economists, technicians, scientists, and so on—and not of administrators raised in the Civil Service tradition.

It is, moreover, evidently undesirable that they should have the same

lifelong guaranteed tenure as most civil servants in fact possess; for where the jobs to be done are largely concerned with technique, it is essential to efficiency to introduce new blood continually from among those who have been actually doing the jobs that need to be planned, in order to avoid a persistence in obsolete notions and methods and to ensure adaptability to developing technical opportunities.

*Nature of Planning Staffs*

Accordingly, planning staffs must on no account consist mainly of lifelong civil servants with any sort of guaranteed permanency of tenure.

Public servants who are engaged in the higher tasks of co-ordinated planning must pass freely to and fro from the service of the Government's planning agencies to the service of industries, whether publicly or privately owned, to universities and research institutions, or to foreign or colonial service; and new planners must be brought in just as freely and continually from all these sources. Neither the government planning staffs nor the planners and administrators in the service of particular industries or public agencies must ever be allowed to ossify: they must be continuously changing and flexible. If they are kept in this condition, the danger of bureaucracy arising in them will be at a minimum.

It will not, however, be easy to achieve this flexibility unless politicians are fully alive to its importance. As planning develops, the civil servants of the regular type will certainly try to secure the leading positions in the planning agencies for members of their own caste, and will do their best to let the experts come in only as subordinates to themselves. This is what they have for the most part succeeded in doing when existing government departments have needed to employ expert technicians and scientists; and anyone who has watched what has been happening in Whitehall during and since the war will have observed that the Civil Service has been steadily busy at this game—above all, in securing the new key positions under the Labour Government elected in 1945.

If the Civil Service is allowed to succeed in this, the danger that the growth of the public services will carry with it an increase in bureaucratic ascendancy will be very great; but I see no evidence that ministers are at all alive yet to the key importance of this issue.

*Parliamentary Checks*

The avoidance of bureaucracy does not, of course, depend on this factor alone. There are at least two other safeguards which are of the utmost importance. In the first place, the strength of bureaucracy is the reverse side of the weakness of political control. The bureaucrat flourishes where he can shelter behind either a weak and ignorant minister, who becomes his puppet, or a minister with a contempt for the public, who prefers bureaucracy to the

processes of consultation and conciliation. Masterful and weak ministers can both aggravate the bureaucratic danger: ministers who stand firm by the necessity of acting democratically can be powerful bulwarks against it. The matter does not, however, rest exclusively—or even perhaps mainly—with the ministers: it rests with the ordinary Members of Parliament, with the organizations that exist to express the views and feelings of the various sections of the public, and with the public itself.

If Members of Parliament keep in close touch with their constituents and are energetic in taking up their grievances and proposals; if local, as well as national, organizations of every sort and kind are continuously scrutinizing the behaviour of ministers and Civil Service departments and other public agencies; if aggrieved members of the public are not content with grumbling but do all they can to get their complaints taken up, the bureaucratically inclined official can be taught to mend his manners and to reach the conclusion that it will cost him less trouble to consider the public than to despise its feelings.

*Devolution*

In the second place, the bureaucratic danger can be lessened by devolution —that is, by distributing over the widest possible field the task of making the innumerable decisions involved in planning. The existence of *ad hoc* boards or corporations for the conduct of particular services undoubtedly helps in this respect, provided that the right relations are established between the boards, the ministers to whose departments they are loosely related, and the planning authorities and agencies working on the Government's behalf.

Each board or corporation ought evidently to play a large part in drawing up and in modifying in the light of practical experience the plan for its own industry or service; and, on one condition, the more it can be left to do this itself, the better. The condition is that the final responsibility for high policy shall rest, neither with the *ad hoc* board or corporation nor with the government planners, but with the Government itself as the representative of the people. Again, the more the secondary decisions can be worked out by regional or local bodies, subject to final approval at the centre, the more flexible will the planning be and the less the danger either of bureaucratic rigidity or of aloofness from the ordinary citizen's views.

*Importance of Management*

This is not the place for a discussion of the immensely important question of the kind of managerial structure and attitude that are needed in order to make publicly organized industry a democratic success. The problem is one to which all too little thought has yet been given by anyone: yet it is clearly vital. It is absurd to suppose that the concepts of management which have been worked out as suitable for capitalist enterprise can be simply

transferred to socialized industries and services. The socialist planners have to find ways of resolving the eternal conflict between the claims of technology and of human happiness—which means, in industry, the finding of a correct adjustment of the managerial functions concerned with technical organization and with human relations. In my view, the responsibility for human relations in industry is higher than the responsibility for technique—by which I mean that the top man at each level should regard himself as primarily a leader of men.

If the administrator has to choose between delegating the oversight of technical execution to a subordinate and delegating the care of human relations, he should delegate the former. This is, of course, precisely the reverse of what is usually done; for usually the personnel officer is made to rank below the technician, and the manager keeps a closer hand on techniques than on human relations. Such a system may have worked under undemocratic capitalism (though I doubt if it did work well even there): assuredly it will not work under socialism or semi-socialism, because it is inconsistent with the democratic spirit and with the kind of works society that must be built up if the real co-operation of the workers is to be secured.

### (3) THE PROBLEM OF INCENTIVES

The third danger is that a planned economy may undermine the incentives to work which exist in a capitalist economy without putting adequate new incentives in their place. The incentives here in question include not only incentives to the wage-workers to work hard and well, but also (and fully as much) incentives to managerial efficiency, to technical and social inventiveness, and to the application of capital to economic development. If I begin this section with a consideration of the incentives to labour, that is not at all because I am at all unmindful of the key importance of incentives of other types.

(*a*) **Incentives to Labour.** The theory and practice of capitalism laid stress on labour incentives of two main kinds, with subordinate recognition of two other kinds. The two incentives on which the principal emphasis was laid were, first, fear of the sack, and, secondly, hope of higher income or of promotion to a higher status, or of both together. The two incentives to which less importance was usually attached, save in exceptional cases, were team-spirit, based on loyalty to a firm or productive unit, and the possession of health and a sense of well-being, as conducive to a natural readiness to work hard and cheerfully. To this last factor should be added that of the importance of making the conditions of work as pleasant as possible, as well as healthy, in order that the irksomeness of labour may be reduced to a minimum.

Today, of the two main incentives to work under capitalist control, the

first has lost a great deal of its force. Even where the employer retains full legal freedom to dismiss the worker, without any provision for appeal, his practical power to do this is reduced—to some extent by the strength of trade unionism, but also under existing conditions by the positive shortage of labour, and especially of skilled labour. Moreover, even when, as was mainly the case up to 1939, the employers still have the power of the sack, the fear of being sacked becomes a good deal less strong because of the growth of the social services.

It was still no doubt extremely unpleasant to spend long periods out of work, especially for the skilled workman who was accustomed to a relatively high standard of living; but unemployment was no longer so utterly crushing a penalty for the main body of the workers as it had been in times of bad trade, when the only form of relief available was that provided by the Poor Law, with its stigma of pauperism and its deterrent conditions.

*Fear as an Incentive*

The determined believers in capitalism who made the New Poor Law of 1834 were definitely of opinion that the principles of deterrence and less eligibility which they made the basis of public relief were essential to the working of the free labour market and to capitalism itself. Quite deliberately they drove and held the workers to their jobs under the new industrialism by the force of fear, in the belief that nothing short of this would avail to make the workers the reliable servants of the machine.

It is not suggested, of course, that by the year 1939 fear of the sack had ceased to count as an incentive, or that it has altogether ceased to do so today; but it has undoubtedly lost so much of its potency as to be no longer reliable as a spur to labour.

This fear of unemployment was, indeed, bound to lose force with the growth of democratic sentiment and influence; for as soon as popular power became great enough to insist that the unemployed worker should be assured of at least a barely tolerable subsistance, this fear incentive, instead of operating continuously and over the whole field of employment, could operate in the main only intermittently and patchily.

With unemployment insurance, including dependants' allowances, to fall back on, the worker ceased to be afraid of *short spells* of unemployment.

*Unemployment Loses its Terrors*

This meant that the motive of fear was strong only when the worker was afraid of being out of work for a long time without finding another tolerable job; and, broadly speaking, this fear afflicted him only in times of depression or when he belonged to an industry that was suffering from exceptional conditions of distress. Even at such times and in such industries the fear was much less intense than it had been, except for the relatively

well-paid workers, for whom the dole meant a sharp fall in income. Thus one of the two principal incentives of nineteenth-century capitalism was greatly weakened.

*Higher Earnings*

The second incentive, the hope of higher earnings under systems of piecework or through promotion to a higher grade, had not been correspondingly weakened up to 1939. There had been, indeed, a tendency to put more weight on it and to apply methods of payment by results over a wider range of occupations, partly in the hope of replacing the influence lost by the waning of fear.

But, on the other hand, the extension of trade unionism had done something to weaken this incentive also, both by the laying down of standards (often not expressly formulated, but none the less potent) of what was deemed to constitute a fair day's work and by insisting on the guaranteeing of minimum daily or weekly earnings irrespective of output. These practices were, of course, not at all new: they had been in use among skilled craftsmen for many centuries.

However, with the development of trade unionism in more and more industries, they came to be much more widespread. The trade unions themselves seldom laid down any rules limiting individual output; but the workers, conscious of the strength of combination, silently made codes of behaviour for themselves, especially where there was a belief that producing more would be simply a signal for the employer to reduce the piecework price.

Nevertheless, the incentive of higher earnings continued to count for a great deal. Under war conditions, however, it was considerably weakened by a diminution in the incentive to work for a higher money income, due partly to the imposition of income tax on wage-incomes and partly to the shortage of things to buy. While the war lasted, this loss of incentive was offset in the main by the increased sense of the urgency of high production in the interests of the war effort; but when the war ended this incentive was inevitably relaxed.

Goods remained almost as scarce and taxation almost as high as during the war, in relation to incomes; and it was much less easy for most workers to appreciate the imperative need for high production in time of peace than it had been to induce them to sustain what they felt to be an exceptional effort in time of war.

*Full Employment*

A planned economy of the type which is now being considered involves, in some degree, planning of the distribution of income as well as of what is to be produced and of the methods of production to be employed. It involves, moreover, planning for full employment, which means not only

a lessened fear of unemployment, but also an assurance for most people of regular and continuous earnings.

The existence of this double assurance, though it is not complete, tends to diminish the value set upon extra earnings, over and above those which are needed to sustain the standard of living to which a person is used.

This effect may be only temporary; for where the chance of additional income as a return for effort exists, the worker may raise his customary standard and therewith his valuation of additions to his income. This, however, will take time; and it will not occur unless the additional earnings can be used to acquire additional goods and services which the worker and his family appreciate. It cannot be developed in a situation in which the total of incomes available for spending greatly exceeds the supply of goods and services on the market at the prevailing prices, so that continual appeals have to be made to people to save more, instead of trying to buy goods and services which simply do not exist.

*Secondary Incentives*

As for the secondary incentives—the appeal to team-work and the provision of the conditions of good health, healthy workplaces, and, as far as possible, pleasantness of the work itself and of the environment—these obviously become much more important in proportion as the old main incentives lose their power. Team-work played a great part during the war, and was stimulated by the establishment of Joint Production Committees and by the development of other methods of joint consultation between workers and employers or managements.

But it must be noted that the basis of this wartime team-work was community of objective—the common recognition of the necessity of winning the war—and when this common purpose no longer existed its foundations were largely knocked away.

*Enlisting Workers' Interest*

One great reason why it was imperatively urgent to socialize the coal industry was that there was plainly no chance under any other conditions of enlisting the full support of the miners for the production drive; and in this industry it has already become plain that public ownership is making a real difference and is rendering possible some recovery, at least, of the team spirit.

The same reason may hold good in favour of considerable extensions of socialization to other industries; and where, from one cause or another, public ownership is not regarded as an immediately practicable or desirable policy, it will be necessary to establish forms of public control—including a large measure of participation by the workers—in order to give them some conviction that they are being called upon to give of their best in the interests

of the whole of the people, and not simply to increase their employers' profits.

This is partly a matter of setting up the right kind of machinery for joint consultation at every level, down to the individual factory or workshop, and for joint control of industrial policy by the Government and the workers together with the employers.

But on the other hand it is also partly a matter of public intervention to enforce the provision of healthy and pleasant factory conditions, so that the worker feels that his or her conditions of work are a matter of public concern, and that a return is owing in good service. In the present temper of the people, only the most exceptional employer can build up a team spirit simply on a basis of loyalty to the firm. This kind of loyalty can still be used by good and imaginative employers as a reinforcement to other incentives; but it needs to rest more and more on a basis which makes the State, as well as the employer, virtually a party to the contract of employment and commits the State to ensuring that the worker gets a square deal.

*Consulting the Individual Worker*

These considerations have a close relation to the problem of planning. The incentive of public service will operate to secure a response in good and hard work much more powerfully if the workers in each factory and industry can feel that they are contributing to the making of the public plan which their labour is to implement.

It is necessary that the machinery of consultation, at the factory level as well as at higher levels, should be closely related to the machinery of planning, and should be regularly used for discussion not only of plans in the making but also of their working out in practice. Through this machinery, suggestions for the amendment of plans and the rectification of errors should be constantly encouraged; and the greatest weight of all should be put on consultation, not between national trade unions and employers' associations, but between shop stewards, managers, and technical experts, including visiting representatives of the Government's planning and controlling agencies, at the factory and workshop level. Moreover, consultation, in order to be effective, must get down to the individual worker, who must be given good cause to feel that he is being consulted and taken into confidence personally and not only through his representatives, even at workshop level.

*New Incentives*

On this basis, it should be possible, over not too long a time, to work out a new system of democratic incentives to labour fully adequate to replace the old incentives that are losing their force. The indispensable condition, however, is that the democratic character of the new processes of consultation and control shall be a reality and not a sham. There is no way of getting

men and women who are free and unafraid to work well, except by trusting them and giving real power into their hands; and this means giving power, not merely to trade union representatives and officials at the national level, but directly to the main body of men and women in the workshops, through those leaders who are in daily contact with them and understand their grievances, their desires and the spirit that moves them to labour well or ill.

(*b*) **Incentives to Management.** The return to effort on the worker's part is limited by the efficiency of the management. No one can do good work with bad tools, or under slack or foolish management. Under the capitalist system, in its traditional textbook form, management (which is usually regarded as resting in the hands of the employers) is supposed to be spurred on to high efficiency by the same forces as labour—that is to say, by the fear of being driven out of business and by the hope of large profits as the reward for efficient production.

*Marginal Efficiency*

In those establishments where management and ownership are divided, as in large firms they usually are, the managers are supposed to be kept up to the scratch by fear of the sack, supplemented in most cases by a share in profits; while the owners of the business, or at any rate the active owners and directors, are supposed to be spurred on by the same forces as the owner-managers of lesser concerns. Where, however, prices and output are regulated by combines, particularly of the cartel kind, all these incentives, as we have seen, are apt to lose much of their vigour; for restrictive combination tends to limit the extent of each particular firm's freedom to go all out to improve its methods and tends to enable inefficient or marginally efficient firms to earn enough profit to remain in business without putting themselves out to depart from their accustomed routine. Under these conditions there can easily develop a slackening of the whole tempo of managerial efficiency throughout an industry, although the main body of managers and the directors may be quite unaware of it.

*Competition as a Spur*

Where competitive conditions exist, there is unfortunately no assurance that things will be better. In developing industries they are indeed likely to be so, for in such cases the constant entry of new capital will be acting as a spur to the older businesses to bring their methods up to date; but where, for any reason, an industry gets into a decline, competition ceases to afford any guarantee of efficiency. The industry ceases to be attractive either to the ablest men or to investors; and even good managers may struggle in vain to keep their standards if they cannot get the money needed for modernizing their equipment. Lack of hope and of opportunity is bad for efficiency; and an industry which, whether by its own fault or not, gets into difficulties

easily becomes stagnant, even should there be keen competition to survive.

Under present-day conditions of rapid technological change, plant tends more and more to become obsolete before it is physically worn out, and a higher proportion of gross income needs to be devoted to the renewal and improvement of plant and buildings. Moreover, in the more up-to-date industries, research plays an increasingly important part, with the result that much larger technical staffs are needed both for research and for day-to-day operations.

*Research and Training*

Small or medium-sized firms can seldom afford to conduct research by themselves on a satisfactory scale; for research projects are often unproductive individually, and only where a number can be undertaken is it well assured that the successes will more than make up for the failures. To some extent, this difficulty is overcome by the development of research associations working for certain industries; but this is not wholly effective, because in many cases the smaller firms have not the technical staffs needed for understanding the results of collective research and for applying them to the particular conditions of their own production. Therefore, small business holds its own best in those industries or branches of industries in which no abstruse scientific problems arise; but in many cases research fails to influence the practice of firms which could produce much more efficiently if they understood how to take advantage of it.

One important function of the planning machinery in a planned economy should be to keep in the closest touch with all the research bearing on industrial problems, wherever it is carried on, and to devise ways and means of diffusing the results of such research in a form which can be widely understood and applied. A closely related function is to watch closely, and to take steps to improve, the training of managerial and technical workers, not only in relation to current processes, but in such a way as to make them more ready and able to take advantage of the results of scientific and industrial research.

*Need for Scientific Training.*

At all times the Department of Scientific and Industrial Research and its related Research Associations and Institutes, the colleges and institutions for higher technical education and training, and the universities in their aspect as centres of both social and scientific research should be in the closest possible connexion with the Government's agencies for economic planning.

The need for better scientific and managerial training and for effective instruments for publicity of the fruits of research applies fully as much in relation to the owner-managers of businesses as to the salaried managers

of joint stock concerns. The weakness of the existing provision in these respects is indeed most notable in those industries which are still largely in the hands of family firms.

Under a planned economy, the efficiency of business management ceases to be a matter of exclusive concern to those who are in charge of each separate business and becomes a matter of high public concern. The inefficient business is guilty of a crime against society, because it is using up scarce resources which could be better applied. Planning involves measures not merely for encouraging high efficiency over the entire economic field, but also for taking steps to enforce it against defaulters, in order to ensure that manpower and other resources are not allowed to run to waste.

(*c*) **Incentives to Inventiveness.** The devising and introduction of new productive methods have become under modern industrial conditions largely a matter of organized research and development of research projects on a large experimental scale. Thus, what has been said already about research provides a part of the clue to the problem of inventiveness; for today most inventions are not the work of individual discoverers but the result of successive labours of a number of persons or organized teams.

*Free Hand for Research Workers*

It often happens that an invention has its origin in the research work of the pure scientist, passes from the university laboratory to the research workers in applied science and technique, and is brought by them into relation to a number of other inventions and discoveries, until it becomes the basis for a proposed new industrial process. But even when the invention has been fully worked out in the laboratory, there are often many further steps to be taken before it can emerge as a practicable commercial process. At this stage the problems of cost become vitally important, and various ways of utilizing the invention may need testing out—expensively—on a commercial scale, in order to find the most economical method.

In this type of invention, large-scale organization and considerable capital resources are indispensable. The necessary work is beyond the means of private firms, except the very largest: it requires the active help of government institutions, research associations and well-endowed institutes or commercial laboratories and experimental stations. A planned economy will have to be lavish in its expenditure on work of this type, and will have, to a great extent, to give the research workers the free hand which they ask for as a condition of their power to get good results.

*Encouraging Inventiveness in the Workshop*

There is, however, even today another kind of inventiveness which is a matter not of elaborate research but of lively imagination and plain common-sense. In many industries it is still possible for the well-equipped manager

or technician, or even for the intelligent workman, to hit on some new device that is of real value in lightening the load of labour or in improving the quality of the product; and it is of the utmost importance that the greatest possible encouragement shall be given to managers, technicians and workers alike to be continually on the alert for fresh ideas. These can be ideas about products as well as about processes, or they can be concerned with the design of machinery, the improvement of workshop amenities or the methods of organizing improved team-work.

It is beyond doubt that inventiveness of this sort is most likely to be widely displayed when men and women are feeling happy and confident. The more people have the sense of living in an expanding economy, in which new methods and discoveries will be welcomed and promptly utilized and will not run the risk of being stifled because their use would damage some well-entrenched vested interest or disturb some traditional habit, the more likely will they be to devise new and better ways of doing their jobs. Conditions of full employment, with the assurance that higher output will go to improving the standard of living and will not be allowed to condemn workers who are thrown out by improved processes to long-term unemployment, will help to establish the required attitude and to stimulate inventiveness among managers and workmen alike. But it will not achieve this result wholly of itself.

It will be found necessary, for example, to make careful provision in the economic plans for re-training in new skills those workers whose skills are made obsolete or inadequate by the introduction of new processes and methods; and it will be equally necessary to discuss the probable effects of new methods fully with the workers whose lives they will affect, and to do this before the changes are made.

(*d*) **Incentives to Capital Investment.** Under the capitalist system the provision of new capital for industry is left to private initiative and enterprise, in two different respects. In the first place, individuals and joint stock concerns are left to decide how much of their incomes or net receipts to set aside for saving or accumulation. In the second place, it is left to business men to decide how much of their own money to use and how much of other people's money to borrow or attract into investment for the purpose of providing new capital equipment of one sort or another. Saving and investment are not the same thing: they are two quite distinct processes, though they can, of course, be combined. When a company or firm, instead of distributing all its profits in income to its shareholders or partners, keeps some of them back and uses the retained sums for buying new plant or for building a new factory, the act of saving and the act of investment are two very closely connected acts. They are not, however, the same act; for it is quite possible for the firm or company, having held back part of its profits,

not to spend them on new capital instruments, but to buy gilt-edged securities with them or to use them to acquire an existing plant from its previous owners. In such cases no real investment takes place, from the national standpoint, for there has been no addition to the supply of productive capital. No doubt, the previous owners of the securities or of the factory bought out of the reserved profits may use the money they receive for these things in buying new capital assets; but they need not do so, and, if they do, their doing so is a separate act.

*Savings May Not be Investment*

The assumption made by the traditional economists of capitalism was that, in practice, whatever was saved would get invested, because the savers would want to use their savings to get possession of real earning assets and because there would always be business men eager to borrow or take charge of any money that was available and to invest it in productive assets with a view to profit.

This was always a natural enough assumption in a rapidly advancing economy; and it was broadly true during the period of capitalist expansion except during the periodic crises which swept over the capitalist world. In such crises and in the ensuing depressions it ceased to be true. There were then few business men ready to apply their own or other people's money to new investment; and the consequence was that the savings which people attempted to make ran largely to waste. This, however, was regarded as the outcome of quite abnormal conditions; and it was generally held that in normally progressive times saving and investment could be regarded in effect as simply two aspects of the same act.

So the traditional economists of capitalism put enormous emphasis on the virtue of saving as the means to capital accumulation and to the increase of productive power, and they were scornful of those who pointed out that increased output was valueless unless there was a demand for it, and that the best stimulus to the expansion of production was rising consuming power. Some economists—for example, Sismondi, Rodbertus, Marx and J. A. Hobson—pointed this out, but they were dismissed as unorthodox.

*Chronic Unemployment*

It was only when unemployment began to persist to a serious extent in relatively good as well as in bad times, and to become chronic instead of merely epidemic, that most economists woke up to the fact that saving was in itself no guarantee of economic progress and that it was necessary to ensure that the level of capital investment should be high enough to take the savings off the market and to yield a satisfactory rate of increase in productive power.

The theory of full employment, as formulated by Keynes, starts out from

this recognition. It asserts the necessity of action to ensure the maintenance of investment in new capital goods at a satisfactory level, and the adequacy of investment and consumption together to take off the market all the goods that an economy is in a position to produce. Keynes did not say that the State had to undertake all the required investment or to control the entire distribution of consuming power; but it did follow from his theory that, if capitalist enterprise failed to achieve the required results, it would be the function of the State to step in and to supplement or to replace it.

*Compulsory Saving*

In a planned socialist economy, such as exists in the Soviet Union, investment in new capital goods becomes a matter for Government decision in the successive Five Year Plans. The Government, using the advice of its planning agencies, settles both the total level of investment that is to be secured and the distribution of this investment among new capital assets of different kinds. It decides to expand the capacity for producing boots by so much, the carrying capacity of the railways by so much—and so on through the entire list of industries and services. These decisions involve an equivalent subtraction out of the total output of the country from the amount that can be spent on current consumption. This subtraction is brought about in a number of ways. In part, the Government gets the capital it needs by means of taxation, direct or indirect, levied either on industries or on personal incomes; in part, it borrows the money by raising loans from the people; in part, it may "create" the money by borrowing it, or allowing industrial enterprises to borrow it, from the banks. However the capital is obtained, the distribution of manpower and other productive resources is not affected, for this is decided first under the plan, and then the necessary steps are taken to bring the financial provisions into line.

*Planned Investment*

Thus in a socialist economy the level of investment depends not on the willingness of private persons to save or of business men to borrow, but on the decision of the Government itself in drawing up the national economic plan. It used to be argued that such a situation would lead to disaster, because no socialist government would ever resist the pressure of the people for higher immediate consumption, or be prepared to set aside enough current productive power to provide adequately for the future. In fact, however, no capitalist society has ever saved and invested so high a proportion of its national income as the Soviet Union has done over the past quarter of a century. This high investment was made as the only way of escape from dire poverty, and as the only means of ensuring the survival of the Soviet Socialist economy in a world that seemed bent on its destruction.

In the light of this achievement, the contention that a socialist economy

will never invest enough to secure progress simply goes by the board. There is every reason to suppose that it will, and that by eliminating the crises which beset capitalist economies it will be able to achieve both a greater and a very much steadier rate of economic progress.

In a fully socialist economy, the problem becomes simple; for it is simply a matter for public decision in the making of the economic plan. In mixed economies, in which socialized and capitalist sectors exist side by side, the problem is a great deal more difficult, for the government must secure that the right amount of investment takes place not only in the industries and services which it owns and controls, but also in those which remain in capitalist hands. Otherwise a right balance between the different branches of production cannot be secured; and unless the balance is right, full employment cannot be maintained or the consumers' preferences supplied.

*Extension of Control*

Accordingly, in a mixed economy the government must take power to control the level of investment in all types of industry and must stand ready to use this power either to repress undue activity in one field or to secure additional investment in another. It may itself have to invest in industries which have not been transferred to social ownership, if the required capital is not forthcoming from private sources; and, of course, where it invests public money, it must exercise the control needed to make sure that the money is used in full accordance with the public interest. Thus, a mixed economy based on general planning for full employment will tend to enlarge the sector under public control, not only by direct socialization of industries and services but also by the acquisition of controlling powers over other industries which need public help and guidance in order that they may play their assigned parts in the general economic plan.

*Saving in a Mixed Economy*

As for saving, it can be provided for in the mixed economy in the same ways as we have noted already—by means of taxation, direct or indirect, by means of public borrowing, and, to a limited extent, by the public creation of money through the banks. The main difference in this respect between a fully socialized and a mixed system is that under the latter more indirect and difficult measures have to be taken to ensure that the demand for consumers' goods is neither too high nor too low in relation to the resources that can be allowed for producing them.

In practice, men and women in Great Britain have shown, especially since 1939, a remarkable readiness to save and to lend to the State out of small incomes, and in these circumstances it has been practicable to distribute to consumers incomes considerably in excess of the available supply of consumers' goods, in the assurance that a substantial part of these incomes

would be saved. This has made possible a lower level of taxation than would otherwise have been imperative; and if the willingness to save were to fall off it would become necessary for the State to abstract a larger proportion of the national income, either by taxation levied on incomes or on commodities or by inheritance taxes or by some other method, such as direct levies on industry, that would have the effect of reducing the spendable incomes in the consumers' hands.

In order to avoid this necessity, it is of high importance, at any rate as long as Great Britain is working under a mixed economy and under conditions of scarcity, that the level of private saving, among the poor as well as among the rich, shall remain high. In fact, the poor and the middle classes have in recent times, both before and since 1939, done the bulk of the private saving, apart from the accumulation of reserved profits by joint stock concerns; and the maintenance of the savings of persons who are not well-to-do, through insurance funds, savings schemes and the like, is a vital factor in the precarious equilibrium of the British economy of today.

### (4) PROBLEM OF PRIORITIES

It is one of the essential postulates of democracy that, by and large, individuals are the best final judges of what is good for them. No one who does not believe this has any real title to be called a democrat; but of course to believe it does not involve believing either that individuals always choose rightly or that when a number of individuals, directly or through representatives, arrive at a collective decision by a majority vote the choice is always wise. What the democratic faith does involve is the belief that, even if individuals and collectivities often make bad or foolish choices, their choices are likely in normal circumstances both to be better and actually to yield more satisfaction than they will get if people over whom they have no control are allowed to choose for them. Nearly everyone admits that there are cases in which it is right and necessary to fetter or restrict the individual's choice, or to weight the scales in favour of this choice as against that.

Probably most sensible people will concur in the view that there are exceptional moments when it is impracticable to leave the whole body of individuals to make collective choices, because the consequence would be that they would fail to make any choice at all and would simply fall into chaos and, perhaps, a fruitless war of all against all.

*Free Choice Among Limited Alternatives*

To admit, however, that there are exceptional cases does not alter the general proposition. A democratic system is one which rests as far as possible on allowing individuals to choose what they want among alternatives that can be made open, and to come together to choose by a majority, directly

or through representatives, what course to take where collective action or regulation is required.

It follows from this that a democratic planned economy will have to be designed on the whole to give people as consumers what they want and not what the planners think they ought to want; and it also follows that the planners must be responsible to the whole body of the people for all the collective decisions that have to be taken about the use of manpower and other resources in producing wealth and about methods of distribution.

*People, Not Planners, Must Decide*

The purpose of democratic planning is social welfare, in the sense in which welfare is popularly understood. If the people want cinemas and football pools, then cinemas and football pools are welfare in the economic-democratic sense. If some of the people want these things and others do not, the some who do ought to be able to get what they want unless in the view of the majority their getting them is inconsistent with the general welfare. In other words, the planners must set out to provide for the needs of the market, except to the extent to which the people or their representatives have forbidden in the general interest the satisfaction of certain wants, or have ordered certain kinds of things to be supplied either on specially deterrent or on specially favourable terms– e.g. by taxing beer and tobacco, or by subsidizing milk or education. Except as executants of public decisions democratically arrived at, it is not for the planners to decide what people ought to want, but to supply what they do want.

This, however, is not so simple as it sounds. In the first place, though total production is limited only by the supply of manpower and other productive resources, it is necessary to decide somehow how much of the available productive power is to be devoted to supplying consumers' goods and services, how much to public services, including defence, and how much to the accumulation of capital resources. These are clearly, in the final resort, political decisions, which need to be made by the Government, subject to the endorsement of the representatives of the people; but they need to be based on a large mass of highly technical information, which only the economic (and the military) planners are in a position to provide.

*Long Term Planning*

Secondly, the decisions about the broad allocation of resources between these main alternative uses mean little until they have been expressed in the form of specific allocations to particular branches of production. Let us leave aside for the moment the allocations for defence and for public services such as education, and consider the problem entirely from the angle of consumers' supplies which are to be sold in the market. Any plan that deserves the name involves settling to a considerable extent (though subject

to as much flexibility as is technically possible) not only how many goods of different kinds are to be made available this year, but also how many next year, and the year after that—up to whatever number of years the plan is intended to cover. Such a plan, for the supply of consumers' goods over a period of years, must include the allocations of capital that are needed to get the goods made in the planned quantities in the future as well as at once. The main part of the planning of capital investment is in effect a planning of the supply of consumers' goods over a period of years. In making any plan of this kind the planners and the public representatives who endorse or amend their proposals will be making estimates of what the consumers will want, and will be trying to devise ways of meeting their requirements. But what the consumers will want will depend, apart from changes in taste or circumstance, on two factors—on the relative prices charged for different things and on the distribution of incomes. A more and a less equal distribution of purchasing power will lead to different structures of demand; for people at different levels of income tend to distribute their expenditure in different ways. Moreover, with any given distribution of incomes, the levels of demand for the various kinds of goods will be affected by their relative prices.

*Importance of Price*

Under planless capitalism, the prices of goods and services are left to be settled in the vast majority of cases by business men, acting either in competition or in some form of monopolistic association. The distribution of incomes is also left to be settled by the tug-of-war between contending groups and individuals, in accordance with the results of bargaining about wages and salaries, with the outcome of the forces which determine rates of interest, and with the greater or less success of particular groups in exacting monopoly returns. In a planned economy, however, matters cannot be left to be settled in this way. If it is decided to produce so many pairs of boots in order to meet the expected level of consumers' demand, it must also be decided that the boots shall be sold at prices at which the demand will just clear the market; and it must also be arranged that the required amounts of capital, labour and materials are applied to producing boots, even if the operation of market forces would cause less or more of these things to be so applied.

*Manpower Distribution*

This involves an attempt to regulate wages and conditions of labour in such a way as to procure the right numbers of bootmakers and makers of boot machinery—which is to say that, unless compulsory direction of labour (an evil expedient in normal times) is to be applied, it involves adjusting wages and conditions in all occupations so as to bring about the right distribution of manpower. It further involves regulating the terms and conditions of

capital supply, so as to ensure the right distribution of this factor of production; and it involves control over the prices, not only of finished goods, but also of fuel, of raw and partly manufactured materials, and of transport services, which all enter into the costs of placing the goods on the market.

*Existing Structure of Demand*

Of course, the planners do not start operations in a vacuum. They are faced at the outset with a certain structure of demand, based on the existing scales of consumers' preferences at the existing prices and with the existing distribution of incomes. This, broadly, is the structure of demand which they set out to satisfy, subject to such changes in it as are expected to occur spontaneously, through changes in taste, or are deliberately introduced by public decision in the general interest. In endeavouring to meet this demand, the planners will aim at enabling each branch of production to cover its costs, except where a public decision is reached to subsidize, or to penalize by special taxation, any particular product. The cost, however, will be influenced by the levels of wages in the various occupations, by interest and rent-charges, and so on; and whenever a public decision affecting any of these is made, there will be changes in costs and therewith in economic prices. These price changes will affect the demand; and so will changes in wages and other incomes. The planners, therefore, in estimating the course of consumers' demand, will be in fact estimating to what extent and how the future demand will deviate from the present as a consequence, not only of changes in the consumers' tastes, but also in the structure of incomes and prices as affected by deliberate changes made in connexion with the plan.

*Planning for Non-essentials*

All this may sound very difficult; but it is not in practice nearly so difficult as it sounds. The basic structure of demand for necessary goods and services is not very hard to foretell: nor is it very hard to measure the effects of changes in prices and income distribution on these kinds of demand, which account for a high proportion of the total national output. It is, of course, very much harder to anticipate the course of future demand for products which are not necessaries, in the sense that even if everybody needs some of them the amounts demanded are a matter of individual taste. It is not always easy to tell how the demand for such goods will be affected by changes in prices or in the distribution of incomes. But this does not very greatly matter; for whereas it is necessary to make over fairly long periods plans which cannot be easily scrapped or largely varied at short notice for the production of basic necessaries of life and of essential materials, no such relatively rigid planning is needed in the case of the more diversified types of less essential goods. Plans for the production of such goods can be highly flexible and can be adapted quickly to changes in demand; for the same

materials and, to a considerable extent, the same plant can be used to make a wide variety of finished goods, and a change in final demand does not mean a proportionate change in the industries producing raw or semi-manufactured materials, or fuel, or in the transport and distributive services.

Thus the problem of priorities has several aspects. It is necessary to decide in each field how much of the available resources to devote to meeting immediate consumers' demands, and how much to making ready for meeting future demands. It is necessary to plan over fairly long periods the amount and character of production in agriculture, in industries (e.g. electricity supply) in which plant takes a long time to build, and, more generally, in basic industries and services supplying essential goods and materials. Given this, the planning of the rest of the national output can be much less rigid, so as to be easily variable over quite short periods.

*Planning and Incomes*

It is important to realize that the planning of the distribution of incomes is fully as requisite as the planning of production, wherever welfare is the end in view. It is of no use to produce the right things, unless the people who want them can afford to buy them. The freedom of consumers' choice is best assured, not where incomes are left unplanned, so that rich men are able to outbid poor men even if the poor men's want is stronger, but where as many consumers as possible have as wide a freedom of choice as the amount of the nation's productive capacity makes possible. The equality of distribution should, if the freedom of choice is to be maximized, be modified only to the extent that it must be in order to bring about a right distribution of manpower and to elicit the required forms of productive effort and service. In laying down priorities, the assumption is always on the side of an approach to equality, except where it can be shown that inequality is necessary in order to elicit skill and effort.

### (5) PROBLEM OF INTERNATIONAL COLLABORATION

So far I have been speaking of planning as if it were simply a matter of making the best use of resources inside a country for meeting directly the needs of its people. But, of course, planning has also its international side. No country is entirely self-sufficient, so as to have no need at all to exchange some of its products for those of other countries; and, over and above what must be exchanged for, if supplies are to be procured at all, there are many other things which it is economically desirable for countries to exchange in order to get the largest possible return of satisfaction for the efforts which their citizens expend. This is not the place to enter into the whole question of the economics of international exchange: the point I need to make here is simply that the best results will be secured if countries plan, not one against another, but with the object of promoting mutual exchange, and of

securing balanced use of productive resources over the world as a whole, or over as much of it as possible.

It is clearly a possible danger of a nationally planned economy that, instead of doing this, it may be planned for a higher degree of self-sufficiency than is for its own good or the world's.

*Restrictive Systems*

A surplus of exports from a wealthy country may be desirable if it takes the form of capital loans designed to help less wealthy countries to improve their productive power and their standards of living; but it is bad if it confronts other countries with impossible problems of payment and thus compels them to protect themselves by restricting their imports. The world suffered terribly between the wars from national restrictive systems which hamstrung international trade, sometimes in the interests of inefficient producers who demanded high protection, but often because countries simply could not help themselves, but had to retaliate with restrictive practices to the restrictive practices of others.

In this field of international trade, the growth of restrictions between the wars has got a bad name for all attempts at planning. Yet it is manifest that planning can be used to encourage and develop, instead of limiting the volume of, international exchange. It is not the case, as the opponents of planning contend, that international trade will necessarily reach the highest level where it is left unregulated and unplanned; for the effect of leaving it so may be to set up such instability in the balances of payments as will presently compel countries in deficit to resort to drastic forms of restriction.

*Barter Arrangements*

It is surely desirable, wherever two countries can agree to their mutual benefit to "swop" considerable quantities of their several products, and thus to make it possible for each country concerned to plan its own output at a high level with the assurance of a fair market, for such arrangements to be entered into. This is a very different thing from arguing that there ought to be a bilateral balance in the total exchanges between the countries in question. That, indeed, would be a thoroughly bad thing to insist on, and would result in most unfortunate restrictions on the total of international trade. The practice of making mutual "swops" on fair terms, agreed upon in advance over a period of years, as an element in world trade relations, will lead not to a restriction, but to a salutary increase in the total volume of international exchange. The hostility of the Americans to such arrangements, which is an outcome of their insistence on the supreme merit of private enterprise, is most unfortunate, and is preventing Great Britain and other countries from taking, on a basis of international collaboration, the measures that are best calculated to promote both international friendship

and speedy recovery from the terrible devastations of the Second World War.

Moreover, we want not only to get a satisfactory standard of living for ourselves, but also, as far as we can, to help in bringing about a rise in standards everywhere, and especially over that large part of the world in which primary poverty is still the condition of the great mass of the people. We cannot, indeed, afford to sacrifice our own standards of living in order to improve other people's: nor would our democracy be prepared to acquiesce in such a policy, except for the purpose of meeting some special emergency, such as a famine. But it is greatly to our own interest that the world as a whole shall get richer, and that its wealth shall be more widely diffused. As other peoples get better off, they will become both better customers of ours, and better suppliers of our wants.

When Sir John Boyd Orr put before the Food and Agriculture Organization of the United Nations his plan for a World Food Board which was to be given the charge of promoting increased food production and improved nutrition of all peoples, his initiative was widely acclaimed as the first step towards an internationally planned economy. Even though the plan subsequently approved falls a very long way short of what he proposed, it is at least a first step towards the recognition of the need for international planning in the cause of human welfare. There is a long road to be travelled before such planning gets fully established as a basic principle of the comity of nations; but we can at any rate see to it that in making our national plans we devise them, as far as we can, in consultation with other countries and as little as possible on narrowly nationalist lines.

## *Test Yourself*

1. (*a*) Think out, and list, the principal misgivings that you, personally, have in connexion with the prospect of a thoroughly planned economy.

   (*b*) Do you think your misgivings should be shared by others?

   (*c*) Are they so important that they lead you to reject the idea of such planning?

2. How, in your opinion, should the problem of international economic collaboration be tackled?

*Answers will be found at the end of the book.*

CHAPTER XI

# DO WE CHOOSE THE ECONOMIC SYSTEM?

TO MOST men, at most stages of social development, a choice between alternative economic systems has not presented itself at all. They have lived in an environment of social and economic institutions which they have simply taken for granted. They may, of course, at all times have grumbled at the working of these institutions, and at some they may have regarded them with a steady hatred. But, even if in extreme cases they have revolted, there has been no real question of choice unless an alternative system was in their minds. To revolt against a thing is not the same as to demand something definite to replace it. Through most of human history, most men have not been in a position to exercise any choice between alternative systems of economic organization.

This is true, not only of most men as individuals, but also of most societies regarded as organized communities, and of their more powerful or wealthier as well as of their weaker and poorer classes. Very seldom, indeed, has a clear-cut choice between alternative systems been made by any society, or by any dominant group. Indeed in all history—or at all events in all history of modern times—I can think of but two clear instances: the Japanese acceptance of Western industrialism in the 1860s, and the second Russian Revolution in 1917. In both these instances a definite choice of system was made—not by the whole people, but by groups of men conscious of what they were doing and making a decisive break with the past. Some might add to these two the Nazi Revolution of 1933, or even Mussolini's march on Rome in 1922; but in neither of these cases was the choice between rival *economic* systems the principal factor in the change.

The Fascist revolutions were more political than economic in intention, whatever may have been the economic forces that underlay them. They led to great changes in the economic systems of the countries concerned; but these changes were incidental to the political purposes of the revolution-makers, and were not themselves the outcome of a primarily economic choice.

The two instances in which a deliberate economic choice was made are both highly instructive. The Japanese, having come face to face with the overwhelming military power of Western capitalism, and having realized

the helplessness of their own traditional institutions to stand up against it, deliberately chose to adopt and initiate the capitalism which could generate such mastery.

They chose a capitalist system in preference to the ancient feudalism which had governed both their political and their economic relations. The choice itself was primarily economic; but it involved comprehensive political as well as economic changes. There had to be a new political framework to fit the requirements of the new economic order. Accordingly, the Japanese Revolution of 1867 was a political as well as an industrial revolution; but the choice behind it was, fundamentally, a deliberate choice between alternative economic systems.

### THE RUSSIAN REVOLUTION

Similarly, the Soviet Revolution of 1917 had to be both political and economic; but here again the fundamental choice was between economic systems. It was, however, a more complex choice; for there were two, if not three, rivals to the existing system in the field. Under the tsars the predominant economic system was traditional and feudal, with an admixture, in certain areas—the big towns and the oilfields—of an advanced but imperfectly assimilated capitalism. Against the old order were arrayed, first, those who believed that the next step should be an advance to fully developed capitalism of the Western type under the aegis of a liberalized political system imitated from that of the parliamentary systems of the West, and encouraged by liberal economic policies on the Western model; secondly, those who believed in the development of a largely co-operative peasant economy built on the foundations of the ancient "feudal communism" of the Russian village, but without the feudal elements; and, thirdly, those who held that the desperate problems of Russian economy could be solved only by the immediate introduction of socialism. The first Revolution of 1917 left the issue doubtful between these contending groups: the second, Bolshevik, Revolution settled it in favour of socialism.

### NOT THE PEOPLE'S CHOICE

In neither of these cases did the people choose—I mean a majority of the people. In neither was the choice, in the terms in which it was made, present in the minds of the majority of the people. In Japan, the majority had no part in the choice: it was made entirely over their heads. In Russia, in 1917, the majority did have some share; but it was negative, except in the limited but important sense that the peasants settled the land question for themselves, as had happened in France after 1789, by taking the land. This choice, however, was not for socialism, but against the old feudalism. The positive choice in favour of socialism was made by the Bolsheviks, with the support

of the industrial workers, who were themselves a small minority of the whole people.

Neither in Japan in the 1860s nor in the Soviet Union after 1917 was the character of the new economic system unaffected by what it replaced. Men, however determined and well-organized, cannot make revolutions just as they please, or create new systems out of all relation to what has gone before in the society which they seek to transform.

### BUILDING ON THE PAST

The Utopia-maker can construct a new world of fancy according to his heart's desire: the politician, even if he be the leader of a revolution, must build upon the past. The industrialism of modern Japan, though it employed the most advanced techniques imitated from the West, was in its social aspects quite unlike Western industrialism in its contemporary forms, because it rested on an essentially different basis of class-relations. In Great Britain and in other West European countries (though not wholly in Germany) capitalism as an economic system developed under the auspices of a powerful and independent *bourgeois* class which was able largely to capture the machinery of State and to turn this machinery to its own purposes, in part ousting the old aristocracy from power and in part allowing it to retain its positions of authority on condition that it used them to further capitalist interests.

In Japan, on the other hand, although great capitalist businesses developed and exercised enormous economic power, this power remained on the whole subservient to a State machine with many of the characteristics of feudalism and dominated by militaristic rather than by commercial interests.

### JAPANESE CAPITALISM

Moreover, whereas the substantial victories of the *bourgeois* class in Western Europe were won with the aid of the working classes, and under conditions which enabled these classes to claim some rights of organization and to achieve at least a subordinate share in political and economic power, Japanese capitalism grew up as the servant of the Japanese military class and was helped by this class to keep the working classes severely in check, denying them both freedom of organization and any real influence on political affairs. In the Western countries, capitalism captured the State: in Japan the reformed feudal-military State created capitalism as the instrument of its own purposes and aided it to maintain a degree of exploitation of labour which in Western Europe was impracticable for long after the capitalists had been successful in taking control of the State into their own hands.

Japan, while becoming capitalist in its economic system, thus remained

all the same largely feudal. Russia, after 1917, liquidated a capitalism that had never achieved a high degree of either political or economic power, and at the same time liquidated the feudal absolutism which had controlled the State and the countryside. But in accomplishing this double revolution, the Bolsheviks had to take over and employ for their own purposes much of the centralized and dictatorial apparatus of the old Russian State. If they had not done this, the Russian State system would simply have fallen to pieces, and the task to which they had set their hands, that is, the making of a socialist system on a basis of the most advanced industrial techniques, would have been sheerly impossible.

The socialist planners of Russia had, if they were to stand a chance of success, not only to manufacture at high speed a new governing and bureaucratic structure and to find the men and women to take charge of it, but also to create, out of very little, a new managerial and skilled working class to execute the plans of the Government and of the bureaucracy.

## FREEDOM OF CHOICE CONDITIONED

In these circumstances many of the characteristics of the discarded system got a fresh lease of life as necessary elements in the working of the new social order. The purposes served were radically different; but the socialism of the new Russia was in many respects manifestly the direct descendant of the tsarist authoritarianism which had been overthrown.

Thus, even where men do make a definite choice between alternative economic systems, their freedom of choice in what they construct is limited by their social inheritance. If this is the case even in revolutions as far-reaching as those of nineteenth-century Japan and twentieth-century Russia, the limitations upon choice are obviously very much greater still when the change is made, not at a blow, by which one economic system decisively replaces another, but by stages and without any single spectacular act of revolution.

Capitalism, in the forms in which we know it in Western Europe and in the United States, came in by stages, winning power not at a single blow but bit by bit, and for the most part building itself up as a private system, apart from the State machine, before it made its impact on the State and transformed and captured the State to serve as its agent. Thus in the growth of Western capitalism there was no one moment of decisive choice between it and the system which it replaced. Capitalism pushed the old economic order out of one key position after another until it was firmly established.

No doubt, in the later stages of this gradual process the leaders of the capitalist forces were fully aware of what they were doing, and were consciously constructing the system known as "Economic Liberalism" as an alternative to the decaying aristocratic regime. But they never chose,

because they were never called upon to choose, one complete system in preference to another. Capitalism in the economic field was already powerful and far advanced before men had even begun to talk or think about the "capitalist system" as a complete social order, or had developed anything in the nature of a clearly formulated "capitalist philosphy."

## WHAT IS THE CHOICE TODAY?

Today, in the West, when we speak of choosing between capitalism and socialism as rival systems for the conduct of economic affairs, what sort of choice have we in mind? Is it the kind of choice that the Bolsheviks made in 1917, when they set out to construct a radically new economic order on the ruins of an old system which was to be liquidated at a blow as thoroughly as the conditions allowed? Or is it the kind of choice that was made, say, by the followers of Ricardo and of Cobden when they aimed at completing the already well-advanced conquest of British society by the rising industrial and commercial capitalist class?

The paradox of Western capitalist societies today is that the people possess, by virtue of their gradual advance in political power and of the economic and social influence which lies behind it, enough influence on the conduct of affairs to be able to insist on anything, within the limits of practicability, on which they have, in the mass, really set their hearts, but that at the same time economic power continues in the main to be exercised in an undemocratic way. The ownership of most of the means of production remains in private hands and the control of the key instruments has become increasingly concentrated in the hands of great capitalist groups dominated by a few very rich men.

## "CONSUMERS' MARKET" FALLACY

Even in those cases where industries and services are publicly owned, interest remains payable on their capital to private owners. Great economic inequality continues to exist, in respect of both "earned" and "unearned" incomes; and, save to the extent to which rationing and State control have modified the position, the alleged "democracy" of the consumers' market remains a fraud, because it weights effective demand according to income and not to need. No doubt, since 1939, the inequality of incomes has in practice been considerably modified by high taxation of the rich; but this may be only temporary. Re-distribution on more democratic lines cannot be taken as assured as long as the great inequality of property remains unaltered.

Yet the people is in a position to insist on anything on which it has in truth set its heart. It does not, however, except where it is confronted with an absolute breakdown of its established way of life, insist on more than a

little at a time. Its demands are for the putting right of a particular grievance, or for the institution of a particular reform; and it does not, as a people, go beyond such demands except where the established system has utterly failed to work.

Even then, in the main, the people accept and follow, rather than actively promote, a revolutionary change of system; for ordinary men and women do not think in terms of systems, but of their own and their friends' and neighbours' lives. Deliberate choice between complete systems is therefore always made by minorities, with the majority at most following and acquiescent; and it is made at all, so as to command the acquiescent endorsement of the majority, only in face of the decisive collapse of the old order. Such collapse may take the form of sheer disintegration as it did in Russia in 1917, or it may be only a plain revelation of impotence in face of a stronger power, as it was in Japan when Commodore Perry demonstrated the helplessness of Japanese armaments against the United States Navy.

## THE BRITISH WAY

In Great Britain today, though there are terribly serious economic difficulties, there is, so far, no positive collapse. The old order is not in actual dissolution, but only in decay; and most men, even if they are minded to support large measures of reform and renovation, are not prepared to go the length of revolutionary change or of complete supersession of the old system at a single blow.

Consequently, it comes about that the British Labour Party is not in a position, even if it wished, to introduce a complete system of socialism. It can proceed only by modifying the capitalist system at certain points, by socializing certain industries, by making spendable incomes less unequal by means of progressive taxation and social services more adequate by legislative provision, and by introducing such measures of control and planning as can be operated without bringing private enterprise to a stand.

## BRITAIN'S CHOICE IN 1945

What the people of Britain chose in 1945 was not complete socialism as an alternative to capitalism, but a move in the direction of socialism that involved the institution for the time being of a mixed system. The people did, however, definitely choose a direction, though not a system. Their choice was socialistic, though it was not in any full sense a choice of socialism.

This choice had two aspects: it was at once a choice of mechanism and a choice of attitude. The latter of these choices was the more fundamental; for what finally matter are less the social mechanisms that societies adopt than the collective impulses by which they are moved. Economic systems

are, after all, only means of giving effect to social attitudes. There is no such thing as a perfect economic system, nor is precisely the same economic system suitable at any time to all peoples. Nevertheless, it is broadly true that today, in Western Europe, the deadlock in economic affairs can be broken only by democratic planning based on the ideas and principles of liberal socialism.

### AMERICAN CAPITALISM AND THE FUTURE

This may not hold good for the United States, with its very different social tradition and its still more different conditions of physical and economic opportunity, any more than it held good for the Soviet Union in and after 1917. In the case of the United States, we can only wait and see what comes out of the immense enlargement of productive power that has been brought about by the war, following hard upon the prodigious setback of the 1930s. We have to wait and see whether America, under the uncontrolled impulsion of speculative capitalism, heads towards another crash like that of 1931 or proves able to avoid a repetition of its late disaster. If it can avoid proceeding by way of speculative inflation into crisis, American capitalism will survive for some time yet, for only a recurrence of the miseries of the 1930s is likely to induce the American people to consider seriously any alternative way of organizing their economic affairs. If, on the other hand, speculative boom and crisis do recur, America as well as Europe is due to experiment in the alternative way of socialistic construction.

We must not expect American socialism, or semi-socialism, if it does come, to follow the pattern of West European socialism. It is indeed likely to be much more thorough-going than the socialism of Britain because the American people is much more open to mass movements and to mass emotions than the more mature and disillusioned peoples of the older capitalist countries. West European socialists may not like American socialism, when and if it comes, any more than many of them have liked the socialism of the Soviet Union, which was born under conditions that made impossible the practice of democracy as it is understood in the West.

### LIBERALIZATION OF THE U.S.S.R.

Between East and West in Europe differences will surely tend to grow less. In the Soviet Union, we can look confidently forward, on one condition, to a gradual liberalization of institutions as poverty grows less, as the sense of stability and security of the new order gets stronger, and as mass education produces its effects in higher standards of individual demand for freedom of choice. The one condition is avoidance of further war; for the greatest obstacle to the liberalization of Soviet culture is the fear of another world war.

In the backward countries, where insurgent forces of nationalism are in

the ascendant, claiming equality of rights with the countries that have hitherto played the imperialist rôle, progress is bound to be slow unless the nations can work together in waging war in common upon ignorance and poverty and in making the scientific power and knowledge of the advanced countries the property of all mankind. These backward peoples are on the way to lifting themselves out of their age-long ignorance and subjection; but their advance, because of their large populations pressing upon the land, cannot be rapid unless the more advanced countries come to their aid, seeking intercourse with them no longer as imperialist exploiters, but as partners in a common enterprise of economic and social development. The backward peoples are fast choosing no longer to submit to imperialist exploitation; but even though they can throw off their exploiters, their way out of primary poverty will be arduous unless the wealthier nations show a preparedness to join with them in internationally planned measures of agricultural and industrial development financed by loans of capital at low interest, and are as ready to receive their products under socialism, as under capitalism, they were, to treat them as markets for the dumping of their own surpluses and as fields for concessions extorted upon unfair and unequal terms.

## *Test Yourself*

1. In your opinion:
   (*a*) Do people in Great Britain think much in a serious way about what sort of economic system the country ought to have?
   (*b*) Also, do they regard the matter as of great importance when they vote at elections?
2. Suppose you were told that you had to emigrate, and that you could choose any country in the world to go to. Where would you go? How far would your decision be determined (*a*) by the *kind* of economic systems that different countries have; (*b*) by the standards of living that different countries have; (*c*) by other factors?

*Answers will be found at the end of the book.*

# II THE STUDY OF ECONOMICS

## CHAPTER XII

# ECONOMICS AND THE SCIENTIFIC METHOD

THE PUBLIC estimation of economics and economists contains a curious paradox. In one sense economics has come into its own during the last few years. Economists are appointed to every conceivable advisory and administrative board and committee, from government departments downwards. Papers and periodicals are full of articles on economic and financial subjects. Economic explanations of this and that, of war and crime and political change, are at a premium. The University courses in the subject are crowded with an embarrassingly large flood of students. Economics is the intellectual religion of the day.

At the same time there is a widespread irritation with the present state of the subject and a growing criticism of its methods of work. It is contrasted most unfavourably with the physical sciences, and many people are coming to the view that economics is not a science at all.

The contrast is certainly startling. The natural scientist—the physicist or the chemist or the botanist—can achieve results that are quite beyond the economist or the student of politics or the social psychologist.

The astronomer can predict, with absolute accuracy and (so far) with complete certainty, that an eclipse of the sun will begin at 11.31 a.m. precisely on 31 October, 2047. The physicist can make an instrument that, without sight or sound, can foretell the approach of an aeroplane a hundred miles away. The chemist can say that wherever and whenever a solution of (shall we say) calcium sulphate is added to a solution of sodium chloride an amount of calcium chloride will be deposited at the bottom of the containing vessel. In fact, scientific students of the physical world can make most accurate prophecies about the future course of events, prophecies that are always true and have been verified a thousand times. As a result, they are able to give us an ever-growing command over the natural world.

How different is the position of the social sciences! In 1930 the late Lord Keynes, the most famous economist then living, prophesied that the fall in prices on the New York Stock Exchange would soon stop and would be followed by a rapid recovery and a large industrial expansion. But stock

prices continued to fall steeply for the next two years, and the world was plunged into the worst depression in living memory. Keynes was exactly wrong. In the same way almost no student of politics (including myself) had the slightest idea that the outcome of the 1945 General Election in Britain would be a landslide to Labour. Indeed, the most careful investigator of these matters that I know, who had been very accurate in his forecasts of previous general elections, foretold a Conservative majority of more than one hundred and fifty! The contrast between the accuracy and universality of the findings of the physical sciences on the one hand, and the uncertainty, inaccuracy and unreliability of the statements made by social scientists on the other hand, could scarcely be more complete.

## IS ECONOMICS A SCIENCE?

This leads us at once to consider the two questions with which this chapter is chiefly concerned. Is economics a science? And, if so, why do its results lack the prophetic accuracy and the universality of the discoveries made in physics, chemistry, botany or astronomy?

My answer to the first question is yes—but before it is possible to explain why I think so, we must be clear in regard to what we mean by a science.

A science, it will be generally agreed, is the result of applying a certain fundamental method of thought to some definite field of human experience. Physics is the result of applying that method to a study of physical objects; botany is the result of applying the same method to the study of plants, astronomy to the study of the heavenly bodies—and so on through all the sciences. It is a *method of study* that is common to all these different subjects, and it is the nature of this method that we must understand.

### THE SCIENTIFIC METHOD

What, then, is the scientific method? It is easier to answer this question by considering two practical examples of it in action.

What was it that Newton did to advance the basic study of physics when he conceived the theory of gravitational attraction? First he surveyed the great number of observations that had been made of the appearances of the heavenly bodies. He did not make all these observations himself—although he made some. For hundreds of years men had been seeing, noting and recording the movements of the sun, the moon and the stars. This led to the accumulation of a great number of facts ("empirical observations," to use the jargon of the scientist) that needed to be explained. Using his imagination and his powers of reason, Newton said to himself, "All these movements of these lights in the sky and the falling of objects towards the centre of the earth would be 'explained' if it were true that bodies in space attract each other in proportion to their weight and in inverse propor-

tion to the square of the distance between them." This was his famous theory, the "principle of gravitation." But he did not stop there. He went on to say: "If my theory is true, and if physical bodies so attract one another, then it will necessarily follow that the pace at which objects fall to the earth will be accelerated at a certain rate, and the curious movements of the planet Saturn can best be explained by the existence of another unseen planet revolving round the sun at a greater distance from it than Saturn." Subsequent work by physicists and astronomers showed that both these logical deductions from the theory of gravitation were, in fact, accurate. Objects did fall with the velocity deduced by Newton; the planet Neptune was, in fact, discovered later, just where he estimated it to be. In short, Newton's theory was verified.

But it is necessary, also, to notice the ultimate fate of his theory. In one sense it lasted almost unchallenged for three hundred years. During that time, however, there slowly accumulated a number of observations or facts (the movements of Saturn's moons, for example) that did not square with the Newtonian theory of gravitation; and so Einstein, some thirty years ago, worked out another piece of mathematics—the theory of relativity—that brought these exceptions into a more general mathematical formula. Einstein's theory has, in turn, been verified by further astronomical observations, but no doubt it will be replaced in turn by still more general theories in the future.

A somewhat simpler case is to be found in the discovery of penicillin. It had long been observed that dead bodies, filled with every kind of infection (pneumococcus, streptococcus and staphylococcus), did not corrupt the soil of graveyards. In 1928 Sir Alexander Fleming noticed in his laboratory that a culture plate of staphylococcus had become contaminated with a mould which, when it had grown, put a stop to all bacterial development in its immediate neighbourhood. Using the power of his imagination and reasoning, Fleming argued: this would happen if it were the case that this mould (*Penicillium notatum*) produced substances that kill or dissolve the bacteria or prevent them from multiplying. He and Sir H. W. Florey went on to verify this theory by extracting penicillin and with it counteracting the effects of bacterial infection, first in test tubes, then in the blood of animals and finally in the living bodies of human beings with the splendid medical results of which we are now aware.

*Observation*

We are not, of course, concerned here with these scientific discoveries themselves, but with the method of thought that is common to them both. It consists, as the reader will see, of three essential and inseparable steps.

First comes observation. Newton sees objects falling to the earth; he takes note of the innumerable astronomical observations made by other men

since the dawn of history. Fleming sees through his microscope that the staphylococci are dead and that the strands of penicillin are present. This is where it must all begin. The facts must be experienced and recorded. Sometimes the observations are simple and made by the unaided senses. Anyone of normal sight can see the movements of the stars and the nearer planets. Anyone can notice that the soil of graveyards is not infectious. In other cases the necessary observations can only be made by elaborate and sensitive instruments—telescopes and microscopes that magnify points of light many hundreds of times; seismographs that detect tremors of the earth at a distance of five thousand miles; scales that can weigh to the thousandth of an ounce; instruments that record electrical impulses to the millionth of a volt. But in all cases the process is the same—the impartial observation and accurate recording of the impressions made upon the physical senses. Science begins with the ascertainable facts.

*Imagination and Reason*

But the observed facts would be meaningless without the other powers of the human mind. The second step is to use the faculty of imagination and the gift of reason to offer some explanation of why the observations are what they are, and why they are related to one another as they are. Newton must sit down (as he did for five months at Cambridge) and say, "If all the bodies in space attracted one another directly in proportion to their mass and inversely to the square of the distance between them it would follow that. . . ." He must sweep the universe with his mind to conceive a general explanation (a hypothesis or theory, as it is called) and then use his reason to show, by logical steps, that all the observations would follow consistently from the point of this theory.

Fleming must not only see that the staphylococci are dead but also imagine that this is so because *Penicillium* secretes invisible substances that kill them. Imagination and pure reason come into their own (little as some natural scientists realize it) at this stage of the scientific process.

*Verification*

Finally, it is necessary to proceed to the verification of the theory. The work of science is not complete until new evidence can be produced to show that the theory works, that is, until it is shown that the theory can be used to make observations that have never been made before. Newton, or his successors, must show that bodies actually move towards the centre of the earth at a pace logically consistent with the theory of gravitation. Astronomers of later generations must turn their telescopes to points in space-time and see the planet Neptune that had never been seen before. Fleming and Florey and their collaborators must inject penicillin into rats and see the fever of pneumonia die away. This is the final duty and reward of the scientist.

And it is the fate of the true scientist—at once sad and challenging—that his work is never done, his results are never final. A theory may stand for three hundred years. But one day it will be replaced. It was always wrong—too limited, eternally provisional. The mystery of the universe still remains. The questing mind moves on—farther and deeper—to a receding goal. Science, in a word, is progressive.

Is this also true of the social sciences in general and of economics in particular?

It should be obvious that, little as many economists understand it, this threefold method—observation, reasoning and verification—is the only valid method available to them for the study of their own subject.

## TYPICAL ECONOMIC PROBLEMS

Let us consider the application of this fundamental method to two of the problems central to economics and dealt with in various chapters of this book—the trade cycle that characterizes the capitalist system, and the problem of industrial incentives.

### *The Trade Cycle*

It has long been known that the capitalist system, while continuously expanding, suffers from a mysterious rhythm of industrial activity. At one moment prices, profits, income and employment are high and increasing. At another they are rapidly declining. These phases last for some time, succeed one another, and, in passing from boom to depression, make much of the history of modern society, including often the immediate causes of some devastating war—for example, the rise of Hitler to power in Germany.

The gradual appreciation of this fact has been one of the main discoveries of modern economics and large amounts of money and time have been given, particularly in the United States, to investigating and recording the movements of the forces at work—prices, rates of interest, volumes of production and expenditure, bank clearings, money income and the rest of it. This is the first stage of the scientific method—observation.

Someone must then sit back to survey the growing body of facts—and many economists did—and conceive an explanation of them or a theory that would logically account for them all. In the case we are considering, that of the trade cycle, the most commonly accepted explanation was that of the alternating excess and deficiency of saving by the consuming public, and the amount spent by industrialists and the Government on new investment. I am not concerned with the detail or truth of this theory but with the nature of the mental processes used in its construction—the employment of imagination and reason for the construction of a hypothesis.

And then it is necessary to attempt some kind of verification. It is possible

for the economist to say, "If I am right, and the trade cycle is due to variations in investment, then it will be possible for me to take the statistics of a particular country—not one of those already examined—known to be subject to the cycle and to show that, in fact, the volume of investment changes in the cyclical fashion required by the theory." Such a test and such a proof would correspond to astronomical prophecy of the existence of Neptune, whereby the theory of gravitation was verified. Or the economist could proceed along the practical road. He could say, "If my theory is true, then it must follow that, if steps are taken to maintain investment at a sufficiently high level, the disastrous down-swings of the trade cycle will be prevented and general unemployment will disappear." Such a process of reasoning, if accurate, would correspond with the medical proof, through the cure of pneumonia, that the substances produced by *Penicillium* were fatal to the life of the pneumococcal bacteria.

And it is certain that this threefold process of economic enquiry is progressive and never-ending; that the final truth is never known; that behind each mystery there lies a greater one. Yet progress is made and knowledge grows.

*The Problem of Incentives*

In the same way it is of the greatest theoretical and practical importance to resolve the problems of incentive in economic life—to discover what will induce people to work hard and will reconcile them to the discipline of group activity within the factory. Again the scientific method is available and is alone likely to yield results. The conditions of employment must be observed —the way in which reward is linked to the effort, the existing forms of leadership and discipline, the conditions of light and humidity. All these factors must be described, measured, recorded and related to performance and output. From these observations a number of theories will result: for example, that men and women work better under a system of piece-rates; that they work better when they are consulted and praised; that they work better if they are kept warm and comfortable. These are hypotheses that can be, and are, tested in practice by the enlightened managements of factories and offices, and proved either true or false.

Thus it will be seen that in the large-scale problems of the whole system, and in the more limited questions that arise within small parts of it, the three-phase scientific method is available to economists and, in so far as they make use of it, establishes their subject as a science and confers upon their findings the passing authority of growing understanding.

This is the answer to the first of the questions with which we started.

Two further points about the method of economics must, however, be made before we pass on to other subjects.

First, it is interesting to notice that many economists do not understand

the nature of the argument that has just been advanced, and that the futility of much past and present economics can be traced to this failure on their part.

Very few economists have grasped the necessity for combining observation with reason and verification. They have tried to separate them and, worse still, to praise one activity at the expense of the other. Many economic historians and statisticians have tended to worship the accumulation of "facts" and to decry "theory." As a consequence they have assembled vast piles of meaningless figures and observations for which they offer no explanation whatever. In half a dozen books by American statisticians, for example, representing the expenditure of untold energy and of research grants running into tens of thousands of dollars, in which there are thousands of elaborate statistical calculations, not a single chapter or paragraph attempts to explain *why* these figures are what they are. This is blind and purposeless work, leading nowhere. Observation without reason is a meaningless burden upon the memory.

## EXCESS OF THEORY

In Britain, economics has suffered from exactly the opposite mistake. Economists have concentrated upon pure reason to the exclusion of fact and test. The science has been cursed with an excess of theory. For a hundred years most English economists have been content to reason upon the basis of classical economics, weaving elaborate problems of logic upon a few assumptions that had never been properly established and were no longer true. I speak as a sinner in this myself.

When Ricardo and John Stuart Mill wrote their books over a hundred years ago it was not unreasonable to assume that industry was privately owned and competitive; that wage rates fell everywhere until there was full employment; that the main purpose of banking and monetary policy was to maintain the gold standard. But it is a strange and pathetic obsession to base ever more complicated and subtle formulae upon these assumptions decades after industry has passed into the hands of joint-stock companies and public monopolies, is dominated by fixed costs and large-scale unemployment, and has long ceased to assume the continued existence of any form of gold standard.

It is not that the textbooks of economics are wrong—the logic is often elaborately correct—but that they are so largely irrelevant to the world in which we live, and give the subject of economics a remote and unconvincing sound wholly missing from other sciences which have the advantage of being firmly based upon fresh observations and accumulating facts.

Of course, this is not true of all economics or economists. The study of the trade cycle, to which I have referred, and most of the work on money

and on foreign trade have always been scientific in the full sense of the term. Here "theory" has never been divided from history and statistics, and has never been lacking in immediate practical application. But in much of the rest of the field, particularly in that part of it (called the principles of economics) which is concerned with the use of economic resources, the divorce is very nearly complete. Consider two examples.

### TESTING THEORY AGAINST PRACTICE

The account of the way in which it is claimed the capitalist system works assumes that the "employer" is kept efficient and adaptable by the search for profit. But this theory wholly ignores the fact that joint-stock enterprise has come to dominate the field and that, in the case of medium- or large-scale firms, all the work of management is carried out by salaried employees who are in no way affected by the level of profits. The profits, in fact, are paid to the shareholders, who contribute nothing to the administration of the concern. Profits have ceased to be a personal motive for ninety-nine out of every hundred persons responsible for the policy of large-scale industry. The old assumption has long since ceased to be true, and the elaborate theorizing based upon it has become wholly unscientific because irrelevant.

In the same way economics had assumed from the beginning that those who invest money do so because they see a difference between the increase in the profits they expect to make and the interest that will have to be paid on borrowed money. Yet an incomplete study carried out in the University of Oxford showed that not one in sixteen of the firms consulted paid any attention whatever to the rate of interest! In both these cases it is a failure to combine observation with reason, or test out a theory in practice, that explains the failure of these branches of economics to rise to the level of a science or carry conviction in the public mind.

### SCIENCE OR DOGMA

Marxist economists are in a different case. There is nothing wrong with their theory or method. They begin with the facts. Marx and Lenin were both economic historians. They are prepared, indeed determined, to use reason to explain the facts of history. They offer a whole set of theories to account for everything, from unemployment to prostitution. They even accept, most rare of all, the obligation to verify their theories or, at least, to offer some evidence that they are true. The Marxist and communist doctrine of "the unity of theory and practice" is, after all, nothing more than a political way of stating the truth about scientific method: if a theory is true, then it must work in practice and fulfil itself in action. And if one is not prepared to act upon a theory, it must be because one does not believe it to be true.

Despite all these positive virtues, some Marxist economists are not scientific, because they do not accept the final test of science, namely, its own self-destructive progressiveness. No one can be a scientist who does not begin by admitting that all his theories are necessarily incomplete, in the sense that they may be modified out of all recognition by the general development of knowledge. No scientist can be dogmatic, yet some Marxists are—with disastrous consequences.

Nevertheless, despite the ignorance and prejudice of many economists and schools of economic thought, the main scientific value of economics remains; and this at once raises the second of our two initial questions.

## THE PARADOX OF ECONOMIC SCIENCE

If it is the case that economics can, and in certain fields does, apply the three-phase method of science, why is it that the results of its studies lack the certainty and universality of the natural sciences? Why is it that astronomers can foretell the future with complete accuracy, and economists cannot? Why do the laws of chemistry apply always and everywhere, while the laws of economics change continually? This is our next main question.

### ECONOMICS AND HUMAN NATURE

The social sciences in general, and economics in particular, differ from the natural sciences in the nature of the objects they study. The physical sciences are concerned with material bodies and forces—with sticks and stones, liquids and gases, stars and electricity. The social sciences are concerned with human beings. This makes all the difference between the kinds of results that can be obtained from the two sets of subjects. The biological sciences, again, are concerned with living bodies and forces and as a result are in many ways intermediate between the physical sciences and the social sciences.

Human beings differ in a number of obvious and vital ways from material bodies and forces, though this is often forgotten by industrialists. They think and feel and act in a way that stones and gases and electricity do not. But they differ from material objects in one certain and in one highly probable way that make an inescapable and all-pervading difference to the results of studying their behaviour.

First, *human beings can learn from their own experience.* And this makes all the difference to the predictability of their actions.

The story begins with quite humble animals. Dogs and horses can change their behaviour according to their past experience of the world in which they live. They can learn to avoid foods that poison them. They can acquire the habits of responding to bells or sights or words of command that they associate with rewards or punishments. They display, in short, the processes

of memory, reason and intelligence. These powers are much more highly developed in other animals, particularly rats and monkeys. The observation of animal behaviour shows quite considerable capacities for reason and learning in the animal kingdom.

Among men these gifts undergo a revolutionary extension and improvement. The immense increase in the size of the brain and the higher nerve centres brings with it a vast capacity (in comparison with animals) for remembering, reasoning, judging and choosing. These are the essential characteristics of all humanity, little as the present state of the world may seem to justify such a view.

But this fact makes a profound difference to the result of applying the scientific method to a study of creatures such as ourselves.

*Cause and Effect*

The law of gravity states that all physical bodies *at all times and in all places* will attract one another with a force proportionate to their mass and in inverse proportion to the square of the distance between them. It is possible for the physicist to say that water (of a certain degree of purity and at a certain pressure) will turn to steam if raised to boiling point *anywhere and at any time*. It is not open to stars to dislike one another and to repel each other, instead of mutually attracting one another. A kettle of water cannot decide that it does not like being boiled and get up and walk away. Consequently it is the basic assumption of astronomy and physics, verified a thousand times, that the same causes will produce the same results—that the outcome of a situation is independent of the past "experience" of the physical bodies affected by it.

*Knowledge and Experience*

Exactly the opposite is true of human beings. A boy who gets his fingers burned at a fire will not touch the fire again. He has learned by experience that the results of doing so are unpleasant. All the surrounding conditions may be the same. The fire may be in the same grate; it may be of the same size, shape and brightness; the boy may be just as cold. Yet the result will be exactly the opposite. Instead of touching the live coals, the boy will draw back his hand. Indeed, the more similar the conditions, the less the effort of memory and the more likely it is that the result will be different. Hence it becomes quite impossible to say, "All little boys of a certain age, placed at a certain distance from a fire of a given intensity, will touch it." Far from it. All that can be said is that under these conditions some boys will burn their fingers and some will not, according, in part at least, to the nature of their previous experience of fire. The outcome of any set of conditions in which human beings are the subject of study will depend to as great an extent upon their past history and experience as upon any other factor.

All this applies directly to the larger problems of human behaviour studied by the economist and social scientist.

Let us revert to the trade cycle. Suppose for a moment that the saving-investment theory of these cyclical movements of prosperity and employment has been true in the past, and that unemployment rises with a fall of investment. If economics were like physics, and human beings resembled bricks or pebbles, then it would be possible to say, "Wherever and whenever investment falls below the intended level of saving, then unemployment or cumulative depression will follow." We should know that the same causes would always lead to the same results.

*The Power to Learn*

But in the life of human society and of nations it is plainly not possible to say anything of the kind. Depressions have occurred before. Particular nations have suffered the dreary consequences of prolonged mass unemployment. The child has burned his fingers at the fire. As a result men and women have been commissioned to study these events, to reflect upon their causes and to recommend a cure. Theories of depression have been worked out, policies have been evolved and, perhaps, the necessary arrangements made to carry them out. In this particular case, for example, steps may be taken to increase public investment or private consumption to offset a fall in private investment. If all this has happened the same effects will *not* follow the same causes. The first decline in capital expenditure will not be followed by spreading and deepening depression and rising unemployment, but by a rise in other forms of spending, a maintenance of total expenditure and full employment. The old sequence between cause and effect has been broken by the human power to learn from experience.

*Element of Choice*

In the same way and for the same reason it is never possible to be dogmatic about the future history of any nation. It is out of the question, for example, to say (as the Marxists say) that *all* nations will abandon political democracy if they attempt to replace a capitalist system by a socialist economy. It may be difficult not to do so. It may be, indeed it is, the case that certain nations have done so. But it is beyond the power of any historian or political scientist to say that we must all behave in the same way, or that what has been must be. On the contrary, the outcome of such a struggle will be deeply affected by the past of the particular nation in question, in the same way as the reaction of children to fire is profoundly influenced by the experience of the individual child. One nation may have used force to settle its internal disputes and learned by experience to dislike the consequences. Such a historical fact is equal in importance to any other cause in deciding the outcome of any crisis of change subsequently faced by that group of human beings.

It is therefore impossible to prophesy with certainty the reaction of individual human beings or societies to the same events. They will differ from individual to individual, and from group to group, and from time to time, according to the lessons that have been learnt by the men and women in question. For this reason alone it is never enough to know, as it is in the physical world, the nature of the external conditions in order to foretell the behaviour of human society.

*Freedom to Choose*

When, in the second place, we remember that as human beings we possess, in all probability, a certain degree of freedom in our choice as well as a capacity to learn from experience, it becomes even more clear why the social sciences must differ from the natural sciences in the degree of certainty their conclusions can reach. As, however, the explanation of what I mean by freedom and its consequences for the social sciences would lead me to raise philosophical problems that would take too long to resolve, I must be content with stating my personal conviction that a certain degree of freedom is a quality of our experience—that we directly know ourselves to be free to turn to right or left, to read a book or close it—and that the problem set to philosophers and scientists is to explain this phenomenon and not to explain it away. We may, of course, exaggerate the extent of our freedom (as the psychologists have shown) or mistake its nature, but no man really doubts its existence in his practical life. If this argument is sound, then it follows that the degree of unpredictability introduced into human behaviour by the ability to learn from experience is greatly increased.

*Can Economists Experiment ?*

Again, it has often been said that the main difference that distinguishes economics from the natural sciences is that economists and other social scientists cannot make use of controlled experiments. They cannot take a nation and submit it to an inflation, or the destruction of property, just to see what happens. While this is perfectly true and certainly deprives social scientists of one of the most powerful and accurate methods of scientific investigation, I do not believe that it is the real explanation of the difference —for two reasons:—

(1) Controlled experiments (though the best) are not the only method of verification, and it is a method denied to some physical sciences, astronomy for example. Prophecy in space (i.e. foretelling what will be found to be true in some as yet unexplored part of the field) or prophecy in time (i.e. foretelling what will happen in the future) are just as good methods of verification as that of controlled experiments and are widely used in all sciences. These are freely available to the social sciences.

(2) Conditions approximating to those of controlled experiments are

often available in the field of the social sciences. This happens when similar societies or social groups pursue different policies or experience different historical events; for example, when France pursued a deflationary, and Germany an inflationary, policy in 1933; or when similar schools in a group are submitted to different forms of leadership and discipline.

But, whatever the method of study available to the social scientist, it is impossible to alter the fact that human beings can alter their response to the same external stimuli and so ruin the accuracy of all mechanically logical generalizations and prophecy.

Nor is the explanation to be found in the greater complexity of the social and psychological facts. I doubt if they are more complex. Certainly the problems of astronomy and physics do not appear to be particularly simple, or any less complex than those of human nature.

It is not the method of study, but the nature of the object studied, that differentiates the social from the physical sciences.

*Certainty Unattainable*

From all this a number of conclusions follows.

(1) The paradox of economics is now explained. It is a science in the sense that it applies the method of science to an important part of social life. And as this is the only method yet discovered whereby a reliable and progressive understanding of any subject can be slowly built up, it is natural that economics should become an important branch of human learning.

On the other hand, since human behaviour is the object of study in this as in all the other social sciences, it is impossible to reach the level of prophetic certainty that is characteristic of physics and chemistry—not because the problems of human nature are more complex and difficult than those of the physical world, but for the deeper reason that causes and consequences are not related in the same way in the two cases.

(2) From this it follows that the future of economics is of a certain kind. Economic studies will progress enormously. Economists will accumulate more and more relevant observations of fact, and they will invent ever wider and deeper hypotheses to explain them. Many of these theories will be verified over long periods of time and large areas of society. We shall come to understand more and more about the economic life of mankind. But certainty will always escape us, and prediction miss the mark.

Just because men can learn from experience, they can learn from economics itself, and so the subject destroys its own conclusions by its own discoveries. Economists study the trade cycle, discover the laws of its movements and the methods by which recurrent depressions can be prevented. Economic administrators apply these policies, and the laws of development previously established are themselves changed in a way that no knowledge of physics

can alter the "laws of nature." Economists must therefore remain content with less spectacular achievements and the public must learn what to expect —a continually changing body of doctrine but a steadily increasing power to control economic processes. This is not a wholly discouraging prospect.

(3) One lesson for economists is, however, of outstanding importance. They must realize that they are studying human behaviour and not the formulae of logic and mathematics. Formulae and equations have their place in making thought precise and quantitative, but they are never a substitute for the close observation of the object studied—in this case the way in which men and women behave in certain of their social relationships. Human beings, unlike stones and electricity, feel and think, love and hate, imagine and conceive, judge and act.

All these attributes of human nature are at the centre, and not at the circumference, of the problem. Hence, scientific economists must master many subjects other than their own and incorporate into the body of their subject the findings of historians, sociologists and, above all, psychologists. In the past forty years the scientific method has invaded the last citadel of ignorance—the formation of human character—with remarkable and revolutionary results. It is this new knowledge that is most needed by the economics of the future.

## ECONOMICS AND THE OTHER SOCIAL SCIENCES

So far we have considered the problems that are common to economics and to other social sciences. How is economics related to these other subjects?

### THE PROBLEM OF POVERTY

First, the central subject of economics is a particular, and very important, human and social problem: that of poverty.

Most of the great group of sciences are concerned with one of the great ills to which mankind is heir. The physical sciences—physics, chemistry, meteorology, engineering—arise from the hard fact that the material world in which we live is not immediately subject to our will. We cannot raise coal from below the earth, or make roads across its surface, or clear the fogs away by merely wishing or willing that these things should be done. The only method by which we have learned a partial mastery of the physical universe is by the scientific study of it. In the same way, we cannot prevent potato blight, or cure the human diseases of pneumonia and tuberculosis, by deciding that these things are evil. It is the biological sciences, like botany, physiology, medicine and biochemistry, that have made it possible for our wishes concerning those evils to become realizable in fact. This is not the sole cause of, or reason for, the growth of science—science is the product of the fundamental instinct of curiosity—but these are the consequences of it.

Now, economics is concerned with the terrible evil of poverty. We find ourselves living in a world in which there is not enough to go round. If income were equally distributed in Britain, for example, it would not provide more than £8–£10 a week for the representative family of four or five persons. For the world as a whole the figures are a mere fraction of this sum. In India and China, containing half the human race, the comparable figure is about one tenth of it—i.e. 16s. to £1 a week for a family of four or five.

Nor is this world-wide condition of fearful shortage traceable to unfair distribution or periodical unemployment. It is perfectly true that income and property are unequally divided, that there are periods of heavy unemployment, and that these are great and remediable evils. But they are not the main cause of poverty. If the product of industry were to be divided with exact arithmetical equality and maintained always at 100 per cent of capacity, these figures would not be appreciably altered. Indeed, these two assumptions have already been made in calculating the figures.

*Insufficient Productive Resources*

No. The cause lies deeper than this and is harder to cure. It arises from a shortage in the means of production throughout the world. There is just not enough fertile land, or ploughs, or mining machinery, or rolling-stock, or electricity generating plant, or manual skill, or technical knowledge to raise output to the point at which the standard of living of all mankind could be twice or three times as high as it is at present. We do not know enough, and we have not yet acquired the capital or the trained labour force, to make such an increase in output possible.

We are thus brought back to where this book began. Poverty and shortage infest human life. Economics is the application of the scientific method to the study of why this is so and what can be done about it. Two problems clearly arise at once. How can the shortage of productive resources be overcome? And how can existing resources best be utilized?

*Production and Demand*

The answer to the first problem leads the economist on to consider the problems of production—of increasing knowledge, of accumulating capital, of maintaining full employment, of providing the best incentives, of running the monetary system efficiently and of organizing foreign trade. The second question leads on to a consideration of what people want (the theory of demand), the measurement of prices and costs (the theory of value), the distribution of wealth, the movement of labour and capital from industry to industry and occupation to occupation, and the planning of economic activity as a whole. These are all recurrent themes throughout this book.

Finally, it is necessary to realize that these questions cannot be wholly separated from one another. A society has to solve its economic problems

by a set of habits and relationships (social institutions) that cover all its economic life at one and the same time. The capitalist system relies, for example, upon the institution of private property for the organization of its industries, the provision of its money, the development of its foreign trade, and the accumulation of its capital, all in one fell swoop. It uses the habit of acquisitiveness to provide the main incentive for every type of labour and the movement of all its resources. And these economic arrangements must fit into, and are deeply influenced by, the still wider political, social, and psychological habits of the national societies in which they are used. The economic system is, in short, a *system* and can be considered only as a working whole, just as a car or a human being cannot be treated as a mere list of its parts or organs. The significance of the wheels and carburettor and magneto, or of the eyes and the hands and feet, can only be understood in the relations they bear to one another and the working unity of life that arises out of them.

Secondly, it follows from what I have just said that economics should be related to the other social studies—history, law, politics, anthropology, and above all psychology—in a particular way. They should be so intimately joined to one another that they lose, in the long run, their separateness.

### HUMAN NATURE NOT DIVISIBLE

Economists are concerned with the economic aspect of human life, politicians with the political aspect, lawyers with the legal aspect and social psychologists with the psychological aspect of social affairs. Now, all these "aspects" are not really separate from one another. They cannot, in truth, be separated at all. Human beings are not divided up into such watertight compartments. A man is not merely an economic machine or a political animal or a legal unit; nor is he any one of these at any single point of time. He is all these things at one and the same time and all the time. He thinks and eats and lives his life in each of these fields at once. His work as an industrial "factor of production" is deeply influenced by his heredity, his education, his political opinions and his emotional make-up. His individual behaviour and, to an even greater extent, the behaviour of the social group to which he belongs, are determined by all these forces at the same time. To study one of them in isolation from the rest is unreal.

This is not a theoretical argument, but an immediately practical problem in the conduct of any piece of social research. Let me quote two examples chosen at random from the economic field.

One of the central questions of economics is that of incentives. By what methods can men and women be persuaded to give their best energies and attention to their work? The level of output and, therefore, the standard of living will be deeply influenced by the effectiveness of the methods chosen.

Yet it is immediately apparent to anyone who has tried to work on the subject that economics alone cannot yield the full answer; nor can any one of the existing social sciences by itself. Each is essential and none can be left out. The economic historian is needed to describe the various inducements that have been tried in the past and the attitude of the working people to them. The economist alone can describe the social consequences of raising wages or relating them to output or changing costs. The contributions of the industrial psychologist and the personnel manager are fundamental, since it is part of their everyday jobs to deal with just such problems. Even the politician and the social psychologist have studied the relation between opinion and emotion on the one hand and productivity on the other. No realistic study of the problem can be made without the co-operation of all these specialists.

Again—and in quite a separate field—the subject of capital accumulation and the saving habits of the people is of central importance. There can be no economic and industrial progress without it. How can societies save? What are the consequences of their saving? How much ought they to save? All these questions are of prime importance.

The historian must tell us how societies have saved in the past and what consequences followed from their doing so. The economist must describe the mechanisms of capital accumulation in our present society and the probable effects of various rates of saving upon the economic life of the nation. The lawyer must tell us about the institution of property and the psychologist must throw light upon the emotional significance of acquiring it. All these have something to say that is more than interesting—something without which the study is incomplete and the conclusions are unreliable.

## CO-OPERATION IN RESEARCH

It follows from all this that the future of economic science must lie in bringing all these separate special studies together. The economist must co-operate with the accountant, with the historian, with the psychologist, to study some part of social reality in all its complexity. The existing social sciences, and certainly economics, can no longer stand alone. Co-operative research is essential.

I do not mean by this that every economist must be working with other social scientists all the time. That would be an intolerable limitation upon the freedom of his mind and work. Many workers in the economic field will wish to remain free to develop the subject independently. And the same will be true of many historians, lawyers, statisticians and psychologists. But if we are to learn more about the societies in which we live, and if these subjects are to be saved from the sterility of excessive abstraction, a number of specialists must overlap the narrow boundaries of their own subjects and

work together on the common problems—the real questions—that now escape between their separate studies. In this, as in many fields of human activity, we must live and work together or hang separately.

### THE STUDY OF POVERTY

Economics, then, is the application of the scientific method to the study of poverty, of the problems raised by the fact that the resources at the disposal of human societies are quite insufficient to provide us with all the goods and services we should like to have. The results obtained by economists may always fall short of the certainty and universality of the physical sciences because human beings, who make up these societies, possess the power of learning from experience and of choosing between the objects of their activity. They must emancipate themselves from the certainty that the same causes will produce the same results, and so greatly restrict the extent to which any accurate prophecies can be made about their future behaviour.

Nevertheless, economics is a valuable and essential study. No one has yet discovered any method other than that of science for bringing the physical world under partial control. There is no rival to the same method for studying the problems of society. If we are to master the evils of poverty and unemployment, of injustice, neurosis and war, we must now look first to the social scientists. And since we live in a democracy in which the pace of public policy is ultimately decided by the extent of public understanding and the furniture of men's minds, it is essential that we should all do our best to master the conclusions that are slowly established. That is the main purpose of writing and reading this book.

## *Test Yourself*

1. (*a*) What claim has economics to be regarded as a science?
   (*b*) What are the difficulties in the way of applying scientific method in economics?

2. What, in your opinion, are the main inducements for a person to work hard at his or her job?

*Answers will be found at the end of the book.*

CHAPTER XIII

# THE DEVELOPMENT OF ECONOMIC THOUGHT

Some writers make economics as old as the oldest known human thought about man; others make it as young as the modern industrial age. This is a pretty fundamental question: to misunderstand it is to vitiate a good deal of our thinking about economic matters. When, more than two thousand years ago, Aristotle said that man was a social animal, he said something important, which remains significant to this day. But not everything that was said in the past by even the greatest thinkers in the long history of economic and social thought is still relevant. And even where something is said that can be called a universal truth—like Aristotle's remark—we have to be very careful how we use it. We shall not get very far, for example, if we keep on repeating that we must work in order to live, that we must choose among the things we want to get because we have not enough time, energy and natural resources to get them all. That, as we all know only too well, is true enough. But it is, of course, equally true of all societies, past and present; it was true of the kings and shepherds of the Bible, the Greek masters and slaves, the medieval barons and serfs, and the nineteenth-century ironmaster and his workmen. It is also equally true of modern British society.

No doubt, interesting and useful propositions can be derived from this simple truth—that we cannot have all we want, and must, therefore, choose. And some people will go so far as to say that this principle of economy (which the textbooks might formulate as "the principle that means are limited in relation to ends and that they have alternative uses, thus necessitating arranging ends in an order of preference") is basic to an understanding of any economic problem.

Unfortunately, it isn't as simple as that. By developing this principle some economists have produced a very beautiful and elegant system of logic, often expressed by means of mathematical symbols, which can throw light on some problems very successfully. For example, it was of substantial, though not unlimited, usefulness during the last war in problems of priorities and allocations. But it fails us quite miserably when it comes to understanding (and solving!) a problem in which the difference between the circumstances of, say, Robinson Crusoe and those of millions of British wage-earners today

is crucial. The problems various societies have had to solve (remember, "man is a social animal"!) have differed, precisely because the circumstances in which their members have found themselves have differed. No doubt, you could reduce these problems every time to one of choosing between the ends to which to apply limited means. But, if you do, you will probably very soon come to the end of your reasoning without being much the wiser.

### BALANCED VIEW OF PAST THEORIES

It is for this reason that it is most important to understand what economists have said in the past and why they have said it. But in studying the thought of the past we must avoid the error which is often found nowadays among those economists who are excessively impressed with the neatness and apparent precision of some modern thought on the subject. They regard all past theories as merely fallacies which have had to be overcome. In their view, the works of earlier economists are mere stepping-stones, built with primitive tools and leading to the present heights of knowledge. There are also some, particularly among economic historians, who fall into the opposite error of regarding everything that has ever been said in the past as being true so far as the particular time and place are concerned.

This sort of relativism is dangerous: economists were as capable in the past of saying foolish things as they are today. The right approach is to recognize that economics is a social science; that society changes; and that, therefore, the history of social change and the development of economics are closely related. Without looking at the conditions of the time in which he wrote, we cannot understand the significance of a writer's ideas. At the same time, the development of economics shows progress in this sense: that as economic conditions become more complex, a more elaborate and more complete understanding of the economic process becomes possible. A writer's ideas must, therefore, be judged by the extent to which he has succeeded in profiting from the experience of social change, usually through a study of history.

It follows, also, that the greatest contributions to economic thought have been those which have tried to take account of, and to illumine, the process of change. The most enlightening writings have been those which have contained some theory of economic development as well as the formal propositions about a simplified and abstract version of the economy they have been trying to explain.

### THE BEGINNINGS

You will find much that is of interest and importance to an understanding of the development of the ideas in this book by going back into the earliest known speculations about human affairs. The Bible, the Greek philosophers, the Roman jurists and the medieval schoolmen had, in varying degrees,

something pertinent to say about the economic problems of their own day. But the economic system which they studied was so far removed from ours that there is very little indeed in their writings that throws light on the problems with which we have to contend, nor anything that contributes towards an understanding of economic development. However, they cannot be ignored, for they continue to exert an influence over men's minds; moreover, they form a residue in the existing body of economic doctrine.

*Use-value and Exchange-value*

Aristotle, for example, was the first to pose the question of value which has been a central one in economics ever since. Reflecting an economic development which, even then, lay in the ancient past, he distinguished between a "natural" and an "unnatural" form of exchange. The former is an aid in satisfying men's natural wants. If, passing beyond the household stage, large numbers of men become associated in a community, they will resort to a simple form of exchange designed to distribute their available goods more nearly in accordance with their varying tastes. As this exchange becomes more complex it necessarily gives rise to a medium of exchange, that is, an article which, beginning by being useful in itself, becomes by convention the medium through which all exchange takes place. Thus money comes into being; but, with it, acquisition for the purpose of accumulation also arises, and the "unnatural" form of exchange is born.

With this (very simplified) account of exchange Aristotle left us two very important concepts: the distinction between use-value and exchange-value, and an ethical criterion for judging different kinds of economic activity. "A shoe is used for wear, and is used for exchange," said Aristotle, and economists ever since have grappled with the problem of these two values of one and the same article. And when he condemned usury, the use of money itself as a means of accumulation, as the most unnatural of all the unnatural forms of exchange, he not only provided many generations of medieval schoolmen with a topic for endless speculation, but he profoundly influenced thinking about the economic aspects of society to this day.

*Exchange and the "Just Price"*

It is hardly an exaggerated simplification to say that for more than fifteen hundred years these two (closely related) thoughts of Aristotle provided pretty much the whole substance of economic thinking. In the Middle Ages, when speculation about social matters was extensive and subtle, men's minds were continually searching for ways to determine the "just price," that exchange-value which would most faithfully mirror use-value. The "just price" ensured that the act of exchange was a natural one. Though it had been made more complex by the progress of society, it still partook of the simple, direct, want-satisfying character of the activities of the isolated

household. Similarly, when they continued to condemn usury as Aristotle had done, they showed that they were hankering after the conditions of a more primitive society in which trade, as a vocation, did not exist.

But economic development had not stood still; and at a time when some medieval philosophers still regarded trade as something in which no Christian could engage, and wealth as being of the devil, commerce was flourishing and expanding. The rigidly stratified feudal society in which the very class division was a unifying principle (the station in which one was placed being accepted as God's pleasure) was being subjected to increasing strains and stresses through discoveries and the social and economic interchange which they produced. Subterfuges had to be resorted to in order to bring doctrine into harmony with contemporary facts. The "just price" became more and more a conventional price, itself subjected to change; while a variety of devices was used to justify the making of a profit from the use of money capital, for which the opportunities were continually increasing.

## MERCANTILISM

The canon law had been the main theory (and, at the same time, prop) of feudal society. Mercantilism was the theory of commercial capitalism. The growth of this phase of economic development has been described elsewhere in this book (Chapter IV). Underlying it were, as always, increases in men's productive powers. The growth of craftsmanship and knowledge in the use of existing materials, above all the improvements in means of transport, particularly at sea, provided both incentive and means for carrying on commerce. You will readily see that as new areas were opened, as new people and products were drawn into the circle of exchange, and greater opportunities presented themselves for making a "turn" on buying and selling, a new theory of the economic process had to be evolved. Moreover, this same process tore apart the narrow framework of feudal society and made for both larger social units and ones in which the group distinctions were less numerous and rigid and the classes differently defined. A new political form appears—the nation-state. And a new political, as well as economic, theory takes the stage.

Mercantilism makes the merchant and his activity the centre of its explanation. It marks the end of the prehistoric period in economic thinking, because it is the first attempt at a systematic body of economic doctrine. For the first time the passing of the self-sufficient household economy is frankly faced, and the activities designed to provide the members of the community with the things they need are recognized as an intricate process which is not consciously directed either by the patriarch or by divine commandment. Wealth (and it is in this period of the sixteenth and seventeenth centuries that the term first becomes frequently used) was the result of commerce;

and in so far as regulation of the economy was necessary, it had to be provided by grants of exclusive privileges to merchants and their companies.

The merchants' chief preoccupation is an adequate supply of working capital. Hence the concentration of the theorists of that time—of whom Thomas Mun was perhaps the clearest—on money. First it meant a concentration on the precious metals of which money consisted. Wealth meant bullion. Nor was this a foolish notion at a time when abundance of gold and briskness of trade could be seen to go together, and when the young nation-states (which, as the protectors of their privileges, the merchants were anxious to strengthen) were always in need of the "sinews of war." Later, thinking became more subtle, and money in all its forms as a medium of exchange and means of payment was recognized as the active element in the economy. The relation between trade, prices and money (including credit) became the chief subject of study. In regard to policy this meant a shift from the use of export restrictions as a means of preserving the amount of bullion in the country to the adoption of more complicated directions of trade to ensure favourable balances with particular customers. Countries were graded into good and bad customers, and elaborate regulations were advocated to encourage the former and discourage the latter. It was a considerable advance when later mercantilist writers such as Mun and Sir Josiah Child, though still believing in a generally favourable balance of trade, questioned the wisdom of relying too much on trade with any one particular country.

You will be surprised, when you read some of these writers, to see how similar both their preoccupations and their remedies are to many of those of present-day economists. Indeed, in the matter of international economic problems, we have, in a sense, never quite grown beyond the mercantilist stage. At least, we can say that those controversies are still very much with us. True, much has been added and much has been changed. The twentieth-century economic structure is very different from that which Thomas Mun tried to understand. For one thing, trade in his day did not rest, as it came to rest a hundred years later, on modern factory industry. But in one important respect the writers of the commercial age had the advantage of experiencing an important new political development—the rise of the nation-state. And what they had to say about the relation between the state and commerce is not without significance for us.

## CLASSICAL POLITICAL ECONOMY

If you study the chief landmarks in the history of human thought, particularly that thought which concerns man in his relations with his fellows, you will find that they generally coincide with times of social upheaval or their preludes and aftermaths.

In the realm of the more comprehensive problems—the very nature of

modern capitalism and its development—the foundation of our understanding was laid in the days of the classics, Adam Smith, Ricardo, Marx and others, whose main work was completed before the middle of the nineteenth century. You may find that any of the basic views you may choose was first expounded in modern terms at least fifty years before the present century and that its modern elaboration and refinement can only be understood against the background of its original form.

"*The Wealth of Nations*"

Of course, classical political economy didn't spring into being fully fledged. Indeed, students of the history of economics will tell you that, for example, Smith's *The Wealth of Nations*, regarded by many as the first great classic, is a very unoriginal book. So it is; for practically every one of its chief thoughts you can find in some of the forerunners of Adam Smith. But there is a quality of synthesis and finality about Smith's book which shows clearly that a new theoretical system was in being.

That system had, you must clearly understand, two essential parts, the joint products of modern industry: the one a view of society (a political philosophy), the other an economic analysis. Together they form the early theory of the modern capitalist system. Capitalism, like its theory, took a long time to develop. By the end of the Middle Ages the feudal economy based on serfdom and the manorial estate had begun to break up, partly owing to changes in agricultural methods which destroyed the older subsistence economy and made farming dependent on the market. The commercial developments here touched upon, by making changes leading to capital accumulation, also led to a change in methods of production other than agriculture. Merchants, or wealthy craftsmen, would go in for the putting-out system in which an entrepreneur owned the raw materials and the product, but manufacture was carried on by the craftsman in his own workshop.

"*Laissez-faire*"

By 1700 a new form of production was already well established in some industries. This form, the factory system, had become prevalent before the Industrial Revolution of the late eighteenth and early nineteenth centuries, but after that time there could be no more doubt about the new economic relationship which it epitomized, that between the capitalist owner of the means of production and the worker. This change in the economic structure of society was accompanied by many social, political, legal, and even cultural changes. Some took place rapidly, others were spread over a long period. Their essence is to be found in the three great slogans of the French Revolution—liberty, equality and fraternity—and their economic counterpart in a maxim also of French origin: *laissez-faire*, *laissez-passer* (let things be made freely, let things move freely—or, more briefly, the "let-alone" doctrine).

Adam Smith and Ricardo will show you this double nature of economic classicism very clearly. In the work of the former it appears most prominently, even though the political elements are not systematically expounded, but strewn over the pages of *The Wealth of Nations*. Smith's politics are essential for an understanding of his economics. They rest on a belief in the natural order, which is bound to correct itself without any central regulation and, indeed, in spite of any such regulation that might be attempted. The natural inclinations of man—self-love, sympathy, a desire to be free, a habit of labour, a sense of propriety and a propensity to exchange—are carefully balanced. Therefore, when given free rein and brought into interaction with the same motives of conduct in others, they will bring about the natural, harmonious order. Let each man try to achieve his own highest happiness; he will, nevertheless, be "led by an invisible hand" to promote the greatest happiness of the greatest number.

You will readily see what are the consequences of this view. Government intervention, except for police purposes, defence, education (for children are not best judges of their own interests) and a few other very limited functions, is evil, for it merely interferes with the working of the hidden hand.

*The Interest of Each is Interest of All*

In economic matters, the natural order emerges most clearly. As Smith summed it up, in a celebrated phrase which to this day epitomizes best this outlook, "It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interest." This is the simplest way of expressing the philosophy of an exchange economy, and once you adopt it (and in the process you must necessarily put on one side a great many things which go to make up our complex society), you must oppose all restriction of, or intervention in, the freedom of exchange.

The economic analysis which follows is, in its broad outline, quite simple. The butcher, brewer and baker bring the results of their efforts into the common pool. From it everyone may purchase what he needs with the proceeds gained from his own contribution to the common stock. This view could be applied to the most primitive as well as to the most complicated trading transactions, and to domestic as well as international ones. Prudence dictates that no one should make at home what can more cheaply be bought from others, and "what is prudence in the conduct of every private family can scarce be folly in that of a great kingdom."

*Production the Key*

What follows from this simple concept is of the greatest importance: it represents the major turning-point in economic thought and Smith's greatest achievement. Forget for the moment the political conclusions, so attractive in their simplicity, which Smith and later adherents of the *laissez-faire* school

draw. The important thing you must realize is the tremendous advance in human thought it was, thus to generalize everybody's contribution to the common stock, that is to say, everybody's labour. Here you see the true significance for economic thinking of the libertarian and egalitarian approach of the eighteenth century, based as it was on the disappearance of the old classes and social groupings. Gone are the ethical preoccupations of Aristotle and the medievalists with the just price. Gone, even, is the undue emphasis of the mercantilists on commerce as the real cause of the increase of wealth. Production, in the widest sense—that is, the expenditure of labour within a social context—is the source of wealth. Wealth itself consists of "all the necessaries and conveniences of life" which a nation consumes. It depends on two conditions: the amount of labour employed and the productivity of that labour. Thus for the first time we have a real general theory of the economy akin to the general propositions of other sciences. To Smith and the other classics the revolutionary importance of this generalization may not have been altogether apparent, but it did mean that they were able to evolve specific theorems of great and lasting importance.

*Taxation and Rent*

Smith's particular contributions to this further development of the basic thesis are his description and analysis of the division of labour, the process of exchange and competition, the origin and measure of value, the quality of money and the distribution of the product among the different classes of society. In Ricardo, some of the resulting concepts are more clearly defined and made more precise; others are added, particularly in the field of international trade and finance. In both there are also special topics, such as Smith's discussion of the principles of taxation and Ricardo's more detailed treatment of the theory of rent.

Of the two, Smith makes easier reading. *The Wealth of Nations* is not merely a discussion of abstract principles; it is full of historical description and political precepts. Ricardo's work (written, you must note, nearly fifty years later, when the system Smith had been analysing was more firmly established) makes much greater demands on the reader. Its argument is more austere; instead of the historical example, the hypothetical "let us suppose" situation is chosen to bring out a point of theory. For this reason, Ricardo's are more the economists' books: it was on the writers and thinkers that his influence was greatest. Smith wrote for every cultured man; his influence was, therefore, more immediate.

*Pattern of Classical Theory*

Between them, though many confusions remained, the main pattern of economic theory was made up. After them, for a hundred years (and particularly after some popularizers, such as James Mill, had had their say), econo-

mics was cast in a mould and was divided into production, exchange and distribution. The description of these must be brief. As regards production, the classics analysed mainly the division of labour and accumulation of capital. One of the greatest changes in history occurred when each individual began to specialize in the production of a single commodity or service. But this was not the end of division of labour. Adam Smith gave a dramatic account of its further development when he described the eighteen different operations in the production of a pin. Today it is not possible for the vast majority of mankind to say, "I made this." We are no longer self-sufficient; and we depend for the satisfaction of our wants on the labour of masses of people in different parts of the world.

*Capital Accumulation*

This development of specialized and co-operative production results, of course, in a great increase in the productivity of labour and thus in the possibility of much enlarged satisfaction of wants. It is powerfully reinforced by a further development which it produces itself: the accumulation of tools and equipment as aids in production. This means, however, in the first instance, accumulation of capital. Thus we find the theory of production becoming the theory of the co-operative employment of three factors of production: land (i.e. all natural resources), labour and capital.

A new problem makes itself felt—that of distribution. This means determining the shares of the total product which are to go to the owners of these three factors. Hence there emerge four new, systematically used terms in economic thought: wages, rent, profit and interest—the shares respectively of the worker, the landowner, the entrepreneur, and the owner of the capital who lends it to the entrepreneur.

*The Labour Theory of Value*

As for exchange, it was in the classical system a simple consequence of the principle of co-operative labour. To Adam Smith and Ricardo, who had begun with the basic theorem that labour was the source from which the total fund of wealth was constituted, it followed naturally that labour was the source of exchange value, i.e. that the share of the total labour that had gone into a particular commodity determined the ratio in which it exchanged for others. This, the celebrated labour theory of value, was the subject of a good deal of theoretical controversy. It was not very clearly elaborated in Smith and only a little more so in Ricardo. It found its most consistent exponent in Marx; but apart from this adoption of it, it was gradually ousted from the orthodox body of economic doctrine.

There is much else in Smith and Ricardo that you should know about, but which cannot be elaborated here. For example, there is Ricardo's development of Smith's analysis of division of labour into a theory of

international trade: the doctrine of comparative costs, which states that in a regime of completely free trade a country will concentrate on the production of those things in which it has the greatest comparative (not absolute) advantages over others. Again, in the field of public finance, Adam Smith was responsible for the famous four canons of taxation: equality, certainty, economy and convenience. But these are subsidiary matters; the main achievement of the classics is that they launched further economic inquiry.

## KARL MARX

During the hundred years following the appearance of these classics, economics, with one important exception, had a fairly even development. Let us take the exception first of all, partly for chronological reasons, but partly also because, in terms of economic theory, it has been argued (perhaps rightly) that Marx is more nearly a member of the classical school than any other economist since Ricardo. Marx was born in 1818, the year after the appearance of Ricardo's *Principles*. His early acquaintance with economic theory was, therefore, with the immediate followers of Ricardo. When he died, in 1883, the significant change-over from the chief theoretical tenets of the classics, although it had progressed, had not been completed. In economic matters Marx regarded himself all his life as the critical heir of the classics. He claimed to have distilled the real quintessence from their work; and he fought most fiercely against those whom he regarded as betraying their tradition. Some among his opponents were prepared to grant him his claim of kinship with Ricardo, but only because they were themselves critical of the Ricardian heritage with the (to them) dangerous implications which Marx had laid bare. The majority, however, among the later non-Marxian economists believed their own theories, and not those of Marx, to be the legitimate developments of the classical system.

### *Class Structure of Society*

Following the views of Smith and Ricardo, Marx regards labour as the source from which the fund of available goods and services is created. Any and every society must have some system for distributing the available labour so as to produce everything it needs in order to go on living. The way this is done differs according to the kind of society we are dealing with. Within the limits of objective conditions (which include his own knowledge, vigour, etc.) Robinson Crusoe can please himself. In a pastoral, patriarchal society, each member's tasks are laid down by an elaborate tribal code of conduct. Under feudalism, the serf has to work so many hours on his master's domain, and has so many hours left for himself. Thus it is what, since Marx, has been called the class structure of society that determines the process by which the available labour is utilized.

Under capitalism there is no central authority which directs labour into different channels. The market mechanism is substituted. The products of labour meet in the market; they exchange for one another, and in the process are reduced to a common denominator—labour. Equal quantities of labour will be exchanged for one another; and this law of value becomes the central controlling mechanism of a capitalist, free enterprise economy.

*The Value of Labour Power*

This does not go much farther than Smith and Ricardo. There is, however, more to the Marxian story. The lack of central planning is not the only feature of a capitalist economy. More significant is the fact that, according to Marx, capitalism means a society which is divided into two classes: the one owning the means of production, the other owning nothing but their labour power, which they have to sell in order to live. Thus among the commodities which are exchanged in the market is labour power. It will be exchanged according to the law of value, i.e. for commodities containing an equivalent amount of labour. That means that whatever amount of labour (embodied in food, shelter, clothing, and the conventional working-class standard of living generally) it takes to produce a given amount of labour power will be the exchange-value of that amount of labour power. It is, however, a fact, proved by the whole history of mankind, that labour power can produce more than it needs for its own reproduction at any given moment. Over a large part of the globe men do not have to spend the whole of their energy on scratching enough from the soil to keep themselves alive.

*The Surplus Product*

Thus the existence of a surplus product becomes another significant feature of the Marxian system. Again, it is in itself not a novel feature. The mercantilists, the forerunners in England and France of the classics, and Smith and Ricardo themselves had accepted it and sought to find its origin and significance. And both Smith and Ricardo (neither very clearly, though the latter more so than the former) had regarded, as does Marx, the surplus product as the source of the incomes of all classes of society other than the labourers themselves, i.e. interest, rent and profit as distinct from wages. What is novel in Marx is that he makes the specific manner in which the surplus product is dealt with in a capitalist society the central part of his whole analysis and draws powerful political conclusions from it.

Every society, other than the most primitive, Marx argues, produces a surplus product. What is important is to see who gets it and how it is distributed. In a capitalist society it belongs to the capitalist, who has bought labour power as a commodity and paid it wages determined in the way in which all exchange-value is determined. The surplus product, and, therefore, the surplus value, is his. He may have to share it with others

(rent to the owner of land, interest to the owner of money capital borrowed by the capitalist entrepreneur); but the essence of Marx's system is this juxtaposition of the capitalist and the worker, the one exploiting the other, because they are members of two classes with this specific relationship in regard to the social process of production.

*Antagonistic Tendencies*

A further feature of the theory which distinguishes it from other similar ones is that it proceeds to forecast the downfall of the system. It does not make this depend only on a moral condemnation of exploitation, but also on an analysis of inherent trends which it regards as inevitable. In the first place, Marx develops a concept to be found in other classical economists. Like them, he believes that there is a tendency, as capitalism develops, for the rate of profit to decline. This, according to Marx, is due to what he called an increasing organic composition of capital, i.e. a relative increase in fixed capital (plant, equipment, etc.) against variable capital (labour power) employed in production. Surplus value (on which the rate of profit depends) is directly related to what is laid out in the purchase of labour power. Given a relative decline in this outlay, the rate of profit must show a declining tendency. A rising organic composition of capital is a concomitant of industrial development, with its large-scale production leading to the emergence of giant concerns and combines with varying degrees of monopolistic power. At the same time, by pressing down on the rate of profit, it leads to increasing fierceness of competition, the search for new markets and unexploited sources of labour power. Here you have a dynamic element containing within it strongly antagonistic tendencies, particularly when you enlarge the analysis to include imperialist rivalries and war.

*Capitalism's Inherent Contradiction*

Marx's analysis becomes, therefore, an analysis of a conflict between the technical possibilities of production and the barrier to them imposed by capitalism; between the increasingly social nature of production and private appropriation of the product and surplus; between the increasingly co-operative nature of production and an antagonistic class relationship. These conflicts are periodically resolved in crises; but the equilibrium established as the result of crisis is precarious and transient; a new crisis must follow, for the end of production under capitalism is creation and (private) accumulation of surplus value; the means, a continual expansion of the productive powers of society. The means are bigger than the end; according to Marx, therefore, capitalism contains an insoluble contradiction and must sooner or later give way to a system in which the capitalist class-relationship is abolished, a system in which the means of production become socially owned, and central planning replaces the law of value.

This is a dangerously abbreviated account of a theory with a vast and highly controversial literature. It is hoped, however, that enough has been said to show you the peculiar development which Marx gave to classical doctrine. The political ideas of liberalism are made use of to explain the development of the capitalist system; and all the ingredients of the Smith-Ricardo economic analysis are also present. The result, however, is very different. Gone is the natural harmony; and "the invisible hand" has become the law of value, behind which there is to be seen an antagonistic class system which "contains within it the seeds of its own destruction."

## THE MARGINAL UTILITY SCHOOL

The main stream of economic thought, from about the middle of last century, took a different course from that charted by Marx. For some decades the spiritual ancestry of Smith and Ricardo was piously acknowledged, but, in fact, a significant movement away from their theories was in full swing.

At first it consisted mainly of an attempt to change the classical labour theory of value into a cost of production theory, the beginnings of which were already to be found in Smith's own treatment of the four factors and their rewards: rent, interest, profit, wages. The system was a simple one: the exchange value of any commodity was determined by its cost of production, i.e. by the sum total of the rewards which had to be given to the various factors in order to induce them to produce the commodity in question. For wages, there was the subsistence theory, taken over from Ricardo, which was not entirely unlike that of Marx. The tendency was, it was argued, for wages to be pressed down to a minimum of subsistence, though that minimum itself was slowly rising as the result of economic progress. Rent, which, following Ricardo, was regarded generally as varying according to different conditions (e.g. the location or fertility of a piece of land superior to that of the marginal piece employed), was also tending to rise as the result of economic progress, giving rise to an "unearned" increment which some economists—the "single-taxers"—wanted to tax away. Profits (and interest, part of the profits of enterprise) were not only tending to a minimum owing to competition, but were also tending to fall as accumulation progressed.

Here you have the outline of a closed system, each part dependent on every other. Moreover, through the beneficent part it assigned to accumulation, both from the point of view of the capitalist and the worker (though not the landowner), it was a system ideally suited to explain and justify nineteenth-century industrialization. But from a theoretical point of view it was not complete, because, having abandoned labour as the quantitative measure of value, it lacked some universal equivalent to which all values could be reduced. At this point the most significant development of (or departure from) the classical system sets in. Taking up an incidental reference

by Adam Smith to the "toil and trouble" of labour, later economists began increasingly to rely on psychological (or, at any rate, subjective) factors to explain the central problem of value. Economists began to speak of real cost, which, as far as labour was concerned, was the disinclination to expend labour. Wages were the reward for overcoming this disinclination. The capitalist also incurred a real cost; by embarking on an enterprise, he abstained from consuming his capital, and his abstinence had to be rewarded by profit (and interest).

This way out of the difficulty of finding the ultimate measure of value was not really satisfactory; and, indeed, it held the field for a short time only. The "sacrifice" involved in working is not easy to measure; it certainly cannot readily be equated with the "sacrifice" involved in the capitalist's "abstinence." Moreover, when Bishop Whately said, "It is not that pearls fetch a high price because men have dived for them; but, on the contrary, men dive for them because they fetch a high price," he opened the door to another subjective factor, that underlying demand; and the "real cost" explanation of value became at least insufficient.

*Jevons and Marshall*

It is through a development of a theory explaining this new factor that the economists of the last three decades of the nineteenth and the first three decades of the present century are noteworthy. The school which they developed is usually known as the marginal utility school. Its founders were (almost simultaneously) Menger in Austria, Jevons in England and Walras in Switzerland. They were followed (and their work was further developed in two significant respects) by Marshall in England and Pareto in Switzerland. As the name implies, this new school laid stress on two things: the subjective desire for a commodity which, when reflected as an attribute of that commodity, they called its "utility," and the predominant significance of considering everything "at the margin."

The former leads to a simple development of Whately and others who had stressed that demand comes first. The argument runs as follows: People have many and various wants. There are goods and services capable of satisfying these wants; and to this capability we give the name utility.

In Jevons, the term utility appears to be expressed in a philosophical context involving the estimation by rational men of the pleasure and pain which actuates them. In later members of the school, however, this context was discarded and the term utility was used without implying any moral judgment either of the good or of the want of it: it merely reflected desire. So disutility (a name at first given by this school to the "toil and trouble" of labour) came to be regarded as an unnecessary duplication: utility was a relative term. At this point the marginal aspect comes into play. We must

be careful not to do violence to these concepts by over-simplifying them and their historical development; but very briefly the marginal idea can be put like this. Desire is reflected in utility. But when economists were searching for an explanation of exchange-value, they were thinking of something concrete that was ultimately expressed in terms of money. Now, it is clear that utility, as such, cannot be expressed (by however devious a route) as a price. Hence, it is argued, it must be the marginal increment of utility that influences price and not total utility.

The reasoning behind this elaborate theoretical façade was founded on the law of diminishing utility (sometimes also called, after a German forerunner of these theories, the first law of Gossen), according to which the intensity of a want diminishes as it is being satisfied, until satiety is reached. By the same token, the utility of successive increments of a good diminishes until it reaches zero.

*Marginal Utility in Modern Economics*

At this point, the modern exponents of this school of thought extend the argument very considerably and, indeed, free it from the philosophical vagueness which the term utility necessarily implies. Take as the starting-point the definition of economics which we have encountered before, and which we may now formulate as being the study of man in the process of employing limited means (with alternative uses) for the purpose of satisfying many wants, not all of which (owing to the limitation of his means) he can hope to satisfy. He must choose: that is, he must carefully watch each increment of expenditure of his limited resources in one direction and each increment of satisfaction derived from so expending them. As a rational being, he will (so runs the second law of Gossen) wish to get the maximum amount of satisfaction out of his resources. He will, therefore, balance different satisfactions "at the margin," that is, try to equalize marginal utilities.

*Concept of "Equilibrium"*

With little effort you can see that once you embark on this line of reasoning, and particularly if you then try to cast it into mathematical form, you will soon arrive at a sort of generalized logic of choice which is completely devoid of any ethical or moral content, which eschews any judgment in terms of right or wrong, rational or irrational. Not that these economists deny that such judgments can (or should) be made; they merely contend that the criteria for making them must be derived from other branches of human thought. Nevertheless, the old notion of natural harmony dies hard; and in many modern economists its place is taken by the concept of equilibrium.

In the so-called Lausanne school, of which Pareto was the most important exponent, and in the later mathematical economists, this concept

of equilibrium is purely formal. It is merely a construction of a theoretical situation in which all the many interdependent parts of the economic system are in a stable relationship. This relationship is not necessarily "good"; nor is it argued that the tendencies which can be shown, theoretically, to lead to such an equilibrium position will be present in reality. Nevertheless, there remain many economists for whom (*a*) a tendency to an equilibrium relationship is something that exists in the economic system unless impeded by deliberate interference and (*b*) the achievement of equilibrium, though not perhaps endowed with the sanctity of the natural order, is something desirable to which economic science ought to give its cachet.

## THE LIBERAL UTILITARIANS

At the same time as these more formal versions of the marginal utility there developed a more refined apparatus within the less austere schools of thought.

Marshall and his school, though equally concerned in the elaboration of the marginal utility approach to value (away from the classical labour theory), nevertheless did not go the whole way with the theorists. They remained conscious of the fact that economics was still regarded as providing significant answers to real problems and not merely as an entirely "neutral" analysis of the implications of these problems. Marshall never quite discarded the subjective real cost or sacrifice of one kind or another which lies behind supply, nor the subjective satisfaction behind demand. He argued that, as in the case of a pair of scissors it is useless to ask which blade does the cutting, so it is useless to put utility before real cost or vice versa. Similarly, while Marshall accepted the marginal productivity theory of wages, the counterpart of the marginal utility theory of value, he thought that it was real, that is, subjective, considerations about the rewards expected which would call forth given amounts of the factors of production. This makes his theory much more capable of grappling with a large range of real problems than is a more formal theory. From followers of Marshall have, therefore, come many theories (for example, regarding monopoly and its control) relating to state regulations and intervention, which, though still based on a fundamentally liberal outlook, do nevertheless provide the reformer with a substantial armoury.

## DIVORCE FROM REALITY

Much in this summary account has necessarily had to be left out; for example, the theory of money or of international trade. Broadly speaking, however, we can sum up this development of about a hundred years by saying that the predominant trend in academic economics was away from the overall problems of the economy, largely away from the problem of

economic development, and towards greater emphasis on the subjective, consumer approach. Later still, it was towards the establishment of a system of formal relationships, often expressed mathematically; and the connexion with reality frequently became more and more difficult to demonstrate.

## THE NEW ECONOMICS

The economics of the modern era has been quite aptly described as a child of the wars and revolutions of the late eighteenth and early nineteenth centuries. The question, therefore, arises: Did the First World War and the twenty years' convulsions which followed it produce as much of a ferment in economic thought? There was undoubtedly a great increase in economic literature during that period. A vast number of books and articles was written about inflation, fluctuations in exchange rates, tariffs and other trade barriers, reparations, collectivism and planning, and many other major and minor problems of the economic system. But as far as the technical literature is concerned little, if anything, produced in the 'twenties and early 'thirties can claim the same originality as the work produced after the Napoleonic wars. Many penetrating things were written in the 1920s, but a book like Keynes's *Economic Consequences of the Peace*, which can be regarded as a particularly good example of influential writing, contains little that was not said exactly a hundred years earlier.

### *"Trade Cycle" Theories*

The chief impetus to new economic thinking was the crisis of the 'thirties and the depression which followed it. What is variously called "business-cycle," "trade-cycle," or "crisis" theory was not new. It had been separated from the main body of economic theory in the past, and for a time, even in the 'thirties, it remained so. The classics had little to say about it: Ricardo's chapter on "Sudden Interruptions in the Channels of Trade" was narrow and fragmentary and not really concerned with the typical cyclic, up-and-down movement in business activity which trade-cycle theory has since tried to explain. Yet this movement was not a novelty in the 'twenties and 'thirties. It has been an established fact over the past 130 years at least. But its analysis and explanation had become a separate body of theory, largely attached to monetary theory.

The classics not only ignored the specific problem of rhythmic fluctuations in business activity; they even failed to analyse the possibility that there might be different levels of activity with the same amount of resources.

The reason for this was that the classics, generally, believed that their theory of exchange and of capital accumulation had already proved that the economic system always tended to a situation of full employment of all its resources. Fluctuations of business were necessarily regarded as

disturbances, the causes of which had inevitably to be found either outside the economic system (e.g. sun-spots and their influence on harvests) or at any rate, in maladjustments of parts of it (e.g. the volume of bank credit).

*Keynes and After*

During the present century the various special theories were increasingly found to be inadequate; and in particular the severity and duration of the "great depression" caused an intensified search for a more complete and satisfying explanation. Probably the first most significant development was a gradual confluence of different streams of thought. The most important combination of this sort was that between the theories which contained a monetary explanation of the uneven rise and fall of prices, causing alterations in the relative wealth and income of different classes, and those which emphasized the structural changes in production that went together with business fluctuations.

This book is itself a most striking testimony to the change that has come over this branch of economic theory. In the late 1930s came a major change in economic thinking—a search for what determines the level of economic activity in general and not merely for an explanation of the periodic departures from an optimum level of activity (with full employment) that is supposed to be the natural condition of the economy. This change is largely associated with the name of the late Lord Keynes. Its significance for us here is that it also represents a return to the classics' preoccupation with the economic system as a whole and an abandonment of the preoccupation with the individual consumer's marginal increments of satisfaction, which had dominated economic thought for over sixty years.

## *Test Yourself*

1. How would you account for the fact that, historically, economic theory has become more and more elaborate?
2. It is said that the greatest contributions to economic thought have been those which have contained some explanation of economic development as well as a theory purporting to show how the existing system functions. Why should this be so?

*Answers will be found at the end of the book.*

CHAPTER XIV

# ECONOMICS TODAY AND TOMORROW

A VAST range of problems still confronts those who make a professional study of the subject of economics, and it is of supreme importance that everyone should know the quintessence of these problems and, above all, understand what divides the different schools of thought at the very foundations of their thinking.

*The Free Enterprise School*

Classification is never easy. But, broadly speaking, we can distinguish four schools of economic thought today. The first believes that capitalism can and should survive; that it is, indeed, the only form of economic organization which is compatible with a democratic order of society and with those ideals of Western civilization which we have come to cherish during the last five hundred years. But its survival requires that we should go back to the virtues preached by the founders of economics, the great liberal thinkers of the eighteenth and nineteenth centuries, and that we should restore free private enterprise and competition, quite unfettered by state intervention.

*The Reformers*

The second school maintains that capitalism can and should survive, if it is reformed. Capitalism, it declares, has certain defects which are inherent and others which it has acquired as it has grown up. It is rather like an adult who has indulged in too good living and now has to pay the price. He has to be curbed in the interests both of his own survival and of those whom he has to serve. No doubt the doctor's prescription will provide for a considerable restriction of the freedom the patient enjoyed in his youth; but his essential nature will not be changed, and his more circumspect mode of life will enable him to carry on for many more years to come.

*The Fatalists*

Then there is a small group of economists which has in recent years had a well-developed and highly sophisticated theory to propound. Theirs is a theory which has been aptly christened the "fatalistic view of capitalism." They regard capitalism as something that is "too good to be true." They like it; they think it should survive; but they are convinced that it cannot. In some respects they hold views about the senility of capitalism that are not

unlike those of the more extreme members of the second group. But their estimate of its chances of survival is one of unrelieved pessimism. The condition of the patient, they believe, has gone too far for any doctoring to have a lasting effect. Moreover, these economists claim that the relatives, friends and even doctors gathered round the bedside neither believe in the patient's ability to recover, nor really want him to. They are grave-diggers and heirs in disguise, anxious to speed capitalism's departure and enter into their inheritance. Thus, the fatal outcome is inevitable.

*The Socialists*

Finally, there are those who believe that capitalism neither should nor can survive. They are the socialists. Their doctrines are not new, though they are much more widely known and held now than they have ever been. Socialists of all schools believe that capitalism must be accounted evil, regardless of the views and desires of individuals within the system. It is an economy, they say, which offends both the practical welfare and the moral sense of the vast mass. It is based on exploitation; it involves of necessity gross inequalities of wealth and income; and it cannot even guarantee security of employment and minimum living standards. In its more comprehensive version, socialism goes farther and makes capitalism responsible for crises, imperialism and war, with their attendant evils.

## THE CREED OF FREE ENTERPRISE

It may surprise you to learn that the first of these groups still exists among professional economists. Its doctrines have, of course, a strong following among business men and their associations, but among the academics they are generally thought to have disappeared altogether. Yet the curious fact remains that the most uncompromising defence of the free enterprise system has come from highly academic quarters. As its symbol, we may take a recent book by an Austrian economist who has lived in Britain for many years and has made it the country of his adoption. Hayek's *Road to Serfdom*, though political rather than purely economic, contains the quintessence of the revived individualist creed. This book has, for fairly obvious reasons, had more of a success in the United States than in England. But it is not a wholly isolated example of the extreme individualist school. Indeed, it was in Britain during the 'thirties that the academic revival of this school of thought first began.

The economic argument against a planned (or controlled, or collective) economy which is propounded by the authors of this group is attractively simple. Economy, they say, means using limited resources (which have alternative uses) to achieve unlimited ends. In other words, it is a synonym for choice. True to the ideals of eighteenth- and nineteenth-century liberalism,

they reaffirm that each individual must be the judge of his own happiness, therefore ultimately responsible for making his own choices. The free, competitive, capitalist market is a unique achievement in social engineering, a remarkably delicate apparatus for absorbing all the individual choices and compounding out of them something which represents a communal scale of preferences. This, though different from each individual component, is yet the result of the interaction of them all. It follows that, while the freedom of each individual to attain his happiness is limited by the equal right of others, the outcome, as Adam Smith claimed, must be the greatest happiness of the greatest number. So runs the argument.

*Operation of the Market*

Planning replaces this fine impersonal and truly communal mechanism by the edict of man—be it an individual dictator or a group. It cannot be otherwise than that planning and economic democracy should be incompatible. Inevitably, no one is entirely free under a capitalist market economy; but the material, as well as social, restrictions upon his freedom are not—or, at any rate, in the ideal system should not be—imposed upon him by another individual but by the impersonal workings of the market. In a planned economy it is not price, wage or interest that tells him how to use his resources, but the ukase of government and the ubiquitous bureaucrat. Thus, under planning, liberty is lost. But more than that, quite contrary to the claims of the planners, efficiency, too, is lost. So long as it is unimpeded, the market produces the most efficient distribution of resources consistent with free choice by all members of the community. Individual errors are quickly corrected by the mechanism of the market. Goods and services will always tend to flow to the point of highest net return, and bankruptcy and unemployment are powerful correctives to misapplied resources. A planned economy, even if we forget its inevitably dictatorial character, puts an intolerable burden upon the wisdom of the small group of men who are charged with its conscious direction. This group cannot afford to make errors, since these are bound to affect vast sections of the economy. It is inconceivable that they should be able to do consciously what the intricate interplay of forces in the market produces unconsciously, to solve, as it were, a vast number of equations with a vast number of variables.

*Not Free and Equal*

Thus, whatever may be its modern refinements, the argument of the out-and-out present-day advocate of *laissez-faire* runs much as it always has. It is not, of course, nowadays a very important one; but it would be wrong simply to dismiss it out of hand without a conscious recognition of where it goes wrong. The truth is that the premises upon which the arguments are based are untenable. Our economy is not one of economic (or even

political) free-and-equals: not only does it still bear the birthmarks of the system of feudal privilege from which it sprang, but, through the development of monopolistic positions, it is itself continuously creating fresh inequalities and privileges. Hence, the statement that, so long as there is a free play of the forces of supply and demand, all will be for the best in the best of all possible worlds, does not convince those who never get a "start" in life or who have to pay the price in poverty and unemployment for the speculative excesses of those who can always "rig" the market. Thus, doubt arises whether the lightning (if ruthless) efficiency with which a competitive, free-enterprise economy is supposed to distribute rewards and punishment, each in terms of money, is really designed to achieve, if not an abstract moral ideal, at any rate, the practical ideal of material progress at the most rapid possible rate. The reduction of everything to the monetary denominator, the measuring of success and failure in terms of money, it is claimed, ensures that remnants of earlier privilege are destroyed and that only those rise to the top and stay there who can literally "deliver the goods."

The fact is, however, that for the greater part of present-day economic activity something other than perfect competition holds. In some of the most important modern industries the sort of limited monopoly created by goodwill or location in the case of the local grocer's shop has been reproduced by product-differentiation, the creation of brands and the use of advertising. In others, where the product cannot easily be differentiated, such as cement, steel, etc., the economies of large-scale production are so pronounced that there is an inevitable tendency towards the emergence of few but vast industrial units, which dominate the market, and which cannot by any stretch of the imagination be said to be exposed to the blasts of competition. Moreover, the basic premisses of traditional individualist doctrine are invalidated by modern developments in the theory of employment.

*Tacit Acceptance of Control*

Most of those economists, even, who ardently desire the maintenance of the present system, have, therefore, shied away from these extremes and prefer to couch their defence of the system of private enterprise in more moderate terms. Similarly, whatever the representatives of business interests may say on public occasions to show that they wish everyone to imbibe the pure milk of the individualist doctrine, few would be ready to reject any and every piece of collective control.

It is quite unlikely that an attempt to revive these doctrines on a large scale will be successful. The ravages of war have made inevitable a conscious direction of large parts of the communities' economic activities, even in the countries in which the capitalist system is preserved. It is unlikely that anyone will be able to preach the virtues of free choice and of an uncontrolled

market to the peoples in countries freed from years of German oppression, peoples who lack food, clothing, shelter and raw material and equipment to set industry going and provide employment. Even in wealthy countries, the United States for example, certain minima of social legislation and government intervention to limit the magnitude of economic fluctuations appear to be firmly established, at least for the present. A recent comment of an important American industrial association (The Machinery and Allied Products Institute), made in the course of a strong defence of the private enterprise system, may be quoted in this connexion: "Capitalism can no longer claim exclusive jurisdiction over the American economy, and it is the part of wisdom not to demand it."

However much one may sympathize with the motives of the extreme doctrinaire upholders of *laissez-faire*, particularly in regard to individual liberty, they have, as a matter of practical judgment, to be written off as an important force in the world of today. Whatever influence they may still have will become more limited as the problems of post-war readjustment become more pressing. Both the academic economist and the man of affairs are certain to turn to more positive theories.

### CAPITALISM IN DECAY

The fatalist school, which we must look at next, has perhaps hardly become a school yet. Its views are, however, held by a number of acute thinkers and have recently been very brilliantly argued by at least one leading modern economist, Professor Schumpeter of Harvard. In a series of books, beginning with his *Theory of Economic Development*, published some decades ago, and more recently in his *Capitalism, Socialism and Democracy*, Schumpeter has made himself the foremost exponent of the view that, although it is highly desirable that capitalism should continue to be the economic structure of Western communities, it has not enough strength left to survive. He believes, to use his own words, "that a socialist form of society will inevitably emerge from an equally inevitable decomposition of capitalist society." Unlike the socialists, however, Schumpeter does not welcome this prospect; he deplores it. Capitalism, he claims, is being killed by forces of its own creation, and there is nothing one can do about it.

What are the reasons for this fatalism? First and foremost, this analysis (although it emphasizes that there is nothing in capitalism's performance to date to suggest economic failure) claims that capitalism's demise is made inevitable by the fact that in the course of its development it creates conditions which sap the social institutions protecting it. Schumpeter, for example, has no doubt that were capitalism able to repeat during the next half-century its performance of the last fifty years, it would produce an increase in production and income which would virtually wipe out poverty and make

possible a series of social improvements which would remove any ground for the strictures of capitalism's opponents. But it is acknowledged that the assumption that capitalism will continue to do as well as it did is not necessarily justified. Many economists have stated that the conditions which were conducive to economic expansion or which are assumed to be peculiar to a capitalist order, are disappearing, if they have not already ceased to exist. As you have seen, it has been forcefully argued in recent years that many of the supposed features of a capitalist order which have been used to demonstrate the beneficence of that order do not exist and may never have existed.

*Dwindling Opportunities*

These two streams of thought, concerned with monopolistic practices of all kinds and with the decline of investment opportunities, must necessarily undermine faith in pecuniary motives and standards. Add to this debunking of the old-time theory, which eulogized the profit-motive by describing the effect of its working in a competitive world, a widely-held fear that the great investment opportunities of the past no longer exist, and doubt about the continued progress of capitalism is no longer surprising. It is argued by many that nearly all the nineteenth-century conditions which favoured economic growth have ceased to exist. Population growth is retarded or stopped, and new lands are no longer available as an outlet for labour and accumulated capital. Even the great technological inventions of the past fifty years may show some slackening in the future. The great improvements in monetary techniques of the last half-century are in future more likely to be matched by monetary disturbances. Perhaps most important of all, not even the optimist would expect that the period of comparative political tranquillity between 1870 and 1914 which supplied the ideal background for economic progress will be duplicated during the next few decades.

*Capitalism its Own Destroyer*

The fatalists, however, do not rest their case solely on these economic considerations. Their main contention is that the cultural attributes of present-day capitalism militate against its survival. In the first place, while the capitalist economic system and its mental attitudes may continue to be accepted by the majority, that majority no longer lives in conditions which create a fighting faith in that system. Originally the maintenance of a system of free enterprise was a matter of the greatest personal importance to a large number of influential people. Agriculture and small-scale industry, the predominant economic forms of not much more than a century ago, meant proprietorship and entrepreneurship. In other words, they involved the element of personal risk-bearing. Many were constantly ready to fling themselves into the fray, to risk all, to exploit—ruthlessly no doubt, but beneficially in the long run—new ideas, inventions and opportunities. Today

"economic progress tends to become depersonalized and automatized" (Schumpeter). The individualist capitalist entrepreneur who once played a part not unlike that of the medieval war-lord has been replaced by the large corporation. Committees, professional managers, salaried officials take the place of the old "robber barons." One cannot expect those who run these large concerns to show the same keen sense of property as their forebears. In any event they can hardly make out the same case in defence of the system. Nor is it likely that the modern worker will consider his present chance of becoming a capitalist good enough to wish to defend the system through thick and thin. Indeed, urban, industrial labour, it is argued, is becoming anti-capitalist, and the protecting strata—the remnants of feudalism still to be found in monarchies and their courts, in churches and in armies—are also being destroyed by the evolution of the capitalist system itself.

*Intellectual and Moral Hostility*

There are more of the debilitating influences. Capitalism breeds rationalism, and rationalism breeds the intellectual. The enlarged opportunities of education, created by modern capitalist society originally for its own economic advancement, now become breeding-grounds of its critics. The intellectual is by definition a critic, and when he sees so much that offends his sense of order, as he is bound to do in the chaotic, unplanned and amoral system of capitalism, it is small wonder that he should work to undermine the general acceptance of the system. Furthermore, the growth of an intellectual class inevitably creates a problem of the proletarianization of the intellectual and of intellectual unemployment. Thus, both a critical attitude and an economic interest (which creates a growing class-consciousness) impel most intellectuals to become hostile to capitalism. The addition to all these phenomena of the growing revulsion of the moral leaders, including many sections of organized religion, and the bewilderment of the politician makes the picture complete. It becomes one which to Schumpeter and others justifies a pessimistic view of capitalism's future.

*Misreading History*

Much in this fatalistic diagnosis is based on an acute analysis, and a good deal of it now forms a part of many general theories, formulated or unformulated, which are believed in by many people. Its purely economic aspects are common to the views of those who would by no means agree that nothing can be done to save the essence of capitalism. Similarly, much, although in different form, is common to the socialist analysis of capitalist development. There are, however, many parts of Schumpeter's doctrine which are patently false. A good deal of the description of the cultural factors which contribute to the enfeebling of capitalism is a mixture of sound analysis and wrong historical appraisal. It repeats, in cultural terms, the error of identifying a

theoretical pattern with a supposedly real but lost Golden Age. It is at least doubtful whether it was really a majority which was deeply imbued with the virtues of capitalism a hundred years ago. Similarly, is not the interest of the large modern company in the preservation of capitalism gravely underestimated? Unless one is prepared to beg the whole question by identifying capitalism with the theoretical system of the traditional economist, one will reject the notion that there is a significant difference between the present and the past desire of capitalism to ensure its self-preservation.

*Swan-Song of the Disillusioned*

But in evaluating the influence which the fatalistic view is likely to have in the immediate future one need not rely too much on these intrinsic defects of the theory. A much more important limiting factor is to be found in the fact that it is far too sophisticated a theory to win any mass acceptance. Its appeal must remain limited to the super-cultivated, the sadly cynical men of the world who have become mere onlookers on the social scene. Among the academic economists there are unlikely to be many who would adopt so frankly impotent an attitude. They will not be satisfied simply to diagnose without taking an active part—even if it be mainly through the medium of theory—in fashioning the world. And the mass of people, especially after the last war, want intellectual leaders who have something positive to say to them. This school, therefore, can also be written off as of no lasting significance. It represents the swan-song of a small section of a generation with nothing more to contribute towards the solution of our problems.

## THE REFORMERS

The most numerous group among present-day economists consists precisely of those who wish to make such a positive contribution. Many of them are socialists of the more moderate variety and, therefore, both expect and hope that capitalism can sooner or later be transformed into a socialist order. But the more typical (though not necessarily now the most numerous) representatives of what have here been called the second school believe that capitalism should and can survive, provided that it is reformed. Those features which create instability and those which create intolerable conditions of misery or inequality must be removed. You have already seen something of the economic analysis on which their view is based. As far as instability is concerned, there has been a growing evolution of economic thinking in recent years in what is known as business-cycle theory. Its culmination is to be found in the last great work of Lord Keynes.

Since the appearance in 1936 of Keynes's *General Theory of Employment, Interest and Money* there has been published an extremely voluminous "Keynesian" literature, not only in Britain, but also in the United States

and many other countries, notably Scandinavia. In the United States, the best known member of this group (hardly a disciple of Keynes, since it is evident that he has independently evolved similar views) is Professor Alvin Hansen, a colleague of Schumpeter's at Harvard. Hansen is probably the most influential American protagonist of an economic attitude which in Great Britain is associated with the name of Keynes.

*Income—Spending and Investing*

A very brief summary of the views of this group, without attempting to be faithful to any one member of it, would run as follows. In the capitalist system the volume of employment depends on the business man's profit. But the profitability of enterprise depends on "effective demand," which in turn depends on the community's income. Income is partly consumed and partly invested; and this division of the total income stream is one of the most crucial aspects of our modern economy. How is it determined, and how does it change from time to time? The Keynesians argue that people's "propensity to consume" declines as income grows. That is to say, as income grows they consume more, but not proportionately more. Unless, therefore, investment, the other stream into which income flows, is adequate to take up the slack, the sum total of consumption and investment will not equal the volume of income from which we have started. This volume (which is also the same as effective demand) cannot therefore be maintained, and—what is more important—neither can employment.

*What Determines Rate of Investment?*

This extremely bare outline will perhaps show you enough of the theoretical skeleton round which so much current debate on national income, employment and investment is built. At this point, however, you find that the Keynesians have some very definite ideas about the way in which this very important relationship between income, employment and investment tends to develop in the course of time. Consumption, they have said, tends to lag behind economic growth. What about investment? Two things above all, Keynes claims, determine it: "The psychological attitude to liquidity and the psychological expectation of future yield from capital assets." The former, which is an index of people's attitude to the holding of money, is one of the determinants of the market rate of interest. By an elaborate analysis Keynes shows that the rate of interest is determined by monetary factors and that, owing to the existence of liquidity preference, it is unlikely to fall as much as may be necessary at times, particularly during a depression.

The marginal efficiency of capital is not unlike the classics' "rate of profit"; and like all the classical economists, including Marx, Keynes is inclined to the view that its long-term trend is downwards. A wealthy community, he

believes, "will have to discover much ampler opportunities for investment if the saving propensities of its wealthier members are to be compatible with the employment of its poorer members," since, owing to the already large accumulation of capital, "opportunities for further investment are less attractive." The vanishing investment opportunities of which Keynes, Hansen and others speak have at times been misunderstood. It is not so much that they believe that there are no opportunities for further expansion of output and for further increases in the standard of living. What distinguishes their theories is the belief that such opportunities as exist are not likely to provide that incentive of a substantial return upon invested capital which private enterprise needs if it is to be expected to take advantage of these opportunities.

*High Income and Full Employment*

The whole theory, taken together, claims to provide a comprehensive explanation of a number of puzzling economic phenomena. It claims to account for secular trends as well as for cyclical fluctuations. Above all, it is ideally suited to the needs of the reformer. The categories which it uses have brought about an important new development of statistical techniques; and these categories lead straight to purposeful public action. The stimulation of investment by monetary management, the financing, through budget deficits, of public investments of a type which private business is unlikely to undertake, social legislation designed to maintain and increase the consuming power of the masses, redistributive taxation for the same purpose—this is a formidable list of weapons in the arsenal of the protagonists of high national income and full employment. If to anyone nurtured in the late nineteenth-century tradition the world of these economists appears topsy-turvy, he must remember that their theories derive from one fundamental approach: they look at the economic system as a whole; they deal in aggregates (income, employment, consumption); they demonstrate their interrelation; and they also prove that a high level of one item is dependent upon the achievement of high levels in the others.

*Monopolies*

The powerful impetus which this way of looking at things gives to the advocate of government intervention is further reinforced by the new theory of monopoly which has been already mentioned. Old theories showing the divergence between the maximum of private profit and the maximum of public benefit which arises when monopolistic elements are present in the market have been greatly refined. Many economists have now a very elegant theoretical technique for proving that, in a monopoly, price doesn't necessarily fall to the lowest point compatible with maintenance of production, output doesn't necessarily expand to the maximum possible, and stability, so far from being strengthened, is undermined. The highly technical theoretical

works of the American theorist, Chamberlin, and the English disciple of Keynes, Joan Robinson, have spread widely a strong belief that the existence of some form of monopoly (which detailed studies have shown to be now the common form of business organization) makes it impossible for capitalism, unless it is very carefully controlled, to be compatible with the highest attainable level of common welfare.

*The Economist in War*

It is worth noting that as a result of these developments economists were better prepared to cope with the economic problems of the last war than they had been in 1914. One has only to read Keynes's account in his *Treatise on Money* of the way in which, in the First World War, the belligerent nations had to stumble upon a truly "virtuous" war finance to realize how far along the road we have come both in understanding the quality of a war economy and in mastering the problem of managing it. It is several centuries ago now that money was called "the sinews of war," and the financial aspect of the waging of war has always been most widely appreciated. But there can be no doubt that the United States and Great Britain, in the face of different problems and, therefore, in different ways, have waged this last war better on the financial front than any previous war.

*Inflation and Deflation*

To the economist must go a large share of the credit for having prepared the public mind to realize the dangers of inflation and for having contrived both simple and ingenious devices for preventing it, at any rate during the war. Price control was better thought out and administered both in Britain and in the United States than it was in the First World War; so was the extremely important and difficult relationship between wage and price policy. Those two bald statements can confidently be made, notwithstanding the frequent and often justified attacks against specific parts of the stabilization programme and its execution. We must, of course, remember that it was not until the First World War was over that the great test of successful financial—and other—control of the transition period came to the ex-belligerents. So, too, after the Second World War, the twin dangers of inflation and deflation are greater than they were, and the technique has still to be tested in new circumstances.

What is even more important, as far as wartime experience is concerned, economists were among the first to recognize the all-out mobilization of resources which the war would require. They had long been trained to look behind the monetary veil to the real facts of the economic process. So from the economists there came a steady pressure for the direct control of the distribution of resources to ensure the prior satisfaction of war needs and the equitable satisfaction of civilian wants. If the fumbling for the correct

methods of allocation of materials, of scheduling of production, or of consumer rationing did in the outcome lead to reasonably successful management, both in terms of practical results and popular support, it is in no small measure due to the recruitment of economists into government service.

In short, the war has greatly accelerated the tendency in economic thinking which was leading to increased preoccupation with the machinery of control. It has brought to the fore those economists who have long had a predilection for economic and social engineering; it has re-emphasized the value of statistical work; and it has led to a reaffirmation of the need for planning.

*Search for Compromise*

The upshot is an increasing belief in controlled capitalism containing a strong socialized sector, as the only possible alternative to full collectivism. There have been few attempts so far to weld all these theories into one body. An indication of what it might be was given a few years ago by an influential young English economist, James Meade, in *An Introduction to Economic Analysis and Policy*. In a more recent book by an American writer, Abba P. Lerner, significantly entitled *The Economics of Control*, an attempt is made to present a comprehensive system of an economy "controlled in the interest of the welfare of the population" which is at the same time free from the extremes of pure capitalism and pure socialism. In itself such an attempt at compromise is by no means novel in the political sphere. Its significance lies in the fact that it derives from highly technical discussions of problems in pure economic theory.

Those who have long suspected economists of being at heart meddlers, interventionists, collectivists and, in general, dictatorially minded ("scratch a planner and you find a dictator") will see in this development the supreme proof of their fears. Give the economist enough rope, they will say, and he'll hang, not himself, but all honest business men. Give him the excuse of war, and he'll come out in his true colours as a bureaucrat, and try to rivet a system of permanent government control on to our economic life.

## THE SOCIALISTS

It is undeniable that many economists regard these new developments of theory and technique as powerful means for eventually achieving a democratic socialist economy. It is not necessary to recapitulate here the broad outline of socialist doctrine as such: its general nature is sufficiently well known. Theoretically and historically it is the antithesis of the views of the extreme *laissez-faire*. But it has the same intellectual ancestry—the ideals of liberty, equality and fraternity of the French Revolution—and socialists have always claimed that they were out to complete the reforms begun by the great liberal thinkers. In its most consistent and comprehensive form—the

Marxian—socialism has produced an analysis of the capitalist system which is a unique blend of a history and forecast of capitalist development with a considerable literature of critical analysis of orthodox capitalist theory.

*Marxian Viewpoint*

Capitalism, such socialists maintain, bears within it the seeds of its own destruction, in the sense that it creates progressively more intolerable conditions for the mass of people. Not only is it a system of exploitation, but in the course of its development it produces more and more acute conflicts. Crises, wars and revolutions are the most extreme manifestations of these conflicts and, through them, the contradictions of the capitalist system are at last forcibly resolved. The system of private property in the means of production gives way to one in which these means are owned by the community as a whole. A planned system of production, distribution and consumption ideally replaces the market economy.

New features have been added to this theory during the last few decades. Socialists, too, have studied the significance of the growth of monopoly. To the moderate ones it has emphasized the shortcomings of capitalism, and, at the same time, has appeared to provide new techniques for making the transition to socialism easier. The Marxian theorists of socialism, however, have traced the effects of increasing monopolization through the growth of modern finance capital to an analysis of the uneven development of different countries, to imperialism and finally to war. This part of the theory, which derives from Lenin, has found its way into a great deal of current economic thought and much of it is accepted by many thinkers who do not share the general socialist views of its protagonists. Its significance lies in the fact that it is the only theory which deliberately attempts to provide a link between economic analysis and current political developments.

## THE ECONOMICS OF TOMORROW

For good or ill, it seems likely that there are only two schools of thought which will influence the present generation of economists: (1) one or other variant of socialism and (2) the belief in the possibility and efficacy of a controlled system of capitalism. Extreme individualism seems a lost cause; so must of necessity be any negative, fatalistic view. Fascism has never had any following among the academic economists whom we are here discussing; and since the war it has largely been driven even from the underworld of quack theory in which it once lurked. As for the two which are thus left (and let it be emphasized again that we are considering here the views of what might be called the professional economic thinkers), it is more than likely that these will exist and develop side by side for some time to come. This is not to say that socialists will abandon their hope expectation

and striving; nor that those who are willing to concede that capitalism may have to be controlled in some respects, but are reluctant to see it eliminated altogether, will give up their opposition to collectivism. However, it is reasonably certain that we may expect a fairly variegated pattern of thought to continue for a considerable time.

In countries where the objective economic and political conditions do not call the continuance of all, or a large part, of capitalism in doubt in the near future (as, for example, certainly the U.S.A. and, in a measure, Great Britain) these economists are bound to find a fertile field for their activities. But there are countries (for example, in Central and South-Eastern Europe) in which one or other variant of collectivism is either already established or an inevitably early development. The war showed that there could be goodwill and co-operation between communities having different economic and political structures, and there are many world problems of peacetime in which similar practical economic co-operation among the United Nations, in spite of variations in their individual circumstances and outlook, would be of immeasurable benefit to mankind. It remains to be seen whether a serviceable alliance of democratic thinkers can emerge from the increasing habit of conference and association or whether time will tend to harden economic divisions and align the nations into opposing camps.

## *Test Yourself*

1. Summarize briefly the argument put forward by those modern economists who believe that capitalism can and should survive.
2. Say what you think constitutes the fundamental approach of the Keynesian economists to the problems of income, employment, and consumption; and show briefly how this view is arrived at and why Keynesians believe that unfettered private enterprise cannot solve the problem alone.

*Answers will be found at the end of the book.*

# GUIDE TO FURTHER STUDY

IT has been argued in certain chapters of this book that traditional economics fails to come to grips with the most important questions which the science should help us to answer. However, this contention is by no means generally accepted among economists, and the great majority of books on economics being written today are still on traditional lines, or else contain only a sprinkling of modern ideas. That dissatisfaction with traditional economics (or "classical" economics, as it is usually called) is increasing among economists there can be no doubt, but this change in the climate of expert opinion is not yet reflected in the books on economics that are available. Of course, the writing and publishing of books takes time, and as the late Lord Keynes's *General Theory of Employment, Interest and Money*, which marks the first break with traditional economics in learned circles, was not published until 1936, and as, after 1939, most economists were caught up in the war effort, it may be too soon yet to look for published evidence of a new approach to the subject.

Moreover, the task ahead of economists, on this modern view of the subject, is gigantic. An outline of what needs to be done may be found in Joan Robinson's *Essay on Marxian Economics*, Chapter XI. The economist will have to ascertain, and then study, the facts, past and present, of technique, of population, of social, political and industrial organization, and of geography in relation to economics more realistically and in much greater detail than heretofore. Modern theory no longer allows him to suppose that he can save himself this trouble, as traditional theory did.

## THE MATERIALS FOR ECONOMIC STUDY

The available facts about the economic structure of society are to be found, to a large extent, (1) in the files and archives of government departments and corporations and (2) in the files and accounts of private businesses. The gathering of this material—for economic, social, geographical and geological surveys—is expensive and very difficult to arrange without the co-operation of the public and private interests concerned; and the study of factual economics must therefore depend very largely on this goodwill, as well as on the financial support of both government and industry.

Under governments opposed to, or even merely lukewarm towards, social progress the financial and practical, as well as moral, support available for economics and the other social sciences would in all probability be very greatly diminished. Indeed the secretive and hostile attitude towards these sciences which is natural to private enterprise might even be powerfully reinforced. Even more than other branches of science, economics depends for its development on favourable social conditions.

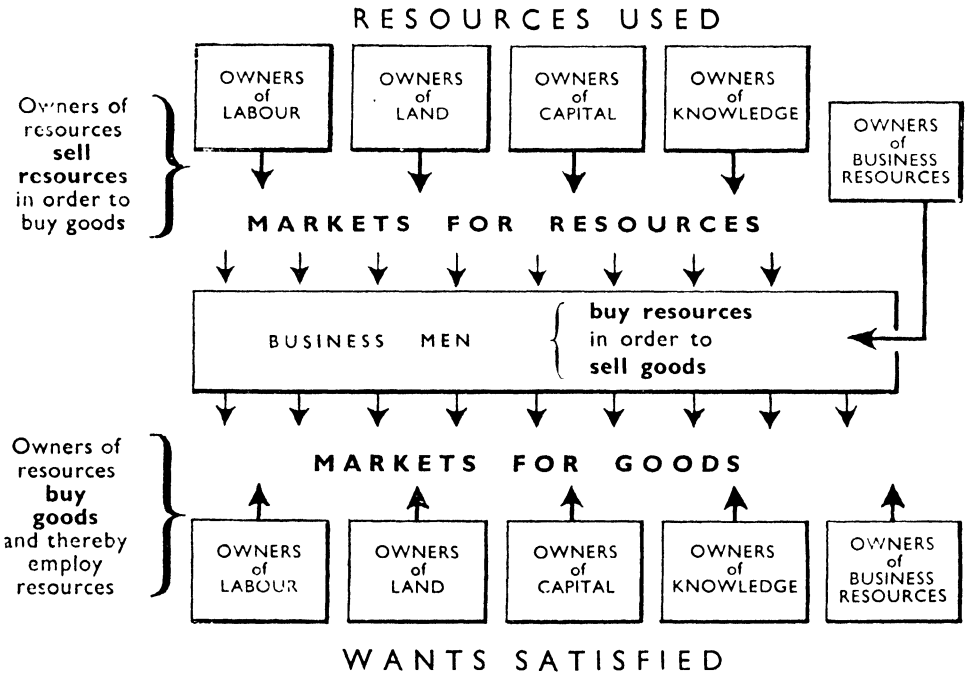
An attempt has been made in this book to show the ordinary reader, not only what traditional economics teaches, but also why there is a growing impatience with that kind of economics among students of the subject.

However, readers who wish to follow up the study of the traditional sort

of market economics (see Chapters III and VI) will find no lack of books both of an elementary and of a more advanced character. Thus, Alfred Marshall, *Economics of Industry*; H. D. Henderson, *Supply and Demand*; F. Benham, *Economics*; A. C. Pigou, *Income* are all written for beginners. A. K. Cairncross, *Introduction to Economics*; J. E. Meade, *Economic Analysis and Policy*; and G. J. Stigler, *Theory of Price* are slightly more advanced, but not hard to go on to after some preliminary study. The first two contain some discussion of the modern theory of employment.

### THE MARKET SYSTEM

In the standard books on economics the economic system is generally examined through the workings of what is called the market system. The general "set-up" of this market system can perhaps be most clearly discerned from the diagram below.




When the market system is examined (i) from the point of view of consumers, the theory that emerges is the theory of Demand; (ii) from the point of view of firms, the theory of Production emerges; and, finally (iii) from the point of view of the owners of the broad groups of productive resources, Land, Labour, Capital and Management, we get the theory of Distribution. Thus, in terms of our diagram, the procedure usually is to start from the bottom of the diagram and move upwards.

In each of the component parts of the market system traditional economics seeks to find under theoretically given conditions, a position of equilibrium. To reach such a position, of course, certain simplified assumptions must be

made concerning the state of competition, the amount of resources in existence and in use, and so on. The various forces which influence the market situation in any of its sectors are usually shown as they act on prices and are acted on by prices, either from the side of demand or from the side of supply. The whole picture of price-formation obtained in this way is called the Theory of Value and thus includes the three departments referred to—the theories of Demand, Production and Distribution.

### THE THEORY OF VALUE

The detailed argument of the Theory of Value leads towards the discovery of a supposed underlying unity, a pattern of the orderly balancing of supply and demand in all the diverse manifestations and divisions of the apparently unregulated and chaotic private-enterprise system. Thus, the equilibrium conditions in the various sectors of the market system are arrived at by making the assumption that the consumer, the business man, and the owner of hired productive resources all want to maximize either their "satisfactions" or their money incomes. Given this kind of assumption and a few general "laws" derived from experience (e.g. the *Law of Diminishing Utility* in the theory of Demand and the *Law of Diminishing Returns* in the theory of Production), it is possible to find the equilibrium conditions in every segment of the market system, while making various assumptions concerning the extent of competition in the markets.

As was explained in Chapter VI, the contents of our traditional textbooks can and do run in terms of abstract reasoning about a few general facts and features of the market-and-price system only because the basis of the theory is that the general working of the market system, *if allowed to work properly*, tends to be ideal. It is, therefore, thought to be unnecessary to attempt to take a more detailed view of resource-utilization beyond seeing that the markets are allowed to work properly. Where the market equilibrium does not lead to the best possible result, some interference with the private-enterprise system is warranted, even on the traditional theory. That department of traditional economics which is concerned with seeing what can be done to make the market system work as it is thought it should is called the Economics of Welfare. The main contribution in this field has been Professor A. C. Pigou's *Economics of Welfare*. There is a good account of his theory in Meade: *Economic Analysis and Policy*.

### MONEY, TRADE CYCLE AND UNEMPLOYMENT

The Theory of Money used to be separated from the Theory of Value and the Economics of Welfare in traditional economics. Money, while historically of great importance as a social device making modern economy on the basis of division of labour possible, was thought nevertheless to be fundamentally unimportant once in general use—a mere "veil." It was only when money had a distorting effect on the "normal" workings of the price mechanism that it was thought to have importance.

Together with the problems of the Trade Cycle and Unemployment, it

was thought in the main to belong to the pathology of the economic system.

Keynes's theory was originally thought of as not affecting the basic validity of traditional economics once full employment had been attained, and it was natural that his *Theory of Unemployment, Interest and Money* should be classed as a contribution to the Theory of Money and to Trade Cycle theory. The books in the following list may be recommended as works which provide clear accounts of this point of view: E. V. Morgan, *The Conquest of Unemployment* (suitable for beginners). J. E. Meade, (i) *Economic Analysis and Policy*, (ii) *The Economic Basis of a Durable Peace*, (iii) *Planning and the Price Mechanism*; R. F. Harrod, *International Economics* (2nd Edition) (all slightly more advanced). Joan Robinson's *Full Employment* (W.E.A. Study Outline) and her *Introduction to the Theory of Employment* are suitable for beginners interested in Keynesian economics.

### THE ECONOMICS OF TOMORROW

The pathbreaking books extending the original Keynesian analysis to more fundamental problems are: Joan Robinson, *Essays in the Theory of Employment* and *Essay on Marxian Economics*; and M. Kalecki, *Studies in Economic Dynamics*. But these are suitable for advanced readers only.

In the hands of such writers the whole structure of economic theory is being changed. They claim that the traditional Theory of Value and the "Economics of Welfare" are entirely unreal concepts, with no relevance to the problems of the world as we know it today. And they seek to substitute for it at the centre of economic thought a unified theory of economic development, employment and money. At the same time, on this view, economic theory as a whole requires, it is held, to be unified with the other social sciences—History, Politics, Psychology, and so on—if it is to throw any light on the real course of economic events. For further reading see: J. G. Crowther, *The Social Relations of Science*; B. Farrington, *Science and Politics in the Ancient World*; and M. H. Dobb, *Studies in the Development of Capitalism* (all rather advanced).

### RESOURCE-UTILIZATION

Post-Keynesian economics (see Chapters VII and VIII) is in its earliest infancy. But the theory is being developed that the urgent task of economists is to work out, in collaboration with others, proper guiding principles for sensible systems of resource-utilization.

The following books are recommended as an introduction: Frank Verulam, *Production for the People*; F. le gros Clark, *Feeding the Human Family* and *Science Plans for the World Larder*; M. H. Dobb, *Soviet Economic Development since 1917*.

# ANSWERS TO "TEST YOURSELF"

## CHAPTER I

1. The different extent to which science is applied in economic life. This reveals itself in three ways. First, in knowledge about the most effective ways of doing things, whether it be breeding plants, or controlling diseases, or preserving foods. Secondly, in the type of equipment used; poor countries are deficient in capital, and make little use of mechanical power. Finally, in faulty organization.

2. The principal reason is the unequal distribution of property, a source of inequality which passes cumulatively from generation to generation. The fact that two-thirds of private property belongs to 2 per cent of the population gives this 2 per cent, without further effort, 20 per cent of the national income, over and above anything that the recipients may work for personally. The unequal distribution of property also promotes inequality of opportunity, both educational and economic, which, in turn, reinforces the original inequality.

3. The latest estimates are pre-war. In 1937, people earning less than £5 a week received in direct benefits from the state slightly more than they paid in taxation. The effect of redistribution was thus to give them all other government services free, plus a small cash benefit. Further redistribution is possible but would not add much to average incomes of the working classes because the number of rich people is not large.

4. Before the Second World War Britain was saving about 5 per cent of the national income, after making allowance for replacing worn-out capital. This is much less than is usual in countries that are making rapid progress in increasing the standard of living. Since the war investment has been greater. In 1947 it was 14 per cent of the national income, but more than half this was financed abroad, or by selling foreign assets. The need for remaking British capital equipment justifies a high rather than a low figure.

5. We are wasteful in different senses. Given our objectives, we would spend differently to attain them if we had more information about the different ways of spending that are available. Secondly, given more information, we should have different objectives. And thirdly, we often spend wastefully in the sense of doing things we do not really want to do, but feel we must do because of social conventions.

## CHAPTER II

1. All scarce resources used in the productive process are "factors of production." Logically, there are as many factors as there are varieties of resources, but they are usually grouped under four categories: Land, Labour, Capital, and Knowledge.

2. The inequality of land per head of population as between Australia and Japan is a good example because it is of great practical importance in those countries, on account of their being comparatively near to one another. Australian policy has been for a "white Australia." The overcrowded and rapidly growing populations of Asia, on the other hand, are bound to be land-hungry. There are three possible courses of action: (1) try to keep things as they are and risk international friction; (2) allow freer migration (which seems politically hard to arrange); and (3) supply capital and knowledge free or against nominal payment to overcrowded countries. This may be the easiest course.

3. Far too little is known in any detail about the true relationship between the scale of production and true economic efficiency. However, the spontaneous growth and spread of large-scale production in the private-enterprise system and the adoption of it, even in agriculture, in planned economies, both support the view of the champions of mass-production. Far too little is known, too, about the important question: do people, on the whole, feel happier working in large or in small production units? There is, unfortunately, no standard factual survey of this

question in the literature of economics.

4. There has been "full employment" in Great Britain for some time now, but it is generally agreed that, even without increased effort on the part of working people, output might be considerably larger. Redeployment of labour, reorganization of management methods, the application of more science to industry have been tried in various places and industries with striking results. Sir Henry Tizard, head of the British Government's Committee on Industrial Productivity, has stated publicly that a 50 per cent increase in output might be attained within two years.

CHAPTER III

1. Difference in the incomes of individuals may be due to differences in (1) intensity of work; (2) skill and efficiency; (3) special talents; (4) costs of training; (5) educational and social opportunities; and (6) ownership of wealth.

3. (a) This is quite a likely case for people who have fixed money outgoings to meet on account of (1) family or other obligations; or (2) strongly established consumption needs. The amount of extra work such people would be prepared to do would also depend on (i) the amount of the rise in taxes; and (ii) the individual's attitude to putting in extra hours.

(b) This would make those people prepared to work harder who have a fairly strong desire for more goods than they can buy with their actual earnings, but for whom this is just balanced by their dislike of doing additional work at existing tax rates.

4. Part of the answer to this question depends on whether one considers that the actual distribution of incomes is right or not. If it is not, then there is a clear case for price-discrimination (that is, the charging of different prices for the same thing). Even apart from this, there may be a case for price-discrimination where the provision of a desirable service is impossible without it. For example, a country doctor's practice or the supply of electricity to remote areas may require such a system of charging, if they are to be made possible at all.

CHAPTER IV

1. From an economic point of view, very little. Under favourable geographical conditions, members of a subsistence economy may have enough to eat and wear and may enjoy considerable leisure. But so long as each family tries directly to satisfy all its own needs, the range of goods and services which it can produce must inevitably be narrow. Under unfavourable geographical conditions, the crude methods used in subsistence economies mean that men work hard for a very low standard of living and, in the absence of trade, go in constant fear of famine.

2. The existence of people who, although they do not live on either rents or tribute, are not engaged in agriculture, fishing or hunting. For craftsmen or traders obviously cannot live by consuming what they themselves produce, and their existence implies that the exchange of their goods and services for foodstuffs is carried on.

3. The major advantage of the division of labour is that it leads to an increase in output per unit of effort, since, by specialization men can obtain higher degrees of skill and make greater use of favourable circumstances, such as an especially fertile soil or deposits of minerals, that exist in their locality. From the point of view of society as a whole the division of labour makes possible the production of a much wider range of goods and services, and hence raises the standard of living. To the individual, the major disadvantage of the division of labour is that it tends to increase his insecurity in so far as he may find no market for the goods or services which he has to offer. From the point of view of society, an increase in the division of labour may be disadvantageous in so far as it may lead to a greater increase in social inequality.

4. Since it is biologically possible for population to grow as rapidly as, if not more rapidly than, the area of available land or the amount of available equipment, there is always danger that an increase in national income will be used to keep more people alive at the old standard of living rather than to make an effort to raise that standard.

Under normal conditions social progress is easier when the population is growing only slowly.

CHAPTER V

1. (i) Private ownership of the means of production, and production for profit.
(ii) Tendency towards large-scale corporate organization and towards combination among corporations.
(iii) Tendency towards trade-union organization among workers.

2. It is possible to think that the Americans' extraordinary faith in the private-enterprise system is due to the greater independence of mind or character of her people, or to the fact that they may seem to be better than others in running such a system. But it is perhaps more likely that their attitude is due to the workings of historical circumstances. Modern America was made by capitalism, in extraordinary circumstances, and the exhilaration of that experience has become the basis of a national tradition.

3. (a) (i) In so far as the private-enterprise system makes for personal independence and initiative it has, no doubt, great attractions for those people who can rise to independent positions in the system. Also, in so far as the favour of the consumer is the condition of making profits, the system forces even the most powerful individual capitalists to pay some attention to the desires of the ordinary consumer, the man in the street. (ii) However, production for profit under the private-enterprise system puts a premium on a selfish type of materialistic outlook. Man's work is reduced to the status of a commodity which is bought and sold, and the brotherhood of man is sacrificed to inter-national, inter-class and individual struggles. Apart from all this, the system appears to contain grave internal defects simply as a wealth-creating machine, and its failings are held by many people to threaten the very fabric of society.

(b) (i) In practice, the alternative to capitalism is socialism, since a return to primitive types of economy is hardly thinkable. There are dangers of bureaucracy under a socialist system, but once a planned economy is in working order, it should, on the face of it, provide at least as much opportunity for initiative for the average person as the capitalist system does. It is possible to have nightmare visions of the tyrannies that might develop in centrally planned economies, but since the whole purpose of socialist planned economics is to provide more abundant conditions of living for ordinary people by ending the exploitation of man by man and by releasing his full creative potentialities, it is at any rate clear that tyranny would not be in the nature of socialist economic systems. It would be a perversion of them.

(ii) The social and moral atmosphere of a socialist economy would, it seems, be bound to be much healthier than it is in the capitalist world. It has been suggested by liberal economists that a socialist economy would necessarily lead to a decline in productive efficiency, and that it would be more likely to lead to international and class struggles than a capitalist system in proper working order. But to many people it seems to become clearer as each day passes that the only hope of ending poverty, social injustice and war in the world lies in the widespread adoption of socialism—together with an extension of the ideas implicit in the democratic way of life.

CHAPTER VI

1. Because, according to the traditional picture of how the private-enterprise system works, a *general* description of how the market-and-price mechanisms function is sufficient to explain the most important aspects of resource-utilization in capitalist economies.

2. The degree of mobility of resources and goods determines the area within which the market-and-price mechanisms can do their work. For this reason, traditional economics condemns all "artificial" restrictions on mobility of goods or resources, such as tariffs, or control of movements of capital or of people.

3. "Cost," for the housewife or the business man, is simply money expense. But the economist goes more deeply into the matter. The cost of goods and the cost of resources are traced by him

to their ultimate source, which is the scarcity of resources in relation to needs. It is claimed for the private-enterprise system that the free market-mechanism leads, in general, to a system of prices which afford a precise and sensitive indication of social costs in this fundamental sense. But the modern economist would question this. (See also Study Guide.)

4. The business man is the most essential agent and organizer of resource-utilization according to this picture. He is forced, by competition, to pay the owners of resources the exact social value of the contribution to production for which they are responsible, and to sell at prices such that normal profits are, at the most, no more than a measure of the social value of his, the business man's, activity. Further, his search for profit is thought to lead to the utilization of all serviceable scientific and technical advances.

### CHAPTER VII

1. The answer to this question might fall under one or more of the following heads: better utilization of labour or of capital; better management; better industrial relations.

2. The comparatively high spending of the U.S.S.R. on science can be understood (in spite of the fact that for historical reasons the standard of living is still lower there than in the other three countries named) when we realize that the capitalist system can normally make only very restricted use of science, whereas a socialist economy has every reason to develop it to the full. In very many capitalist countries, much expenditure on science tends to be regarded as a luxury, except in relation to war, so that one would expect that the richer a capitalist country, the higher the proportion of its national income devoted to science would be. This would explain the position of the U.S.A., but not that of Great Britain, since she has a higher standard of living than had Germany. In fact, historical factors must also be considered, such as the traditional scarcity of labour and the democratic educational outlook of the U.S.A., and the intense efforts made by German capitalism to offset the earlier start of modern industrial techniques on a large scale in Britain.

3. In modern conditions competition is commonly associated with technical backwardness, because the ability to finance exclusive experiments in technique is likely to be lacking in smallish firms. Nor is it possible to get over this disability by co-operative or state-aided research, since the only point of doing research in the capitalist business-world of so-called free competition is to steal a march on someone else.

### CHAPTER VIII

1. In the private-enterprise economy the level of employment depends on the level of spending, and the level of spending need never be high enough to cause all willing workers to be employed.

2. A superficial explanation can be given in terms of differences in land, capital and knowledge per head of workers, but the real problem is to find out how such differences arose in land, capital and knowledge per head of workers. This fundamental explanation must be made in historical terms.

3. Economic Geography, Military and Economic History, Political Theory and History, Statistics, Engineering Economics. Further, a wide knowledge of industrial techniques and some idea of the trend of science in relation to these techniques.

4. On the modern view of economics, capitalism breeds war between rival capitalisms. Moreover, when the supremacy of world capitalism is seriously challenged by the growth of socialism, capitalism has shown a tendency to degenerate into aggressive military fascism. On the other hand, the class struggles of subject peoples for freedom from imperial rule tend to give rise to civil wars and colonial wars. So long as the social and economic roots of war have not been removed, the risk of general conflagration remains.

### CHAPTER IX

1. *For*: (i) greater prosperity for most people, (ii) social justice, (iii) elimination of international and class conflicts, (iv) replacement of chaos by order.

*Against*: (i) inevitability of muddle and bureaucracy, (ii) sapping of individual initiative, (iii) loss of freedom, (iv) danger of war (so long as planning is national instead of international).

Planning is here taken to mean thoroughgoing planning.

2. Private property in articles of consumption, whether perishable or durable is a right of everyone guaranteed by the law, and small-scale private ownership of the means of production is also legal, provided that it does not make use of wage-labour.

3. The truth seems to be that it is only in a socialist economy that a price-mechanism exists which really does do a socially useful job. The planning of costs and prices and their use as a collective incentive and, in addition, as a check on the fulfilment of plans, is an essential part of thoroughgoing socialist economic planning.

### CHAPTER X

1. See answers to question 3 of Chapter V and question 1 of Chapter IX, and then consider your own personal attitude to the matter in relation to these.

2. The traditional economists' answer is: make trade free; free the movement of capital and of people. This, he thinks, will lead to a resumption of the kind of progress that was witnessed in the Western World between 1850 and 1913. Many modern economists, however, regard the 1850-1913 period of *laissez-faire* capitalism as an abnormal episode made possible by special circumstances which are not likely to recur. What we now need, they argue, are planned methods of trade, planned migration and planned world investment, guided by a realistic detailed survey of world needs and world resources.

### CHAPTER XI

1. The answer to this question is probably best put in comparative terms. How does interest in political economy compare with interest in other matters? How much does it influence voting compared with other matters? There seems to be little published information on these questions, although people familiar with politics should know the answer. Also, a comparison might be made with conditions in foreign countries.

2. If you put, say, your socialist convictions first, you may prefer to go to Australia or New Zealand, where you would remain within the Commonwealth and be surrounded by familiar ways of life. You may even want to go to Eastern Europe or the U.S.S.R., where, however, standards of life may be lower and the way of life strange at first. If your main interest were in the standard of living you would, in all probability, go to the U.S.A. or one of the Dominions. But you may wish to turn your back on the standards and political conflict of modern highly industrialized societies. For a time, at least, you might be able to cut yourself off from them in simpler societies in South America, the Pacific islands or on the African continent.

### CHAPTER XII

1. (a) It has every claim to be so regarded, in so far as it is based on the employment of the usual scientific procedure of observation, reasoning and verification.

(b) The main difficulties are: (i) the difficulty of making experiments; (ii) the complexity and ever-changing character of the material of study; (iii) the difficulty of viewing the subject-matter dispassionately.

2. (i) The prospect of earnings; (ii) the prospect of advancement; (iii) the love of the work; (iv) pride or rivalry in work; (v) feeling of social duty; (vi) desire for approval; (vii) fear of the sack.

These are some of the possible and more obvious inducements.

### CHAPTER XIII

1. Increasing complexity of economic conditions as a community passes from a subsistence to an exchange, and probably later still to a capitalist economy stimulates philosophers and scientists to inquire how the system works as a whole. Once the division of labour begins to operate, not only does the organization of production, distribution and exchange become increas-

ingly complicated, but it becomes increasingly difficult for the observer to discern where any operation or activity fits into the scheme of things. And so the scientists' attempts to explain how the system works have tended to become more and more abstract and ever more elaborate.

2. Because, of course, the writers who have tried to show how the system they are explaining came into being have thereby done a great deal to make acceptable the economic theory they have propounded. Unless such a theory can be shown to have relevance to the facts of economic development as revealed by a community's history it risks being regarded as a mere exercise in speculative ingenuity.

### CHAPTER XIV

1. The out and out believers in free-enterprise capitalism contend, much as Adam Smith did in *The Wealth of Nations*, that each individual must be the best judge of what he wants and how he wants it. In economic terms this means that he must have unlimited choice among the ends to which limited economic resources can be devoted. Capitalism provides the best means, through the operation of markets and the price system, of gathering these individual choices into a scheme of production which ensures the greatest happiness of the greatest number. Provided business men are allowed to follow their own interests, the impersonal workings of the market will see to it that the business men use resources to give the community the greatest value from them. The conditions for the success of the system, however, are completely free play for private enterprise, entirely unrestricted and unregulated by state intervention, and a return to the rigours of free competition in the open market.

2. Keynesian economists regard income, employment and consumption, not as three separate problems for which independent solutions must be found, but as inter-related parts or aspects of a single economic problem.

The successful functioning of capitalism, they say, and therefore the volume of employment it can provide, depends, on its own showing, upon the profitability of enterprise. This, however, depends upon effective demand and it in turn upon the income the community can count on having to spend. Therefore, they argue, you cannot have a high level of employment with low income and inadequate consumption. But neither can you have a continuing high standard of living unless you have, also, an adequate rate of capital investment; and as investment must also come out of the total volume of income, the central problem becomes one of determining what proportion of the volume of income this rate of investment ought to be. The problem is further complicated by what the Keynesians contend is a fact, namely, that as income grows the propensity to consume tends to decline, and unless investment can be encouraged to increase in proportion to that decline the relationship between income, consumption and employment will get out of balance. Since the capitalist system, they go on to argue, needs substantial returns upon invested capital to induce it to function, and since the opportunities for such returns are progressively decreasing, that system by itself is likely to become less and less able to provide a high level of employment without the revitalizing stimulus of public intervention in the form of monetary management, fiscal adjustment and state investment.

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