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GROUNDWORK OF ECONOMICS

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PREFACE TO THE SIXTH EDITION

THIS book, well known to students at home and overseas for many years, provides a sound introduction to the study of Economics, especially for those gaining their first ideas of the subject. The matter is presented in such a manner that the volume will make a ready appeal to the ordinary reader anxious to obtain a knowledge of current economic problems. It forms, moreover, a comprehensive basic textbook for candidates for the General Certificate of Education (Ordinary Level) and other examinations of similar standard.

In the fourth edition the text was extensively rewritten, divided into sections, and completely reset in modern style, and new matters dealt with included the Marketing of Consumer Goods, the Organisation of Business, and Money and Capital Markets, Foreign Exchange Control, and the Nationalisation of Industry.

In this edition the main body of the text remains substantially unchanged although the latest available information has been included, but in order to bring the work into line with the new requirements of the syllabus for the London General Certificate of Education (Ordinary Level), new sections have been inserted in Chapters I, VI, and VIII, covering such topics as the size, the age, and sex distribution, of the population, the location of industry, the occupational distribution of the working population, and a descriptive account of the most important British industries.

An outline sketch of the main occupational changes that have taken place since the early nineteenth century is also included.

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GROUNDWORK OF ECONOMICS

CHAPTER I

INTRODUCTORY: THE SUBSTANCE AND SCOPE OF ECONOMICS

1. Introduction

Wants, efforts, satisfactions, comprise the circle of life's activities, a circle in which we move either successfully or unsuccessfully according to the extent of our self-interest, our interest in others, our education, our experience, our judgment, our ability, our courage, our opportunities. Economics deals with the actual conditions of this circle; it examines our activities in the business of life, not as they ought to be, or as they would be under ideal conditions in a modern Utopia or Arcadia, but as they are—a mixture of meanness and of nobility, of sorrow and of joy.

Unfortunately, our wants cannot always be satisfied because of the relative scarcity of the means with which to satisfy them. This relative scarcity of means, or resources, leads us to choice-making, the foundation of most of our economic activity. If all goods and services were in superabundance, the problems of choice would not arise, and economic activity as we know it would largely cease. All the ideas and schemes brought forward for the economic improvement of society, *e.g.* co-operation, nationalisation, etc., have for their main object, the overcoming of scarcity.

It is true, of course, that technical science has modified the scarcity of many means of satisfaction, at least, in particular areas, but if we view the world as a whole the means of satisfying most human wants are likely to be relatively scarce for a very long time to come.

We must always remember that economics deals with man as a social being, as a member of society, as an individual in

a "herd" with the "herd instinct," as a gregarious animal living in communities. He may, for instance, be one of thousands of workers in a factory, or one of many vendors in a town market, or one of a large number of speculative buyers in an organised produce market, or one of the board of directors of a powerful joint stock company, or one of the partners of a prosperous private business.

Obviously, therefore, we should be particularly cautious in considering the implication of the principal terms that are used in economics, always bearing in mind that their economic meanings do not necessarily coincide with their popular meanings. The term "wealth," for example, leads us to think of such terms as "money," "capital," "property," "income," "stocks and shares," "the national dividend," and probably many others; the term "market" immediately reminds us of "buyers," "sellers," "middlemen," "speculators," "wholesalers," "retailers," "consumers," "producers," "freight," "transport," "mass production," "competition," "monopoly," "rings," "combines," "trusts"; the term "wants" brings thoughts about "labour," "the workers," "the management."

And each of these in turn leads to further trains of thought, to further associations of ideas, as instances of which we may take two of the most important of the preceding—"income" and "property." "Income" suggests at once not only such terms as "earnings," "wages," "salary," "fees," "profits," "rent," "interest" and "dividend," but also the inseparable income tax and the problems of taxation. "Property" makes us think about inheritance and bequest, about great "fortunes," and about the inequality and accumulation of wealth, a train of thought which leads to the taxation of, and the income from, property.

Hence our subject matter appears to become considerably bigger; we begin to think that economics is in itself a "big business." But as we proceed it will be seen how our economic horizon gradually becomes not only wider and wider, but also more and more interesting, if, of course, we proceed cautiously, carefully considering the significance of the various terms and always remembering that the fundamentals are the wants of man and his efforts to satisfy these wants.

2. Population

Man is a member of society, and for that reason certain aspects of the population, its size, future trend, and age, and sex distribution, are of vital interest to the economist as changes in the size, and in the age and sex composition of a population, have a profound effect on the economic activities of the community.

We have no reliable information on the growth of the population of England before 1700, but it is highly probable that between the Norman Conquest and 1750 the rate of increase was very small; diseases due to insanitary conditions, impure water supplies, and to inadequate and improper feeding took a heavy toll of the population.

After 1750, however, the population began to increase with unprecedented rapidity, especially between 1780 and 1821, and the high rate of increase was maintained through the nineteenth century. Between 1901 and 1941, however, although the absolute size of the population was increasing, the percentage rate of increase was falling steadily as is indicated in the table below taken from the Report of the Royal Commission on Population published in 1947.

DATE	TOTAL POPULATION (in thousands)	INCREASE IN PREVIOUS TWENTY YEARS (in thousands)	INCREASE AS A PERCENTAGE OF POPULATION TWENTY YEARS BEFORE
1801	10,501	—	—
1821	14,092	3,591	34
1841	18,534	4,442	32
1861	23,128	4,594	25
1881	29,710	6,582	28
1901	37,000	7,290	25
1921	42,769	5,769	16
1941	46,605	3,836	9

The reasons for the rapid growth of the population after 1750 are controversial, but most authorities believe that the decline in the death rate had an effect much more marked than any increase in the birth rate. The agricultural changes

in the second half of the eighteenth century made fresh meat and milk available all the year round, and attention began to be given to preventive medicine, sanitation, and to pure water supplies. In 1848, public health became a concern of the Government, and during the second half of the century the rate of mortality gradually declined. This downward trend in the death rate became more marked after 1900 with advances in medicine and surgery.

It is probable, however, that there was some increase in the birth rate between 1770 and 1870. The development of canal and rail transport made it possible to move heavy building materials about the country, and with the greater supply of houses couples would tend to marry at an earlier age and have larger families. The factory system created a demand for child labour, and when children are largely self-supporting at an early age, and the general standard of living is low, parents have no vital economic motive to limit the number of their children.

3. The Falling Rate of Increase of Population

Between 1900 and the outbreak of the Second World War, the population of Britain continued to increase, but at a definitely diminishing rate, and statisticians began to predict the possibility of a stationary, and of even a declining population before the end of the century.

It is not difficult to think of various reasons to account for this change, so marked a contrast with the corresponding period of the previous century. The fundamental cause was the decline in the birth rate, and a large part of the absolute increase was due to the decline of the death rate, especially of the very young, and middle-aged persons.

The causes of the lower birth rate are too complex to be discussed in detail here, but some authorities believe that there has been a decline in human fertility since the mid-Victorian period. During the past hundred years the proportion of married persons to the total population has remained fairly constant although there has been some variation in the average age at which people married, and, other things being equal, a female who marries young is more likely to have a

large family than one who marries later in life. But, as with plants, human fertility does not remain constant in all conditions, and it is possible that in the more primitive conditions of the first half of the nineteenth century human fertility was higher than it is to-day. In round figures, in the period 1840 to 1850, the average number of children born in a family was six, but in the period 1920 to 1930 it had fallen to just over two.

Changes in the birth rate, however, are not due solely to changes in fertility. The voluntary factor is equally, if not more important. Probably some control of the birth rate has taken place in every phase of civilisation, but the effects were negligible, or at least very small, until the beginning of the present century. To-day, most married couples have a definite idea of the number of children they desire, and expect to rear. This raises grave social problems as it does not necessarily follow that a future generation will spring from the classes most socially desirable, either from a moral, or intellectual standpoint. The population problem, therefore, is closely related to many important present-day State activities—education, child welfare and nutrition, housing, family endowment, and so forth.

4. Age and Sex Distribution

The population problem is not exhausted by the question of changes in size. The population of this country is composed of two classes, male and female, each of which can be divided into a large number of different age groups. It is possible, therefore, to have two populations of equal size, but fundamentally different in all other respects.

The proportion of males to females is not a matter of indifference in various ways. A century ago there was a considerable excess of females in the age group 15 to 49, the marriage and child-bearing age group, due to emigration and higher rate of male mortality. In the last twenty or thirty years this excess has been greatly reduced, and it is believed probable that the position will be gradually reversed, and that long before the end of the century there will be a slight excess

of males. When females are in excess there is a natural tendency for them to marry at an early age, a fact of importance for the natural birth rate.

More important than the sex ratio, however, is the age distribution of the population. In spite of scientific inventions and labour-saving devices, men and women, as a labour force, are still of supreme importance. In the welfare State the real goods and services expressed by the money paid out in pensions, family allowances, health services, education of young people, the maintenance of defence forces, and interest on the public debt must be provided by those sections of the population within the limits of the working age. The working age is an elastic term, but in most forms of productive employment productive capacity diminishes with age, so that, speaking broadly, in any welfare community, the older age groups are supported by the younger.

During the last sixty years very important changes have taken place in the age distribution of the population. In 1891, 75 per cent. of the population of Great Britain was under forty years of age. In 1947 it was estimated that the percentage had fallen to 5·8. During the same period it was estimated that the percentage of persons sixty years and over rose from 7 to 15. The serious point is that forces have been set in motion, that, if not checked, will tend to make matters gradually worse. During the above period the fall in the birth rate was lowering the percentages in the lower age groups; the lengthening of the average duration of life was increasing the numbers in the upper age groups.

A top-heavy population is a serious matter for a people with a huge national debt, and a complex and costly system of social services. The greater the bulge in the higher age groups and the heavier the burden of supporting the social services that must fall on the shoulders of the younger workers. If the distortion were carried beyond a certain point an intolerable position must follow.

Apart from the question of age distribution the absolute size of the population is a thorny problem. From the point of view of food supply there are probably too many people in these islands. Despite the attention now paid to agriculture

much of our food will probably always have to be imported. Before 1940 that was an easy matter, and we obtained our food on very easy terms. The situation is very different to-day, and is likely to become more difficult in the future.

On the other hand, from a manufacturing point of view there are definite advantages in a large population. Speaking broadly, with modern machine production, the average cost of producing goods diminishes as the output becomes larger ; indeed, many of the most economical methods of production are not profitable to use unless the output demanded is very large. A large population provides the necessary home market. Much of the success of American methods of mass production has been due to the huge American domestic market.

5. The Family

Man is not only a member of society, but he is also a member of many lesser associations as well, the most important of which is the family. The importance of the family as a political and ethical institution has always been recognised. Aristotle paid a high tribute to the family as a training ground in civic virtue, and, although Plato and certain Christian Fathers inclined to the view that family ties and affections tended to seduce the individual from his loyalty to the State, and to God, the majority of writers have seen in the family the true centre of moral and social life.

The institution of the family is the great preservative of the continuity and stability of society. Family ties, affections, and interests form a barrier against sudden and violent changes. That does not mean that the existence of the family renders changes all but impossible; the family itself changes from one generation to another; but it does mean that an institution naturally conservative gives a certain balance to society. We are concerned, however, only with the economic aspect of the family.

6. The Family, the Economic Unit

The family, rather than the individual, is the real economic unit of society. The family provides the necessary supplies of labour; its habits, tastes, and size govern the direction of

industrial activity. In every competitive industrial society which produces for a market, the consumer is the king, even though his demands can sometimes be modified by producers. A change in family tastes, and habits, or a change in its size, affects the demand for services and commodities.

In a Dictatorship the position is different; the demands of the consumer must be subordinate to the plan of the Dictator and even in this country, if all industries were nationalised, the consumer would lose some of his sovereignty,—production would probably be much more standardised than it has been in the past, but as long as our free political institutions are preserved, the demands of the family will be a strong influence in our economic life.

We need not travel back very far in history to find in the family a self-sufficient economic unit. There was a time when the family consumed only what it produced. In the course of time certain forms of production were specialised into independent productions for small local markets outside the family circle; but until the development of the railway, a very large part of the family needs was satisfied by home production. During the past hundred years many family activities, *e.g.*, laundering, baking, jam making, etc., have been specialised into separate occupations.

Changes in family habits affect production in many ways. There was a time when the family spent most of its leisure in the home, and spent the bulk of its income on matters connected with the home. The family now spends much of its leisure and surplus income outside the home, and this change has decreased the demand for many things connected with the home, and greatly increased the consumption of amusements, and recreations of various kinds, *e.g.*, the cinema, motoring, and the seaside holiday. As a result of changes in family habits, then, new occupations have arisen, and the demand for the products of certain industries has declined.

7. The Size of the Family

As has already been shown the size of the family has been a matter of grave public concern for many years. Throughout the Victorian era the large family was the normal unit of the working classes, and even among the middle classes the

large family was very common. By 1914, the large middle class family had almost disappeared, and since 1920 the small family has spread to most sections of the so-called working classes.

One of the important causes of this change in the size of the average family has been a deliberate limitation of the number of off-spring for various reasons. In the first half of the nineteenth century the employment of children in the factories and other forms of work was very common, so that children were more or less self-supporting at an early age. From a financial point of view, therefore, a large family was a matter of indifference to the parents. During the course of the century, however, Factory Legislation and Education Acts gradually excluded children from gainful employment. By 1914, children had to be fully maintained by their parents for a period much longer than was the case in the early nineteenth century; a large family, therefore, had become a crushing financial burden. Many young people, when they reached the age of marriage, would almost instinctively seek to escape the poverty of their parents by having a smaller family.

The same tendency was even stronger in the middle classes. In these classes it was not a question of poverty, but of maintaining a conventional standard of life. It was rarely possible to do this and provide a number of children with an expensive public school, and university education, or training for the learned professions.

Since 1914, especially, the habits of the so-called working classes have changed greatly. People have aimed at a higher standard of living; large sections have acquired motoring and holiday habits, and where income is limited such desires cannot be indulged in when the family is large.

Many people now wish their children to enjoy greater opportunities for advancement than they themselves had. They feel that they can make provision for one, and possibly for two children, but not for more. They desire their children to follow some occupation more attractive than their own. A large family often means that children remain in the same station of life as their parents.

Another, and to some extent independent factor, has been the lack of economic security from 1875 down to 1939. The struggle to keep one's job became intensified; unemployment was always round the corner, and economic insecurity is not fertile soil for enlarging the family, at least where married people have a sense of parental responsibility.

But perhaps the most important factor of all is the change that has taken place in the economic position of women. In Victorian days marriage was the main source of livelihood for the majority. Women of the poorer classes did find employment in the textile factories, in various forms of domestic service, and as shop assistants; but much of the work was menial, wages were low, and marriage was the main avenue of escape. Suitable employment for women of the lower middle classes, apart from some forms of teaching, was practically non-existent. Marriage was practically their sole career.

A century ago a married woman was restricted to the role of producer of children, and, in most cases, to that of a household drudge. To-day, women compete in almost every form of employment open to men, and large numbers of them continue their employment after marriage, either because of their professional interests, or because they wish to preserve their former standard of life. But whatever the reason for it may be, employment after marriage is incompatible, as a general rule, with unrestricted child-bearing.

Since 1914, and especially since 1939, the housing shortage has prevented large numbers of young married couples from having children. Few women want even one child unless they are in a home of their own. From the standpoint of population the housing shortage is the greatest social evil of the present day.

8. Some Consequences of a Falling Birth Rate

The fall in the size of the family is a matter of economic as well as of social significance. An expanding population may tend in some circumstances to keep down wages, but it increases the demand for the primary necessities of life,—foodstuffs, clothing and houses; it also tends to keep low the

average age of the population, and that means a strong demand for services and commodities used by children and young persons,—toys, certain articles of furniture and so forth.

Small families have the opposite effects. There is a smaller demand for the primary necessities, and as the average age of the population rises, a larger demand for goods and services consumed by older people.

A small family means that a smaller proportion of the family income need be expended on the first necessities of life; there is thus a larger surplus for the so-called luxuries; a smaller family means a larger demand for pianos, wireless sets, motors, etc.

This is an important economic fact. The smaller family means a change of demand from things for which demand is fairly stable, to things for which demand is very variable; many of the so-called luxuries pass in and out of fashion very easily, and in such trades the demand for labour is likely to be very irregular.

Some industries, especially those that cater for primary needs, like coal, the textiles, and iron and steel develop productive capacity, but a reduction in their size is a difficult matter as specialised capital and labour cannot be transferred without heavy loss. A blast furnace is useless except as a blast furnace. Cotton making is difficult to adapt to other forms of production. Similarly, a redundant miner is not easily turned into a bricklayer. These problems arising from surplus productive capacity were very serious ones during the inter-war years.

It is sometimes supposed that a declining population must mean less total unemployment, but that is not necessarily the case. Every individual is a consumer for many years before he competes for employment, and in many cases, for some years after his working life has ended. A reduction in the size of the population may reduce the amount of work demanded in a greater ratio than the number of workers.

9. Family Endowment

The remedy for the falling birth rate most widely advocated is family endowment, that is to say, special state assistance

towards the maintenance of the family. In some form or other, family endowment has long had a foothold in many European countries, and also in Australia, and New Zealand. In the past, the only direct assistance given by the State to the family in this country has been the income tax reliefs. In the year (1946), the State began to grant weekly allowances to the mother, on all children after the first one, and this direct grant is now supplemented by certain provisions of the new Education Act relating to free milk and dinners in schools, and by the abolition of fees at the Grammar Schools. Family endowment has long been a controversial subject. It has been argued that it is necessary to correct the downward trend of the birth rate; to ensure that every child shall be properly clothed and fed; and to make possible equal pay between men and women doing the same work.

On the other side it has been argued that family endowment must weaken the sense of responsibility in the parent, and that it will lead to a disproportionate increase in the least desirable elements of the population. Whether this is true or not, time alone will show.

10. The Geographical Distribution of the Population

So far, we have considered population in its aspects of size and structure; it now remains to consider its geographical distribution and its distribution between different occupations.

The population of Great Britain is very unequally distributed. Large areas, *e.g.* Westmoreland, Cumberland, the Southern Uplands, Central Wales, and north of a line going Glasgow to Aberdeen, are very thinly peopled. Outside of these areas, in the counties predominantly agricultural, the density of population is small. In England, the bulk of the population is concentrated in six relatively small industrial areas,—the greater London area; the Lancashire area, including a part of Cheshire and a small fragment of Derbyshire; the West Riding of Yorkshire; the North East coast, comprising the County of Durham, part of the North Riding of Yorkshire, and part of Northumberland; the Birmingham to Wolverhampton area, comprising parts of Staffordshire,

Warwickshire, and Worcestershire; and South Wales, comprising Glamorganshire, and parts of Monmouthshire, Brecknockshire, and Carmarthenshire.

In Scotland, the population is concentrated mainly in the basins of the Clyde, Forth, and Tay.

The above concentration of population is not accidental. It is explained by the fact that we are mainly an industrial people; hence, during the past hundred and fifty years the population has gradually become concentrated on the main sites of industry, that is, on and around the coalfields. Since 1875, and down to 1939, agriculture has been relatively neglected as we found it more profitable to import most of our food-stuffs in exchange for the products of our manufacturing industries.

In the interval between the world wars some slight redistribution of industry took place. The basic industries on which our industrial greatness was founded, coal, iron and steel, engineering, shipbuilding, and the textiles, were in a very depressed condition. On the other hand, new light industries, *e.g.* the motor car, electrical equipment trades, artificial silk, and chemicals, were expanding rapidly. These new industries did not always take root in the old centres for various reasons. The old industrial areas were highly rated ones, so that it was cheaper to develop new sites. The development of electricity as a source of power made it unnecessary for industry to be tied to the coalfields, and the new road motor transport allowed firms a wide range of settlement. Moreover, the policy of spreading industry was favoured by the Government for reasons of national security. The tendency that began with the Industrial Revolution to concentrate the population on the coalfields was thus slightly reversed, and for twenty years there was a definite drift of population from the north to the south, and from South Wales into England.

Since 1945, there has been a reversal of Government policy. The location of industry, and, in consequence, that of the population is now being deliberately planned by the Government. Briefly, the present policy is to limit the growth of the very large towns by building round them a ring of small

satellite towns. Also, instead of encouraging a drift of population from areas peculiarly 'liable to industrial depression, the Government is actively stimulating the growth of new industries in such districts.

Incidentally, the problem of shifting surplus population is an exceedingly difficult one. Single men can be induced to migrate with comparative ease, but it is otherwise with a married man and his family. Many conflicting interests must be considered and reconciled. It may be to the advantage of the father to move, but that advantage may be outweighed by the adverse effects of migration on the interests of the children.

11. Occupational Distribution of the People

Towards the end of 1950 the number of workers in civil employment was approximately 22,500,000. These figures do not include persons serving with the forces, employers, or persons working on their own account. This working force is distributed between different occupations. The distribution does not remain constant in proportions; it is affected by short term temporary changes, and by long term permanent ones. The number of men engaged in coal mining, for example, declined very considerably between 1913 and 1939, but since 1946 every attempt possible has been made to win men back to the pits. It is very unlikely, however, that as many miners will ever again be employed as there were in 1913, one reason being the mechanisation of the mines.

The number of textile operatives, especially in the cotton branches, also declined in the same period. On the other hand the number of building trade workers steadily expanded owing to the building boom. Machinery plays a small part in the building trade, so that the demand for houses, and for factories, constitutes a direct demand for labour.

The number of workers in any industry tends to expand and contract with movements of trade. If an industry falls into prolonged depression, young people are deterred from entering it. There may be some movement of adult workers into occupations requiring a similar amount of skill, but mobility between trades is restricted in various ways, and often in peace times by trade unions. The long term permanent

movement is of greater importance, but that will be discussed in another chapter.

Workers can be classified either by the industry or the occupation they follow. It is often necessary to draw this distinction as an industry may include many distinct occupations. Personal service, for example, includes not only domestic servants, but waiters, and waitresses in hotels, and restaurants, theatre, and cinema attendants, and so forth. Similarly, the textile industry includes a variety of occupations, ranging from cotton spinning, and rayon production to lace, and carpet making. An industry as a whole may be prosperous and yet certain occupations with it may be depressed and losing workers. In any industry new occupations may arise, *e.g.* rayon and nylon weaving in the textiles. New industries may develop. The motor and electrical industries are of comparatively recent date.

The Ministry of Labour gives the following distribution of workers between the various occupations and services in October, 1950:—

INDUSTRY OR SERVICE	Thousands
<i>Basic Industries:</i>	
Coal Mining	756
Other Mining, and Quarrying	82
Gas, Electricity, and Water supply	327
Transport, and Communications	1812
Agriculture	1221
Fishing	41
Total Basic Industries	4239
<i>Manufacturing Industries:</i>	
Chemicals, and Allied Trades	454
Metals, Engineering, and Vehicles	3947
Textiles	1026
Clothing	752
Food, Drink, and Tobacco	779
Other Manufactures	1485
Total Manufacturing Industries	8443
Building, and Contracting	1496
Distributive Trades	2849
Professional, Financial, and Miscellaneous Services	3953
National Government Service	650
Local	788
Total Number of Workers Employed	9736
Total Number of Workers Employed	22418

As has already been shown small fluctuations continually take place in the various groups, but they are of no special interest. The basic industries produce and convey the raw materials for our manufacturers, but they provide employment for only half of the number of workers in the manufacturing industries. Clearly, then, a large proportion of our raw materials must be imported from abroad.

The largest group of workers in the basic industries are not the miners, nor those engaged in agriculture, but the transport workers. This, at first glance may seem curious, but as an industrial and commercial society progresses, markets become correspondingly wider and transport gains in importance.

In the manufacturing group the iron and steel, engineering, and textile trades are still the most important, at least from the point of view of employment. But the most interesting fact disclosed by the table is that the number of workers in the distributive trades, the public services, the professions, and financial institutions is roughly equal to the whole of the workers employed in the manufacturing industries.

12. Permanent Occupational Changes

In order to appreciate the significance of the paragraph above, it is necessary to turn back to the beginning of the nineteenth century, as from 1800 to 1939 permanent occupational changes were taking place in a definite direction.

There were at least four broad trends in the nineteenth century,—an absolute and relative decline in the number of agricultural workers; a proportional decline in the number of domestic servants; a moderate proportional increase in commercial and professional employment, and in employment in the public services. These movements were slow down to 1860, but after 1870 they quickened, and by 1914 they were in full swing.

One of the remarkable features of the nineteenth century was the relative decline in agricultural employment.^f Between 1811 and 1901, the percentage of agricultural workers fell gradually from 35 to 9.5 per cent. of the employed population. To-day, it is about 5.4 per cent. This relative decline

did not begin with the Repeal of the Corn Laws, as by 1841 the percentage had fallen from 35 to 23. During the worst years of agricultural depression, between 1871 and 1891, the number of agricultural workers dropped by 5 per cent., but between 1851 and 1871 there was an even greater fall, and those years are often described as the "Golden Age" of English farming. There are two explanations. The improvements in agricultural methods gradually reduced the amount of labour needed to raise a given crop,—that has been very marked since the war with the mechanisation of agriculture. A more fundamental reason, however, is as follows: in agriculture, most of the labour used in the past has been used in the growing of cereals, and wheat in this country. But, as the standard of living of the working classes rose, bread ceased to be the main element in working-class diet. Other, and manufactured goods came into use. This alone would explain the relative decline in agricultural employment, and the phenomenon has not been peculiar to this country.

The decline in the importance of domestic service which began to be apparent as early as 1881 has been due partly to the increasing opportunities for women in industrial employment. To-day, there are many occupations available, akin to domestic service, but without its disadvantages. The change has also been due to the redistribution of wealth that has taken place since 1900. People can no longer afford to keep many servants even if they were available. There is also a third reason of some weight. In 1800, a very large staff was needed to work a country mansion. Coal fires had to be made and maintained: a multitude of lamps had to be cleaned and trimmed daily; all the washing was done on the premises; grooms were required for carriage horses, and so forth. To-day, the motor car has emptied the stables, except perhaps the hunters; electricity and central heating, the laundry, and other devices have made it possible to run the large house with much less labour.

Since 1860, the number of industrial workers has grown with the increase of the population, but the rate of increase has gradually slowed down. The reason is the gradual substitution of automatic machinery for labour. In the hand-work

days, an increase in the demand for goods could only be met by an increased supply of labour. During the course of the nineteenth century a position was reached in which output could be increased with a smaller proportional labour supply. That is a special characteristic of the manufacturing trades. In the coal mining and building trades down to 1913, the number of workers continued to increase, as before that date machinery had a negligible effect in those trades.

After 1860, as society became richer and more complex, commercial occupations, that is, marketing occupations became more and more important. The number of retailers, wholesalers, and commission agents began to multiply. Branded goods gradually appeared on the market and with them an array of commercial travellers and advertising agencies. Marketing began to be as important as the production of goods. Correlated with this movement was a great expansion of financial institutions of various kinds.

Towards the close of the nineteenth century the rapidly growing wealth of the country gave an impetus to occupations that hardly existed, or were of negligible importance in 1800—the classes catering for luxuries and recreation, such as the actor, the artist, the newspaper employee, the professional footballer, and more recently, the occupations connected with the cinema, and wireless industries. The increasing complexity of business life and the increasing size of certain business units increased the demand for the services of the lawyer, the architect, the accountant, the auctioneer and valuer. The development of the joint stock company created a large demand for financial services of various kinds. The number of workers connected with the Stock Exchange, and in the offices of brokers, company promoters, and bankers multiplied rapidly. At the same time there was an ever increasing demand for the services of the doctor and the nurse. A series of Education Acts that began in 1870 gradually called into being a large number of teachers. The reason for the growth in the number of transport workers needs no explanation.

Perhaps the most outstanding change is the enormous growth in the number of persons directly employed by the Central Government and the local authorities since 1914, and

especially since 1939. This has been due to the growth in the economic and social activities of the State.

13. Private Property

A fundamental institution of our economic life, and one closely connected with certain aspects of the family, is that of private property, although it would be an error to suppose that the family, or society need rest, or always has rested, on a foundation of private property. Among tribal peoples, communal property has always been the rule, and not the exception, and even in the early Christian world, private property was regarded by many of the Christian Fathers as a "Fall from Grace"; private property in land and slaves was the Divine punishment for sin.

Incidentally, it may be noted that in modern times private property has been explained, and justified, in several ways. The philosopher John Locke explained private property as the fruits of man's labour, and as man had a natural right to his own body he had an equal natural right to that which his body might produce,—to the work of his hands.

In some cases, among settlers in a new country, and perhaps also in an industrialised country where a small business man acquires property through work and abstinence, Locke's theory had reason, but it was easy for later socialists to point to innumerable cases of people acquiring property without labour in any form.

Another explanation of private property is that it is simply a convention of society, an institution like other legal institutions created by the State for the convenience of society. This theory is of interest to-day as it has been used as a justification for the confiscation of private property. If private property is simply a creation by the State, what the State can create, it can also take away.

In economic and social controversies, private property refers only to the ownership of the means of production,—the land, the minerals, the factories, and the railways, etc. The private ownership of personal possession is taken for granted, and such ownership would not be challenged in any form of modern society.

14. The Socialisation of Private Property

The arguments in favour of the socialisation of private property are long, many, and old, but of special interest to us all now that the nationalisation of the basic industries has been accomplished. The Bank of England is now a State bank; the coal, gas, and electricity undertakings, and most of the means of inland transport have been nationalised. A matter that was largely academic in this country as recently as 1939, has now become a concrete reality.

In summary, the argument against private property is as follows:—Private property is the source of most of our social evils, for as long as the ownership and control of the means of production are in private hands, they will be employed with a view to private profit, and not for the advantage of the community as a whole. In a socialised system, it is argued, the real needs of the community, and not private profit, would determine the uses that would be made of the scarce means of production.

From the side of the worker it is argued that workers can never bargain on equal terms with the owners of property, for the latter have waiting power, and the workers must toil to live. The right to work is a natural right and should not be dependent on the owners of property, for in a modern industrial society unless owners of the means of production will allow them to be used, the workers must remain idle.

Another argument is that the receivers of urban ground rents, and dividends of joint stock companies, receive payments out of all proportion to their services to the community. Many reformers argue that the claims and interests of private property are a grave obstacle to social reform at home, and a major cause of wars abroad.

The existence of private property and its rights leads to great inequalities of wealth in many ways, the most important of which, perhaps, are the results of inheritance and bequest. These property rights concentrate property into the hands of a relatively small class of persons, and an idle class may exist on the labours of society as a whole. In any case, the inheritors of property gain a start in the race of life through no effort of their own, and in the view of many reformers the

right of inheritance of property leads to an order of society that is neither natural nor the best possible.

15. The Case for Private Property

In social matters, something can always be said for the other side. Many of the worst defects in private property have been corrected by the actions of the State. Great inequalities of wealth, arising from private property, have been diminished by income and sur-tax, and by death and inheritance duties.

Even the right of inheritance, although not free from defects, is not wholly an evil. It gives expression to a fundamental family instinct; a man's will to work and to save is greatly stimulated by the ambition to leave an inheritance to his children, and it is probable that the balance between spending and saving would be seriously disturbed if inheritance were abolished by the State.

The supporters of private property stand on the ground that nothing promotes efficiency so much as private property. Rightly or wrongly, man is by nature an acquisitive animal, and his passion for wealth and power has been the main driving force of progress through the ages. Deprive him of the outlet for this instinct, as would be the case if private property were abolished, and the strongest of all the incentives to progress would disappear. Men vary greatly in intellectual and in other abilities, and these natural differences find expression in the corresponding inequalities arising from the institution of private property, and this is, on the whole, to the benefit of society.

Lastly, and this argument is very old, each person is an individual as well as a member of the community, and private property allows each individual to give expression to his individuality; in other words, private property is a medium through which personality can be developed.

CHAPTER II

THE FOUNDATIONS

1. Introduction

We begin, then, by examining briefly the nature of the wants of mankind, and the meaning of the economic term "wealth." In economics, when we speak of our wants, which are sometimes referred to as "desires," it is implied that we are prepared to make an effort or a sacrifice in order to satisfy them, and not that we are simply longing or craving for certain commodities. Thus, with certain striking exceptions, before we can satisfy our wants by the possession of desirable things, before we can obtain what the economist terms "goods," there must have been a certain amount of effort or sacrifice on the part of someone or other. The striking exceptions are water in streams or in the sea, air, and sunshine, which are accessible to all, and are therefore termed "free goods."

"Free goods" are not man's products; they are not the result of human effort or sacrifice. Consequently they are to be distinguished from the "goods" which are the result of such effort. The latter are termed "economic goods." Water, for instance, becomes an "economic good" after it is conveyed in pipes from a reservoir for the use of dwellers in a town. Its conveyance has entailed a cost, and the users or "consumers" of such water have to pay a small charge or rate because the water has been brought to their homes.

Thus we have two great classes of goods: (1) free, and (2) economic; and it is the latter which the economist usually regards as wealth, though it is not inaccurate to include under the broadest meaning of the term wealth free goods as well. Economic goods include all those things that have entailed a cost to produce, and all those services, such as the services of the doctor or the lawyer, which are not to be had free. In other words, economic goods are scarce goods and services.

2. Classification of Goods

To the economist, therefore, goods include not only material things but also the services which persons perform for one another for a remuneration. Thus we may classify goods into: (1) material, which we can handle, and exchange for other goods, and (2) non-material, or personal, which we cannot handle and transfer, such as our own powers of skill and ability. In the former class we must, in addition to ordinary commodities like merchandise, include investments in commercial enterprises, patents, copyrights, and the right to make use of material things; and the latter class we may subdivide into internal non-material goods or the qualities which lie within ourselves, and external non-material goods such as the goodwill of a business, which depend on our relations with other members of a community. We may also classify goods into: (1) transferable, and (2) non-transferable, while another classification which is frequently used groups goods according to ownership into: (1) public, municipal, or national, and (2) private.

It is thus evident that goods, that is, wealth in the broadest sense, may be classified in more than one way, but for our purpose it is sufficient to emphasise that the chief feature of goods is that they satisfy our wants, that they possess certain qualities or attributes which make them more or less desirable, more or less agreeable, more or less useful, in brief that they possess what the economist terms "utility."

3. Utility

The utility of a commodity is therefore simply its capacity of fulfilling a want, of satisfying a desire. An article which may be "worthless" to one person, which so far as this person is concerned possesses no utility, may possess a great deal of utility to another person.

It should be noted, however, that utility in the economic sense has no moral significance. It does not necessarily mean usefulness in the colloquial sense. Gin, for example, has economic utility; whether it is useful or not is a matter of opinion. Economic utility is simply the capacity to satisfy a want. •

Utility is therefore of fundamental importance in economics. We make or produce things because of their utility; we buy, enjoy, or, as the economist says, "consume" things because they possess utility. Furthermore, utility varies. Other things being equal, if we possess a great amount of one commodity, any addition to this commodity will possess less utility than an addition to a possession of half the amount of the said commodity. An addition to our stock of a commodity possesses less utility than a previous similar addition to the same stock, or, in other words, an increase of the stock reduces our desire, our eagerness, our anxiety, to acquire more of this particular commodity. By increasing the stock in this way with equal additional increments we ultimately reach a point where instead of acquiring another increment we begin to think about the utility of a different commodity. Thus the utility of an article diminishes as we add to the stock of that article, and this is termed the law of diminishing utility or of satiable wants.

We have now reached another very important fundamental conception. The utility of an article is the basis of our demand for that article; the process is quite clear: wants, utility, demand. In other words, demand depends upon our wants, our preferences, our choice, our comparison of one commodity with another, and also, of course, upon our possession of other commodities. As the stock of a commodity increases the utility of each additional increment decreases until we arrive at a point when no further increment is desired, and the increment which we are almost on the point of not adding to our stock is said to possess marginal or final utility. The utility of the whole stock is termed total utility.

4. Marginal Utility

Normally, the economist has no interest in the total utility of even the primary necessities of life, as total utility has no influence on our economic activity. Without air, water, food, clothing and shelter we could not exist; without spectacles, the short sighted person could not earn a living, and without recreations and amusements, life would be a very dull affair.

Fortunately, in normal circumstances, we can and do take all the above items as totalities, for granted. No person ever

considers the question of doing without food or clothing entirely; what he does consider is the question of consuming a little more of the one or less of the other. A rise in the income tax does not make the motorist give up his car, or the smoker cease smoking. They may motor a little less, or smoke a little less, or, alternatively, they may redress the balance by slight economies in other directions. Economic choice is always a consideration of slight changes.

When the economist uses the term utility, it is always marginal utility that he has in mind, the gain or loss from a slight change, in either direction, of his supply of any good or service. It follows, therefore, that marginal utility is very closely related to scarcity. The marginal utility of a cigarette to a smoker is very much less when he has a box of a hundred than it is when he possesses but two, particularly if there is no possibility of immediately renewing his supply.

5. Competition

Before leaving these foundations some reference is necessary to competition, the framework in which economic activity moves. The economists of the early nineteenth century usually assumed an ideal, or perfect competition that worked without hindrance. In those days, that assumption was not without reason. Machinery had gained only a foothold in industry and was of a simple character; the typical business unit was a small one man ownership, or family partnership; trade was still largely local, and anything approaching a trade combination was regarded as abnormal.

A century ago, wages were determined by competition; the trade union movement was in its infancy, and the majority of the workers were outside it. In the early nineteenth century, free competition was a reality.

Industrial society presents a different picture to-day. The terms monopoly, combination, price ring, and trade union are familiar to all. Competition still exists, but in an imperfect form. Most actual competition is limited by custom, prejudice, and lack of knowledge; by the cost of transporting goods and services from place to place; by the cost of moving anything from one occupation to another; and by the fact that most goods sold on the market are a series of brands.

People do not regard one brand of a given article as a perfect substitute for any other brand. As soon as a product on the market acquires a special trade name, it enters the sphere of imperfect competition.

It follows, therefore, that the imperfections of the market can be removed in three main ways. In the first place by commercial education designed to diffuse market knowledge, and above all to remove the irrational preferences of buyers for particular brands of certain products. Secondly, by reducing costs of transport; and thirdly, by state assistance to capital and labour to change over easily from one occupation to another.

Competition has a very important bearing on the pricing system. It is easy to see that, when competition is very free between producers and buyers, there can be no great difference between the price of an article, and its necessary costs of production; and also, that each firm will be forced to produce in the cheapest possible way. On the other hand, as soon as competition is imperfect, prices may, and usually do, remain well above costs, and producers make high profits.

CHAPTER III

VALUE AND PRICE

1. Value

In commercial advertisements we often see such announcements as "splendid value," "we give value for money," "go to Wilson's for value," "we stock no valueless goods," and in our ordinary conversation we frequently make use of such phrases as "the value of the Bible," "the value of clothes," "the value of vitamins," "the value of argument" and "the value of rubies."

These examples show that in popular usage varying shades of meaning are attached to the term value. It is, for example, obvious that value in the phrase "the value of the Bible" has not quite the same meaning as value in the phrase "the value of rubies." The loose way in which the term value is used in everyday language shows the necessity of a thorough grasp of the economic meaning.

In economics there are no varying shades of meaning to value. To the economist value is a relative term; it expresses the rate which an article will exchange for another or for others. This is what the earlier economists described as "value in exchange," which must be carefully distinguished from what they termed "value in use," which modern economists call utility. The difference is thus explained by Adam Smith: "The word value has two meanings, and sometimes expresses the utility of some particular object and sometimes the power of purchasing other goods which the possession of that object conveys." Value, has also been defined as the power which an article confers upon its possessor of commanding, in exchange for itself, the labour, or the products of the labour, of others.

In this work, however, we shall not be concerned with the theory of value; in a groundwork of Economics, value may be identified with price, and the first question that presents itself for consideration is how do prices arise?

2. How Prices Arise

The reason why a price cannot be charged for air, and for water in this country, when it is in a crude state, is very obvious. There is always enough for everyone, and to spare, and for every use to which these vitally necessary things can be put. Land in this and in most other countries has a price simply because it is scarce in relation to the demand for its use. Land in the centre of an industrial city commands a high price: land in an agricultural district has a relatively low price, because, in the one case, the demand for any particular portion of urban land is very intense, and in the other case, the demand for agricultural land is much less keen because the land can only be employed in less profitable uses.

What is true of land applies to all the other means of production, and goods. Houses have a price that varies with the scarcity in relation to demand. On the outbreak of war in 1939, all house building ceased, and by 1943, an acute house shortage, accentuated by the effects of the German air raids, had set in, and the prices of houses began to rise like a rocket. Rents would have behaved similarly but for the fact that they were controlled by an Act of Parliament.

In the shops, the prices of all goods not controlled by the Government have greatly increased and so have most wages and salaries.

The explanation is sometimes offered that the rise in prices has been due to wicked profiteers, and that wages have had to rise in sympathy, but if so, why do not the profiteers force up prices in peace times, and how is it that there was no marked general increase in wages and salaries between 1920 and 1939? No simple answer will give the whole truth, but the most important reason has been the scarcity of houses, goods, and workers.

As a first approximation, then, we can say that prices arise because the supply of goods and services is always scarce in relation to the demand for their use, and that the price of any good or service will rise, or fall, as its supply becomes more or less relatively scarce.

3. Functions of Price

In an economic society still largely based on private property and enterprise, price has two functions, it regulates production, and it limits consumption.

The fact that price limits consumption needs little explanation. Most of us would increase our consumption of clothing, most kinds of food, tobacco, and so forth, if they were free gifts. It is true, that, for the rich man, the prices of the primary necessities of life are a matter of indifference, but that is because their total cost is a very small item in his total expenditure. He is not indifferent to the price of servants' labour, works of art, and many other things that enter the circle of his class or conventional consumption.

The limitation of consumption by means of price is the method by which demand is adjusted to supply in a competitive society, and, if allowed to function unhampered, it will always adjust the demand for any good or service to the supply available. Whenever the supply of anything tends to outstrip the demand for its use, prices fall; and, conversely, whenever the demand for anything exceeds the supply available, the price of it will rise to the point at which demand is just equal to the supply.

The second function of the price system in a competitive society is to distribute the production resources of the community among the different forms of production, and in such a society, all decisions as to what to produce, and how much of it to produce, are made by independent individuals.

It is not an accident, or chance, that at any time there is a certain number of articles of clothing for sale in the shops, or a certain number of men working down the coal mines. In all forms of production, producers regulate their decisions by their anticipations of the demand prices of the buyers, for in a competitive society the consumer is king, and production is governed by the demands of the consumers. When these decisions are correct, consumers are offered just the kinds of goods they want at the prices they can just afford to pay. If the producers estimate wrongly, and produce too much of one good, and too little of another, changes in the price mechanism will give the warning signal to damp down one form of production, and to expand another.

Unfortunately, in an advanced industrial society, these shifts of production can only be made slowly and with great difficulty. A steel works cannot be turned into a clothing factory, or a clerk into a coal miner, at short notice. Shifts of production due to change in the price mechanism leave in their trail a legacy of unemployment and waste.

4. Costs and the Price Mechanism

Cost is a complex concept to explain. It is much more correct to regard the cost of the late war, not as so much money, but as the loss of the various social, and consumer amenities, we might otherwise have enjoyed, but as we are concerned with first approximations only, we shall use the term cost in the usual sense as the money price paid for the goods and services embodied in the production of a commodity.

In the sections above, we have used the term supply as if it were something given, but in reality, the size of a supply has a close relation to the cost of producing it. In normal times there is usually an abundant supply of pots and pans, but always a more or less scarce supply of houses, and the reason is this. Pots and pans cost little to produce, and they are usually produced in circumstances such that the greater the number produced, the smaller is the cost of each, at least up to a certain point. A house, on the other hand, is relatively costly to build, and in consequence, its supply remains well below demand; for that reason, a house usually sells for much more than it cost to build.

Costs of production, then, have a definite influence on supply, and many people have supposed that the prices of all goods and services are determined by their costs, and, in certain conditions of society, this belief has some reason. In times of war, Governments usually pay manufacturers for munitions of war on a basis of costs plus a percentage for profit, and an economic dictator might possibly decree a price system based on costs; but in a free competitive society, the consumer is always more or less "king," and costs gradually adjust themselves to his demand prices.

Suppose, for example, that a manufacturer producing a certain line of goods finds that demand price has fallen below

his costs, what must he do? Clearly he cannot continue to produce his present output, and in view of competition he cannot raise his prices; neither can he afford to keep his machines idle. Two courses are open to him: either he must find some way of reducing his unit costs, or he must adapt a part of his production resources to some other line of production with a higher demand price.

These movements, which are a fundamental part of modern economic activity, are made possible by technical progress, which is always striving to find new ways of reducing production costs; indeed, the industrial history of the past hundred years has been mainly an expression of the principle of reducing unit costs in order to expand demand. In a society in which production is undertaken by the decisions of free individuals, even when competition is imperfect, costs always tend to adjust themselves to the anticipated demand prices of the consumers.

5. Alternatives to the Price Mechanism

A state of society in which the price system as the regulating mechanism is suspended is conceivable, but such a system would require an iron economic dictatorship. The dictator would doubtless use a system of prices for accounting purposes, but all decisions in respect of production and consumption would be made by him. The merits and demerits of such a "Utopia" are matters of opinion, but one thing is clear, the sovereignty of the consumer would cease. The forms and the quantities of production would be decided by the will of the dictator, and so would the occupation of each individual.

An iron economic dictatorship, however, is not likely to be established in this country for a long time to come, but the free working of the price mechanism can be, and since 1939 has been, modified in various ways, of which the most familiar is the rationing of essential food stuffs. When a good is rationed it ceases to be distributed through the agency of prices; rationing, therefore, is an alternative to prices as a means of equating supply and demand. Demand is limited to the supply available, and the quantity allotted to each

individual is decided by a Government Department, irrespective of the individual's demand, and of his ability to pay.

Other Government controls of the uses of raw materials and labour work to the same end. At the present time, what, and how much, shall be produced is decided mainly by Government policy, and not by the prices the consumers are willing to pay.

Under present conditions, these restrictions on the price mechanism are vitally necessary. In respect of the uses of land, building materials, and many forms of labour, the public interest must override that of the individual if we are to escape chaos. How far these controls should be gradually lifted, and which, if any, should be permanently retained, is a controversial subject beyond the scope of this book. The only point we seek to establish here is that the free price system is not the only way of equating supply and demand.

6. Overhead Costs

The costs of producing an article fall within two main classes.

In the first class fall the wages of labour, and the costs of raw materials. These are called prime, or variable costs, because they vary with the size of the output. If the demand for a product falls off, the costs of labour and raw materials can be reduced correspondingly, and immediately.

The second, and in many cases, the more important class of costs is called overhead, or supplementary, or fixed, costs. The main overhead costs are rent and rates, interest on borrowed capital, cost of depreciation of machinery and equipment, and the expenses of organisation. These costs are fixed whether a business is working at full capacity, or working short time. Usually, they can be increased fairly readily, but they can be reduced only with great difficulty and loss. Overhead costs are very high in respect of railways, and public utilities, and in the mining, steel making, and shipping trades, and, wherever they are high, a reduction in demand for products is a serious matter for the business.

High overhead costs explain why, in normal times, a railway company issues so many cheap excursion tickets. The object is to attract passengers, who would not otherwise travel, to

use rolling stock that otherwise would be idle. What is earned over and above fuel expenses, is a credit towards overhead costs, as the railway staff would be employed in any case. High overhead costs also explain the frequent cut-throat competition in the shipping world, and they are a factor in the tendency to industrial combination. One of the reasons why firms combine, although not the only one, is the possibility of lowering average overhead costs.

7. Joint Products

In speaking of production it is easy to think of a single product only, and in many cases, a firm does produce a single product. On the other hand, many products are produced jointly, that is, two or more products are produced at the same time from the same source. When the products are of roughly equal importance we usually call them joint products; when one product is a main product, and the others are incidental to its manufacture, we use the term by-products. Wool and mutton, beef and hides, are typical examples of joint products; gas and chemical manufactures yield a range of by-products. One aspect of economic progress is the turning of what at one time was waste into usable by-products. By-products indirectly cheapen the manufacture of the main product, and but for these by-products we should have to pay much more than we do for many things.

There is one peculiarity about joint products which may be noted. The proportions between the products may, or may not, be capable of variation. When the proportions cannot be varied, an increase in the supply of one means a proportionate increase in the supply of the other; but if the demand for one product only increases, the price of the other product will fall sharply. Where the proportions can be easily varied, the case is somewhat different. Wool and mutton for example, need not be produced in fixed proportions; the proportions can be varied by cross-breeding. An increase in the demand for wool only would lead sheep farmers to produce sheep that yield more wool and less mutton, and in that way the supply of mutton would be gradually brought down to the level of demand. Varying the proportions by cross-breeding has been practised in Australia with marked effects.

CHAPTER IV

VALUE AND PRICE (*continued*)

1. Marginal Demand and Supply

In Chapter III, demand and supply were discussed in very general terms and a little deeper analysis is now necessary. It is a fact of experience that when a number of people enter a shop to buy, say, apples, the quantities that each is prepared to take will depend on current prices.

At a given price one customer will be willing to buy 14 lbs., another perhaps 13 lbs., and so on, down to a customer who is prepared to buy 1 lb. only at the given price. The same customer, if prices were slightly lowered, would perhaps purchase 2 lbs.; on the other hand, if prices were slightly raised, he would expend his money on some other purchase. This customer is usually called the marginal customer, and his purchase the marginal purchase.

Let us now suppose that a quantity of apples is being sold by auction and that the stock must be cleared. The bidder just induced to buy the last basket is the marginal buyer, and the price at which it is sold is the marginal demand price. These concepts are of fundamental importance as they explain much of the selling activities of producers. Producers are always striving to reach new marginal buyers, or new marginal classes of buyers, that is to say, to tempt people on the margin of doubt about purchasing by reducing their technical costs, and thus making possible a slight reduction of prices. As it is impossible to charge different prices to different customers for the same good in effective competition, the demand price is the marginal demand price.

The concept of the margin applies also to supply. If the different firms of an industry are producing their outputs at different average costs per unit, the firm with the highest average costs is usually regarded as the marginal firm, as, if a fall in demand price makes a reduction of supply necessary,

that firm will usually shift its resources, or at least a part of them, into some other line of production. Wherever competition is very free, there will be a strong tendency for the average costs of the most efficient firm to equal the marginal demand price for the output of the industry.

Neither marginal supply price nor marginal demand price should be regarded as something fixed, except during a short period. Both change with new conditions; for example, a new invention will change the marginal costs of an industry, a change in tastes will affect marginal demand.

2. The Interdependence of Prices

As we probe the price question a little more deeply, the complexities increase. It might be supposed at first glance, and, indeed, it has often been assumed, that prices form an independent system, that is to say, the quantity of apples I am prepared to buy depends solely on the price of apples. A little reflection, however, will show that such is not really the case; owing to the necessity of making my income cover most of my wants, I am forced to adopt, consciously or otherwise, some pattern of expenditure. What I am prepared to pay for apples is affected by what I have to pay for other things. Any change in prices that affects my pattern of expenditures at one point will quickly have reactions at one or more other points. A rise in the price of clothes, if I must buy the same quality as before, will affect my demand for one, or more, of other things. For example, I might decide to buy two, instead of three pairs of shoes in a year, or, alternatively, I might decide to buy the same number of pairs of shoes as before, but of a cheaper quality. A change in one price, therefore, may have various, and unexpected reactions on a number of other prices.

3. Substitution and the Price System

It may appear from what has been said above that we are at the mercy of a price system over which each of us, as individuals, can exert little or no control. Fortunately, however, we are not wholly defenceless, as many of our wants can be satisfied by alternatives. My appetite for meat, for example, can be satisfied by beef, mutton or pork. A rise in

the price of beef will shift some of my demand to mutton or pork. Similarly, a rise in the prices of butter and tea, will transfer some demand to margarine, and to cocoa or coffee. The possibility of substituting margarine for butter limits the power of the butter producers to exploit prices.

Substitution is the consumers' main safeguard against monopoly exploitation. An uncontrolled monopoly cannot exploit the public beyond a certain point if possible substitutes for its product are available.

Substitution is not less important in industry and agriculture. A farmer must always use some land, some labour, and some implements; an industrialist must always use buildings, labour, machines, and so forth, but they need not use them always in the same combination. Slight variations, or marginal substitutions, are usually possible. A rise in wages may cause the industrialist to use new labour-saving machines, and the farmer to use a machine for work formerly done by hand. A rise in rents may cause a farmer to use a little less land, and more intensive methods of cultivation. A rise in the price of coal may cause the industrialist to change over to some other form of power. Substitution is one of the main forms of economic activity; one of the most important ways of keeping down average costs.

4. Elasticity of Demand

A peculiarity of demand which may now be noted is what is termed the elasticity of demand. We know that a small drop in the price of some commodities may cause a big increase in the amount sold, while a small drop in the price of other articles results in only a very small increase, or perhaps no increase, in the amount sold. In the former case demand is said to be elastic, and in the latter inelastic. A small drop in the price of a commodity that is usually cheap, such as matches, salt, potatoes or bread, would not result in a very great increase in the amount bought. Thus the demand for these articles is inelastic. The demand for such articles of food as meat or butter, is, as far as the lower or middle classes are concerned, elastic; for a small drop in price would lead to a big demand for these commodities among these classes.

The connection between elasticity of demand and substitution is very close. If a good can be easily substituted the demand for it will be very elastic. The demand for bread in this country is inelastic, not only because of its low price, but because in normal circumstances, there is no satisfactory substitute.

The demand for any good will also be inelastic when its price is but a small item in normal expenditure. A slight fall in the price of an expensive good will stimulate demand to a much greater extent than a slight fall in the price of a cheap good. Other factors that effect elasticity of demand are the durability of a good, and in some cases, the price of another good with which it must be used, for, just as certain products are supplied jointly, many goods are demanded jointly,—pens and ink, for example.

Elasticity of demand is sometimes expressed in the following way. If, after a slight change in price, the total amount of consumers' money spent on a good is the same as before, the elasticity of demand for that good is unity. It follows, therefore, that if the total consumers' outlay on the good after a slight fall in price is greater than before, the elasticity of demand is greater than unity. Conversely, if the total consumers' outlay is less after a slight fall in price, the elasticity of demand will be less than unity.

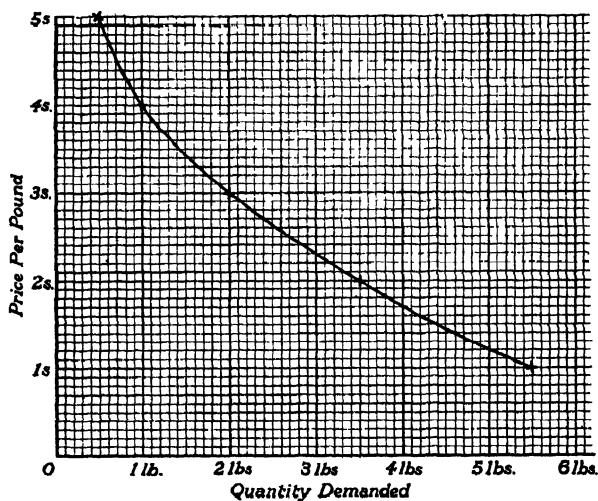
It should be noted that elasticity refers only to slight changes, but in normal circumstances it is only with slight price changes that the decisions of the consumers are concerned.

Elasticity of demand is usually discussed in connection with demand schedules and curves. A demand schedule for a commodity is simply a list of amounts that consumers will purchase at given prices. A simple schedule would appear as follows:—

PRICE PER POUND OF BUTTER	QUANTITY DEMANDED
1s. per lb.	5½ lbs.
• 2s. „ „	3½ „
3s. „ „	2 „
• 4s. „ „	1 „
5s. „ „	½ „

If we now take a piece of squared paper, we can easily construct a demand curve from the above data. If we draw two axes at right angles, and measure the prices per lb. along the vertical axis, and the quantities demanded on the horizontal axis, we should get a curve of the shape shown below.

Demand curves vary with their schedules, but most curves slope downwards from left to right, and flatten as they approach the horizontal axis. That means that as price falls they become more elastic, which from what has already been said, we should expect.



In exceptional cases it is possible for a demand curve to slope upwards from left to right. A rise in the price of a good may increase the demand for it by making it more fashionable. A rise in the price of shares may induce speculators to buy more in the hope of making a profit from a further rise. It has been argued that a rise in the price of bread will induce very poor people to consume more than before, because bread has such a high food value. They would probably gain by transferring expenditure from less nutritious foods over to bread.

The above cases, of course, are exceptional ones, and do not invalidate the general principle.

5. Elasticity of Supply

Like demand, the supply of any good may be elastic or inelastic. If the supply of a good expands, or contracts easily with changes in demand, we say that the supply is elastic. Conversely, if changes in the supply of a good can be effected only slowly, and with difficulty, we say that the supply is inelastic.

The elasticity of supply of any good depends mainly on the nature of the factors used in its production. Speaking broadly, production factors are either specialised, or general, that is to say they can be used for one or two purposes only, or they can be used for a variety of purposes.

Much of our land is a general factor as it can be used for pasture, corn, potatoes, and other crops. Many labourers are general factors; an agricultural labourer can easily become a miner, a building labourer, or an unskilled worker in a factory. On the other hand, much modern machinery, and many factory buildings are specialised to one use only. Professional men, lawyers, doctors, accountants, etc., are also highly specialised factors.

If, therefore, production of a good involves factors of a general nature only, the supply of that good will be elastic; the supply of factors necessary for an expansion of production can be easily increased; on the other hand, should it be necessary to curtail production, these factors can be easily drafted into alternative occupations.

Where the production of a good uses highly specialised factors, the supply of that good will be expanded but slowly, and it can be contracted without scrapping expensive capital only as these factors wear out, when they will not be replaced.

6. Changes in the General Level of Prices

We must distinguish between a rise or fall in the price of one commodity and a rise or fall of prices in general. Changes in general prices, or what the economist refers to as changes of the price level, often give rise to serious economic problems, and during the last hundred years there have been big fluctuations in this respect. In his *Introduction to the Study of Prices*, Layton traces with great clearness the history of

these fluctuations during the nineteenth century. He examines the causes of the changes in the general level of prices, and shows that between 1820 and 1900 there were two periods of rising prices, 1849-74 and 1896-1910, and that both these periods were preceded by periods of falling prices.

Before the 1914-1918 war these changes in price levels were fundamentally due to a rise or fall in the production of gold. But owing to the fact that during the war period gold went out of circulation the very high prices immediately after the war were primarily due to the great increase of paper money accompanied by a decrease in the output of commodities. This is what is termed inflation, a subject which we shall have to examine in more detail in a subsequent section.

We must next consider how changes in price levels are measured. How, for example, is it possible for economists to state that prices in any one month are approximately 50, 60 or 70 per cent. higher than they were fifty or sixty months previously? Changes in prices are measured by means of index numbers.

7. Index Numbers

An index number has been defined as a device for ascertaining the average change in the prices of a number of commodities. There are at present several types of index numbers in use in various countries, but the underlying methods of construction are the same in each type. In England there are three important ones, those published in the *Economist* and in the *Statist*, and that issued by the Government through the Board of Trade.

Index numbers are constructed by taking a large number of typical commodities in every-day use, and comparing their wholesale prices at different intervals. There are, however, obvious difficulties in making our calculation such as the number, and the selection, of the commodities, detecting changes in quality over a number of months or years, and estimating the relative importance of each article included.

The equalising of the importance of the commodities selected is sometimes done by means of what is termed "weighting." Take wheat, for instance. If buyers spend

four times as much money on wheat as they do on cotton, then wheat may be "weighted" in calculating the index number as four articles and cotton as one. The general principle according to which the weights are usually assigned, is that they should represent the importance of the commodity to the consumer. A "base" or "standard" year is then taken, and the changes in prices of the selected commodities are expressed in percentages of the prices of these commodities in the "standard" year. So, if 1913 is our "standard" year, and we find, say, tea marked as 159 for 1926, then we know that the wholesale price of tea was in the latter year 59 per cent. higher than in 1913 for which year the price would appear as 100.

Now if this method is applied to say 45 different articles in common use, and we decide to attach equal relative importance to each article, which, considering the difficulties of "weighting" some of the articles selected, is a method frequently employed, our index number would then be calculated by simple addition or by simple averaging. Thus, taking our "standard" year to be 1913, under which, of course, each of our 45 commodities would be marked as 100 with a total of 4,500, let us suppose that the total of our prices for the 45 in 1914 came to 4,545. Then we could either find the average price of each article, *i.e.* 101, from our new total, which would be our index number for 1914, or we could by taking 4,500 as the index number of our "standard" year, regard 4,545 as the index number for 1914.

The preceding example illustrates the simplest type. It, however, shows the underlying principle, for all index numbers, elaborate or simple, "weighted" or not "weighted," are fundamentally based on averages, and owing to the difficulties which have just been discussed, can never be calculated with absolute accuracy. An index number is simply a method of measuring fluctuations approximately. It can be applied not only to wholesale prices but also to other things such as imports and exports, wages, or the cost of living (retail prices), while it can be calculated weekly, monthly, or yearly.

The *Statist* index number, for instance, is calculated on the wholesale prices of 45 foodstuffs and materials, is "weighted,"

and is published monthly. It is a continuation of a series of index numbers compiled by Sauerbeck for the years 1846 to 1912, in which the compiler took as his "standard" the average wholesale prices for the eleven years 1867 to 1877, giving to each commodity the average wholesale price of 100. As continued by the *Statist*, the index numbers for the month of January in the years 1914, 1916, 1918, 1920 and 1921 respectively, are: 83·5, 123·6, 186·2, 245·3, 197·2. After 1922 wholesale prices fell continuously until they again approached the 1914 level. The annual average for 1938 was 91·6. The index number for August 1939 was 90·4, but owing to the outbreak of war the average number for 1939 rose to 95·3. The average of the index numbers for 1945 was 163·3.

Another very important index number was that published by the Ministry of Labour in its *Gazette* down to July 1947. This was a cost of living index number which was an ingenious attempt to calculate average monthly changes in the cost of living, based on retail prices in four main groups and one subsidiary group: 15 articles of food; rent; clothing; fuel and light, and a small number of articles in general use. Each of these groups was weighted according to its relative importance as follows: food—7½, rent—2, clothing—1½, fuel and light—1, other items—½.

In the first group 8 out of the 21 items were beef and mutton prices, both of which were classified into (1) British, and (2) chilled and frozen, and which were each subdivided into two classes according to the quality of the meat, the price per lb. being quoted in each instance. The other food articles were: bacon (per lb.), fish (per lb.), flour (per 7 lb.), bread (per 4 lb.), granulated sugar (per lb.), milk (per quart), fresh butter (per lb.), salted butter (per lb.), cheese (per lb.), margarine (per lb.), fresh eggs (each), potatoes (per 7 lb.). The standard year (100) was 1914 but the average increase was not, as in the *Statist* and the *Economist* index numbers, added to the average "standard" price.

The Ministry of Labour cost of living index number gave three separate percentages for the food group. The first referred to food prices in towns with a population of over 50,000, and the second to food prices in small towns and

villages, while the third gave a general average. Thus for February 1933 these three index numbers were 22, 21, and 22, respectively, each number, of course, representing an average "weighted" percentage increase so that the general average food price for the country would be represented by 122 in February 1933 as compared with 100 in 1914.

In connection with the clothing group the compilers emphasised the difficulties of calculating an index number owing to the wide range of quotations both before and after the 1914 war, to changes in qualities and in stocks held by retailers, and in variations in the extent to which different articles and qualities have been affected by price changes. The rent group included the various rates, and the fuel and light group such items as gas, coal, oil, candles, and matches.

Though approximations only, the results of these calculations gave us some idea of the changes in the cost of living between the years 1914 and 1939. The Ministry of Labour cost of living index numbers for the years 1918 to 1927 were: 100 (*i.e.* twice as high as 1914, a doubling of prices in four years), 105, 150, 119, 80, 69, 69, 72, 68, and 63. The index numbers for the years 1939 to 1947 were: 55, 85, 99, 100, 98, 100, 104, 103, 103. The relative constancy of the index numbers between 1941 and 1947 was due mainly to the Government subsidies to stabilise the cost of living, and to the price control of certain goods other than foodstuffs, *e.g.* utility clothing.

The Ministry of Labour cost of living index number as published down to July 1947 was, however, far from satisfactory, especially where it was used as a basis for wages and salaries. In the first place it assumed a representative or standard family, but there is no such thing. Different people, and different classes of people, do not necessarily consume the same things, and where they do so they do not consume them in the same proportions. A cost of living index number valid for one class of people may be very inaccurate in respect of another. •Further, if the year under consideration is far removed from the "base" year, tastes and habits may have changed in the interval. Again, if, during the interval, there have been great changes in the prices of certain essential

things, substitution will have taken place; less of the dearer and more of the cheaper goods will be consumed in the year in question than was the case in the "base" year.

The term "cost of living" is a complex concept. To-day most wage earners regard beer, tobacco, and the cinema as essential items in their cost of living. Many of them would also include the costs of motoring, and of annual holidays. In the higher income scales, many people would include the wages paid to a servant, or a gardener.

For the above reasons the Ministry of Labour, early in 1947, decided to discontinue the existing index number and to publish an interim number until such time as a really satisfactory number could be evolved. The interim number was first published in July 1947 and was based on the average level of prices on 17th June, 1947 (100).

In order to give greater reality to the index number the classes of items have been extended to eight, and a much more complex system of weighting has been devised. The items are now based on the family budgets collected in the years 1937 and 1938. The interim index number also recognises that all people do not pay rents controlled by the Rent Restriction Acts. By March, 1951, the index number was 117.

COST OF LIVING INDEX NUMBER DOWN TO JULY 1947

ITEMS	FOOD	RENT	CLOTHING	FUEL AND LIGHT	OTHER ITEMS	ALL ITEMS
WEIGHTS	7½	2	1½	1	½	12½

NEW INTERIM COST OF LIVING INDEX NUMBER

ITEMS	FOOD	RENT AND RATES	CLOTHING	FUEL AND LIGHT	HOUSEHOLD DURABLE GOODS
WEIGHTS	348	88	97	65	71

ITEMS	MISCELLANEOUS GOODS	SERVICES	DRINK AND TOBACCO	ALL ITEMS
WEIGHTS	35	79	217	1,000

CHAPTER V

INCOME

1. Definition

Wants, utility, demand, value, and price, lead to the important question of income. More or less of a commodity is bought according to whether the income of the buyer is big or small. We may, of course, obtain commodities as gifts, by inheritance, by appropriation, and by barter. Buying, however, is the customary method of obtaining possession of commodities in civilised countries.

But what is income? Income is really a flow of services and commodities, or rather the value of such a flow. It may include receipts in kind received regularly like money payments, but it is usually understood to mean incoming money. It may be described as an amount of wealth obtained by an individual or a community during any period of time, and is therefore to be distinguished from capital, which, as will be explained in more detail later, is a quantity of wealth in existence at a particular moment. Capital is used to produce further wealth. Income is derived from capital; it is a stream of wealth, and is constantly being converted into capital.

2. Money and Real Income

We must, therefore, carefully distinguish between what the economist terms "money" income and "real" income. The latter consists of commodities and services, the necessities and luxuries, obtained by means of the former. Strictly speaking "real" income includes not only the services we pay for, such as those of the doctor, the lawyer, or the butler, but also the services we ourselves perform for ourselves, and the services performed free of charge by members of a family for one another. Indeed, we may even take a broader meaning and regard income as including all utilities or satisfactions. Thus a bicycle, or a table, is a regular source of utility or satisfaction for many years, and we derive in this way a great

deal of what some people call "psychic" income. But such income is not measurable, and though we may feel quite certain that "psychic" income has greatly increased in a country like England during the last hundred years, we usually confine our attention to "money" income and its command over "real" income.

Income is an important part of our study, for economics investigates how man, through his activities in the ordinary business of life, gets his income and how he uses it. Economics is concerned with the sources, the classification, the fluctuations, and the inequalities, of income.

3. Sources of Income

There are, as we have already seen, only two kinds of income receivers, workers and owners, and therefore only two sources of income, work and property. But it is usual in everyday language to apply the phrase "the workers" to those that use physical effort, that toil heavily with their hands, in order to obtain their income. Hence the term "the working classes." But the term "workers" has in economics a much wider meaning than this. It includes the mental workers, the so-called "genteel" or "middle class" workers, and such high salaried people as the organisers and managers of industry. Thus the term "working classes" really includes all types of wage earners from those engaged in the most unskilled form of manual labour to those engaged in the highest form of brain work.

It is, however, becoming more and more customary for workers to be also property owners. Many thrifty wage earners possess this other source of income; they may be part owners, or even the sole owners, of a house or a field from which they obtain rent; they may have invested some of their savings in a big company, and these investments will provide income in the form of dividends. A striking illustration of the growth of investment among the workers occurred in the early part of 1927 when two great British railway amalgamations, the London Midland and Scottish and the Southern, decided to increase their capital by £5,000,000 and £1,000,000 respectively, and to invite their employees to subscribe parts of these amounts. The railway 'workers'

response to this invitation was a remarkable one. The specified amounts were not only quickly subscribed but also greatly over-subscribed.

A consideration of income from property opens up big problems. Large-scale production under competitive conditions has resulted in the accumulation of surplus income which has been invested in property. Some of our modern millionaires have built up fortunes in this way. But there are others whose fortunes are due to non-competitive conditions such as monopoly or inheritance, and yet another class to certain fortuitous, or accidental, circumstances which are not beneficial to a community, such as war or shady speculative dealings.

4. Inequalities of Income

This brings us to the great problem of the inequality of incomes, and in considering this it is necessary to remember that among the workers vigour, ability, enterprise, organising power, experience, and prevision, are important factors in causing their incomes to vary. Inequalities, however, are far more evident when we compare the incomes derived from work with those derived from property. There are also great inequalities among property incomes which are due to the inheritance of unequal amounts, to an increase in the value of the property inherited, and also to the unequal savings of those that inherit such property.

The second of the causes of inequalities among incomes from property is particularly noticeable in the incomes derived from urban sites in great cities, sites which have increased in value with the expansion of these cities usually through fortuitous circumstances and not as the result of any effort on the part of the owner. London, Liverpool, and Manchester contain some remarkable and well-known examples of such urban sites from which the owners obtain particularly large incomes under non-competitive conditions.

5. National Income

It will thus be seen that the study of income is not so easy as at first sight would appear. An individual's income is that which comes in regularly, weekly, monthly, or quarterly,

usually in money, and if in kind is measurable in terms of money. A nation's income, or national dividend, as it is termed, is the total of all commodities and services produced in a country during a certain period. National income has been defined as the aggregate money expression of those goods produced and services rendered by the inhabitants of the country in a year, that are, as a fact, generally exchanged for money. Thus, everything that is produced in the course of a year, every service rendered, every fresh utility brought about is part of the national income.

When an individual obtains his income it is used in various ways, the most important of which is as payment for commodities or services. Part of it is used for the payment of taxes; part of it may be given away as a bequest or in the form of charity; part of it may be put aside for future use or loaned to others to make use of.

The amount of an individual's, or of a nation's, income depends upon the amount of wealth produced, that is, upon production. Low output lessens both individual and national incomes, high output increases these incomes. A high output in a country means greater comforts, a greater satisfaction of needs other than the primary ones, and a higher standard of living among the workers.

6. Measurement of the National Income and National Wealth

The most definite data for the measurement of national income are furnished by the income tax returns. From a careful analysis of these returns the total incomes of individuals, companies, and corporations that pay income tax can be obtained. To the total thus obtained additions must be made to cover estimated evasions of the tax. Incomes below the statutory limit are deduced from representative samples obtained from special inquiries. The Government income, Post Office profits, etc., must also be included.

From the total gross income obtained above the amount due to foreigners residing here must be deducted, and so must the interest on the internal part of the National Debt which is merely a redistribution of income. Some authorities also deduct old age and war pensions as these are not payments for current services.

The total individual income of the country is not the same as the total corporate income as the latter includes the undistributed profits of the joint stock companies.

The measurement of the national wealth of a country is a matter of great difficulty, as in the first place many things that contribute to the productive capacity of a people, *e.g.*, their character, and the geographical situation and natural facilities of the country, cannot be measured in terms of price. Neither, of course, can the skill and training of particular classes of its people.

There are two methods of measurement that can be used. We can take a census of all the transferable possessions in the country, plus our possessions held abroad, minus our foreign debts and the possessions in the country owned by foreigners, and assign a monetary value to each. This is called the inventory method and is used to estimate the value of the personal possessions of an individual.

The second method used is the capitalisation method. In valuing a business, for example, we do not usually take an inventory of the different assets, and value each separately; on the contrary we capitalise the profits the business may be expected to yield over a term of years.

An illustration of this method is as follows:—Suppose that a business is expected to yield a net profit of £1,000 per annum over the next, say, ten years, and that the average rate of interest is 5%. The capital value of this business would be $£1,000 \times \frac{100}{5} = £20,000$, as a first approximation. The valuer would then make deductions for depreciation, and other factors affecting the capital value of the business.

The chief statistical data for the measurement of national wealth is furnished by the income tax returns, and may be classified as follows:—

Income from the ownership of land and houses; income from the occupation of land; income from Government securities; income earned in trade and the professions; salaries of officials in the employ of the Government and other Public Authorities.

Among the difficulties in the way of accurately measuring the national wealth the following may be noted:—The income tax returns do not exhaust the national assets; it is difficult sometimes to avoid double counting; depreciation of

investments, and of means of production, cannot be measured accurately; if prices are rising rapidly the national wealth will appear to be increasing even if the output of goods is declining. To compare the national wealth in 1938 with that in 1946, allowance would have to be made for the all round increase of prices.

Comparison is also made difficult by the fact that new forms of wealth are continually coming into being, either in the form of entirely new goods, or in the form of new qualities of old goods.

7. Classification of Income

Output or production according to the early economists depended upon what they termed three "factors" or "agents": land, labour, capital: and corresponding with these agents they classified incomes into the rent of land, the wages of labour, and the profits of capital. Modern economists have added a fourth agent, organisation or management, and they include a fourth kind of income called interest. Thus, applying this classification to the human factors, we may say that the landlord obtains rent, the worker wages, and the capitalist interest and profits.

But, it will be asked, what is the income or share of the organiser termed? That, of course, depends on what his functions are. If he is simply a paid manager, or director of a business then, like other workers, he receives his wages or earnings—the wages of management or superintendence. But if he has invested some of his surplus earnings in the enterprise which he manages then he will also receive interest on such investments, that is to say, as a wage earner and a capitalist he will receive earnings plus interest, and if the business is a very successful one he will also receive something in addition to this. Suppose, for instance, that he has invested in the business £100 when the rate of interest on such investments is 5 per cent., and that after a year's trading he receives say, 7 per cent. This is termed his dividend and represents both interest on his investment, and a share of the profits. The sharing of income into rent, wages, profits, and interest will be referred to again in subsequent chapters.

We are now in a position to describe in more detail the four "agents" of production—land, labour, capital, and organisation.

CHAPTER VI

THE AGENTS

1. Natural Resources

Production is the preparation and adaptation of material for the prospective users, or, in other words, the "creation of utilities." It involves, as we have seen, four "agents" or "factors": land, labour, capital, and organisation; and it depends on the co-ordination of these agents, agents which must now be briefly described.

Land has been termed the "mother of wealth." Everything useful to the life of man, springs from the ground. It must, however, be noted that under the term "land" the economist includes not only the soil, but also water, sunshine, and all the gifts of nature. It would thus be better to refer to the first agent of production as nature power, natural resources, or even nature.

2. Hydro-Electric Power

In view, however, of the recent great development and of the immense possibilities of hydro-electric power, we might now even regard water as a separate agent of production. Take Canada, for example, with its enormous water resources. The rapid increase in the use of hydro-electricity in this vast and progressive Dominion is well illustrated in the Reports of the Toronto Electric Commissioners. These Commissioners are the biggest consumers of the current supplied by the Hydro-electric Commission of Ontario. In 1912 they sold just over 35,000,000 kilowatt-hours; in 1926 the total sold exceeded 550,000,000 kilowatt-hours, which yielded a revenue of £9,500,000. In 1943 the total Canadian output was 6,350,000,000 kilowatt-hours.

These are astonishing figures. But other countries, particularly the United States and Norway, have made quite

as remarkable strides as Canada has in the use of hydro-electricity. In Great Britain, also, progress has been made in the use of water power for generating electricity. England, Scotland, and Wales have been divided into a number of electricity districts, and the Electricity Supply Act of 1927 established a central authority—the Electricity Board. The industrial use of hydro-electric power is being rapidly extended in the form of electrical heat, particularly in connection with the melting and treatment of various kinds of metals.

3. Diminishing Returns

But natural resources are not inexhaustible. The tarns of Caledonia and Snowdonia as sources of hydro-electric power are limited in number; the produce of the Welsh anthracite coalfields is gradually diminishing; the forests of Britain have almost disappeared, so much so that Government schemes of afforestation are becoming more and more prominent, and every effort is now being made to cultivate a “forest conscience.”

Moreover, owing to differences in its physical and chemical composition, the fertility of the soil varies. Man can alter the character of the soil, and by scientific methods increase its fertility and economic efficiency, by irrigation, by the rotation of crops, by the use of chemicals, and by the destruction of insect pests. But despite such methods, and the assistance of more labour and more capital, the cultivator of a specific area will ultimately reach a optimum stage of fertility—a maximum output of produce—after which his returns for equal applications of labour and capital will get less and less. In other words, equal successive applications of labour and capital will result in continuously decreasing returns after the maximum output has been reached. This is termed the law of diminishing or non-proportional returns, a law of great importance to the producer.

Thus a stage is reached when the extra produce obtained, say in one year, from a certain amount of capital and labour expended on a certain area of land will not be equal to the extra produce obtained from an equal amount of capital and labour expended in the preceding year.

It is obvious that if cultivation is extended from a more fertile area to a less fertile, equal amounts of capital and labour expended on both areas will not produce equal returns; the produce of the more fertile land will be greater. We must therefore distinguish between two types of cultivation, the intensive in a single area, and the extensive as the margin of cultivation is extended to less fertile areas.

4. Population

A great deal has been written about the problem of diminishing returns, not only with reference to the extractive industries such as mining and agriculture, but also in connection with manufactures. The problem is linked up with that of increasing population. Writers on population have been prominent in England since Tudor times. The beginning of English overseas expansion, which the Tudor and early Stuart periods witnessed, was due to some extent to the prevailing idea that England was over-populated, and the writers of the day were often haunted with the spectre of over-population.

But in Tudor and Stuart times over-population did not mean great density per square mile, for the population of England in the Elizabethan period was only about 5,000,000. By over-population the Tudor and Stuart writers simply meant that there were too many people in England in relation to the quantity of food that the country produced. In an age when periods of general scarcity were apt to recur with distressing frequency the problem was one of economic self-sufficiency. Over-population was gauged according to the number of bushels of English agricultural produce; the problem was an agricultural one based on returns from the soil.

Though certain eighteenth century writers favoured an increase of population, these views with reference to the bogey of over-population prevailed in England even after the great scientific development of English agriculture in the latter part of that century, when such remarkable progress was made with the cultivation of crops and the breeding of animals for their meat. Towards the end of the century Thomas Robert Malthus propounded what was termed "the principle of population," which, with a pretence to mathematical accuracy, was

imply in essence an attempt to state more precisely what the Tudor and Stuart writers had in mind when they wrote about over-population. Indeed, some of his views on the problems of population were anticipated by that observant early Stuart writer Gerard de Malynes.

5. The Malthusian Theory

Malthus in his treatise on the theory of population compared the increase of annual produce with the increase of population. He thought that population when unchecked increased in geometrical ratio, and that the means of subsistence increased only in arithmetical progression.

This is the Malthusian theory of population, according to which population would double in twenty-five years, quadruple in fifty, and octuple in seventy-five, whereas the means of subsistence would only increase three times in fifty years and would take seventy-five years to quadruple. But Malthus did not foresee the opening of the great corn lands of North America and the Argentine which has brought the rich virgin soils of the New World to reinforce the more exhausted soils of the Old, and though population has greatly increased since the beginning of the nineteenth century, there is no evidence to show that this increase has taken place every twenty-five years in the ratio he suggested.

Among the natural checks Malthus included moral restraint, vice, war, disease, famine, and he did not forget to emphasise unhealthy occupations, severe labour, bad nursing of children, and city life. In France, for instance, increase of population is very slow, chiefly owing to a particularly low birth rate. In some countries the death rate is needlessly high. This is the case in Roumania and Hungary where, in 1926, it was nearly 30 in the 1,000 per annum.

If the "bogey" of the early nineteenth century was over-population, the "bogey" of the present time is under-population; hence the recent measures designed to promote both the birth rate, and the health of the child population. Malthus made the mistake, not only of supposing the population problem to be a food question only, but also of assuming that every rise in the standard of living would stimulate the birth rate. In England, and in most other progressive

countries, the contrary has been the case, for reasons that have already been outlined in connection with the family.

To answer the question whether England is under- or over-populated on the theory of Malthus would lead to contradictory results. From the stand-point of food only, England is over-populated. Whether or not it is physically possible to produce all the food we need, it is certainly not economically desirable. To-day there is a definite shortage of labour in most of the manufacturing industries, so that even if England does appear over-populated from one narrow point of view, from a broader angle it appears under-populated.

The only way in which we can apply a test for the optimum or ideal size of the population of a country is to relate the population to the totality of the country's production resources. Such a measurement would be complicated and difficult in practice, as conditions continually change, and also because the ideal population is not a function of the quantity only but of the quality of the people as well.

6. Recent Problems

So far as England and Wales are concerned it has taken over a hundred years for the population to quadruple. In 1811 it was just over 10,000,000; in 1921 it was 37,885,000; and in 1931 it was 39,950,000. There was a great deal of rural depopulation during the nineteenth century, and, as a result of the rapid industrial expansion, a constant migration to the big towns. This urbanisation of England constitutes a serious economic problem. In London, for example, the evils of overcrowding are appalling, and are a perpetual source of anxiety to the municipal authorities of the various Metropolitan boroughs. Such congestion is accompanied by a high rate of infant mortality. Hence the importance of new housing schemes which will, with the aid of State subsidies, rapidly fructify not only in the London area, but also throughout Britain.

Perhaps the most important of all the recent developments are the town planning schemes for London, and other parts of the country, which are now being considered, and adopted. Their object is to plan the distribution of industry, and

population, on scientific and social lines by a policy of diffusion, rather than of concentration.

That has been made possible by modern developments in transport. The undue concentration of the working population, and the development of the slum in the early nineteenth century, was not due solely to human greed, as sometimes has been supposed. The industrial development of our towns and cities took place at a time when transport was in infancy. Without the tram and the bus, the cycle and motor car and the suburban railway, the workers were forced to live crowded around the factory.

7. Productive Labour

The problem of population leads us to the second agent of production, labour, for the quantity of labour is simply a question of population. The earlier economists made a distinction between what they termed "productive" and "unproductive" labour. Services such as those of the actor, the doctor, or the lawyer, they regarded as "unproductive." The only "productive" labour was that expended on material objects. In fact, the Physiocrats, the well-known French economists of the latter part of the eighteenth century, regarded labour other than that devoted to agriculture as "sterile." Modern economists, however, regard all kinds of services as productive except, of course, those that are harmful to the good of a community. Thus the labours of the mechanic, the dustman, the doctor, and the errand-boy are all productive, while that of swindlers is unproductive and has been termed "predatory" labour.

8. Efficiency of Labour

Though the quantity of labour is entirely a matter of an increase or a decrease of population, its quality depends on many factors. The efficiency of labour is a result of physical strength, skill, intelligence, and adaptability, together with such important moral qualities as honesty, and trustworthiness. It is also obvious that the well-fed, well-clothed, well-housed, better educated, and better trained worker is

more efficient than the ill-fed, ill-clothed, ill-housed, ill-educated, and ill-trained. The influence of home life, of surroundings, of climate, of earnings, of the duration of work, of family affection, and of outlook and prospects, are also important efficiency factors.

Moreover, it must be remembered that though labour may sometimes be pleasurable, it is more frequently irksome and monotonous. A reduction of irksomeness by an increase of leisure adds to efficiency. Hence the numerous welfare schemes which are important features of many modern industries. Human agents of production are not bought and sold as machinery and other material agents of production are. Labour is perishable; the more skilled the worker the longer the time spent in training; the worker has to sell his labour, and this is often done under great disadvantages.

The efficiency of the worker, however, does not depend solely on his efficiency as an individual. In an industrial society the worker does not normally work alone; he works in co-operation with other workers, and with the aid of land and capital. The efficiency of the individual worker depends not only on himself, but also upon the efficient organisation of his group, and on the quantity of land and capital used by the group. Each individual working in a factory with the aid of modern organisation and machinery will produce much more than he would if working alone with primitive tools.

Similarly, a farm worker using a tractor and other mechanical implements and as much land as he can cultivate will be much more productive than a labourer cultivating a smaller area of land with a spade.

The average worker in the United States is much more productive than the average worker in China, largely because he works with more land and capital per head.

9. The Mobility of Labour

Finally, we must consider the mobility of, and the methods of applying labour. Some economists have distinguished various groups of labour. Cairnes, for example, gives four such groups. The first includes the unskilled and nearly unskilled; the second, the artisans, such as carpenters and smiths together with the small retail dealers; the third, the

producers and dealers of a higher order such as civil engineers and chemists and the superior class of retail tradesmen; the fourth, persons "still more favourably circumstanced."

Whatever classification we adopt it is evident that the mobility of labour from one group to another is not very great. Nor is the mobility of labour from one industry to another a particularly great one, for labour tends to be localised. Hence, because of this general immobility, we speak of "frozen" labour.

In an advanced industrial economy there are four main obstacles to the mobility of labour. In the first place, custom and ignorance in many cases leads the child to the father's occupation. As soon as the worker reaches the adult stage, movement is difficult, partly because of trade union and professional regulations, but also because of the costs of training for a new occupation. To cite an extreme case, it would not, perhaps, be impossible for a clever young bricklayer to become a doctor, but it would be a rare exception.

Lateral mobility, that is to say movement from place to place, is often difficult for the married worker for family reasons. He may be able to move to another town with advantage to himself, but does not do so for fear of injuring the prospects of his children.

At the present time a further obstacle to lateral mobility is the acute housing shortage. Workers cannot move to towns in which there is a keen demand for labour, because in most places there is no housing accommodation for their families.

As the demand for labour fluctuates continuously between trades, greater mobility is essential to a policy of full employment. This can be effected by the education facilities provided by the 1944 Act, and by free Government training schemes with maintenance during the period of training. It has been suggested that the cost of moving an unemployed family from one part of the country to another, should be paid by the State; a policy of social security would appear to demand that in the future, most workers should master more than one occupation.

10. The Division of Labour

Labour is applied in various ways. It may be purely manual, it may be used in connection with machinery, it may be used in private enterprise, it may be used in large scale production, the labourer may work alone or in co-operation with others, a man may be a specialist or a "jack of all trades." In modern industry, however, specialisation is the outstanding characteristic. Each worker has his own job, the work is divided in order to secure better co-operation. The complex nature of modern industry has intensified this specialisation or division of labour, though, of course, in its elementary form it is as old as family life, for man's first labour was that of hunting.

Specialisation allows each worker to be put to that task for which he has some natural aptitude. The stages in modern manufacture are so numerous and diverse that widely different abilities can be utilised. As a rule, although there are exceptions, each worker will drift to that process which demands the special abilities that he, or she, possesses, and these abilities will be developed by repetition.

Specialisation makes for economy of time, tools, and materials. The medieval craftsman spent much of his time in the fields, for his limited market made continuous employment impossible. Much time was wasted in passing from one occupation to another; at one time of the year he would have more work than he could conveniently manage; at another, he would be more or less idle.

In the modern factory the working day is spent in a definite place; no time is lost by unnecessary movement, and the worker is employed to his full capacity throughout the day. Specialisation has limited the number of unnecessary workers in an industry and promoted their transfer to other occupations in which they could be employed more efficiently.

Similar considerations apply to tools and machinery. If each worker performed a multiplicity of tasks, each of these would require tools and machines, and some of them would be idle for part of the working day. When a carpenter is using his saw, all his remaining tools are idle. In this case, the waste is not serious, as carpenter's tools are inexpensive; machinery, however, is very expensive, and most of it is

purchased with borrowed capital on which interest must be paid. An idle machine is a serious loss to the producer, and without a minute division of labour, most modern machinery could not be profitably used.

More generally, the progress of knowledge depends largely on the division of labour. The work of the scientific inventors has been possible because other people have worked at the same time to provide them with means of sustenance, and materials necessary for their work; they have been able, therefore, to devote their intellects, and energies to some narrow field of discovery.

11. Standardisation

Specialisation, or division of labour involves standardisation and mass production, as specialisation is neither practicable nor profitable where goods are produced to an individual pattern. That explains why certain small scale types of business still persist. The high class tailor who caters for wealthy customers is a case in point, although such examples are relatively few in the modern world.

Many goods for which individual production was once thought essential have been adapted to mass production by the process of standardisation. Clothing, and boots and shoes, for example, are now made in standard sizes, and to standard patterns.

The wide use of most kinds of machinery is largely a consequence of the standardisation of the numerous parts of which they are made. Standardisation not only enables these parts to be produced in large quantities by specialised labour, but it facilitates repairs, and lowers running costs. If every part of a machine were made to an individual pattern, replacements would be expensive, and the time necessary for such replacements would be a grave inconvenience.

12. The Defects of Specialisation

Industrial specialisation is not without disadvantages. It is often objected against the factory system that factory life is dull and monotonous, as the vision and interest of the worker are limited to his machine which performs one simple operation.

This, of course, is true, but the drawback is easily exaggerated. Work has become more monotonous, but the working day has been shortened. The worker of to-day has ample leisure, and he lives in a society in which it is possible to develop many interests; monotony of work no longer necessarily means monotony of life.

A more serious objection is that specialisation has made employment much more unstable. The more highly specialised a worker becomes the smaller is his range of alternative employment.

The minute division of labour has affected the worker adversely in two ways. As a link in a chain, he is dependent on those who go before, and on those who follow him. A worker in an automobile factory may be out of employment periodically, either because the miners are not producing sufficient coal or iron ore, or the blast furnaces and rolling mills sufficient steel; or because some later stage, perhaps the assembly shop or the distributing department, has got out of gear.

Secondly, methods of production continually change. A new type of machine may, at any time, displace a particular task and the operatives who perform it. In some cases, the displaced workers are able to adapt themselves to the new methods, but very often they are thrown out of employment for a period more or less long, and that is particularly true of the older and less efficient workers.

The worker in modern industry, therefore, is liable to be thrown out of work by a number of circumstances over which he has no control.

13. Localisation of Industry

In addition to the division of labour among the various specialists, the division of processes, we often find labour concentrated in certain localities. This is what is termed the territorial division of labour, or the localisation of industry, of which there are some striking instances in Great Britain. Why, for example, is the English cotton industry concentrated in South Lancashire or the English porcelain industry in North Staffordshire? The reasons, of course, vary with the different localities.

Industries that use a large quantity of coal are usually located on the coal-fields as coal is costly to transport, and similarly export industries of a heavy and bulky nature are usually located near the coasts. No manufacturing district in England is situated very far from the sea, but now that so much of our iron ore is imported it is cheaper to manufacture steel on the North East coast and South Wales coal-fields, than it is in the Black Country.

The light steel and blade industries of Sheffield developed in the first instance because good grinding stone was abundant in that district. The pottery industry grew up in North Staffordshire in the eighteenth century not only because Staffordshire clay was of a suitable quality, but because fuel, salt, and lead ore for glazing were found in the neighbourhood.

The cotton trade developed in Lancashire, partly because the moist climate was ideal for spinning, and there were abundant water supplies, and also because Liverpool was situated conveniently for importing raw cotton from America. The good sheep grazing lands and the rivers of West Yorkshire are the origins of its woollen industries; the leather trade developed in Northamptonshire, because the pasture lands of that county are good grazing lands for horses.

Once an industry becomes localised in a given area, it tends to remain there even when the conditions that brought it into existence pass away. The woollen and leather trades no longer depend on local wool and hides, but the industries have not changed their localities, partly because their skilled labour is localised, and partly because necessary secondary industries have established themselves there.

Lancashire and Yorkshire are not only the main centres of the textile industries, but the making of textile machinery is an important secondary manufacture in Leeds, Keighley, Oldham, and Manchester. This industry settled in those towns because it was a great advantage to be in close contact with the local conditions of the primary industry. Whenever a primary industry becomes localised, a number of auxiliary industries tend to cluster around it, and to hold it in place even when conditions arise which make movement a possibility.

It will be seen from what has been said above, that industry tends to settle on the sites on which it can produce its output most cheaply.

14. The State and the Location of Industry

But the location of industry is no longer decided by individual interests, or by natural circumstances. The State has now a voice in the matter. Down to 1914, State regulation of industry was hardly considered; the location of industry was regarded as a purely private affair. Since 1920, however, a revolution of ideas of the economic functions of the State has taken place. As the State gradually became committed to enormous expenditure on welfare work,—housing, public health, education, etc., it could no longer view with indifference the location of industry and its problems. A migration of industry from one locality to another now involves the public in considerable expense for new roads, sewers, houses, schools, and other amenities. At the same time this social capital equipment becomes redundant in the area from which migration has taken place.

Secondly, the undue concentration of an industry, and industries dependent upon it, has long proved to be a source of economic weakness in times of depression, for, whenever the primary industry is depressed there is little or no alternative work in the neighbourhood. In the nineteenth century this was not a too serious matter as world markets were expanding,—new countries were continually being developed. A depression, therefore, tended to be temporary only.

This was not the case between 1920 and 1939, largely because developmental work in new countries had slowed down, and also because many countries had adopted a policy of self-sufficiency. The result was that our highly specialised districts, *e.g.* South Wales, South Lancashire and West Yorkshire, the North-East coast, and the Clyde Basin were centres of mass unemployment throughout the period.

There was also a third reason for the growth of State interest in the problem of the location of industry,—our vulnerability in the event of aerial warfare. It was for this reason

that the State, before 1939, favoured dispersal rather than attempts to revitalise the depressed areas.

The first step taken by the Government was the setting up of the Barlow Commission, which, shortly before the war, reported in favour of the decentralisation and dispersal of industry. It advocated the establishment of a National Industrial Board to regulate the location of industry and to limit the growth of very large cities, especially London. In the Commission's view, no new undertaking should be established in London that could be worked just as economically elsewhere.

The outbreak of war prevented any action being taken on the lines of the Barlow recommendations, but in the early years of the war the Scott Committee was set up to consider certain aspects of the Barlow Report,—the development of industry in relation to the preservation of agriculture and rural amenities. The Scott Report did not favour the diffusion of industry into rural areas; it suggested that light industries should be encouraged to develop in small towns rather than in villages and the open countryside, but like the Barlow Commission it accepted the principle of the controlled location of industry.

Between 1942 and the passing of the Town and Country Planning Act of 1947 which brought the land of the country, and its development, under central control, two important Acts regulating the location of industry were placed on the Statute Book. The Distribution of Industry Act of 1945 empowered the Board of Trade to acquire land for the building of factories, or to build factories, to promote a more varied industrial development in areas liable to very severe unemployment. These areas were marked as Development Areas.

The New Towns Act of 1946 provided for Public Development Corporations responsible for the building up of new towns to attract industry, and population, from overcrowded areas.

The principle of State regulation of the location of industry is not universally accepted. Under free competitive enterprise, a producer must locate his factory on the most advantageous economic site, especially if the product must be sold on a

world market. But a Government is influenced by considerations other than purely economic, and planned location may result in production costs being higher than they would otherwise be. Where the goods are sold at home this is not a vital matter, as if consumers pay higher prices they receive social compensation in various ways. In the export trades, however, costs of production are a serious problem and too much planning of industry may raise a grave problem in the future.

15. Migration of Industry

Migration of industry does take place. Between 1760 and 1830, as coke substituted charcoal in smelting, and the steam engine displaced the older forms of power, the wool, iron, and shipbuilding industries migrated from south of a line joining Bristol to Norwich, to the Midlands, Yorkshire and Lancashire, and to the North East coast.

Since 1914, the South has regained some of its lost importance. There has been a great industrial development there, and a corresponding decline in former staple industrial districts, especially in South Wales, Lancashire, and the North East coasts. It was in these districts, between 1920 and 1939, that unemployment was most persistent, and most acute.

This industrial revival in the South has not been due to a re-shifting of the old basic industries, but to the rise of new trades, which, before 1914, either did not exist, or were of almost negligible importance. The motor, aeroplane, electrical and wireless industries, and artificial silk, are familiar examples.

This revival of industrial activity in the South of England has been due to various causes. Coal is no longer the sole source of heat and power, and the other special causes that localised our basic industries in the West Midlands, South Wales and North of the Humber, do not affect the newer industries. Steel-making and shipbuilding cannot be carried on anywhere; the textile industries must have abundant and cheap water supplies; but the new industries can be undertaken as well in one place as in another. The development of road motor transport, and the electric grid system, has given the new industries more latitude. The older industrial districts

are, for the most part, heavily rated areas, and for that reason, new industries have moved to southern areas where the burden of rates is less heavy.

Perhaps the most significant fact of the years 1914 to 1939 has been the industrial expansion of the Greater London area, for the following reasons:—

London is naturally the great distributing centre of the British Isles, and the rising standard of living of our population has led to a great expansion of the distributive trades, and of light industries. More and more of our workers between 1919 and 1939 were producing goods for domestic consumption,—clothing, furniture, luxury articles, etc., and these industries have tended to settle around London because a large market was already there. To some extent, the great size of London has contributed to its further growth by acting as a magnet on industry, and on the industrial population.

This concentration of industry in certain areas, especially in and around London, has been a matter of concern to the Government for some time. Legislation has recently been passed with the object of effecting some measure of decentralisation of the industrial population. Limitations have been placed on the erection of new factories in many industrial districts, and above all, new medium sized industrial towns are being planned for various parts of the country. Industrial planning of this kind has great advantages from the standpoint of industrial health, and from that of national defence, although, as has been shown elsewhere, there are possible economic drawbacks.

Even the basic extractive industries are not rigidly fixed. If the deposits are scattered over a wide area the main centres of production tend to shift from one site to another as advances in the technique of mining make it possible to “lap” reserves formerly uneconomic to work. For example, the coal mining industry is tending to shift from the main original sites, Durham, South Wales, Lanarkshire, and Lancashire, to South Yorkshire, Nottinghamshire, Derbyshire, and Leicestershire,

Similarly, the iron ore industry has been moving for many years from the coalfields to Lincolnshire and Northamptonshire.

16. Capital

We must now briefly examine the nature of the third agent of production, capital. The term capital appears to have been first used by English writers in connection with accountancy, and in one of the earliest English treatises dealing with this subject, written by John Peele in Elizabethan times, it is used as equivalent to "stock." Professor W. R. Scott tells us that the East India Company began in 1613 to call the sum invested by each shareholder in the company "capital." Thus in the business of this great commercial corporation, and other such Stuart corporations, it came to mean a sum of money, and this is still the usual popular meaning.

The term capital was thus in use in England long before it appeared in a treatise dealing with economics. Adam Smith states that a person's capital is not identical with his stock, and he defines capital as that part of a man's stock from which he expects to derive an income. Smith classifies capital into "circulating" and "fixed." Modern economists regard circulating capital as that which serves its purpose by being used once, or, that which fulfils the whole of its office in the production in which it is engaged by a single use. Coal used as fuel, the wages of the workers, leather made into boots, steel made into a safe, raw cotton converted into cotton cloth are examples of circulating capital.

Fixed capital, on the other hand, modern economists regard as durable capital, such as factories or machines, which can be used continuously, and from which returns are obtained over a period of time. Smith, however, distinguished between circulating and fixed capital from the standpoint of profit, whether or not the capital concerned yielded "a revenue or profit to its employer." His distinction is an interesting one, and is worth quoting.

"There are," he states, "two different ways in which a capital may be employed so as to yield a revenue or profit to its employer. First, it may be employed in raising, manufacturing, or purchasing goods, and selling them again with a

profit. The capital employed in this manner yields no revenue or profit to its employer, while it either remains in his possession, or continues in the same shape. The goods of the merchant yield him no revenue or profit till he sells them for money, and the money yields him as little till it is again changed for goods. His capital is continually going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive changes, that it can yield him any profit. Such capitals, therefore, may very properly be called circulating capitals. Secondly, it may be employed in the improvement of land, in the purchase of useful machines and instruments of trade, or in such-like things as yield a revenue or profit without changing masters, or circulating any further. Such capitals, therefore, may very properly be called fixed capitals."

Another early economist, Ricardo, defined capital as that part of the wealth of a country that is employed in production, and consists of food, clothing, tools, raw materials, machinery, etc., necessary to give effect to labour. And this is a good definition of the term, for capital is wealth that is used for producing more wealth. Thus, though we speak of the "capital market" and mean a money market, the market where loans can be obtained to start a business, capital includes a great many commodities other than money. It is likewise true that the head of a business when he refers to his "capital" usually means the sum of money or the total "stock" that is invested in the business and not his "stock" of tools, machinery or raw material. The economist, however, includes both the money "stock" and the "stock" that is used to produce new economic goods or commodities, that is, to create further wealth, under capital. But it must be remembered that the "stock" that is ready for sale, that is waiting for the "consumer" in a finished and enjoyable form, such as clothes, furniture, or loaves of bread, is not by some economists regarded as true capital, because it is not directly used in the production of new wealth.

We may therefore distinguish between "consumer's capital," *i.e.* the finished economic goods in an enjoyable form, and "producer's capital," such as raw material and plant, which is directly used in the process of production. Both forms

constitute wealth, but, strictly speaking, only the second is true capital.

This is the classification of capital adopted by Professor Taussig. Another classification, as we have just seen, is "fixed" and "circulating," and there are several others only the chief of which can be described here. Such are natural capital (land for example) and artificial (instruments made by man); trade capital (used in trade, such as a factory, raw material, the business man's own money, and loans) and social (belonging to the community, such as roads, the Post Office, state-owned railways); sunk capital (specialised capital used for one purpose such as the telephone, railway lines, and locomotives) and floating (capital fulfilling more than one function such as coal); remuneratory capital (the earnings of labour) and auxiliary (all other forms such as raw material, plant, and money invested in a business); material capital (concrete goods used in production) and personal (skill, efficiency, and ability which cannot be transferred).

17. Capital Accumulation

We must next consider how capital is accumulated. Fundamentally, of course, the accumulation of capital depends on labour and effort, on time, and on the will power to save. But there are other contributory factors, such as security, sound judgment, future needs, social ambition, and family affection. Obviously, much more capital is accumulated in a country possessing a stable government than in a country where there is constant social or political unrest. Then there are certain stimuli. In England, for instance, sound banks and thrift societies, and the National Savings Certificates are strong inducements to saving. Attractive rates of interest and a great demand for capital will also stimulate people to save.

Capital is more mobile than labour. It is not so easily hindered as labour is by barriers of language or of distance. Illustrations of this mobility constantly occur in the great capital markets of the world, such as London and New York, where large loans are frequently obtained for productive enterprises in countries far away from the capital market where the loan is raised. British capital has been used for the

construction of great railways in India and in North and South America, docks in China, and dams in Egypt. The interest on loans of this nature are often a big source of income to the lending country.

All the capital needed in the process of production is composed of such "fixed" elements as factories, machinery, and tools, together with what may be termed "live" capital, or what the business man would call "live" assets, such as raw materials, intermediate products, outstanding accounts, and cash in hand. Capital is applied to business in certain organised ways. The business may be a private firm belonging to a single person or a small number of partners, a large scale firm or joint stock company with thousands of shareholders, a municipal or State enterprise in which the rate-payers and tax-payers are particularly interested, or a co-operative concern run by the consumers whose profits depend on their personal purchases. These various types of business organisation will be described in more detail in another chapter.

18. Organisation

The actual application of capital to business is the sphere of the fourth agent, organisation. The earlier economists, as we have seen, did not recognise this agent; they confined their attentions to land, labour, and capital. The remarkable development of modern industry and enterprise has caused more recent economists to add this fourth agent. Thus, the chariot of production has been given four wheels: land, labour, capital, and organisation.

Organisation or management has to do with the technique and problems of industrial administration, with the governance of companies. It co-ordinates the other agents, and is thus the key to industrial prosperity. The paramount importance of skilful management to the life of a community is shown by the fact that in Great Britain alone there were in 1938 over 159,000 companies with a total paid up capital of over £6,000,000,000 and employing some 10,000,000 wage earners. Before the war both Germany and the United States, however, were far ahead of Great Britain in the provision of instructional facilities in the principles of industrial administration. The British universities have been slow in developing facilities

of this nature, and are only just beginning to realise the importance of the administrative faculty in business. .

Other countries are also ahead of Great Britain with reference to the establishment of national associations for the study of the various methods of industrial management. The United States, for example, has its Management Association, which is a national body, and before the war in France, Germany, Italy, Belgium, and other European countries there were national associations of this kind. It is true that Great Britain has its Federation of British Industries, and its National Confederation of Employers' Organisations, but the functions of such bodies are different from those of a management association. The object of a management association is to study the art of management and the underlying sciences on which that art is based, to consider the different means of lowering production costs and of increasing efficiency, and to find out how to establish the right relations between Capital and Labour.

19. The Entrepreneur

Organisation implies an organiser, or to use an economic term, an entrepreneur. In a small, one man owner business, the owner is the entrepreneur. He, alone, decides the kind of product, and how much of it shall be produced, the methods of production, and the arrangements for the finance, and for the marketing of the product. He also shoulders the responsibility for such risks as arise from the uncertainty of the course of future events that cannot be standardised, and insured against. Risks of loss from fires, accidents, and storms at sea, indeed, all risks that conform to the laws of probability are now passed over to an insurance company, which has some claim to be regarded as an agent of production; but no entrepreneur can insure himself against the effects on his product of a change of taste or fashion on the part of the public, or a new method of production by a competitor. He must also bear the chances of loss when putting a new line, or product, on the market. Incidentally, a large part of business profits are usually regarded as the payment for the bearing of these uncertainties.

In a modern joint stock company, the entrepreneur is difficult to identify, and certain of his functions are usually delegated to a salaried manager; but in every concern there must be some person, or group of persons, who have the final word on all decisions.

20. Scientific Management and Selection

When Adam Smith, in 1776, drew attention to the advantages of specialisation of processes within a firm, it was assumed that competition would distribute the workers among the different tasks in accordance with their special aptitudes. In a very general sort of way that has been the case, but there have always been "square pegs in round holes" for reasons that are not far to seek.

Young persons entering employment do not always deliberately seek the work for which they have a special preference or aptitude. In many cases, special aptitudes are not discovered until long after a worker is established in an occupation and has reached an age at which change is difficult.

Secondly, the choice of an occupation is often governed by considerations other than the preference of the individual for a particular work. Family circumstances may chain a young worker to a particular locality, and to a particular job, because the immediate wages are high. Custom, too, plays an important part. Boys tend to follow the occupations of their parents, as fathers can often obtain employment for them at their own place of work; boys, too, often wish to work with their friends.

Since the first World War, attempts at a psychological selection for jobs have been made. Outside the factory, juvenile employment bureaux, and employment exchanges, have made some contribution to this end. Inside the firm, or factory, various psychological tests have been applied to test the fitness of candidates for particular positions, and these psychological tests have yielded fruitful results.

It is probable that this mode of selection will become general at some future date, for the suitability of the worker to the job is a first condition of industrial welfare and happiness, the importance of which in relation to the productivity of the worker is now generally recognised.

Organisation in itself has been scientifically investigated by pioneers like Taylor, and industrial fatigue and motion study have received special attention, and it is now understood that the efficiency of the worker is greatly affected by his general surroundings:—lighting conditions, temperature of the factory, provision for his working comfort, the height of his bench, and so forth.

Every task must be performed by a series of motions, and it has been discovered that the instinctive movements made by a worker are not always the best from the view point of time taken and energy expended. Various systems have been devised by which the time and energy used in a task are reduced to a minimum.

The weight, shape, and structure of tools and appliances have also received careful consideration with the object of increasing the productivity of, and at the same time lessening the strain on, the worker.

CHAPTER VII

THE PRODUCERS

1. Types of Business Enterprise

We have seen that income is derived from two big sources—labour and property—and that there are two great classes of income receivers—wage earners and capitalists. Both the wage earner and the capitalist are, of course, indispensable to production. The “automatic” and “responsible” wage earners labour to produce commodities; the capitalists invest their surplus income in business enterprises.

We may distinguish three main types of business enterprise. There is, first of all, the small scale business owned by a single person or a few partners, which operates under the most intensive competitive conditions, and whose existence depends entirely on the ability and initiative of its proprietor or proprietors.

Secondly, there are the businesses managed by public authorities. These are public concerns or public utility undertakings, and many of them are of great magnitude. In this class are included the big national businesses directly controlled by the Government such as the British Post Office, the Royal Mint, the Office of Works, and His Majesty’s Stationery Office; national undertakings controlled by officially appointed bodies such as the Transport Commission and the British Broadcasting Corporation; local undertakings managed formerly by local authorities such as municipal gas works, bus services, and tramways; local undertakings managed by specially appointed authorities such as the Port of London Authority, the Metropolitan Water Board, and the Mersey Docks and Harbour Board; and companies formed under the Building Societies Acts and under the Industrial and Provident Societies Acts, of which the Co-operative Wholesale and Retail Societies, established under the latter Acts, are of outstanding importance.

Finally, there are the joint-stock companies which operate large scale businesses under boards of directors appointed by the shareholders.

2. The Meaning of a Firm, and an Industry

A firm is simply a combination of production agents, or factors, organised by an entrepreneur, or producer. A firm may, and indeed, often does produce more than one type of commodity, and the same firm may operate in more than one place.

An industry is a group of firms producing the same or similar goods so that the products of one firm are substitutes for those of another. What is called the coal industry is really a collection of industries producing different products; coal used for domestic purposes is not the same product as the coal used in gas manufacture, or on steamships.

In an industry as defined above, the prices of the products of the different firms must move in the same direction as the products of one firm can substitute those of another. The size of an industry can increase, or decrease, in two ways; the firms within the industry may increase or decrease in size, or the number of firms in the industry may increase or diminish.

If the demand for the products of an industry increases, prices will usually rise. This encourages existing firms to expand their output, and it also encourages new firms to enter the industry. A decrease in demand will usually have the opposite results, but as we shall see later it is not always easy for a firm to restrict production, or to go out of business.

3. The Laws of Returns—Diminishing Returns

The average costs of producing a quantity of goods are the total costs of production divided by the number of units of output, and average costs can increase or decrease as output expands, or they can remain relatively constant for a wide range of outputs. We shall examine the case of rising average costs first, and this case is known in Economics as the Law of Diminishing Returns, as it was first formulated in respect of the yield of land.

Every farmer knows that if the size of his farm is fixed there is a certain combination of labour and fertilisers which, when applied to this fixed quantity of land will yield the most profitable crop. He is also aware that it is physically possible to force the yield beyond this point by the application of further capital and labour, but that the additional crop will be less than proportional to the extra capital and labour used, and that the further this process is carried the smaller will be the proportional returns from the land. Ultimately, a point would be reached after which the absolute, as well as the proportional size of the crop would diminish, although in practice no farmer would cultivate his farm anywhere near that point. Diminishing returns set in, therefore, whenever we apply to a factor more or less fixed in supply a greater quantity of other factors than can be used to the maximum advantage.

This proposition can be illustrated in many ways. If you double the quantity of apples you must also double the other ingredients and the dish if you wish to double the pie. Ten men each working with a spade may dig a well in ten days, but twenty men will not complete the work in five days unless the number of shovels can be doubled. If no more shovels can be had the time may be reduced by working in relays, but not in proportion to the additional men employed.

But what the business man is interested in is not so much the size of the output as the average costs of its production. He thinks of diminishing returns as rising average costs, and average costs may rise with output in various ways. As we increase the depth of a coal mine, the fixed or overhead charges for sinking the shaft, for ventilation, for pumping, and so forth, increase progressively, and raise the average costs of mining the coal. When a railway is working below full capacity, so that the line, rolling stock, and staff are partly idle, the average costs of the traffic carried rises, and the same applies to most factories working short time.

The most general case of diminishing returns, however, is when the output of a firm or industry must expand, and some necessary factor is in scarce supply. The range of possible scarce factors is wide; the scarce factor may be land, skilled labour, power, machines, a raw material, or even organising

and technical ability. Any firm or industry may, and in fact often does obtain as much as it needs of this scarce factor, but only by paying a higher price for it, and that raises its average costs. If less efficient factors have to be used, as sometimes is the case, the result is the same.

The question may be asked; why, in view of the continually increasing pressure on the supply of production factors by the world as a whole, all industries are not now producing in diminishing returns? The answer is this. If technical conditions remained constant, most industries would be working in diminishing returns. But technical conditions do not remain constant; technical science is always more or less active, although it does not make uniform progress in all industries, as some are able to adopt technical improvements much more easily than others, but whenever technical progress takes place, factor scarcity in that industry is lessened.

4. The Laws of Returns—Decreasing Average Costs

We know from experience, however, that increasing the output of many kinds of commodities decreases their average costs of production, except over a short period when the expansion is due to a sudden and unforeseen increase of demand. Industries working in such conditions are said to be working in increasing returns.

It may appear from what has been said above that increasing returns is simply the opposite of diminishing returns, and solely a matter of technical progress, and in a certain sense that is so. When a factory that has been working short time begins to expand output once again, its average costs will gradually fall until it is working again at full capacity. The reason is that factors previously partly idle are now used to full capacity, or, to express the matter technically, the firm's fixed charges, rent, rates, staff expenses, and interest on borrowed capital, are spread over a larger number of units of output.

It is also true that technical progress is a factor in increasing returns, but there is more in it than that; there are the advantages of size.

In many forms of industry the output can be doubled without doubling all the factors used. If you double the size of a

motor lorry still only one driver is required, and that applies to engines and machines in general; and if you double the size of many plants, and machines, you do not double their installation and running costs.

Certain large factors used in many industries are either not divisible at all, or only partly divisible; increasing the scale of operations, therefore, up to the point at which such factors can be used to full capacity, lowers their average costs per unit of output. Electricity can be generated and steel can be produced much more cheaply per unit on a large than on a small scale.

Some factors such as a linotype machine or a conveyor system for the manufacture of motor cars are profitable only when used for a very large output, but, once installed, they make possible a much more efficient production organisation.

Owing to the advantages of size, then, increasing returns are possible in many industries even when technical conditions remain constant, but unless technical progress is active sooner or later diminishing returns arising from the scarcity of some factor or factors will offset the advantages of size.

The economies outlined above take place within a firm, or industry, and are known as internal economies, but when the size of an industry becomes very large certain economies external to the firms of the industry become possible. For example, the growth of an industry tends to develop a larger and more reliable supply of the skilled labour and technical ability used in the industry. Secondly, the means of transport that serve the industry are usually cheapened, and thirdly, most of the machinery and the semi-manufactured products which form part of the raw materials used by the industry tend to be supplied to it at a lower price, as they also will be produced on a larger scale. It is possible that, at any time, any tendency to diminishing returns within an industry may be more than offset by economies external to the industry.

5. The Laws of Returns—Constant Average Costs

In some cases an increase of output over a fairly wide range may have little, if any, effect on average costs. If a firm or industry is working under conditions in which it can obtain all the production factors it needs at a constant price, and if

there are no special economies of size available, it may expand its output considerably without affecting its average costs.

Small firms using simple equipment usually work under constant costs and even the large firm, when it has exhausted the economies of size in the given technical conditions, may expand its output under constant costs for some time before being faced with diminishing returns.

An illustration of the laws of returns is provided by the following table which represents the daily outputs of a number of men employed to shift a heap of large stones with the aid of a fixed factor, one motor lorry. If we assume that each man, including the driver, is paid £1 a day, and that the costs incidental to the lorry are also £1 a day, we get the following possibilities:

NO. OF MEN EMPLOYED	TOTAL OUTPUT IN TONS	AVERAGE OUTPUT IN TONS	TOTAL COSTS PER DAY	AVERAGE COSTS PER TON APPROX.
1	2	2	£3	£1.50
2	4½	2¼	£4	£0.89
3	8¼	2¾	£5	£0.61
4	15	3¾	£6	£0.40
5	26½	5½	£7	£0.27
6	43½	7¼	£8	£0.18
7	68½	9¾	£9	£0.13
8	78	9¾	£10	£0.13
9	87¾	9¾	£11	£0.13
10	95	9½	£12	£0.13
11	101½	9¼	£13	£0.13
12	108	9	£14	£0.13
13	110½	8½	£15	£0.14
14	112	8	£16	£0.14
15	105	7	£17	£0.16
16	96	6	£18	£0.19

Notes. The average physical output is increasing up to the 7th man, and the average costs per ton are falling. Production is in increasing returns in respect of both output, and average costs. The reason for that is the men and the lorry are working in better and better combinations. Two men, for example, will move a little more than 2×2 tons as the lorry will be loaded a little more quickly.

In the above table, combinations of 7, 8, and 9 men are working in constant physical returns. That may be due to an economy in the arrangement of the men being exactly offset by waste connected with the lorry. In this particular case, production costs are constant for 7—12 men, and they are also at a minimum, so that if the contractor were moving the stones to sell them, he would probably use 12 men to shift 108 tons a day at a cost of £12 a ton, assuming that the stones shifted had to be sold each day to meet expenses. On the other hand, the demand price for stones may be such that it would be more profitable to send 8 men to shift 78 tons as the average cost of the stone would be the same. The physical average returns begin to diminish when 10 men are employed, and when 13 men are used average costs begin to rise. This slight discrepancy is due to the artificial nature of the table. The changes in average output resulting from combinations of 10, 11, and 12 men are too small to have any appreciable effect on average costs. The table illustrates a general pattern only, not a concrete example.

But in all cases where increasing returns are possible, we get the same general pattern—a series of increasing average physical outputs or falling average costs, followed in many cases by a series of constant physical outputs and constant costs, and then a series of diminishing physical average returns, or increasing average money costs. In some forms of production the series will occur in the reverse order. A change from increasing, or constant, to diminishing returns, will be caused by the scarcity of some factor, or factors; a change from diminishing, or constant, to increasing returns, will be due in most cases to a change of technique made possible by the progress of science.

Finally, if we consider the table as a general picture of production in free competition, where selling price tends to equal average costs, an individual producer would be likely to produce 108 units at an average cost of £3, a monopolist would be likely to produce any output between 78 and 108 units, as for all outputs between 78 and 108 units, his average costs are constant. The output he would choose would depend on his control of selling prices, which in turn would depend on the elasticity of demand for the product.

Production would never pass beyond 112 units, as beyond that point, increasing the quantity of variable factors used with a fixed factor, would diminish the total product—in various ways the extra factors would be wasted. But in times of scarcity the production of an essential good, food, for example, would be forced up to 112 units, as costs would have no influence on output. The output would be produced irrespective of costs. That, of course, is not the case in normal competitive enterprise.

6. The Advantages of the Large Firm

From what has been said already it follows that the advantages of the large firm rest on the division of labour and the economies of size. A large firm can make use of specialisation to a much greater extent than the small firm. In a small firm, one man may have to do several jobs; a large firm can be organised into specialised departments, and in consequence is more effective. A large firm can set up a research department for the purpose of investigating its special problems of organisation and technique.

Secondly, only the large firm can utilise the most modern machinery and methods to advantage. In the motor car trade, for example, only the large firm can use casting moulds for parts of engines, and an assembly line, and other labour saving devices. Large modern machinery can only be used profitably when it can be worked to full capacity, as interest on the capital borrowed for its purchase, and maintenance charges, must be met whether the machinery is working, or idle. Much of the machinery used by the large firm would be idle part of the week in a small factory. Machinery depreciates, partly from use and partly because it is gradually made obsolete by new inventions. When a machine is idle, it is not earning anything towards its cost of replacement.

Thirdly, the large firm can turn the waste materials of many forms of production into valuable by-products. Coal used in the manufacture of gas has a number of valuable by-products—coke, tar, chemicals, and dyes—and, thanks to the progress of technical science, by-products from what was formerly waste are now a feature of many industries. In

many cases, the production of by-products allows the main commodity to be sold more cheaply than would otherwise be the case.

Fourthly, the large firm has advantages in the buying of its raw materials, and in the marketing of its products. A large buyer is always in a strong bargaining position and is able to force better terms from the seller than can the small manufacturer, whose order, being one among many, has little influence on prices.

Only the large firm can afford to maintain an elaborate sales organisation and a publicity department. Apart from the question of advertising, the costs of executing an order, in many cases, are much the same whether the order is large or small.

Lastly, the large firm can raise capital, either from the public, or from the banks, more easily and more cheaply than the small firm.

7. The Small Scale Firm

In spite of the advantages of large scale production, the small firm persists and is unlikely to be wholly eliminated unless by State policy. All forms of production are not equally suited to standardisation, and where the work requires close supervision the business unit tends to remain small. In the clothing, jewellery, and light engineering trades, the small business unit is still common.

In many cases, the small firm persists for technical reasons. As the large firm grows in size, the difficulties of organisation often increase more than proportionally; at a certain size therefore it is more profitable for a large firm to hand a process over to a small firm instead of expanding organisation.

The small firm has the advantage of a flexible organisation in its struggle with large scale rivals. The organisation of a large firm tends to become rigid; a Board of Directors will usually reach important decisions more slowly than a single proprietor who has only himself to consult; the energy and initiative of one Director may be balanced by the excessive caution of another. Similarly, the decisions of one department may be held up by those of another. Where initiative, quick judgment, and the ability to probe into the future, are

important factors, as in trades affected by changes of tastes and fashions, the small firms have many advantages. A large number of small firms in an industry may be due to an ample supply of business ability; on the other hand it may be due to technical inefficiency.

Where the market for the product is stable, or inelastic, the business unit remains small, because any attempt to expand production to lower average costs would lower prices in a greater proportion than the saving on costs. That is one reason why the joint stock company has not spread to agriculture. The other reason is that the major factors in agriculture are land, and the weather; the factors that lend themselves to division of labour and economies of size in industry are of secondary importance in agriculture. Labour and machinery that can be used continuously in industry have periods of enforced idleness in agriculture, partly because of the seasonal nature of the work, and partly through the vagaries of the weather.

8. The Growth of Firms

A firm may, and indeed very often does, increase in size through the energy and enterprise of its founder. At a certain stage of growth, more capital and organising ability will be required than can be supplied by a single owner. In such cases, the business is turned into a partnership of several persons, or into a private company, and if a further expansion is desired, the business will be turned into a joint stock company, sometimes called a public limited company. A large single proprietorship is often turned directly into a joint stock company, and joint stock companies can combine or amalgamate in ways that will be noted in another section.

The driving force behind the growth of firms is the desire to increase annual profits, either by controlling selling prices, or by reducing average costs, or by a combination of both. Which idea will predominate will depend on the amount of competition from firms producing the same product, or substitutes, and the elasticity of demand. If the demand is very elastic, that is to say, if every small fall in price will greatly increase sales, the firm will have more interest in expanding output than in exploiting prices.

In view of the economies of large scale production, it might be supposed that there are no limits to the growth of a firm, but that is not the case.

The first factor limiting the growth of a firm is the difficulty of raising capital. This difficulty is most acute for the single proprietor, and it is one of the main reasons why many businesses do not expand. The single proprietor cannot usually borrow more than he has of assets to pledge as security. Even the joint stock company cannot escape this difficulty altogether; it may always be able to raise from the public as much capital as it may require, but in many circumstances it would have to pay a rate of interest so high that borrowing would not be profitable. Even the large firm in England has always remained relatively small, compared with the giant concerns of the United States and of pre-war Germany, the reason being that in these countries, firms could borrow their permanent capital on easy terms from their banks. In the past, British banks have normally provided our industries with short period loans only; permanent capital has been subscribed by the investing public. Now that the Bank of England has been nationalised there may be a gradual change of policy in that respect.

The second factor limiting the growth of firms is that when a firm reaches a certain size the economies of large scale production may be more than offset by other factors. The gradually increasing difficulty of obtaining supplies of certain factors except at a much higher price, may raise average costs and make further expansion unprofitable.

The larger the firm the greater the difficulty of avoiding waste through defective organisation. At the same time when the output of a firm passes a certain point, it will usually be able to market more only by lowering selling prices. With average costs rising on the one hand, and selling prices falling on the other, there is a size for any firm beyond which expansion would not be profitable.

The maximum size will vary from industry to industry according to opportunities for reducing average costs, and the elasticity of the demand for the product. If the demand curve is very inelastic a point will quickly be reached beyond which demand prices will fall rapidly as output expands.

9. The Best or Optimum Size of Firm

Where a firm is one of a large number of competing firms in an industry its size is decided mainly by the average costs of producing that output of goods it aims to produce. As long as competition remains effective, any output the firm produces will have no effect on selling prices so that the producer's main problem is, having decided the size of his output, to produce it at the least possible cost. One method of doing that is by changing the combination of his factors as their prices change. If any factor rises in price he will substitute it, as far as possible, with a cheaper one; if he finds that some part of his equipment is not being fully used, he will revise his decision on the size of the output, and slightly increase it.

The most efficient size of any competitive firm depends on a number of factors,—industrial technique, managerial ability, marketing facilities and finance, but in most cases mainly on industrial technique and on abilities of management.

This explains certain peculiarities in many firms, as the best technical size is not necessarily the best management unit. Where the best technical size is much greater than the best managerial size, a firm will sometimes divide into a series of departments, each producing a part of the product, which are separately managed, and which function on the most efficient sites. These departments are co-ordinated by a central organisation. Before the war, Morris engines were made in Coventry; the radiators in Oxford; certain parts in Birmingham, and the parts were assembled at Cowley.

In the converse case, in which the best managerial unit is larger than the most efficient technical unit, we find the large firm which is really a compound of two or more units of the best technical size, and, in many cases, located in different parts of the country. Each unit can then supply a different part of the market.

10. The Joint Stock Company

The single proprietorship was the original form of business organisation, and in agriculture it is still almost universal in this country. A very large number of retail shops are owned

and worked by a single proprietor, and this form of organisation still persists in small scale manufacture.

The partnership is a business the ownership of which is vested in two, or in several more persons; the powers, duties and rights of each partner are regulated by the partnership agreement, which, in turn, is regulated by the Partnership Act of 1890. Each partner usually provides some portion of the capital, and each is liable for the debts of the firm up to the full value of his property and possessions. For that reason the consent of each partner is necessary before vital changes can be made in the business.

The partnership is still common in businesses in which the amount of capital required is relatively small, and in the Professions—auctioneers and estate agents, accountants, solicitors and doctors.

The limited company is an association of shareholders each with a liability for the debts of the company limited to the nominal amount of his investment, and no shareholder can be held responsible for any debts of the company in excess of that amount. This is called limited liability.

Limited companies are of two kinds, the private limited company, and the public limited company, and, where the amount of capital required by the company is not very large, the private company has certain advantages.

It is free from certain obligations compulsory on a public company:—there are no restrictions on commencing business; a private company need not furnish an annual balance sheet to the Registrar of joint stock companies; and a company may be formed by only two persons. The drawbacks to the private company are that the number of shareholders cannot exceed fifty, and there are restrictions on the right of transference of its shares. The greatest drawback is that the company is not allowed to raise capital from the investing public.

There are several classes of public companies which are owned by a large number of shareholders collectively, some of which, The Hudson Bay Company, for example, were created by Royal Charter; others known as Statutory companies were created by Acts of Parliament. These companies own public utilities such as tramways, railways, gas and electricity undertakings. Another type of public company is the building and co-operative society.

Most of the public limited liability companies, however, are regulated by the ordinary Companies' Acts, and not by any special Act of Parliament. These companies raise their capital from the investing public, and their shares can be bought and sold in the open market. Most large-scale manufacturing and trading concerns are now public joint stock companies.

11. The Organisation of a Joint Stock Company

The management of a joint stock company is in the hands of a Board of Directors, usually elected by the shareholders. The size of the Board depends as a rule on the size of the Company, but it also depends on how much power is delegated to the administrative machinery:—the general and departmental managers, and the secretary.

In some companies, the General Manager is made a Managing Director with a seat on the Board. In very large companies, Departmental Managers are often made Managing Directors. The position and status of the Secretary varies; in some companies his work is purely clerical; in others, he exercises some of the functions of a managing director.

The Chairman of the company, like all chairmen of committees, exercises wide powers, and he usually gives more of his time to the affairs of the company than the other members of the Board, with the exception of the Managing Directors. The business of the company is transacted at Board Meetings, which take place at regular intervals.

Every company is obliged by law to hold an Annual General Meeting of the shareholders, who consider at this meeting the balance sheet and the annual report of the Directors, copies of which are sent to each shareholder before the Meeting.

The Chairman of the Board reviews the events of the past year, outlines the present position, and usually sketches the future prospects of the company. Shareholders present have the right to ask questions, although Directors are not compelled to give answers.

12. The Capital of a Joint Stock Company—Share Capital

The capital of a company consists of two kinds, share capital, and loan capital, and we shall consider the former first.

When a company is formed, the shareholders subscribe the share capital of the company, and the total amount of share capital which a company is authorised to raise by agreement with the shareholders is called the Authorised Share Capital of the Company.

The full amount of authorised share capital need not be issued to the public in the first instance; the amount actually raised is called the Issued Share Capital. The issued share capital need not be paid up to the full amount of each share. If the shares are of a nominal value of £5 each, the subscribers may be required to pay only £3 at the time of purchase, and the balance, which may never be called for, is known as the Uncalled Share Capital. This procedure is a benefit to both parties, as the subscriber receives the dividend on the nominal value of his shares, and the company has two reserves of capital on which it can draw if necessary. Should the company become bankrupt the holders of the shares are liable to the creditors for the full amount of their uncalled share capital.

The holders of share capital are part owners of the concern, and share capital can be withdrawn only by selling the shares to some other person, and the price the shares will realise will depend on the past, present, and future earning capacity of the company. No dividends are paid until profits have been earned over a certain period of working, and not even then until certain loan charges have been met.

Share capital is of two broad classes, ordinary shares or equities, and preference shares. Although ordinary shares are sometimes divided into deferred, and preferred ordinary shares, as a general rule the preference share holder receives a fixed rate of dividend before any dividend is declared on the ordinary shares; the ordinary shareholders take the residue when all other claims have been paid. A preference shareholder, however, receives a dividend only when a net profit has been made; a debenture holder receives his interest whether the company is working at a profit or at a loss.

There are many kinds of preference shares but the only point of importance to note is that they represent different degrees of risk. The preference shareholder takes less risk, but he receives a smaller dividend, although it may be paid more regularly. The bulk of the risks fall on the ordinary

shareholder, whose shares may earn nothing over a long period; on the other hand, when the company is prosperous he may reap a rich harvest.

What applies to dividends applies also to the distribution of any surplus assets when a company goes into liquidation.

It may be thought: is not a multiplicity of share capital unnecessary? Why not have just one kind of share? The answer is that as the different classes of share represent different degrees of risk, they appeal to different sections of the investing public; preference shares came into being because that section of the investing public willing to take the maximum risk was unable to subscribe all the capital required. Even so, few companies can raise all their capital through the sale of shares; hence the necessity for loan capital.

13. The Capital of a Joint Stock Company—Loan Capital

As soon as a company is launched as a working concern and has acquired assets of various kinds,—buildings, equipment, machinery, etc., it can raise capital in another way: it can borrow money on the security of these assets. Such capital is called loan, or debenture capital, and these loans are subject to a fixed rate of interest which must be paid whether the company is earning profits or not. Interest on debentures is an important overhead cost to many companies.

Usually, a debenture holder receives a low fixed rate of interest on capital fully secured on the assets of the company, but he has no voice in its management. Debenture holders as a body, however, if they think their capital endangered by mismanagement of the company, can apply to the Courts for a receiver to be appointed to take charge of, and if necessary, realise those assets that form the security for their debentures.

There are two kinds of debentures—permanent debentures and debentures that are redeemable at the end of an agreed period.

A company can also raise capital by saving. Instead of distributing the whole of its net profits among its shareholders each year, it can place a part to a reserve account, and in this way many companies accumulate large sums; indeed, an important part of the nation's annual savings is now made by the joint stock companies.

We have already incidentally compared the relative merits of shares and debentures from the standpoint of the investor; it now remains to examine the matter from the side of a company seeking to raise new capital.

When a company has valuable assets in the form of land, buildings and equipment, it can usually raise debenture capital more cheaply than share capital, as the debenture holders, being fully secured, will accept a low rate of interest. If the investing public is in a cautious mood, it may be possible to raise share capital only at a discount, that is to say, by offering the shares below their face value.

On the other hand, interest must be paid on the debentures whether profits are being earned or not, and the greater the number of debentures issued the greater is the difficulty of raising further share capital, as debenture charges limit the profits available for distribution among the ordinary shareholders. Another drawback to debentures is that the holders may hamper the actions of the directors in order to safeguard their capital.

The great advantage of issuing share capital, both ordinary and preference, is that dividends are paid only when profits are earned. In many cases, both methods may have to be used, and the proportion of capital raised by each will depend mainly on the attitude of the investing public.

14. A Company Balance Sheet

A company balance sheet is a technical document and cannot be thoroughly understood without training, but the leading principles are as follows:—

The balance sheet is drawn up in two columns in one of which the liabilities, or debts of the company are entered, and in the other, the assets, or possessions of the company.

If the company is solvent, the assets must exceed the liabilities; if the company is heading for bankruptcy, the liabilities will exceed the assets. But a balance sheet must balance; some items therefore are entered in the liabilities column that are not really liabilities—profits, for example.

Let us suppose that at the end of a year's working the assets of a firm are £10,000 and that its total debts amount to £8,000, so that a profit of £2,000 has been made. To balance

the accounts, therefore, the £2,000 must be included in the liabilities. That is not illogical as the £2,000 is really a debt owed by the company to the shareholders. For the same reason, the issued share capital, and the Reserve account, which is undistributed profits of previous years are entered as liabilities.

The balance sheet of any particular company may be long, and complex, but the following simplification illustrates the essentials:—

LIABILITIES		ASSETS	
To Issued share capital	£50,000	By Land, buildings,	
„ Debentures ..	£20,000	machinery ..	£45,000
„ Bank Loans ..	£10,000	„ Investments ..	£20,000
„ Sundry Creditors ..	£5,000	„ Stock in trade ..	£15,000
„ Reserve Account ..	£8,000	„ Book debts ..	£15,000
„ Profit and Loss		„ Cash in hand and	
Account ..	£7,000	at the bank ..	£5,000
	<u>£100,000</u>		<u>£100,000</u>

When drawn up, the balance sheet must be audited by the auditors of the company, who have the right to inspect the books, receipts, and other documents of the company in the interests of the shareholders, and who report on the accounts at the next Annual Meeting.

15. Floating a Company

Since 1939 new capital issues have been strictly controlled by the Government, and it is doubtful if that control will ever be relinquished: many changes in company procedure may be made, but down to 1939 the method of “floating” a company was as follows:—

The first step was the drawing up of a prospectus which stated the value and kinds of shares to be offered to the public, the aims, objects, and prospects of the company and the nature of its assets.

The prospectus contained the names of the directors, the auditors, the solicitors, the bankers, the secretary, and the address of the registered offices of the company, and a copy of this prospectus was filed with the Registrar of Joint Stock

Companies. Copies were then advertised in all the leading newspapers, and sent to people likely to be interested.

The directors could place the shares on the market themselves, but the usual method was to arrange with an Issuing House to underwrite the shares, that is to say, the House agreed to take up all shares not bought by the public in the first instance in the hope of selling them gradually, and for this work the Issuing House was paid a commission. Sometimes the Issuing House bought the whole of the shares offered by the company and sold them gradually to the public at a profit, or, if the deal was unfortunate, at a loss.

16. Monopoly

Tendencies to monopoly in industrial enterprise need our careful examination. Indeed, the methods of certain big American combines had become so dangerous to the general community that in 1890 the United States Government passed the famous Sherman Anti-trust Act which forbade combinations in restraint of trade. This was followed in 1914 by two other anti-trust Acts, which declared "unfair methods of competition in commerce" to be illegal. The second of these later Acts—the Clayton Act—describes these unfair methods, such as preventing by exclusive contracts of the buyers of commodities from dealing in the goods of rival firms; the practice of price discrimination, that is, the selling of commodities at different prices to different buyers; and the obtaining of favourable rates from the railway companies.

A monopoly may be a brief control of supply such as a "corner" in a wheat market, or it may be a control of supply for a lengthy period. Monopolies have been classified by economists in many ways. Professor Taussig, for instance, divides them into the absolute and the industrial. The former either depend on legal protection, such as copyrights and patents, or are caused by the control of natural resources, a control which is very rare owing to the constant discovery of new sources. He gives as an example of the latter the control of the South African diamond mines. The industrial monopolies he classifies into public service industries and the so-called "trusts." Examples of the former of these are frequently found in modern municipalities, *e.g.* the public

supply of electricity or of gas, and town corporation tramways, which, of course, so far as certain districts or urban areas are concerned, are absolute monopolies within these areas, just as a nationalised railway or the Post Office are absolute monopolies within the countries they serve. In the so-called "trusts" Professor Taussig includes all big industrial combines, mergers, or amalgamations which are powerful enough to influence prices.

The latter are included by another well-known American economist, Professor Ely, under the title of "complete monopolies," which he defines as combinations which are able to fix prices by controlling over 75 per cent. but less than 100 per cent. of the supply of an article, while the control of 100 per cent. of the entire supply of a commodity or service, such as that of a single company which controls a town's supply of light, he regards as an "absolute" monopoly. Professor Ely, however, introduces a third class, the "partial" or "incomplete" monopoly, in which he includes those combinations "which control so large a portion of the field of a particular business as to be able to restrain competition," and, therefore, as a result to make the conditions affecting the determination of price different from those prevailing under a régime of free competition.

17. The Trust

The so-called "trusts" are of two kinds: an amalgamation of similar industries, such as the Standard Oil Company or the Imperial Tobacco Company; and an amalgamation of different industries. The former type is termed a "horizontal" combination, and the latter, in which all the individual industries usually contribute towards the production of the finished commodity, is the "vertical" combination, such as Dorman Long and Co., which was primarily a great iron firm but had absorbed a number of collieries; or John Brown Limited, of Sheffield and Clyde Bank, a company which covered what has been termed "the whole field of production from pig-iron to battleships."

The identity of the individual firms in the merger may be preserved, each firm being allowed to trade under its old name as in the Imperial Tobacco Company, or it may be

completely destroyed. The^t latter is the usual rule and is strikingly illustrated in the British railway and bank amalgamations. The names of the old railway companies that comprised the four groups after the amalgamations of 1921 disappeared. The London Midland and Scottish Railway Company, for example, was an amalgamation of eight constituent companies, which included the old London and North Western, Midland, Caledonian, Glasgow and South Western, and Lancashire and Yorkshire, and twenty-seven subsidiary companies, which included the old North London, and the Maryport and Carlisle. In one railway amalgamation only, the Great Western, was the name of the absorbing company retained. In the six big British bank amalgamations three of these powerful combines, Lloyds, Barclays, and the National Provincial—have retained the name of the absorbing company.

A "trust" has been defined as originally a combination of a number of companies through a board of trustees to whom the shareholders assigned their shares in exchange for trust certificates. The name "trust," however, is now applied to big combines that are not organised in this way. Thus when we speak of the "trustification" of industry we really mean the development of big amalgamations such as those that have just been discussed.

Indeed, the forms of industrial combination are far too varied to be examined in any detail in an introductory treatise of this nature. At the bottom of the scale is the simple agreement among a number of companies to adopt the same price. This is the price association. But the term "association" is often applied to a somewhat stronger and more definite type of combination not only for price-fixing purposes but also for the preservation of trade interests, and the arranging of the cheapest transport rates with railway and shipping companies. Among such combinations are the British Tube Association, and the Small Iron Makers' Association. Moreover, the term "association" may be applied to an organisation such as the Durham Coal Sales Association for increasing the sales of a commodity. The last-named resembles the German "kartel," which is really

an association of companies for regulating output, prices, and sales, by means of a central committee or agency acting on behalf of each associated company.

18. The Kartel

Under the kartel arrangement each individual firm manages its own affairs. This type of German industrial organisation made remarkable progress in the two decades preceding the war of 1914-18; its aim was the stabilisation of prices. But after the war there grew up in the kartel system a type of amalgamation with a greater degree of fusion, and this development resulted in the establishment of "trusts" either by direct amalgamation or by "holding" companies, *i.e.* companies that are formed to acquire all or nearly all of the shares of the combining firms. In the first instance this new German development resulted in a number of "vertical" combines, but later the tendency was towards the "horizontal" form of combination, particularly in the "heavy" industries, coal, iron, and steel; the finished marketable article, such as machinery, being constructed by a firm that is not in the combination. In 1926, for example four big coal and iron groups which were themselves combines, were formed into a new powerful steel "trust," the Vereinigte Stahlwerke A.G., the largest on the continent.

Nor was this German "rationalisation" of industry confined to the iron and steel trade. The reconstruction of German industry between 1919 and 1939 proceeded rapidly on these lines in other industries, such as locomotive and waggon building, shipping, shipbuilding, dyes, and potash. In shipping, the Hamburg-Amerika Line absorbed the Deutsch-Austral and Kosmos Lines, while in the dye industry the two biggest combines were absorbed in what became the largest of German "trusts," the I.G. Farbenindustrie A.G.

An interesting and valuable form of amalgamation for selling purposes, which has, since 1922, revolutionised the Canadian wheat trade, is the so-called wheat "pool." The industrial depression which followed the First World War seriously affected the Canadian wheat farmers, so much so, that it became imperative to devise new methods of marketing their produce. As a result a system of co-operation was

introduced that was known as the wheat "pool," and there was one such "pool" for each of the wheat growing provinces of Manitoba, Saskatchewan, and Alberta.

These "pools" or combinations of wheat farmers were governed by a board of management, which was the selling agency of the produce. The "pool" advanced to the wheat farmer a sum of money, as soon as the crop was harvested; and such an advance which, of course, did not represent the final market price of the wheat, immediately placed the control of the wheat in the hands of the agency whose business was the marketing of the produce, and the making of additional payments to the farmer as the wheat was sold. The remarkable development of the Canadian wheat "pool" system is shown by the great increase in membership. In 1923 the "pools" possessed 70,000 members; in 1926 more than 126,000. In 1926 the "pools" sold 212,000,000 bushels of grain, which was over 70 per cent. of the total Canadian output of wheat, while in the same year their takings amounted to £54,300,000. In 1943 the entire handling of Canadian wheat was entrusted to the Canadian Wheat Board, and in that year the Board sold 293,704,000 bushels of wheat at a total price of £70,000,000.

In Britain also, amalgamation has made remarkable progress since 1914. Bank combines have culminated in the "Big Six," Barclays, Lloyds, Martins, the Midland, the National Provincial, and the Westminster; even before the railways were nationalised, amalgamations had reduced the number of companies to four main groups; and in the chemical industry there is what may be termed the "Big One," Imperial Chemical Industries Limited. This great chemical combine was formed at the close of 1926. It took under its wing the four most powerful chemical firms in Britain—Brunner, Mond and Co., Nobel Industries, the United Alkali Company, and the British Dyestuffs Corporation, a £65,000,000 combine, and within five months of its formation again expanded by absorbing the Cassel Cyanide Company, an old-established Glasgow firm.

Moreover, in the interval 1920 to 1939, there were many instances of exceptionally big combinations in other British industries such as coal, iron and steel, textiles, grain-milling,

and the tobacco and liquor trades. One big coal merger was the amalgamation of two great Welsh companies, which were already powerful combines, the Amalgamated Anthracite Collieries Limited and the United Anthracite Collieries Limited, a merger authorised by the Railway and Canal Commission in June 1927. Such powerful amalgamations in the liquor trade as Bass-Worthington and Buchanan-Dewar are, of course, well-known. But a more novel merger of 1927 is perhaps not so well-known. This was the amalgamation of two great building societies, the Halifax Permanent Building Society, and the Halifax Equitable Society. The former of these societies was at the time of the fusion the largest society of this type in the world, while the combined assets amounted to over £40,000,000, a remarkable sum, which proves that one of the outstanding economic effects of the housing shortage in Britain after the war of 1914-18 was a striking increase in that part of the savings of the workers which has been invested in building societies.

But, as is well-known, the great land of "trusts" and huge combines is America, where, as we have already seen, the evils of trustification became so pronounced that the United States Government was forced to intervene with special legislative measures. In the seventies of last century there were only four big industrial combinations in the United States; by the end of that century the number had increased to 185.

Though the holding company is still the usual form of trustification in America, the term "trust," here as elsewhere, includes all kinds of large scale amalgamation. The holding company, however, is not regarded favourably by American law particularly if it can be proved that such a company stifles competition. The Great Standard Oil Trust, for example, operated from 1899 to 1911 under a holding company registered in New Jersey and termed the New Jersey Standard Oil Company, but under the Sherman Anti-trust Act the Supreme Court of the United States decided that this particular holding company was an illegal combination in restraint of trade. Hence the Standard Oil Trust is to-day simply a big merger of some thirty-six constituent companies.

The extraordinary development of big combines in the United States during recent years has been well described by

Professor Bogart. They control more or less successfully, he states, the production of tobacco, petroleum, sugar, linseed oil, iron and steel, copper, ship-building, beef, starch, flour, cotton-seed, candy, chewing gum, candles, salt, ice, glucose, crackers, matches, whiskey, anthracite coal, fertilisers, tin cans, farming tools, locomotives, writing paper, school furniture, sewer pipes, glassware, rubber goods, buttons, leather, and electrical supplies.

19. Rationalisation of Industry

The term rationalisation of industry means the organisation of industry into as large aggregations as are compatible with the maximum economy in costs of production. Thus we find industries which are already big forming amalgamations, combines, and mergers. The bigger the amalgamation the greater is the concentration of production in the best-equipped works, the greater is the marketability of the shares, the greater are the advantages arising from the general pooling of experience and of brain power, the greater is the saving in overhead charges, the greater is the probability of weathering industrial storms and depressions, the greater is the command over capital.

On the other hand, "rationalisation" has certain disadvantages. An amalgamation may be so large as to become unwieldy; its size may be a handicap, and the personal touch between those in command and those in subordinate positions may be lost with consequent damage to the business. Amalgamations not infrequently result in staff reductions that cause much hardship, while the directors do not possess that intimate relationship with the consumer that the owner of a small business possesses.

20. Vertical and Horizontal Combination

These forms of combination have been referred to under trusts and kartels, but a further explanation is necessary as they may, and do, take place independently.

Vertical combination, or integration, is an amalgamation of firms engaged in the different stages of an industry, and in Great Britain is most common in the iron and steel trades for special reasons.

In the first place, the markets for raw materials, and for semi-finished products such as pig iron and crude steel are very unstable. The costly fixed capital used in smelting, etc., forces producers to keep their plants working as long as prime costs, that is to say, the costs of the raw materials and labour used, are covered by prices. When these various stages, coal, and iron mining, smelting, rolling, etc., are in the hands of independent firms, the market is glutted with products whenever the producers of finished goods damp down their outputs. When these various stages are integrated into one concern, the outputs of the different stages can be planned and co-ordinated.

Vertical integration makes possible important economies in these trades. When the various operations are performed by different firms, ore is heated for smelting, then for converting into malleable iron, or into steel, and again for converting the ingots into finished products. In vertical integration, the ore goes to the blast furnaces, and the molten pig, while still at full heat, is refined, drawn out into ingots, and then sent to the rolling mills. In that way, fuel costs, the most important costs of the industry, are greatly reduced. Waste heat, and gases can be utilised. The rolling mills, hot blast plant, and general machinery, can be run to some extent with power generated by the gas and heat from coke ovens and blast furnaces necessary to produce the pig iron. For the above reasons, the whole of the processes from the mining of coal and iron ore to the completion of finished products, tend to pass under a single control. John Brown & Company of Sheffield were producers in all the stages from the mining of coal to the completion of an ocean liner, or a battleship.

Horizontal combination, or integration, is a union of firms engaged in the same stage of production of a commodity, with the object of forming a more satisfactory scale of unit, or for the purpose of limiting output and competition. This form of combination has no marked influence on production costs, but it can effect economies in marketing costs.

Examples of horizontal combinations are the amalgamations in the soap trade, in cotton spinning, and in the transport services. A larger unit avoids the duplication of many services; it limits competition in marketing, and it allows the output of the industry to be regulated.

It follows from what has been said above that the reasons why firms combine are wider than the possibility of exploiting selling prices by limiting output; indeed, where the demand for the product is elastic, it is often equally, if not more profitable to slightly reduce selling prices and to lower average costs by producing a larger output.

But the main reason, in many cases, why firms combine is the possibility of building up more stable conditions. A large combination can plan the market, and stabilise output and selling prices. It can reduce the competitive costs of marketing, and it can influence in its favour, the market for its raw materials.

It will be noted that many of the terms used in this chapter have much in common. As coal, iron and steel, are now nationalised industries and likely to work in conjunction, the motive for vertical integration will pass away.

21. Associations of Employers, and of Workmen

Such are the ways in which industrial enterprises are organised. We must next consider how the human factors engaged in industry organise themselves for the purpose of protecting their interests. On the one hand are the Employers' Associations, and on the other the Trade Unions of the employees.

An Employers' Association is, as its name implies, a body of the employers in a trade or their representatives. Primarily concerned with the interests of the owners, such a body must, of course, devote its attentions to all the factors, internal and external, affecting the trade as a whole. Sometimes it may be a group of local employers like the old Cumberland Coal Owners' Association, and sometimes a national body such as the Association of British Chemical Manufacturers, the National Federation of Iron and Steel Manufacturers, or the National Union of Farmers. Almost every trade and industry now has its associations of employers, and of workers, whose unions are organised on a national basis. The forces that brought one type of association into being made necessary the other. Of these forces, the most important have been the necessity for some form or other of protection, and the advantages of collective bargaining.

A Trade Union has been defined by Lord Passfield as "a continuous association of wage earners for the purpose of maintaining or improving the conditions of their working lives." Its business is, therefore, the uplifting of the worker, the improving of his standard of life, the reducing of the irksomeness of labour, the raising of wage rates, the assisting of the worker in times of unemployment and of sickness with friendly benefits, the protection of the worker from being unjustly treated, the encouraging and the developing of latent skill, the educating of the children of the workers and also of the workers themselves. In brief, a Trade Union looks after the interests of its members, and makes a point of possessing a thorough knowledge of the position and condition of the industry by which its members get their daily bread.

The striking nature of the real functions and widespread influence of a powerful and well-organised British Trade Union is clearly reflected in the annual reports of the National Union of Railwaymen. In April 1946, for example, the industrial secretary of this great Union, reported that during 1945 big grants were made out of the Union's four Benevolent Funds: (1) the Disablement Fund, (2) the Death and Orphan's Fund, (3) the Accident Fund, (4) the Sick Fund. Out of the Death and Orphan's Fund, for instance, £20,386 was paid during 1945 in weekly allowances to 2,683 children, all of them fatherless and some also motherless; and since 1875 over £1,224,987 has been paid in this way on behalf of over 35,000 children. "The worth of a Union," Mr. Cramp very cogently stated in his report of 1927, "must be measured by the figures on the employers' paysheets, the lessening of hours, the prevention of accidents, the remedying of wrongs, and the general upliftment of the lives of the workers."

The development of Trade Unionism in England during the last hundred years is a particularly interesting one. Lord Passfield and Mrs. Sidney Webb, in their *History of Trade Unionism*, have given us a detailed account of its progress. There is no doubt that trade clubs or unions existed in England in the eighteenth century and even earlier, and that despite the rigorous Combination Laws, which were in existence from 1799-1825, such clubs continued to flourish. This is proved

by the references to these institutions in the evidence of various witnesses examined by the Royal Commissions and Select Committees of the first two decades of the nineteenth century.

When the Combination Laws were repealed the way was opened for the development of Trade Unionism, but it was not until the middle of the nineteenth century that the modern type of Union began to emerge. In 1851 the formation of the Amalgamated Society of Engineers gave the movement a new impetus, and some twenty years later a great deal of good constructive work was done by a central body of administrative officials known as the Junta. This body was composed of five able men who, by their energy and initiative, contributed so largely to the placing of the movement on a particularly sound foundation.

Since the eighties of last century there have been some striking developments in British Trade Unionism. The movement received a powerful stimulus as a result of the great London Dock Strike of 1889, out of which sprang an enthusiasm for Trade Unionism which, it is estimated, increased the total membership by about 200,000 within twelve months. Amalgamation and federation have in recent years been outstanding features of the movement. The National Union of Railwaymen, formed in 1913, out of three unions, is an important example of amalgamation, while among the federations the Miners' Federation, the Building Trades Federation, the National Federation of General Workers, the Engineering Trades Federation, and the Transport Workers' Federation are the most powerful.

The federations are of various types. The Miners', for instance, is an amalgamation of local Unions whose members are all engaged in the coal industry, but the Building Trades Federation includes a number of national Unions whose members are engaged in different industries.

British Trade Unionism has also been unified and strengthened by the establishment in 1868 of a central body called the Trade Union Congress, which meets annually to discuss matters of general policy, and by the General Council set up in 1920. The latter body is composed of representatives from eighteen federations and amalgamations, and in 1924 was given by the Trade Union Congress the power to direct trade disputes.

In addition it must be noted that between 1870 and 1914 a number of legislative measures contributed towards the development of Trade Unionism in Great Britain. The most important of these measures are the Trade Union Act of 1871, the Conspiracy and Protection of Property Act of 1875, the Trade Union Amendment Act of 1876, the Trade Unions and Trade Disputes Act of 1906, and the Trade Union Act of 1913.

The Act of 1871 declared that combinations in restraint of trade were not illegal. The Conspiracy and Protection of Property Act enacted that "an agreement or combination by two or more persons to do or procure to be done any act in furtherance of a trade dispute shall not be indictable as a conspiracy if such act when committed by one person would not be criminally punishable."

The Act of 1876 defines a Trade Union as "any combination, whether temporary or permanent, for regulating the relations between workmen and masters, or between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business, whether such combination would or would not, if the principal Act (*i.e.* the Act of 1871) had not been passed, have been deemed to have been an unlawful combination by reason of some one or more of its purposes being in restraint of trade."

The Act of 1906 allowed peaceful picketing, stipulated that any act done in pursuance of an agreement or combination by two or more persons shall, if done in contemplation of a trade dispute, not be actionable unless the act, if done without any such agreement or combination, would be actionable, and prohibited actions of tort against Trade Unions.

The Act of 1913 gave a new definition of the term Trade Union, and dealt with the use of Union funds. A Trade Union is defined in this Act as "any combination, whether temporary or permanent, the principal objects of which are, under its constitution, statutory objects," which are explained as (1) the regulation of trade, and (2) the provision of benefit for members. This Act gave a Union power to use its funds for political purposes, and allowed members not willing to subscribe to a political levy to "contract out," *i.e.* to inform their secretary that they did not intend being subscribers to such a levy.

It will thus be seen that these legislative measures placed British Trade Unionism in a very powerful position by 1914, for the Acts of 1875 and 1906 had exempted the Unions from criminal and civil liability to which the ordinary person is subject.

But though the legislative measures were favourable to the development of Unionism, two judicial decisions in the early years of the present century caused a great deal of anxiety among the rapidly increasing members of the British Unions. These were the famous decisions in the Taff Vale (1901) and Osborne Cases (1911).

The Taff Vale Case was the result of a strike of the employees of the Taff Vale Railway Company, the company being awarded £23,000 damages against the Amalgamated Society of Railway Servants, which had persuaded the employees to strike and thus break their contracts. A higher Court reversed this decision, but upon an appeal by the railway company to the House of Lords, the ruling of the first Court was upheld. The principles upheld in the Taff Vale judgment were set aside by the Act of 1906, which gave the Unions immunity from liability for civil wrongs, *i.e.* torts.

In the Osborne Case (*Amalgamated Society of Railway Servants v. Osborne*) the House of Lords decided that no Trade Union could legally demand from its members contributions to funds which were to be used for the purpose of paying Parliamentary representatives. This decision was followed by a great deal of agitation which ultimately resulted in the Act of 1913, which authorised the political levy.

Following on the General Strike of 1926, a new Trade Union Act was passed in 1927 which greatly restricted the rights of Trade Unions in trade disputes. Drastic limitations were placed on the right of a Trade Union to call a strike, and on the right of picketing, that is, prevention by "peaceful means" of either Union or non-Union members resuming work except at the direction of the Union leaders. This Act, which was bitterly resented in labour circles, was repealed in 1946.

One of the consequences of Trade Union development is the problem of the "closed shop." In the extreme form of the "closed shop" all the employees of a firm must be trade unionists, and members of the same union; that is the first condition for employment.

At first glance the "closed shop" appears inconsistent with the natural right of the worker to freedom of action, and for that reason it is opposed by many people. On the other hand, it is urged that since non-unionists enjoy all the benefits gained by Trade Unions it is only reasonable that they should contribute to them.

The argument for forcing all the workers of a trade into one Union is based on the ground that the hands of their leaders are greatly strengthened when bargaining with the employers.

CHAPTER VIII

THE PRODUCERS (*continued*)

1. Co-operation

The amalgamation of industries that we have just discussed must be carefully distinguished from what is termed co-operation in industry. The term co-operation may be applied to the co-ordinating by a manager of different types of workers for productive purposes, which, as we have seen, is the dividing of the required labour among the various classes of wage earners employed in an industry, or in other words, the combining of the different human factors needed for the production of a commodity.

But when we speak of "the co-operative movement" we are referring to a form of co-operation of a different nature, and of which there are different varieties. A number of workers may, on their own initiative, co-operate in order to produce commodities, thus dispensing with the big employer or organiser; a number of tradesmen may co-operate for granting one another credit; a number of farmers may co-operate in order to strengthen their methods of marketing their produce or to improve their methods of cultivation; or a number of consumers may, in order to eliminate the profits of middlemen, co-operate for retail trading.

Of these latter kinds, co-operation in agriculture has not made much headway in a country of big landlords and comparatively short tenures like Britain. The conservatism and individualism of British farming, and the self-reliance of the British farmer, are not conducive to agricultural co-operation. But though Britain lags behind in this kind of co-operation several other countries are particularly active in this respect. There has, for example, been a great deal of agricultural co-operation in Germany and in the Irish Free State, while Denmark, as is well-known, is often referred to as a "co-operative commonwealth," because a great part of the Danish export trade has been built up on co-operative principles.

British agricultural co-operation is on a very small scale when compared with, say, Germany before 1914, where there was a large number of dairying, corn-selling and granary, cattle-selling, electricity, machine, and agricultural credit societies.

“Co-operative production,” as it is called, or the co-operation of workers for productive purposes without the assistance of the “entrepreneur” or organiser, what may be described as the combining of the functions of worker and employer in the same person, has not made much progress in any country owing to the difficulty in securing a ready supply of capital, and the enormous competitive pressure of large-scale capitalist enterprises.

A variation of the preceding type is that form of co-operation known as labour co-partnership. This form has met with much success, particularly in America, but it must be distinguished from cash profit-sharing. Under co-partnership, the wage-earners acquire part-ownership of the undertaking which employs them; the employees become shareholders with a real stake in the business, and possessing the right to elect one or more members of the board of management. The South Metropolitan Gas Company, Messrs. Lever Brothers, and Messrs. J. T. and J. Taylor of Batley, are outstanding examples of successful co-partnership in British industry.

2. Consumers' Co-operation

Of these various types of co-operation that of the consumers, the “distributive co-operation” of the co-operative store, has been singularly successful in Great Britain where such co-operators are now numbered in millions. This type had also made great progress in Germany but has not been particularly successful in the United States. Its limited development in the last-named country is probably largely due not only to a certain indifference among receivers of high wages to schemes which result in very small individual savings, but also to a better managed retail trade.

Indeed, lack of organisation among the British small, and individualistic, retail shops, greatly contributed towards the initial success of the consumers' co-operative movement in Great Britain, for after the establishment of the famous

Rochdale Equitable Pioneers' Society in 1844 by twenty-eight men with a capital of £28, the movement developed rapidly, and co-operative stores quickly sprang up in all parts of the country.

There are, of course, a number of other causes that greatly assisted the development of the consumers' co-operative movement in Great Britain. The general improvement after 1850 in the condition of British wage earners gave it a great impetus. Between 1850 and 1870 the new railway system rapidly developed a national market, while British overseas trade was in a particularly prosperous condition. It was during these two decades that the movement made very big strides under the guidance of middle-class wage earners of considerable ability and initiative.

Other circumstances that may be mentioned are that the societies have always sold goods of reliable quality; they make no "bad debts"; and they have regular customers whose wants are well known. They can buy more cheaply than the retail shopkeeper, and they have no need to advertise to gain their customers.

The most fundamental reason for the success of the consumers' co-operative movement, however, has been the distribution of profits to members as dividends. Between 1850 and 1914, the "Co-op" was practically the only means of saving for the poorer sections of the working class.

A consumers' co-operative society was originally composed of members who eliminated the middleman by functioning as traders, selling at less than ordinary retail prices, and, after retaining a portion of the profits for the future needs of the business, sharing the remainder among themselves in accordance with the amount of their respective purchases. This, in essence, is still the function of such societies. But the movement has also developed a production side.

3. The Wholesale Societies

Wholesale societies were established for providing the retail stores with supplies on the same principle as the stores cater for their own members. In 1864 the English Co-operative Wholesale Society was established, and in 1868 the Scottish Co-operative Wholesale Society. These wholesale societies are

really big producing companies possessing vast reserves, enormous factories, and wide sources of supply such as tea, cocoa, and sugar plantations. Their "members" are the various retail societies who share the profits of the wholesale society in the same way as their own members share their profits.

The consumers' co-operative movement has thus developed big organisations of producers. There were in Great Britain before the war three wholesale and 1188 retail co-operative societies, the latter possessing about eight million members and a share and loan capital of over £150,000,000, and with sales for the year amounting to £225,000,000.

These figures show the extraordinary growth of the consumers' co-operative movement in Great Britain. But though the societies are of a capitalistic nature, and are now concerned with the production as well as the distribution of commodities, there are, however, certain limitations which make them a great deal different from the ordinary joint stock company. In the co-operative society the profits are shared in accordance with the amount of a member's purchases and not according to the amount of the shares held. In the co-operative society, also, the shares allowed to a co-operator are limited in number, and in shareholders' meetings each co-operator is allowed one vote only.

4. The Thrift Aspect

In the co-operative store prices are usually the prevailing market prices, though occasionally the store price exceeds the market price in order to increase the dividends of the society. An expert witness told the British Food Prices Commission in 1925 that during the period of food control the co-operative societies were no gain to the working classes and no help in reducing prices. "They have," stated this witness, "a certain price for each and every article, which is as much as anywhere else in the town. If a customer thinks it is more than he should pay he is told that he will get it back in dividend. When co-operative societies started they served a useful purpose. They sold goods at practically cost price, and they not only reduced prices to their own customers but other trades had to come into line. Now the idea is to pay a big dividend which puts all competition on one side".

But though the co-operative movement may not be a factor in price reduction there is no doubt that it has given many wage earners a great deal of experience in organisation. The movement has also caused the demand for certain commodities to be far more regular, and this has resulted in a great reduction of waste; it has been a big stimulus to thrift, for the stores not only make savings, they act also as savings banks. In addition, great sums out of the profits have been devoted to educational projects, and the wholesale societies possess both banking and insurance departments.

5. The Slow Development of Production Co-operation

The founders of the co-operative movement believed that by a gradual extension of their movement the evils of competition could be eliminated, and the basis of society radically transformed, but such expectations have not been fulfilled. After 1850, various attempts were made to establish iron and steel works, clothing and boot and shoe factories, etc. The workers, as shareholders of the society provided the capital and were paid wages, interest on their capital, and a share in the net profits in the form of a dividend. The organisation of the factory was in the hands of a salaried manager, and in many cases of a committee of workmen. As the same people were employers, and employees, it was believed that the conflicting interests of capital and labour would be reconciled.

Most of these schemes were failures as the conditions of production differ greatly from those of distribution, especially of the distribution of the primary necessities of life, the field in which co-operation has had its most marked success.

In the first place, the retail store and its wholesale society deal in goods for which the demand is relatively inelastic, that is to say regular, and little affected by the seasons of the year, or by trade fluctuations. Secondly, the amount of capital required to start, and to maintain a store, or even a wholesale society, is relatively small.

A production factory requires machinery and equipment of a very costly nature in some trades, hence, more capital is needed than the members can provide. In many forms of production the demand for the products is very elastic and fluctuates greatly with the general state of trade. Losses are

incurred through delays in, or non-payment of, debts, which, as we have already seen, do not enter consumers' co-operative trading. Production undertakings, too, are exposed to competition from the large joint stock companies, and from various combinations from which the consumers' stores are protected by their payment of dividends.

Another reason is that, in the past, the workmen who owned the factories were not willing to pay the salaries necessary to obtain the best type of manager.

6. The Organisation of a Co-operative Society

All co-operative societies are governed by a Committee of Management elected by, and responsible to, the members, which appoints, and supervises the work of, the chief executive officers, and departmental managers. In the smaller societies, the chief officers are the secretary and the general manager. The secretary is responsible for the secretarial work of the Board meetings, and he is in charge of the accounting and office organisation in connection with purchases, membership, and shareholdings. The manager is in charge of the equipment, the staff, and the trading activities. Where the society deals in lines other than grocery, these lines are in charge of departmental managers, who are responsible to the general manager.

In the larger societies there is usually only one executive head, the managing secretary, who functions as secretary and general manager; ~~the head of the grocery department is merely a departmental manager, and like the other heads of departments, is responsible to the managing secretary.~~

In the very large societies, the Committee of Management is divided into trading sub-committees which exercise a supervision over the various departments. In some societies there are two main sub-committees, a Building committee which deals with problems of buildings and equipment, and a Trading committee which supervises the returns of the branches and the methods of trading. In some very large societies there is a sub-committee for each trading department.

These sub-committees are in close touch with the departmental managers, who submit reports to them on all matters connected with their trading activities, and they usually make

the suggestions in respect of changes of policy. The reports of the sub-committees are, in turn, considered by the full Committee of Management. The position of the sub-committees and of the Managing Secretary varies from society to society. In some societies the sub-committees have full control over the departmental managers; more usually, however, these committees are advisory bodies only, all executive power being retained by the Committee of Management, which issues its orders to the departmental managers through the Managing Secretary. The powers of the Managing Secretary will vary with the circumstances peculiar to each society.

7. The Organisation of Various Industries

A few general observations may now be made on the organisation of various industries, bearing in mind that anything said here may be modified in the near future by the Government policy of nationalisation; some reference will be made to this in the chapter on the economic activities of the State.

Business units in the iron and steel trades tend to be large scale, not only because large scale iron and steel plant operates at a lower unit cost of output, and because of the economics of integrating the industries producing the raw materials required, but also because in some cases the finished products into which the iron or steel enters can be manufactured in the same factory, as in the Ford works at Dagenham.

The engineering industries fall into three main branches:—the heavy industries (marine, and railway engines), the light industries (aeroplanes, motors, cycles, and machine tools), and electrical machinery and fittings. Until 1914, the average firm in the light engineering trades was a relatively small concern producing a number of products. One result of the 1914-18 war was an impetus to specialisation, and to a certain amount of amalgamation. Firms producing aeroplanes, motors, and cycles, which can be produced by mass production methods have sometimes expanded to a great size. Firms not highly specialised, and producing a number of products, tend to remain relatively small.

A Bill for the nationalisation of the coal mining industry has now been passed. Until the passing of the Coal Mines Act of 1930, there was a great diversity in the size of the coal producing firms of this country, owing to variations in the quality

and surface depth of the coal and the difficulties of mining. All pits were not equally suitable for the installation of electrical coal cutting, and other machinery. Many small pits were owned by simple partnerships, and worked on primitive lines. At the other end of the scale was the large joint stock company owning a number of pits and subsidiary industries such as the manufacture of coke and fire bricks.

Competition in the industry was very keen as much coal was produced for export; hence, periods of depression did not lead to a restriction of output but to price cutting and wage reductions.

To remedy this state of affairs a Coal Mines Act was passed in 1930. Under this Act the country was divided into districts, and the maximum output of each was fixed by a Central Board. In that way it was hoped to fix coal prices at a remunerative level. Amalgamation schemes were also proposed with the object of concentrating production in the better pits where modern mechanical equipment could be used.

A coal mine is usually organised in three main branches; surface operations under a surface manager responsible for the provision of stores, power for the mine, and the removal of coal brought to the surface; underground operations, under a manager, assisted by deputies, in complete control of all mining operations; and general administration which embraces the preparation of various statistical records, wage sheets, and the purchase of stores.

Nationalisation has not changed the organisation of the coal industry fundamentally. The Central and Area Boards were retained and these have set a pattern for the organisation of other nationalised industries. The main criticism so far made is that the Central Boards centralise organisation too much and that efficiency would be improved if more authority were delegated to the Area Boards.

The building trade covers various kinds of constructional work as well as house building. Unlike agriculture, and the manufacturing industries, the builder does not operate on a fixed site; hence the work requires close supervision, and for that reason the building unit remains relatively small. A second reason is that even in the case of a contract for the erection of a large block of city offices the builder usually

employs sub-contractors for certain branches of the work such, as constructional iron work, central heating, and so forth.

Like the building trade the textile industries are divided into many branches, spinning, weaving, finishing, etc., and in the past, these branches have remained distinct, and have been largely localised in different districts. This has been an important factor limiting the size of the production unit.

The largest firms in the textile industries have always been in the spinning and weaving branches, although the unit in spinning tends to be larger than in weaving, as a weaving firm manufactures a less standardised commodity and a greater variety of products.

In the clothing trade where clothes are made to measure, and to individual tastes, the firm is usually small. In the strictly ready-made clothing trade, where a single firm turns out thousands of suits to standard sizes, the firms are relatively large as power machinery can be used for sewing, and for cutting out the cloth.

The capital equipment, however, required for a clothing factory is small and inexpensive in comparison with that used in the steel, engineering, and even the textile industries, and the demand for clothing is relatively inelastic. The organisation of a clothing factory can be well undertaken in the first instance by a simple partnership, which if the firm grows to a certain size, can be extended into a private limited company and the profits retained in the hands of a small number of people.

Some of the reasons why agriculture is a small-scale business have already been given. Many farmers now own their farms, but the high cost of land in this country limits expansion. A large part of our agricultural land is still owned by a landlord class, which, in the past, provided the fixed capital of agriculture—land, buildings, drainage, and fencing. The small tenant farmer had, and still has, many advantages. But the primary reason, perhaps, why the joint stock company has not entered agriculture is the physical impossibility of concentrating a large mass of agricultural activity in a very small area.

There are instances, however, of large scale farming in this country. Some of the jam makers have acquired large fruit farms, and some of the potato merchants cultivate very large potato farms in the Eastern counties.

The typical English farmer cultivates a farm of between two and three hundred acres, and he supervises every activity on the farm. A large type of farm sometimes extending to several hundred acres is that owned by the so-called gentleman farmer. This kind of farmer manages the business side of the farm only; the actual cultivation is handed over to a paid manager.

8. The Structure of Industry (*continued*)

One of the most striking characteristics of British industry during the past half century has been the steady increase in the average amount of capital used by each worker. This means, in effect, that an increasing amount of employment has been given to machinery with the result that most industries have become increasingly productive. This movement has been very marked since 1945; greater productivity has been our economic salvation, but the movement was in evidence long before the war. It has been estimated that between 1924 and 1938, industrial production increased by over 2 per cent. per annum; since the war the rate of increase has been much higher.

Coal mining provides an example of increasing mechanisation. In 1913, less than 10 per cent. of the output was cut by machinery, and conveyed mechanically from the coal face. By 1939, 59 per cent. of the output was cut by machinery and mechanically propelled from the coal face. Since 1945, the shortage of labour in the mines has given a great impetus not only to use more, but to use better machinery, and the time is not far distant when practically all coal will be cut, and conveyed, by machinery. The same tendency is present in all trades where machinery can substitute, or supplement hand labour.

Another characteristic is that until recently, in spite of the joint stock and combination movement, which had been in progress since the late nineteenth century, most British industries contained a surprisingly large number of small firms. According to the last Census of Production, in 1935, there were 173,000 firms in the factory trades and 90 per cent. of these had less than fifty employees. At the other end of the

scale, 1,650 firms, roughly 1 per cent. of the total number, employed about 40 per cent. of the total number of factory workers. About 9 per cent. of the total number were firms employing between fifty and five hundred workers.

As has already been noted the size of the typical firm varies greatly between industries. The very large firm, that is a firm with over a thousand employees is most common in the heavy industries, *e.g.* shipbuilding, marine engineering, and iron and steel smelting, mainly because in these industries large-scale plants are the most economical. But the very large firm is also found in trades where firms produce standardised products, *e.g.* the motor car, cycle, and rubber tyre manufactures, and in the glass, chocolate, biscuit, and tobacco trades.

In the cotton and worsted spinning, tin-plate, steel tubes, and machine tool trades the medium-sized firm employing upwards of three hundred workers is common. But in all these industries, alongside the medium-sized, are many small firms producing specialities.

In the leather trades (apart from boot and shoe manufacture), in some branches of the clothing and light engineering trades, and in the cutlery and jewellery trades, the small firm predominates.

The reasons for the comparative smallness of most British firms compared with the huge concerns of America and pre-war Germany are mainly historical. British industries developed for the most part under free trade. The Government did nothing to assist the growth of the business unit until after 1919, and gave little active help until after 1931. American and German industries developed under the protection of tariffs.

Secondly, British industries developed slowly. There was no reason for "forcing" them with outside assistance. In America, and in Germany, for various reasons, it was desired to build up industries rapidly. The banks, therefore, provided growing industries with permanent capital for machinery, and equipment.

In England, during the greater part of the nineteenth century, most businesses were founded by individuals, and

partners with capital which they had saved or borrowed privately. Expansions of the firm were financed out of profits. The method of finance, therefore, limited the size of the firm.

Even when the joint stock company with limited liability began to develop in the late nineteenth century the financial problem was difficult. The companies borrowed from the banks, but for working expenses only. Permanent capital was raised by subscriptions from the investing public (share capital) or by mortgages on the assets of the company (debenture capital). But it was not easy to raise very large amounts of capital easily and cheaply in this way, except in the case of a concern with an outstanding reputation, so that the average joint stock company in this country was of a smaller size than in Germany and America.

It should not be concluded from the above that the banks never help with the permanent finance of industry. In the interval between the world wars the banks advanced large sums, on long-term loans, to the cotton and steel industries, but these loans were a deviation from normal principles due to special circumstances.

Between 1930 and 1939 several institutions were formed for the purpose of providing long-term capital for industry. The most important of them were the Bankers' Industrial Development Company; the Credit for Industry Limited; and the Charterhouse Industrial Development Company.

In 1945, two further institutions were founded to provide capital for industry. The Finance Corporation for Industry, and the Industrial and Finance Corporation. The purpose of these corporations, whose capital is subscribed by the Bank of England, and other banks, is to provide capital for approved concerns that find it difficult to obtain the necessary subscriptions from the investing public.

9. The Organisation of the Firm

In the last section organisation was considered in respect of industries, it now remains to briefly survey the organisation of a single firm. Firms can be classified as retailers, wholesalers, and manufacturing concerns, and although organisation is far from uniform, certain features are common to each type.

The organisation of a large retail firm usually consists of three main departments, the office, the warehouse, and the shop or shops, all of which are controlled by a general manager. The office, which is under the charge of the cashier, deals with the accounting side of the business—receipts, payments, correspondence, and the bookkeeping. In a relatively small firm, the cashier, and an assistant, may perform all these functions; in a large firm, the office will be divided into departments under the general supervision of the cashier.

Similarly with the warehouse. If the firm is a large one, the warehouse will be divided into at least two departments, one in charge of a buyer for the intake of stock, the other in charge of the stock-keeper who supplies the shop or shops with new stock as required.

The organisation of the shop will vary with its size. In a very large shop, the manager will exercise a general supervision, and there will be separate departments for the counters, the window display, the intake of stock from the warehouse, and for local parcel deliveries.

The organisation of a large wholesale warehouse is usually divided into administrative and executive sections, under the control of a general manager, who, in the case of a company, will be responsible to the managing director.

The administrative side of the business is divided into departments, the number of which will vary with circumstances, but as a rule there will be an administrative department in charge of staff matters, advertising, the commercial travellers, and of all correspondence; a cashier's department, concerned with all forms of payment and receipts; and a book-keeping department, under a chief book-keeper, responsible for the keeping of the various ledgers.

The executive section usually has three main departments each of which may be subdivided, according to the size of the firm. The buying department deals with the purchase of all goods, their costs, and warehousing; the order department takes in all orders, and deals with all matters pertaining to them; and the forwarding department arranges for the despatch of the goods.

The organisation of a large manufacturing concern is usually divided into a commercial section, and a technical section,

both under the control of a Board of Management, which, in many cases, is represented by a managing director.

The commercial side of the firm, which is organised in departments which vary with circumstances and the size of the concern, has responsibilities such as book-keeping, correspondence, and general office routine; the purchase of all raw materials, and supplies, advertising, and above all, matters relating to wages and costs.

The main work of the technical branch is in connection with the drawing office, and constructional design—if the firm is engaged in engineering—technical research, works administration, and details of manufacture.

The above details give a general picture only, but the organisation of most firms of a similar size tends to conform with the same general pattern.

10. The Basic British Industries—Coal, Iron and Steel, and Engineering

The coal industry is widely distributed, but two-thirds of the total output are still provided by three main fields: the Northumberland and Durham, the South Wales, and the South Yorkshire, Nottingham, and North Derbyshire coalfields. In addition there are important mining districts in Lancashire, Cheshire, Staffordshire, and Scotland, and smaller ones in Cumberland, North Wales, Somerset, and Kent. The main coal exporting areas are Northumberland, Durham, and South Wales.

The coalfields vary widely in the kind of coal produced, and in the difficulty of mining it. Pits, too, vary greatly in size. In Lancashire and Scotland they are mainly small; in South Yorkshire and in Nottinghamshire, many of them are very large. In some areas the coal is near the surface, in others the seams are deep down.

South Wales produces high-grade steam coal; nearly all the anthracite is mined there. The Durham field produces soft coal specially suitable for coking and for gas works. South Yorkshire and the Midlands produce coal mainly used for domestic purposes.

Until the passing of the Coal Mines Act of 1930, the coal industry was highly competitive, owing to the scattered nature of the industry, and because of the large number of mining concerns. Whenever the industry was depressed competition forced down wages unduly, and it was to remedy this that the Act of 1930 was passed. The Act put the industry under the control of a Central, and a number of Area Boards; 'a quota system limiting the amount of coal that could be mined was introduced; machinery was set up for the purpose of amalgamating mining concerns, and every encouragement was given to the creation of organised selling agencies in order to steady the selling price of coal.

The difficulties of the coal trade before 1939 were partly natural, due to varying conditions in different parts of each coalfield, and also to the fact that a large number of mining concerns were small, inefficient, and without the capital necessary to effect improvements. One of the main objects of the 1930 Act was, through voluntary amalgamations, to close down the inefficient mines and to concentrate production on the most profitable seams. When the voluntary method failed, nationalisation became inevitable.

Britain is still one of the chief iron and steel producing countries in the world, especially in the production of high-grade steels, and she has two special facilities for this production,—abundant supplies of good coking coal, and extensive iron ore fields in Northamptonshire and Lincolnshire. Considerable quantities of ore have to be imported, but as many of our coalfields are near the sea, these imports can be handled at low cost.

The North-East coast, with its ample supplies of Durham coking coal, and cheaply imported ores, is a centre of pig-iron and ingot steel manufacture, and it has a ready market in the shipbuilding and heavy engineering industries of the area. South Wales is also important in the production of steel, much of which is used in tin-plate and galvanised sheet industries. West Scotland provides the steel for the shipbuilding and marine engineering industries of the Clyde. The West Midlands produces the steel for the engineering and metal goods industries of the Birmingham district.

Sheffield, the home of cutlery, is now mainly concerned with the manufacture of special steels.

Large vertically integrated firms are very common in the steel trades. Many firms own blast furnaces, rolling mills, etc., and have interests in the engineering and shipbuilding industries. But alongside the great combines are many medium-sized and small firms, engaged either in the finishing processes of iron and steel, or in manufacturing specialities. In 1950 there were still many small iron foundries, small rolling mills, and small sheet and tin-plate works.

But apart from specialities the tendency is in the other direction. In 1946 the Iron and Steel Federation submitted a scheme to the Government for the concentration of the tin-plate, and steel-rail manufacture, within a few very large firms. Now that the Act nationalising the iron and steel industry has become operative, it is probable that a general policy of concentrating different sections of the industry in very large units will be carried through in the next few years, although there will always be a place for the medium-sized firm producing special lines.

Like the coal industry, iron and steel reached nationalisation through an intermediate stage. Between 1920 and 1930 the industry was in a sad plight, and in 1933 the Iron and Steel Federation was formed to control the industry, regulate output and prices, and eliminate competition. From the Iron and Steel Federation to nationalisation was a short and easy stage.

Engineering has two main sections, mechanical and electrical, and each section contains many distinct and diverse trades. Some trades are highly competitive; others are monopolised by large firms or by cartel agreements,—the Textile Machinery Makers Limited, and the Associated Machine Tool Makers Limited, for example. These associations limit their members to a certain range of products, and control prices. The electrical engineering trades are more highly organised than those in the mechanical engineering, and some of the firms are very large, *e.g.* the General Electric Co., and the Associated Electrical Industries. In 1935 it was estimated that 70 per cent. of the workers in the industry were employed

by fifty-eight firms. There are, however, a large number of small firms engaged in the manufacture of wireless components and miscellaneous goods.

One of the most important sections of the engineering industry is the motor-car trade. The trade is not only important in itself, but for its effects on trades that supply accessories and parts.

This comparatively new industry first took root in Coventry and Birmingham owing to the specially favourable conditions there. Many of the motor firms were originally cycle manufacturers or engaged in light engineering. Secondly, the non-ferrous metal, and light engineering industries of the area easily adapted themselves to the manufacture of components and accessories. Although the industry has now spread to Oxford and Greater London, Birmingham and Coventry are still of supreme importance.

The advantages of large-scale production in the motor trade are so great that most of the vehicles are manufactured by a few large firms, or groups of firms—Nuffield, Austin, Ford, Rootes, and General Motors. Practically all the electrical equipment is manufactured by a single firm, Lucas, of Birmingham. Prices are fixed by each manufacturer separately, but all re-sale prices are regulated by trade associations. Since 1945, the export of motor vehicles has been very important.

11. The Textiles, and Other Industries

The most important branch of the textile group is the cotton industry which is concentrated mainly in South Lancashire. Cotton presents perhaps the most remarkable example of localisation of industry. In 1800 it was localised not only in Lancashire, but in Derbyshire, Birmingham, Nottingham, and West Scotland. During the nineteenth century the industry gradually migrated from these places to Lancashire, although West Scotland still provides certain specialised cotton goods.

Moreover, even in Lancashire, in spite of the great growth of the industry, the cotton trade gradually became concentrated in a smaller area, and, still more remarkable, the area has become a series of localised districts for the various

branches of the industry. Spinning is localised in the towns around Manchester; weaving in the northern part of the area. Specialisation, however, goes much further than this. Spinning is localised according to the quality of the yarn. The Oldham district, including Ashton, and other towns south of Manchester spin chiefly medium yarns; the finer qualities are spun in Bolton, Chorley, and other northern towns. In weaving, there is a similar division of labour, each town or district specialising in some particular product.

The cotton industry embraces the following sections. The Raw Cotton Commission, which imports the raw cotton from America and Egypt, the spinners, the yarn merchants, the weavers, the piece-goods merchants, and the finishing trades. In the years between the World Wars the cotton industry was in a sorry plight, largely due to Japanese competition in Far Eastern markets. Many complaints were made that the industry was organised in too many small units using obsolete machinery, and many schemes were formulated for reorganising the industry, eliminating surplus productive capacity, and concentrating spinning in a small number of highly efficient firms. To-day, the Lancashire Cotton Corporation controls a large part of the spinning trade and has largely eliminated price competition,—most yarn is now sold under agreements.

As a general rule the different stages of manufacture are undertaken by separate firms working in different districts. Most of the weaving firms are small as the product is varied, although some are of medium size. The small firm also predominates in the finishing trades, but each finishing section is dominated by a combine, *e.g.* the Bleachers' Association; the Dyers' Association, and the Calico Printers' Association.

Much of what can be said of the cotton trade applies to the worsted trade. Production is carried on by a large number of firms so that, apart from the combing and finishing sections, the industry has remained largely competitive.

Most firms, as in the cotton trade, specialise in a particular process. The merchant buys the raw wool, sorts and blends it, and then has it combed into "tops" by the comber.

The spinner buys the combed wool and, in turn, sells his yarn to the weaver. The woven cloth is bought by the piece-goods merchant who passes it on to the finishing trades. Some of the worsted spinning mills are as large as the market is wide,—much worsted yarn is either used by the hosiery trades, or is exported—so that the spinners can afford to specialise on a particular kind of yarn, and the worsted weavers use a wide variety.

In the woollen trade the procedure is different. All the processes in the manufacture of cloth, except finishing, are often carried on in the same mill. This is due to the fact that there is little demand for woollen yarn except from the weavers, and also the trade supplies such a great variety of products. There is little scope, therefore, for specialisation.

A similar localisation and concentration of the woollen and worsted trades to that already noted in connection with cotton has taken place since about 1760. In the eighteenth century the woollen industry was localised in several areas in addition to West Yorkshire,—East Anglia, Wiltshire, and the West of England, but between 1760 and 1830, the industry left these districts because Yorkshire was better adapted for machine production. Within Yorkshire, localisation of the manufacture of the different kinds of cloth has taken place. The worsted manufacture is concentrated in the Bradford district; heavy woollens, such as blankets and carpets, round Halifax and Huddersfield; “shoddy” cloths round Batley and Dewsbury; fine cloths in the Leeds area, and so forth.

Other British industries are so numerous that it is impossible to give more than a passing mention to them here. Of the leather and clothing groups the most important is that of ready-made clothing concentrated mainly in Leeds and London, and the boot and shoe trades of the Leicester and Northampton areas.

Ten combines exist, although there is a price-fixing association for rayon goods, and one for controlling the output of leather for soles. There is a large number of small firms, as these trades are easy of entry, but there are a number of medium-sized firms producing ready-made clothing for export,

and several vertically integrated concerns in the boot and shoe trade. Stead and Simpson Limited own tanneries, boot and shoe factories, wholesale warehouses, and retail shops. In the clothing trade, too, there are examples of manufacturers selling direct to the public through a chain of retail shops. Burtons is a familiar example.

Food, drink, and tobacco, includes a large assortment of trades which vary widely in structure. Some are competitive, others are dominated by a few large firms or combinations. Indeed, in most of these trades the tendency to concentration is very strong. Refined sugar production is almost wholly in the hands of Tate and Lyle Limited, and flour milling is largely monopolised by the large firms—Spillers, and Rank. The biscuit, drink, chocolate, and tobacco trades are also highly concentrated.

The major part of the cocoa and chocolate production is in the hands of four firms, Fry, Cadbury, Terry, and Rowntree, and the tobacco trade is largely controlled by the Imperial Tobacco Company, and Carreras. Similarly with the drink trade; a few large brewing concerns control both the manufacture and the retail sales. Competition in the sense of new entrants, and price cutting, has disappeared. Such competition as exists is for custom, and even this competition is less than might be supposed. In the chocolate trade, for example, each firm seems to have acquired a special position in a particular section of the country. This may be due to accident or to formal or informal agreements.

Apart from nationalisation, concentration seems to have reached high-water mark in the chemical and allied industries. The Imperial Chemical Industries has acquired a practical monopoly of the production of alkalis, explosives, and dye-stuffs, and a partial monopoly of the production of such products as sulphuric acid, benzol, salt, and sulphate of ammonia, but the range of its new chemical products is continually increasing. One reason for this high degree of concentration is that the chemical trade is dominated by applied science. New technical methods are continually being devised which involve a change in expensive fixed capital equipment.

and only a very large firm or combine with huge reserves of capital can afford to make such changes.

The soap, and cement trades are also dominated by a few large firms. Lever Brothers produce about 80 per cent. of the soap used in this country, and in the cement trade the associated Portland Cement and Tunnel concerns occupy a similar position. So high a degree of monopoly has been reached in the cement trade that it has already been considered for nationalisation. All cement output and prices are now controlled by an organisation.

An accurate overall picture of British industry is not easy to draw, but three statements can be made. The first is that in some trades the medium-sized and small firm is still common, and that apart from State intervention such firms are likely to persist.

Secondly, and on the other hand, many trades show a high degree of concentration being dominated by a small number of large firms which form associations to regulate prices and output. Independently of the war, and a Socialist Government, effective competition had been disappearing from large sections of British industry for many years.

Thirdly, between 1919 and 1939, the old fundamental industries, coal, iron and steel, shipbuilding, heavy engineering, and the textiles, were definitely contracting. On the other hand, new industries—the motor-car, electrical equipment, chemicals and dye-stuffs, and synthetic products such as rayon, expanded greatly. Moreover, new synthetic products, *e.g.* nylon, are continually being invented.

There was a similar expansion in the finished consumer goods trades. The export markets for such things as chocolates and spirits, for example, have widened considerably since 1920. The rise in the average standard of living in this country in recent years, has given a great impetus to the tobacco, clothing, furniture, and household equipment trades.

Compared with 1913, a fundamental change has taken place, and although new economic circumstances have revived the old staple industries since 1945, it seems unlikely that they will ever again reach the position they occupied before 1914.

12. Industrial Fluctuations

Despite, however, most elaborate and detailed organisation, industry suffers from fluctuations, from ever-recurring periods of depression and serious unemployment. Business fluctuations are of various kinds. There may be monthly or even weekly variations, or there may be lengthy periods of prosperity followed by lengthy periods of depression. Fluctuations may occur very irregularly or fairly regularly in what are called "cycles." Sometimes trade depressions are so serious as to be termed commercial "crises."

Many theories have been advanced with reference to industrial fluctuations. The causes of a seasonal fluctuation in a specific industry such as the British coal trade normally experiences in the summer months, are, of course, evident. But the causes of the more widespread depression which covers many industries and which, during the nineteenth century, occurred at fairly regular intervals—the so-called trade "cycle"—are far from clear. Trade depressions may be due to an excessive expansion of output, to changes in the minds of business men, or to special disturbing factors such as war or bad harvests.

But whatever the real causes may be, a trade depression results in serious unemployment. The depression, for instance, in British trade between 1926 and 1934 is reflected in the startling unemployment figures. The total number of insured persons registered as "wholly unemployed" at Employment Exchanges in Great Britain and Northern Ireland on April 24, 1933, exceeded 2,000,000.

In considering the problem of unemployment it will be observed that the figures vary considerably in different areas of a country and in different trades. In the British agricultural industry, for instance, there was no unemployment during the year 1927, whereas in the British pig iron, iron and steel, and tinplate trades, out of a total of 442 furnaces the number in blast at the end of July 1927 was only 174, figures which are striking evidence of a great deal of unemployment at this time in one or more of these particular trades.

A reduction of unemployment in a manufacturing country like Britain depends on increased orders for British goods, which, of course, can be obtained only when the prices of

British goods compare favourably with the current prices in competing countries. The decline of exports, between the two wars, and the consequent effect of this on the great industries associated with the export trade, such as the coal, engineering, shipbuilding, iron and steel, cotton and woollen industries, together with the heavy taxation which British industry had to bear, were two of the chief causes of the very high British unemployment figures between 1920 and 1939.

In attempting to analyse the problem of unemployment there are, however, several other factors to be considered. Thus, for example, seasonal and cyclical fluctuations in trade result in a surplus of labour, while inadequate facilities for the training of juveniles leads to a serious overcrowding among the ranks of the unskilled, or semi-skilled, workers. The invention of new machinery which dispenses with labour produces short-period unemployment, but in the long run, as production increases, new mechanical inventions decrease the volume of unemployment.

It follows, therefore, that some of the remedies for the disease of unemployment are: greater and cheaper production, a lessening of the burden of taxation, a better distribution of man-power, a better industrial training of juveniles, and a closer and more harmonious co-operation between labour and capital. Unemployment naturally leads to a great deal of social discontent, and it is of the utmost importance that every effort should be made to lessen the trials of the unemployed and to preserve industrial peace.

13. Juvenile Employment

Juvenile employment has two aspects—firstly, the age at which, and the conditions in which employment shall be followed; and secondly the training for employment.

The first aspect of the problem has been more or less solved by factory legislation, and the Education Acts. The problem of so training children as to eliminate blind-alley employment has received much attention since 1918, and various methods have been devised for testing the natural aptitudes of children for certain jobs.

The greatest advance made in the years just before 1939 was in the deliberate placing of children in employment

through contact between the school and the Employment Exchange which was established in two ways; by the Juvenile Advisory Committee, and by the Choice of Employment Bureau, both of which gave assistance and advice to children leaving school in respect of their future careers. When the Education Act of 1944 becomes fully operative, very great developments may be expected in that direction.

14. Employment Exchanges

Unemployment Exchanges were created in 1909 in order to reduce unemployment due to lack of knowledge of vacant jobs, and in order to encourage mobility from a depressed to a more prosperous area. These Exchanges seek to increase the amount of employment, not by creating jobs that did not exist before, but by bringing the worker and the job into closer contact. Their primary purpose is to notify all unemployed persons of vacancies; to give advice and assistance to people seeking work; and to assist employers to find suitable employees. The returns furnished by the Exchanges provide valuable statistical information on the amount of unemployment.

Employment Exchanges have a future that must become increasingly important as plans for social security and full employment develop, especially in the training and transfer of labour between occupations.

15. Public Works

One important method of increasing employment in bad times is by a public works programme.

Public works are of two kinds, those which must be undertaken in any event, and those which would not be undertaken in normal circumstances, although a dividing line is not easy to draw.

Vast schemes of public works specially designed to combat unemployment, such as have been tried in Germany and America have not yet been adopted in England, but before the war, the State and the Local Authorities together spent large sums annually in improving highways, docks, harbours, public buildings, in drainage schemes, and in the provision of

working class houses, and there was a tendency to plan these schemes so that the expenditure on them was at a maximum when the general conditions of trade were bad. In any future trade depression, a vast public works policy is certain to be adopted.

16. National Insurance

Germany was the first country to inaugurate the policy of compulsory State insurance for working men. This outstanding event in the history of social reform took place in 1883 during the remarkable period of industrial and commercial expansion that Germany experienced after the Franco-Prussian War, a great transition period in German industrial history which was, as in England several decades earlier, accompanied by a great deal of social unrest. The first German insurance measures were the Sickness and Insurance Bill, which became law in 1883; the Accident Insurance Bill, which was adopted by the Reichstag in 1884; and the Old Age and Invalidity Bill passed in 1889. "The whole matter," said Bismarck in supporting the second of these historic bills, "centres in the question, Is it the duty of the State, or is it not, to provide for its helpless citizens?"

From these beginnings the system of social insurance was not only rapidly developed in Germany but was also adopted by other countries. France, Austria, Belgium, Holland, Italy, Norway, Sweden, Denmark, Switzerland, the United States, Australia, New Zealand, and Great Britain now all possess well-developed systems of social insurance.

For lessening the trials of the unemployed a system of unemployment insurance has emerged, and in this development Great Britain led the world. Unemployment insurance was first introduced as an experiment confined to a specified number of trades, under the British National Insurance Act of 1911, since which date the British Government has rapidly developed it by a series of further legislative measures, one of the most important of which was the Act of 1920. This Act extended the scheme to all persons of the age of 16 and upwards who were employed under a contract of service or apprenticeship, and all non-manual workers receiving less than

£250 per annum, except persons in certain exempted employments such as agricultural workers, domestic servants, State and municipal employees, and most railway workers. When thus enlarged the scheme applied to a total of nearly 12,000,000 wage earners; in the first instance in 1911 it applied to about 2,400,000.

Many changes have been made since 1920 in the working of the British system of unemployment insurance. Originally there were invariably three contributors, the employee, the employer, and the State, and unless the wage earner regularly paid his contributions he became ineligible for any benefits when unemployed. Subsequent legislation introduced the payment of what is termed "transitional benefit," which meant that the registered worker might receive, after undergoing a "means test," a certain amount of unemployment "pay" when the "payments" he was entitled to had ended.

The general history of both the Unemployment and the Health Insurance Schemes since their first inception has been a gradual widening of their scope. In the Act of 1911, unemployment insurance was limited to certain trades in which the amount of unemployment fluctuated widely, *e.g.* building and shipbuilding trades, constructional and mechanical engineering.

The National Health Insurance Scheme was much more comprehensive from the start, as all employed persons, whether manual workers or not were included in it with the exception of non-manual workers earning more than £250 a year, and the classes still outside the Unemployment Acts in 1946.

Unlike the Unemployment Insurance, which was administered by the Employment Exchanges, the Health Insurance Scheme was administered by the Approved Societies. In 1925 a pensions scheme was added to the Health Insurance Scheme by the Widows, Orphans, and Old Age Contributory Pensions Act.

All of these Acts, and the subsequent legislation down to the end of 1945 has been consolidated and amended in the comprehensive scheme which became operative in July, 1948.

Briefly, one social security scheme now covers practically everybody in the land in respect of unemployment, sickness, including full hospital treatment, and old age. Retirement

pensions are available for men at the age of sixty-five, and for women at sixty. The benefits, which are too numerous to be outlined here, are of a more generous and comprehensive nature than was previously thought possible in this country. How far the retirement pensions will really give social security to the workers in their old age must depend on how far the Government can control the general level of prices.

The Act is administered by the Ministry, which will set up regional authorities. These have opened local offices up and down the country. In addition, a National Insurance Advisory Committee has been appointed to advise the Minister on the working of the Scheme. As before, the insurance, in the case of employed persons, will be financed by the joint contributions of the employed person, the employer, and the State; and in the case of persons not working for an employer, by the insured person and the State.

17. Industrial Peace—Works' Committees

Works' committees are the elected representatives of the employees of a single firm, and since 1920 the movement has made great strides in this country. In a large factory several distinct works' committees may function. The Shop Stewards' Committee consists of Trade Unionists only, elected by the different departments of the works, or by the different trades, if several are carried on in the one factory.

This committee is in close contact with the management, and its special function is to find ways and means of adjusting differences between the management and the workers, especially in respect of wage rates, but all grievances are ventilated through the Shop Stewards' Committee.

Other recognised committees are the Staff Committee which deals with matters affecting the interests of the staff; and the Welfare Committee which has a wide range of welfare and social activities.

18. Industrial Peace—Profit-Sharing

Profit-sharing is a feature of some industries, but the method employed varies considerably. Sometimes half the profits

of a business are set aside for distribution among the workers; sometimes a quarter; and sometimes a definite sum is allotted out of the profits to the employers and the remainder divided between the employers and the workers.

An interesting example of profit-sharing is that introduced by Messrs. Rowntree many years ago. In this scheme, after the ordinary wages had been paid to all types of workers, a fixed share of $7\frac{1}{2}$ per cent. went to capital (*i.e.* the shareholders), and any surplus in certain agreed proportions. Before, however, the surplus was divided, 10 per cent. of it was set aside and added to the reserve. The remainder was then divided between labour, management, and capital, in the proportions of 50, 10, and 40 per cent. respectively. Thus the workers received their normal wages plus 50 per cent. of any ultimate surplus, and the 50 per cent. was divided as an equal percentage on the actual earnings. Each worker's share of the surplus was paid into a bank from which it could be withdrawn in cash if the worker so desired.

In the above scheme the worker could receive his share of the profits in actual cash, and this is the usual method in profit-sharing schemes. In addition, however, in Messrs. Rowntree's scheme, power was given to the directors to pay the worker his portion of the profits in shares. When this is done, of course, the worker becomes a shareholder or co-partner in the business, and the scheme then becomes a co-partnership one, a form of industrial co-operation which we have already examined.

Profit-sharing, however, is only successful where a firm can make a regular and substantial profit, and in consequence, the field for it is very limited.

19. Industrial Peace—Conciliation and Arbitration

Collective bargaining between Trade Unions and employers' associations does not in itself ensure peace in industry, although it does much to promote it. Collective bargaining frequently requires the help of other kinds of action, the most important of which are conciliation and arbitration. A Board of conciliation is composed of representatives of employers and the employees who meet together in order to settle any disputes within the trade with which they are concerned. In

arbitration the dispute is referred to a third party, either to a single arbitrator or to a body of arbitrators.

Conciliation may take the form of a number of committees within an industry, each committee functioning at a different stage of a dispute. Once established, these Boards can meet at intervals, and discuss all matters affecting the interests of the industry.

Arbitration may be voluntary or compulsory. In the first case the findings of the Court need not be accepted; in the second case, both parties are under a legal obligation to observe the award. In this country complete compulsory arbitration does not exist, but in the railway and coal mining industries, for example, all parties must carry disputes at a certain stage to an arbitration court although they need not accept its awards.

Arbitration has certain obvious defects. There is, for instance, the great difficulty of securing an efficient chairman to preside impartially over a board of arbitration. Another difficulty is the enforcing of a decision against the wishes of a large number of workers. A guarantee to accept the decision of a board of arbitrators must necessarily be given by a few workers' delegates, and this guarantee might not be accepted by the main body.

In making an award, an arbitrator must take many things into consideration, for he has to reconcile, not only the conflicting interests of the parties to the dispute, but also these interests with those of the general public. An arbitrator, therefore, must know how the wages and conditions of employment in the industry concerned compare with those in similar industries, and the probable reactions of an increase in wage rates on industries directly, or indirectly connected with the industry in question. In the case of railway men's wages, for example, he would have to consider the probable effects on industry in general, and on the cost of living.

On the other side, he would have to know the net profit the industry was making; if it could stand an increase of wages without forcing up prices; the effects on the industry of a rise of prices; and the possibility of offsetting a rise of wage rates by a lowering of technical costs.

As full information would be a long and difficult matter to collect, it is sometimes asserted that arbitration simply means

that the arbitrator takes an average of the claims of both sides, and that workers and employers are thus encouraged to claim far more than is justified by the facts of the case.

Compulsory arbitration has been introduced in New Zealand and Australia, but in Great Britain both these methods of promoting industrial peace have, except during the war periods, been entirely voluntary. There are, however, two British legislative measures relating to conciliation and arbitration, the Conciliation Act of 1896 and the Industrial Courts Act of 1919, but both were based on the voluntary principle. Under the former Act the Board of Trade had power to set up an industrial board of conciliation upon receipt of a request for such from both employers and employees. The latter Act required the Minister of Labour before referring a dispute, with the consent of both parties, to the arbitration of the Industrial Court—a Standing Court composed of independent representatives of employers and employees—to satisfy himself that all methods of conciliation within the industry have failed. The findings of the Industrial Court are not legally binding, but are usually accepted.

The machinery for deciding trade disputes is very complex, as certain workers have special bodies instituted for this purpose. In 1935, a Railway Staff National Tribunal was established as an ultimate court of reference for all disputes over wages and conditions of service. Under the Transport Act of 1947 which nationalised the railways, the Transport Commission, in consultation with the unions, is required to establish and maintain machinery for settling by negotiation the terms and conditions of employment, or for arbitration where agreement fails. Any machinery which existed in 1947, and which was adequate to achieve its purpose was left intact.

The miners also have special machinery for conciliation,—the National Conciliation Scheme of 1943. This Scheme provides for a National Reference Tribunal for settling all disputes of a national character. Purely local questions are settled by District Boards, but if a matter is of sufficient importance it can be referred to the National Tribunal. This conciliation machinery, with some slight modifications, was

accepted by the National Coal Board when the mines were nationalised in 1946.

The Minister of Labour and National Service functions in industrial disputes in various ways. He can offer his services as mediator in any industrial dispute. Under the Conciliation Act, 1896, and the Industrial Courts Act, 1919, trade disputes can be referred to single arbitrators appointed by the Minister of Labour and National Service. The Minister has also the power to nominate the Chairman of any temporary Board constituted for the purpose of arbitration in a particular dispute. When it appears to him necessary, he has the power to institute special courts of enquiry to investigate the nature and causes of any industrial dispute. These courts make reports which are laid before Parliament, published, and sold to the public. These courts may also make recommendations to both parties to a dispute. By these means the Minister can give such publicity to a dispute that unreasonable demands must usually yield to the pressure of public opinion.

The Wages Councils Act of 1945 gave to the Minister of Labour and National Service powers to institute for any trade in which voluntary machinery for the settlement of wages does not exist, or is inadequate and cannot be made adequate, on the recommendation of a Commission of Enquiry appointed by the Minister, a Wages Board or Council to deal with all matters relating to wages, holidays with pay, and intervals for meals or rests. The recommendations of these Councils, if accepted by the Minister of Labour and National Service, become legally binding on all parties concerned. The powers of the Minister, exercised through Statutory Bodies over the whole field of wages and conditions of employment, are now very wide.

The Act of 1945 transformed existing Trade Boards into Wages Councils.

CHAPTER IX

THE INCOME SHARES: WAGES, PROFITS

1. Introduction

The sharing or apportioning of income among workers and property owners is called by economists the distribution of wealth, and the income is, as we have seen, classified into wages, profits, rent, and interest. There is, of course, another meaning to the term distribution—the ordinary one. When we speak of the distribution of merchandise or newspapers we mean the forwarding of these commodities to widely scattered buyers, or, in other words, the passing of goods through the hands of wholesale and retail traders until they ultimately reach the consumer.

2. General Factors Influencing Wages

A complete theory of wages would fall beyond the scope of this work, but light can be shed on simple wage problems. The first factor influencing wages is that of relative scarcity. One reason why professional men such as doctors and lawyers usually earn more than dockers, is that whereas any man of good physique can become a docker, a man can qualify as a doctor, or a lawyer, only after a long and expensive training. Dockers are usually, therefore, relatively abundant; professional men are usually relatively scarce.

The same applies, although in a less extreme form, over the whole field of industry. Skilled workers, during their period of training, earn less than unskilled labourers, and that tends to limit their supply, and in consequence to keep their ultimate wages above the level of the earnings of the general labourers. It follows, therefore, that the power to afford an expensive training greatly influences a man's earning power in later life.

Labour scarcity, of course, does not depend on costs of training alone. Some kinds of work have certain disadvantages compared with others. A bricklayer has more broken

time through bad weather than has a carpenter; bricklayers thus tend to be slightly scarcer than carpenters, and usually earn slightly higher wages per hour. Many examples of varying earnings can be explained on these, and similar grounds. But whatever the cause of the scarcity, in free competition high wages can only be gained and maintained in any occupation by making that particular class of labour relatively scarce.

If any person could enter any occupation without any loss of time, that is to say, if labour were perfectly mobile, and when allowance had been made for the disadvantages of certain occupations, wages would tend to equality; but labour is far from being perfectly mobile, hence workers do not crowd the highly paid occupations and reduce the earnings in them to a common level.

The question may now be asked, but does not the productivity of the worker determine his earnings? In the case of piece-work wages it certainly does, and directly, but in most cases it is not easy to separate productivity from scarcity. From the employer's point of view the productivity of the worker is his contribution to the value of the joint product of labour, capital, and land. The value of labour's contribution, therefore, will largely depend on its relative scarcity compared with that of capital and land.

The third general influence affecting wages is the value or the demand price of the product. Where the selling price of the product is low, wages cannot be high, and that fact gives a partial explanation of the low wages paid in certain trades in the nineteenth century. A firm producing a product of high selling value can usually afford to pay higher wages than a firm producing a less valuable product. One of the reasons why teachers had four grades of salaries under the original Burnham award was that some local authorities were richer than others.

3. Trade Unions in Relation to Wages

Wages are influenced by trade unionism, a factor of a type different from those noted above. We may assume that in perfect competition the worker will receive as wages the value

of his scarcity or productive contribution to the value of the product, but it does not follow that unorganised labour will receive it in actual competition, for several reasons. ✓

In the first place the worker will rarely know the value of his contribution, and secondly, his individual bargaining power would be negligible compared with that of a modern employer. We can say, therefore, that where the workers are unorganised, they are likely to receive as wages much less than their real worth. A Trade Union can, through its facilities for acquiring information and its power of collective bargaining, ensure that the wages of its members approximate to their contribution to the value of the product.

There are, however, very definite limits to the bargaining power of Trade Unions. If the demand for a product is very inelastic, so that its selling price can be raised, a single union can force up wages to a level above that paid in similar trades, but if the consumer has to pay more for one thing he must economise in other directions, so that wages tend to fall in trades producing goods for a highly elastic demand. But if all Trade Unions attempt to do this, employers, where possible, will use more capital and less labour than before and widespread unemployment will follow, and this limits the power of Trade Unions in general to force wages much beyond what the average worker is worth to the employer.

4. Money Wages and Real Wages

When we use the term wages we may have in mind one of two very different things which must be clearly distinguished. We may refer to the money in the wage packet, or we may refer to the real wages, that is the goods and services which the money wages will command.

Money wages, of course, rise as the average level of prices rises through the actions or policy of the Government, although not necessarily in the same proportion. Since 1914, speaking broadly, wages and salaries have roughly trebled, although how much the workers have really gained in goods and services is difficult to determine. In such a transition period, Trade Unions can effect a general rise of money wages, but a large proportion of that increase is due to a depreciation

of the value of the monetary unit. When people have said that Trade Unions cannot raise wages in general above a certain level they have had in mind either a stable monetary system, or else they were referring to real wages in conditions of a fixed industrial technique.

In these days, however, technical conditions progress at a rapid rate, and every advance benefits the worker as a consumer and so raises his real wages. In a period of relatively stable monetary conditions, technical progress can and does raise the workers' real wages. Fundamentally, real wages owe far more to technical science than to Trade Union action, but the Trade Unions can secure for the workers their share of the fruits of progress much more quickly and effectively than can natural forces or the play of competition. It follows, therefore, that wise Trade Union leaders will start a campaign for wage increases only when technical progress is active.

5. State Regulation of Wages

The last important factor influencing wages is State regulation. The State now regulates wages both indirectly and directly. Indirect regulation is achieved by arbitration, which has already been considered. Direct regulation of wages was first accomplished by Trade Boards, which, by the Act of 1945, have been transformed into Wages Councils.

The Trade Boards system was a consequence of that stirring of the public conscience in respect of unduly low wages that began about 1890, but it was not until 1909 that legislation was enacted. A Trade Board was instituted by the Ministry of Labour for any trade in which wages were unduly low, and where there was inadequate machinery for collective bargaining.

A Trade Board was composed of representatives of the employers, the workers, and some independent members all of whom were nominated by the Minister of Labour. The Board had power to fix minimum rates of pay, and maximum hours, and to take such steps as were necessary for the enforcement of its awards. These Boards have done very good work in trades employing badly paid female labour, especially in the clothing, lace, and box-making, trades.

Minimum rates of pay were first fixed for coal miners by the Coal Mines Minimum Wage Act of 1912, and for agricultural workers by the Agricultural Wages Act of 1924. In 1934, the Cotton Manufacturing Act gave statutory effect to the collective bargains made by the employers and the workers in the cotton industry.

• We must distinguish the wage-fixing boards from such bodies as the Central and National Wages Boards which were set up under the British Railways Act of 1921. These particular boards were constituted for arbitration purposes, and not for the purpose of fixing statutory wage rates. If in the case of a wage dispute no agreement was arrived at between the railway company and the Trade Union or Unions concerned, the matter was referred to the Central Wages Board and, on appeal, to the National Wages Board. The former body was composed of eight representatives of the railway companies and eight representatives of the men; and the latter of six representatives of the companies, six of the men, and four users of the railways, together with an independent chairman appointed by the Ministry of Labour.

Since 1939, State regulation of wages has been greatly extended, and in the future practically all wages will be fixed by some form of Wages Council.

6. Minimum Wages

The principle of minimum wages, which simply gives effect to the idea of a reasonable standard of living, is not without drawbacks, even from the side of the workers, although the benefits of the Trade Board system cannot be denied.

Investigators have shown that in certain individual trades the increased rates of pay, fixed under the British Trade Boards system, have conduced to a greater efficiency among the workers, and have prevented sudden changes in the number of persons employed. On the other hand there have been complaints in some trades about the working of the system. The Government therefore appointed a Select Committee in 1921 to make a thorough investigation of its effects. The members of this committee, after listening to a great deal of evidence, came to the conclusion that there was

“substance in the allegations that the operations of some of the Boards had contributed to the volume of trade depression and unemployment.” The committee, however, thought that the effect of the activities of Trade Boards upon British Trade had “occasionally been stated in terms of exaggeration, because, unfortunately, many of the increased rates of pay fixed by the Boards commenced to operate when trade was actually decreasing, and that under such circumstances many employers were unable to adjust themselves to the changed conditions.”

The final conclusion of the Select Committee was that the system had, on the whole, been a beneficial one because it was quite evident that the condition of the less skilled workers, both unorganised and organised, had been greatly improved, and that the Trade Boards had certainly succeeded in abolishing “the grosser forms of underpayment.” The committee was also of opinion that the fairer or “good” type of employer, who was “able and willing to pay a reasonable rate of remuneration to his workers,” had benefited under the system by being protected from the deliberate wage-cutting of unscrupulous competitors “prepared to take unfair advantage of the economic necessities of the workers.”

Furthermore, the committee emphasised that the higher rates fixed by the boards had acted as “a stimulus to improvement in working methods”; that there were even instances of some piece-workers reaching their minimum wage without any increase in the actual piece rates paid; and that, generally speaking, the system had improved industrial relations, and had strengthened the organisation of both employers and employees.

The great problem of the minimum wage principle is the effect on the position of the older and less efficient workers. Where a Council or Central Board fixes a minimum wage for an industry, those who can earn the wage benefit; those who cannot are thrown out of work, or forced into still worse paid occupations. In the case of a general minimum wage fixed by the State, such people would be permanently unemployed, and in these days would have to be maintained by the public at large. Even the power of the State to fix minimum wages for all has definite limits.

7. State Regulation of Working Conditions

State regulation of working conditions has a close connection with State regulation of wages, as one of the main objects of regulating working conditions is to promote efficiency.

During the first half of the nineteenth century a series of Acts was passed regulating working hours and conditions in the textile factories. The employment of children was greatly restricted; regulations were enacted to prevent accidents due to machinery; the Ten Hours Act of 1847 fixed the maximum hours for women and young persons at fifty-eight hours per week; the principle of a normal working day, 6 a.m. to 6 p.m. was established; and as early as 1833, Factory Inspectors were appointed to see that all Government regulations were observed.

Since 1850 the principles of factory legislation have been gradually extended over almost the whole field of employment. The average length of the working day has been reduced; special health provisions have been made in trades dangerous to health; compensation for injuries received during employment, the principle of which was first recognised by the Employers' Liability Act of 1880, has recently been put on a sound and comprehensive basis; and the principle of holidays with pay for all workers has been accepted.

8. Wages and the Standard of Living

It has long been contended by social reformers that the guiding principle of wages should be the workers' natural right to a certain standard of living, that is to say, a certain minimum recognised by society, and, in a general sort of way, the regulation of wages and of conditions of work by the State has been directed to that end. In the past, however, the standard of living principle has only been applied to any marked extent in the Central and Local public services. It would be an exaggeration to state that the wages and salaries paid by these bodies have been governed solely by an estimated standard of living judged desirable, but such considerations have played an important part, and in times of depression a corporation tramway driver has often

received higher wages than a skilled engineer because his occupation was "sheltered" from the blasts of competition.

Over the main field of industry, however, wages in the past have been governed by competitive conditions, that is to say, the standard of living of the worker has been governed by the wages he has earned, especially in the trades producing for export. What may happen in the future is difficult to foresee, but in respect of workers producing goods for export, or engaged in trades producing goods in competition with foreign imports, it is difficult for even the State to decree that wages shall conform to a conventional standard of living, at least until a planned world economy has been achieved.

9. Why Women usually have Earned Less than Men

We are now able to throw a little light on a very controversial problem, without attempting to dogmatise. In the first place the argument that on the average, women are less efficient than men, if interpreted in a certain sense, is not without truth. In any short period of time, women may be as efficient, or even more efficient, than men, but over the whole period of working life that is not so; she stands the strain and stress of life less well, and is thus more liable to break down. In many cases, too, industry is not her ultimate occupation. Man, on the average, and over a long period, is a more satisfactory machine, and as such, he commands a higher price.

It is not wise, however, to push this argument too far, and in any case it is only a partial explanation. Custom has been an influence in determining the wages of women, and custom and law have been made, and have developed in the interests of man. Women are numerically superior, and until recently, their opportunities for education and training, were negligible; they crowded certain unskilled occupations, and forced wages there to the minimum level, and thus created conditions that had adverse effects wherever women were employed.

Lastly, women have been much less inclined for combination than men for various reasons. Trade unionism, therefore, has been able to give little protection or support to women workers in respect of wages.

The question of equal pay for men and women doing the same job has been examined by a Royal Commission sitting 1944-46. As the Report contains no recommendation, it is difficult to decide whether the Commission is for, or against, the principle. Speaking generally, the Report seems to suggest that equal pay might reduce the field of employment for women as at the same rate of pay employers would probably prefer a man to a woman; and also that it might have adverse effects on marriage and the birth rate for two reasons. In the first place a large increase in the wages and salaries bill would be likely to reduce the purchasing power of all money incomes, and secondly there is the risk of the common wage falling below the level of the wage previously paid to men alone. In any case equal pay would greatly strengthen the demand for family allowances equivalent to the former differential payment between men and women.

After hearing evidence for and against almost every aspect of the equal pay problem the Commission appears to have been more impressed by the question of cost than of abstract individual justice. Equal pay would raise costs in industry and in public administration. In the teaching profession alone the estimated cost for Great Britain is about £16.5 million. Costs may be a small matter to the idealist, but they cannot be ignored by a Government.

10. Methods of Wage Payments

The methods of wage payments most widely used are the time and piece rate systems, and both methods may be supplemented by a bonus, or by participation in the profits made by the firm. Methods of a somewhat different type are the co-partnership and the sliding scale methods of payment.

The time wage is a payment at a given rate per hour, month, or longer period, and is still the method most widely used in this country. The time wage has the advantage of being easily understood; it places all workers in an industry on an equality, and in consequence has always had the support of the Trade Unions. On the other hand, a standard wage leads to disputes as to what should be the minimum output required

from each worker, and workers of more than average ability are penalised.

The piece rate method by which the worker is paid in proportion to his output is customary in many industries, *e.g.* textiles, mining, clothing, and boot and shoe industries. This method has the advantage of rewarding the worker in proportion to his efficiency, and sometimes of allowing the employer to use his fixed capital to maximum advantage. Against this, it is argued that the system leads to an excessive speeding up, and in some cases to bad work. The Trade Unions dislike it on the ground that it divides the interests of the workers. Another objection urged against it is that employers are tempted to cut rates whenever the workers earn above a certain amount. Again, the changes in the methods of production that continually take place may react adversely on piece rates.

The bonus system takes many forms, and in this country it has been used mainly in the engineering trades. The bonus is paid whenever work is finished in less than the standard time allowed; the worker is paid a sum corresponding to the amount of time saved.

Some reference to profit sharing has been made in another chapter, so it may be passed over here.

The sliding scale has two forms, that which is based on the cost of living, as in the Civil Service scales, and that based on the selling price of the product, as has been tried in the iron and steel industries. A wage based on the cost of living is a great advantage to the worker when the cost of living is rising, but it causes disputes when prices are moving in the opposite direction. Apart from that the cost of living is a concept difficult to measure to the satisfaction of the two contending parties, and without causing resentment.

Sliding scales based on variations in the selling price of the product have the advantage from the employers' standpoint that, when prices are falling, the wage bill is reduced. On the other hand a rise in selling prices may not always mean a rise in profits, but the wage bill rises.

In good times, the worker feels that he is sharing in the prosperity of the industry, but falling wages following falling

prices leads to serious discontent. On the whole, the workers prefer fixed to fluctuating wages.

Before closing the topic of wages, a word may be said on an old question first raised by early socialists. Is there really a market for labour? If by market we mean a market in the sense of a commodity market, the answer is no. The only true labour market is the slave market now happily extinct. In a free society the worker is hired, not bought; he disposes of the product of his hands and brain, but his property rights in respect of his mind and body are inalienable. Within limits, he may work or stand idle, and when he works he labours in conditions in the making of which he has a voice. It is only in respect of the products of his labour that we can rightly speak of a market for labour.

11. Profits

The employer's own share of the income of the industry he controls is usually termed "business profits," a phrase which admits of more than one explanation. Profit is the second of the great shares of income as originally distinguished by the earlier economists. It has been defined as a "mercantile margin," that is, the difference between the expenses of production and the market price of the product. But the term is not quite so easily explained because, in the first instance, we have got to decide what is meant by expenses of production.

The early economists wrote before industry was organised as it is to-day, before the co-ordination of specialists had become such a fine art, before the régime of the departmental system and of scientific management had become paramount. They did not foresee the rule of the salaried manager or director; they did not recognise organisation or management as an agent of production.

And it is this emergence of the paid organiser that makes the analysis of the term profits a somewhat difficult matter. Profits have been termed the "wages of management"; "business earnings"; "the reward of the entrepreneur, or undertaker, or enterpriser," the reward of the man who undertakes the hazards or risks of business. If the business has a

paid manager or organiser, then the wages of management in this case are not profits but a reward for work done and are therefore earnings in the true sense of the word. Then again, if the owner of the enterprise is also the manager, he may regard what others term his profits as his wages for managing the business, and deem his services worthy of such wages, in which case there is not that "something over" which constitutes true profits.

Let us take a concrete example in order to make the reasoning a little clearer. Suppose X owns and manages a business which brings in £10,000 a year, the "expenses" of which amount to £9,000. What then, may we term the sum of £1,000 which is the so-called "mercantile margin," the difference between his "expenses" and what he receives for the output? Ordinarily, of course, it would be termed "business profits." But X himself manages the business, therefore he naturally expects a remuneration for his work as manager. If he thinks that his services are worth £1,000 a year then the profit of the business is nil. On the other hand, let us suppose that X regards his services as worth £700 per annum. What, then, is the remaining £300? Part of it will represent interest on the money invested in the business. If for example X originally invested £5,000 in order to start the enterprise, and the market rate of interest for loanable capital is 5 per cent., then £250 represents interest on capital invested, while the remaining £50 is the true profit or risk money, the "something over" to compensate him for the "hazards" of the business. Thus "business profits" may include: earnings, interest, and risk money or insurance.

Of course, in a big joint stock company where there may be more than one paid manager or director, the wages of these officials, which are fixed in advance of the marketing of the output, are included in the expenses of production in their correct place under salaries. Therefore the difference in this case between the actual monetary cost of production and the market price of the product would be made up of interest on the capital invested in the business plus a reward for risk, and this amount would be divided among the various shareholders in the form of dividends. If, say, at the end of the

year, the board of directors declared a dividend of 12 per cent., and at the time of this declaration the market rate of interest for loanable capital is 5 per cent., then the true or "net" business profits amounts to 7 per cent. Hence the 12 per cent. may be regarded as "gross" profits, but in this case, however, there are only two elements: interest and risk money or insurance.

Thus, what in everyday language is referred to as "business profits," is really "gross" profits which includes elements other than risk money or the reward for "uncertainty-bearing."

This completes our brief examination of the terms wages and profits. We must next turn to the remaining big shares of income—interest and rent.

CHAPTER X

THE INCOME SHARES (*continued*): INTEREST, RENT

1. Introduction

The problem of interest is centuries old. "Love ye your enemies," we read in St. Luke, "and do good, and lend, hoping for nothing again, and your reward shall be great." Plato forbade the taking of interest, and Aristotle regarded interest as unnatural because he thought that money was "barren." The medieval church was severely antagonistic to the interest taker, or, as he was then known, the usurer. Usury was looked upon as a deadly sin. Gradually, however, in the thirteenth and fourteenth centuries people began to recognise two things: that the lender might easily suffer a loss during the period of a loan as a direct consequence of having given the use of his money to another person, and that the loss might easily be increased if the loan was not paid back on the day agreed upon. It was thus that the doctrine that usury was a sin began to break down, but it was not until 1545 that the taking of interest up to a maximum of 10 per cent. was first legalised in England.

Down to the early nineteenth century interest was still viewed with suspicion, but the need for capital during the Industrial Revolution forced the State to accept the logic of facts, and all restrictions on interest were removed.

2. The Meaning of Interest

The theory of interest is complex and controversial but certain threads run through most theories. Why should anyone wish to borrow capital for which interest must be paid? One obvious answer is that in various ways capital is productive, and that as long as the borrower can obtain the capital

at an interest payment less than the additional value created by the capital the transaction is worthwhile. This applies to loans outside industry—to loans even from the money lender where the term productivity appears somewhat strained, but it is difficult to believe that anyone would borrow capital without advantage, real or supposed.

But why is the lender willing to lend? One answer is that he considers it a greater advantage to himself to lend his capital than to use it in some productive capacity himself, or to allow it to stand idle, or to consume it privately. A capitalist in a position to open up a business will require some inducement to forego that alternative if approached by a third party anxious to borrow his capital. That inducement, of course, is the payment of interest, and it is evident that there must be some connection between the rate he is willing to accept and the return he would expect his capital to yield if he opened up a business himself.

Let us suppose next that the State was able to enforce a decree that no interest must be paid. Some people would still be willing to lend their capital, but the majority would prefer to consume their capital privately. A second reason why interest must be paid is that it is necessary to limit the private consumption of capital, and here again there must be a connection between the rate of interest, and the propensity of the capitalists to consume their capital privately.

The third alternative has probably the widest range. Let us suppose that Mr. A has saved £1,000; two most probable alternatives before him are to keep the money idle in a strong room or on current account at a bank, where it can be withdrawn at will by a single cheque; or to invest it in some Government stock or bonds or in some joint stock company's shares.

At first glance the choice of alternatives seems obvious but there are certain advantages in keeping one's capital in a money, or as is usually said, in a liquid form. In the first place it is perfectly safe. In an investment of any kind there is always an element of risk—a company investment may prove a failure, and the selling price of Government stock varies with the state of the market.

Secondly, the course of future events is very uncertain. Mr. A may have no immediate need of cash but he cannot, with certainty, foretell his position in six months' time. He could, of course, invest his capital now and turn the investment into cash as required, but as we have already seen he may have to sell at a loss, and in any case, investment means trouble.

If Mr. A keeps his capital in liquid form, he avoids the risk of both loss and trouble; hence to persuade him to forego this alternative, borrowers must pay interest at a rate that will induce him to sacrifice his preference for cash, or as Lord Keynes termed it, his preference for liquidity.

Interest then is a complex concept containing such diverse elements as productivity, time, risk, trouble, and the sacrifice of alternatives.

3. Why Interest Rates Vary

The considerations outlined above enable us to understand why we have a number of interest rates instead of a uniform rate for loans.

Interest rates on long term loans are usually higher than on short period loans because such loans entail greater risks. For a loan from a building society running from ten to twenty years, a borrower must pay 4 per cent. On the other hand a business firm of sound standing could borrow from various financial houses for a period of one to two days at about 1 per cent. The Government can borrow more cheaply than business firms because the risk of the Government defaulting is nil.

Money lenders usually charge a high rate of interest, partly because of the keenness of the borrowers, and partly because of the risks of loss. Pawnbrokers charge high interest rates largely because their loans entail trouble of various kinds such as booking and storing the pledges. The book-keeping element enters also into the loans of building societies, and money lenders. Some economists seek to isolate these elements by distinguishing between "Gross" and "Net" interest.

4. The Relation between Interest and Capital Values

The rates of interest have an important bearing on the capital values of all durable goods that yield a fixed income. Consider the example of a Government 5 per cent. bond issued at its face value of £100 when the average long term rate of interest is 5 per cent. To avoid the effect of the time of repayment we can suppose that the bond is consolidated stock, usually known as "consols," the capital value of which is not repaid by the Government. At the date of issue the capital value of the bond will be its face value, £100.

Next, let us suppose that at a later date, the average rate of interest for long term market loans falls to $2\frac{1}{2}$ per cent. The income from the bond is not affected as it is fixed at £5 per annum. £200 must now be invested in variable interest securities to yield an income equal to that of the bond, and the capital value of the bond will rise sharply; in some circumstances it may approximate to £200.

Conversely, a rise in the average long term market rate of interest would depress the capital value of the bond.

An area of land can be regarded as a fixed interest security as rents change but slowly; any fall in the long term market rate of interest would raise the capital value of the land for the reason given in the example of the bond; conversely any rise in the long term market rate of interest would have the opposite effect.

The capital value of a durable machine yielding a regular income moves in a similar manner with changes in the average long term rate of interest, but to a much smaller extent than the capital value of land, as it is a much less secure investment. For the same reason movements in the capital value of land would be less marked than in the case of a Government bond.

The long term average rate of interest has also an influence on the capital value of a house. Let us suppose that Mr. X wishes to purchase the house of which he is the tenant, and is uncertain of what offer he should make to the landlord. He therefore calls in a valuer, who, as a first approximation capitalises the net rent, say £50 per annum, at a rate of interest equal to the present average long term rate, plus an allowance for repairs, and other risks incidental to property investment.

If the valuer thinks that the capital invested in the house should yield 6% to cover these charges and net interest, his first approximation will be $\frac{£50 \times 100}{6} = £833\frac{1}{3}$, in round

figures £850. He will then take account of the state of repair of the buildings, and the decorations, the state of the district from a letting point of view, and so forth, before making his final decision, but his starting point is the capitalised value of the annual rent, at a certain rate of interest. It is assumed in this example that Mr. X is not a mere speculator seeking to make a "windfall" from a present boom, but an investor anxious to ascertain the long term value of his house.

5. Interest in Relation to Saving

It was generally accepted at one time that the amount of saving was governed by the rates of interest, and that a rise in interest rates would stimulate saving, and that a fall in interest rates would check it. That view has been modified in recent years.

It is true, of course, that some people will save more when interest rates are high than when they are low, but in these days large numbers of people save more when interest rates are low than they do when they are high. The reason for this is that they save with a view to enjoying a certain fixed income at some future date, and the lower the rate of interest, the larger will be the capital sum required to yield the desired income.

Most saving, however, is done by individuals and by the joint stock companies with little regard to interest rates. The joint stock companies save to provide capital necessary for expansion; private individuals who have income in excess of their conventional needs usually save that surplus without troubling about rates of interest. In these days, the level of incomes is probably a more important factor in saving than rates of interest.

6. The Meaning of Rent

The term rent has two very different meanings which can best be understood through a simplified example. Let us suppose that a builder owns a plot of freehold land on which

he decides to erect a house with a view to letting it to a tenant. Let us further suppose that the house costs £2,000 to complete; that the annual value of the land is included in the costs of the house; that the expected average return to cover all charges on capital invested in house property is 6 per cent.; and above all, that the supply of and demand for houses of this type is roughly equal. On these assumptions the tenant will have to pay an annual rent of about $£2,000 \times \frac{6}{100} = £120$.

In this case, however, the rent is nothing more or less than the interest on the capital invested.

The assumption that the supply of, and demand for houses is about equal is seldom valid. Although the conditions created by the two world wars are very abnormal, the supply of houses, on account of high costs of building, is usually well below the demand for them, and when and where rent restriction Acts do not apply, the landlord can command a rent in excess of the interest on his capital invested. It is this scarcity, or surplus payment that is true economic rent, and the two senses in which the term rent is used should be clearly distinguished. If the present rent restriction Acts were removed, house rents would rise alarmingly, and landlords would receive a high economic rent. As the building programmes mature economic rents would gradually fall, and if ever the supply of all types of houses became equal to the demand for them, economic rents would disappear.

7. Quasi-Economic Rents

The peculiarity about the economic rent noted above is its more or less temporary nature; the economic rents of houses can be almost, if not entirely extinguished by gradually increasing their supply, and to denote this peculiarity, the term "quasi-" is attached to economic rents of this kind.

Quasi-economic rents have a very wide range, as they arise whenever a durable good is in short supply, and when that supply can be increased but slowly. After the first world war, cargo vessels earned high quasi-rents, and they are probably doing so now; indeed, we can treat the high earnings of

professional men, and classes of skilled workers, when they are in short supply, in part, at least as quasi-rents.

8. True Economic Rent

It is customary to reserve the term true economic rent to land alone, because land has been supposed to be a factor fixed in supply, so that however much the demand for land, or for the products of land increased, the supply of land remains constant.

This assumption is not rigidly true. The land area of England, or of the world for that matter, is fixed, but agricultural improvements have an effect equivalent to increasing the land area of England; also in these days of developments in transport we can import the products of land from overseas. In that sense, the area of England can be extended almost indefinitely.

But agricultural improvements take effect only gradually, and may be more than offset by increasing population, and imports from abroad may be interrupted by many causes, so that we can rightly regard land, especially in England, as fixed in supply to a very large extent.

It is easy to see, from what has already been said, how economic land rent emerges. Let us suppose that all owners of land, or their families, have purchased the land they own, and that the population is of such a size that the demand for the products of all types of land is exactly equal to their supply. As landlords have the alternatives of using the land themselves, or of letting it, they would expect a return from their tenants equal to the interest on their capital invested. In reality the matter is more complex than this, but as a first approximation we can say that in effective competition, the rents they would receive on the average would be almost equal to the interest on the capital invested; there would be little or no economic rent.

Now let us assume, what is normally the case, that the population is such that its demand for land, or for the products of land is greater than the supply; the consequence is that prices of land products rise, the farmers make a surplus

profit which competition forces them to pay over to the landlords who thus take an economic rent, in other words, a surplus payment due to land scarcity. The only real difference between land and houses is that in a densely populated country like England, economic land rents tend to be permanent.

In normal times, and with free food imports, the economic rent of much agricultural land in this country may not now be high, but owing to the concentration of the population, urban land, especially in the centre of large cities yields a high economic rent.

The economic rent of particular areas of land is affected by many circumstances. Transport developments will raise the economic rent of some land, and lower that of others. This applies to both agricultural, and to urban land. If transport development tends to concentrate population on a particular area, the economic rent of that land will rise; if it tends to diffuse it, the economic rent of that area will fall, but will tend to rise in other districts. When mechanised transport made possible large imports of American wheat into this country after 1870, the economic rents of most English corn lands were extinguished.

9. Shop Rents and Prices

An analysis of the relations between rent and prices is too complex for the scope of this work, but we can correct one erroneous impression. It is often supposed that, because the rents of shops in a fashionable city thoroughfare are much higher than the rents of suburban shops, the prices of their goods must necessarily be higher. It is true, of course, that articles of clothing in a fashionable shop are priced much higher than those in a suburban shop, but that is quite independent of the rents charged for the shops. In the first place qualities of the goods are not the same in both cases; secondly, the highly rented fashionable shop usually caters for well-to-do customers, who are able and willing to pay for reputation, style, and so forth.

There is no direct relation between shop rents and prices. A business man will offer a high rent for a site on which high profits can be made, and high annual profits are possible with

very low prices if the volume of business done is very large. This explains why firms like Woolworth's can pay high rents, and yet sell low priced articles; but a rigid comparison is not easy owing to the different types, and qualities of goods sold in various shops.

10. The Rental Value of an Area of Wheat Land

It has already been noted that the capital value of an area of land in normal circumstances is determined mainly by the rental value and the long term rate of interest. The question therefore arises—how is the rental value determined?

Many factors enter the rental value of wheat land—fertility of the soil, situation in respect of transport and market facilities, suitability of the site for mechanised farming, conveniences in respect of labour supply, and in some cases, perhaps, the force of custom.

An important factor of another type is the demand from alternative crops. If sugar-beet, potatoes, and pasture, compete with wheat for the possession of a certain area of land, and it must be used for wheat in the interests of the community, the rent it will command will be at least slightly in excess of what it could earn in the production of any alternative crop.

In a food importing country like England, the rent of wheat land is affected by foreign competition. During the period 1760 to 1860 when the population of this country was growing very rapidly, and large scale imports of corn, for various reasons, were impracticable, land rents increased very considerably. As has already been noted after 1870, when improved communications abroad, and free trade, allowed large quantities of American corn to flow into this country, there was a sharp and general fall in the rents of all corn producing lands.

CHAPTER XI

THE CONSUMERS

1. Meaning of Consumption

To the economist "consuming" means the using of wealth, the using of raw materials for the creation of further wealth, and the satisfying of our desires with the finished commodities. Steel is consumed when a battleship is constructed: bread is consumed to appease hunger; a book is consumed when it is read. Thus the consumption of a commodity may take place quickly or slowly, while the commodities consumed vary in accordance with our wants and preferences.

In a competitive society the consumers are therefore the controllers of production, for it is upon their decisions that the supply of goods and services depends; their desires settle the total amount of the products, the size of what has been termed the "wealth heap." An increased demand for a commodity stimulates its production.

"Consumption," declares the author of the *Wealth of Nations*, "is the sole end and purpose of all production, and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer."

But despite Adam Smith's declaration the earlier economists did not pay much attention to the "theory of consumption," and it is only within the last three decades that this section of the subject has secured greater prominence in economic treatises.

The amount consumed by an individual depends primarily on income; the rich consume more than the poor. Individuals, however, even of the same social group, often differ greatly in the standard of their consumption; some are far more frugal than others. It may also happen that the supply of a commodity is very much in excess of the amount usually

required by the consumers, that there is a large surplus in the hands of the sellers. This is what is generally termed "over-production," and it may be due to several causes, such as a wrong estimation of the potential demand, a sudden change in fashion, the appearance of a substitute, or defective organisation.

2. Over-production

But "over-production" is a term that needs careful examination. In modern industry it is not difficult by means of mass production to supply an article in such numbers as to cause a glut in the market. "Over-production" in this sense means that articles have been produced which can only be sold at a reduced profit, or at a loss. In the former case the so-called "over-production" results in the substitution of small profits for big; in the latter case it does not necessarily follow that the articles remain unsold; they may, for instance, be bought for purposes for which they were not originally intended, or sold in another type of market. Thus because of the extensiveness of human wants there is really no such thing as "over-production" in the sense that an article cannot be used in some way or another, or that there is absolutely no market for it at any time or in any place. One of the earlier French economists maintained that the immediate remedy for a glut of one commodity is a big increase in the production of other commodities.

Several factors, therefore, may cause the sale of a commodity to fluctuate. Fundamentally, however, such fluctuations are due to changes in the wants of mankind, to changes of choice or of preference. Thus the foundation of a study of consumption and of consumers is a study of human choices or preferences, of the problem of choice-making.

3. Choice-making

This brings us to the problem of the "rational" man. Can we speak of a rational consumer? Does the ordinary man decide upon what he is going to consume without being in some way stimulated, influenced, assisted, guided, or even forced in his choice-making?

In the first place it must be recognised that the modern consumer is hemmed in by price-fixers, by rings of traders who agree beforehand to adhere rigidly to fixed price lists. Many commodities nowadays have a "ring" price; even the price of our daily bread was fixed by rings of millers and bakers before the war.

In the second place we must remember that mass production has not only greatly affected the consumer from the standpoint of quantity but also from the standpoint of quality. This, of course, means that consumption is much more standardised in modern communities than it was a hundred years ago.

In the third place it is necessary to emphasise that variations and inequalities of income compel the consumer to make choices quite different from what he would like to make. The amount of the income is the dominating factor from the standpoint of the potential buyer.

Finally, both rich and poor consumers are constantly being influenced or guided in their choice by the highly developed methods of the salesman and the advertiser in bringing to their notice the qualities and prices of commodities.

Salesmanship and advertising are powerful weapons in modern business, weapons which have far-reaching effects upon the choice-making of the consumer. Without efficient salesmanship efficient production must fail to achieve its full and fitting reward. Selling is the end and aim of production. The work of the sales manager is the essential complement to that of the works manager; indeed, it is the condition precedent to his continued employment; for without markets the works of the country must cease to function. Not only must the manufacturer produce the goods but he must also persuade the intending purchaser that they are just the commodities he wants. Manufacturers often establish contact with the consumer by the art of suggesting the use of a commodity, which the consumer may not even have thought of, and by constant reminders of its qualities. This means that in order to "nurse" the public, certain commodities are given a great amount of publicity.

But we have not exhausted the factors that affect the consumer in his choice-making. There are certain other influences which merit careful consideration. There is, for instance, what psychologists term "the herd instinct," or "group behaviour." The consumer often buys an article because other members of his class buy it. In addition, the consumer's choice may depend on his outlook, on his education, on his expectations, on his ignorance, and even on legislation. The last-named factor is well illustrated in the old sumptuary laws for checking excessive consumption, and in the modern British licensing laws which compel a consumer to purchase alcoholic drink during certain periods regulated by law.

4. State Control of Consumption

Legislative measures for regulating the consumption of commodities often have interesting economic results. Among the old sumptuary measures, many of which related to the regulation of apparel, the Tudor laws with reference to compulsory fish days, the first of which, passed in 1549, declared Fridays, Saturdays, the Ember days, Vigil days, and the period of Lent as fish eating days, resulted not only in stimulating a Tudor key industry but also in raising the standard of English seamanship in an age of great maritime expansion, when an increase in the number of master mariners was one of the chief objects of national policy. Such legislation, however, as the British licensing laws may result in the consumer consuming more than he originally intended to, or less, or reducing his consumption to nil.

State control of consumption is, of course, well in evidence in all the belligerent countries during a war. The Food Controller is paramount, food necessities are rigidly rationed, while a large number of substitutes for customary foods make their appearance. The State, also, has in the present century increasingly protected the consumer against adulteration of goods, the marketing of commodities under false names, and the sale of commodities that are harmful to health. Food inspectors and public analysts have rapidly increased in number, and food councils and committees keep a watchful eye on quality and on the trend of prices.

5. Instalment Buying

Furthermore, the consumer's choice-making is often greatly influenced by the system of instalment buying under which a consumer is able to fulfil a want immediately and pay for his satisfaction in instalments over a fairly lengthy period. In between the two world wars instalment buying made great progress in Great Britain and America. Its effects have been carefully investigated by American economists, who have come to the conclusion that if the system is properly managed it will develop into a particularly powerful stimulus to trade and to national wealth. Strictly speaking, there is no greater risk in consumer's credit than in producer's credit. The consumer benefits from instalment credit just in the same way as the manufacturer benefits from the credit granted him by a great commercial bank. If instalment credit is restricted to proper commodities under proper management, a well-known economist has said, it will gradually throw off abuses and will stand forth as one of the most signal contributions of the twentieth century to the potential creation of national wealth and national welfare.

There is no doubt that instalment buying has become an indispensable part of modern trade. It is an inducement to thrift, for it makes the consumer exercise a careful control over his expenditure, and it benefits trade because certain commodities would not be widely purchased except under this system. A danger, however, arises when very long credits are given with minimum initial deposits, or shorter credits with no initial deposits.

The instalment system is safest when applied to the more durable type of commodities, for the commodities purchased under this system should outlast the instalments. It is also important that the consumer should carefully compare prices as in cash dealing, and not buy indiscriminately after agreeing upon the initial deposit and the number of instalments.

It is, therefore, quite evident that in modern communities choice-making is far from free. The consumer is subject to incessant stimuli which may, or may not, lead to wise consuming.

6. Luxuries and Necessaries

Wise consuming is a problem of luxuries and necessities. The latter we may divide into two kinds: commodities which are necessary for existence, the necessities of life; and commodities which are necessary for efficiency, the necessities of efficiency; while luxuries may be regarded as those commodities which are not indispensable either to life or to efficiency.

The terms necessary and luxury are, however, relative terms. An article that was regarded in civilised communities as a luxury a hundred years ago may, as a result of the raising of the standard of life, now be deemed a necessary. Necessaries may depend on custom, on habit, or on climate; indeed there are so many cases in which a classification in general terms is impossible that it is now usual to define a necessary as a good with an inelastic demand, and a luxury as a good with an elastic demand. This seems the only way in which we can classify cosmetics, tobacco, beer, and even motor cars.

Spending on luxuries is sometimes regarded as "good for trade." It is true that such spending may give certain businesses a stimulus. But it must be remembered that the consumers of luxuries are making use of money which might easily be invested in industrial enterprise, and in this way provide work for more workers than those who are engaged in producing the luxuries. The short period results of spending on luxuries are far less beneficial to a community as a whole than the longer period results of investing the money in industry.

7. Saving

Wise consuming is therefore a question of wise spending. It is also a question of saving, of which there may be more than one kind. We may satisfy our wants by consuming as little as possible of a commodity, reserving the remainder for another occasion; we may make a better use of so-called waste products; or we may defer our consumption of a commodity by completely sacrificing a present satisfaction

for a greater one in the future. An illustration of the last case is, of course, the lending of money at a certain rate of interest, the lender denying himself the use of the money so lent for a period of time. Saving, however, must be carefully distinguished from hoarding. The hoarder of money simply withdraws it from circulation so that the amount withdrawn is not available for any purpose. It possesses no utility and from an economic standpoint is valueless. The saver also withdraws money from circulation when he deposits it in a bank, but such money does not lie dead like the hoarder's, for it is made use of by the bank in the form of loans to its customers.

The facilities for saving in modern communities are many. Apart from the ordinary banks, there are the big insurance companies; the various municipal and State loans; the shares of joint stock companies; the local and national savings institutions, such as the British Post Office Savings Bank; the sale in Britain of savings certificates; the provident societies; and the building societies.

8. Consumers' Associations

Finally, we must remember that, like the producers, the consumers have developed certain types of associations. The association or co-operation of consumers for retail trading, the consumer's co-operative movement, has already been described. Another type is the association, such as a temperance or vegetarian society, whose members bind themselves not to consume a certain commodity, and who attempt by preaching and pamphleteering to convince others of the wisdom of their practices. Other types are those associations, societies, or leagues that aim at protecting the interests of the consumer in the sphere of markets and marketing by fighting high prices, by increasing or reducing tariffs, by eliminating adulterated food, and by reducing railway rates.

CHAPTER XII

MARKETS

1. Introduction

It is usual for the general reader to associate the term "market" with a hall or open space in a town where buyers and sellers meet. But the gathering of such a concourse of dealers in so limited a space is, under modern conditions of large-scale industry, only the most rudimentary type of market. Yet scarcely a hundred years have elapsed since Manchester's first market hall for "butchers and greengrocers" was erected, while even as late as 1825 Birmingham possessed no such building for marketing purposes. In all the important English provincial towns at the commencement of last century the produce market was held in the street, usually in a central square of the type still possessed by fine old cities like Norwich and Peterborough.

These early produce markets were simply retail markets for the direct exchange of commodities between producer and consumer, the produce sold being chiefly agricultural. Such markets still exist in many big centres, the buyers and sellers usually meeting weekly. But vast changes have taken place in markets and marketing since Liverpool erected the first big English provincial market hall in 1822, and with these changes the meaning of the term market has been greatly extended. We have only to consider the implications of such terms as "the Money Market," "the Stock Market," "the Oil Market," "the Cotton Market," "the Mining Share Market," "the Rubber Market," "the Coal Market," in order to realise the nature of this extension. Originally a market was a public place in a town where provisions and other objects were exposed for sale; but the word has been generalised so as to mean any body of persons who are in intimate business relations and carry on extensive transactions in any commodity.

Markets must be distinguished from fairs. The old medieval fairs were really big markets, chiefly of a wholesale nature, in which the buyers and sellers were usually the bigger traders, the commodities being sold to the small buyers by itinerant pedlars or small packmen-merchants. Fairs still survive, but the fair day is now chiefly used as a pleasure day, and the fair ground as a meeting place of travelling showmen. In recent years, however, the term fair has been used in another way. It has been applied to big national or semi-national trade exhibitions, such as the British Industries Fair. The term fair is becoming increasingly popular as a descriptive title of such exhibitions.

Long, however, before the old type of medieval fair—an excellent English example was that held at Stourbridge near Cambridge, of which Defoe has given us an interesting description in his *Tour of Britain*—had commenced to decline, both produce and financial middlemen had appeared, and these dealers were quite numerous even as early as the sixteenth century. Wool and corn middlemen—"broggers" and "bodgers" as they were then termed—were well known in the England of the Tudors. The financial middlemen helped the merchants to adjust their accounts, and granted them credit. They were originally money-changers, or dealers in foreign moneys, and, as such, were indispensable at the old fairs where traders from many countries met. Their original business was the changing of the money of the foreign merchants who visited the fair for the coins of the country where the fair was held. These money-changers, or *campsores* as they were termed in Italy, were the first European bankers.

The old type of fair declined with the growth of capitalism and the development of agriculture and of the factory system. As the scale of production of commodities increased it became more and more difficult to sell in bulk in fairs or small markets. As agriculture, for example, developed, the farmers began to produce in bigger quantities than could be sold in small lots in the fairs. This gave rise to the local dealer who developed into a retailer, and also to the dealer who distributed the produce to other centres. But the volume of produce increased so rapidly that sellers had to resort to dealing by sample, and

as this method grew markets emerged which not only covered far wider areas but also greatly increased the forces of competition.

When dealing by sample was commenced, markets were still of the mixed variety, that is to say, each wholesale market dealt in a number of commodities. But the wholesale market carrying out big dealings in a single commodity, such as sugar, corn, cotton, soon appeared. This is the type which is now often termed an exchange, and whose field of operations is the whole world.

2. Characteristics of Modern Production

Most production to-day is production for an open market which may be local, national, or world wide. Usually, although there are exceptions, the middleman stands between the producer and the final consumer; with the final consumer the producer has no direct contact, and the ultimate user of his goods is unknown to him. It is therefore impossible for the producer to study the individual requirements of the consumers; production must be carried out to standard patterns, and the producer can only estimate tendencies based on the actions of the dealers, or middlemen.

Demand in an open market can be estimated only through price changes, and it is influenced by the vagaries of fashions and tastes, which sometimes change rapidly. Apart from this, the demand for the product of any industry will be affected by the general state of trade, for on that will depend the amount of money that consumers can spend on commodities.

The greater the distance of the market from the site of production the greater is the difficulty of estimating the demand. The demand for a commodity may suddenly fall away in some distant State because of political disturbances, or because of some physical catastrophe such as a tornado, floods, or an earthquake. Demand in an open market is always more or less speculative.

An unstable demand has serious reactions on an economic system based on the division of labour. If the demand for tin kettles falls away the fact is quickly apparent to the

retailers, but it may be a considerable time before that information reaches the early stages of production, and is diffused among the coal and tin producers, the smelters and the plate makers. The production system is thus easily thrown out of gear.

Where much fixed capital is employed, it is very difficult to "damp" down production if demand falls away, and for that reason, each producer seeks to tempt demand in various ways. He may try to attract demand from a rival commodity, and he may try to enlarge the former demand for his commodity by persuading the public to use more of it. In any case, producers produce according to their expectations of demand, and these expectations frequently prove to be inaccurate.

3. The Importance of Overhead Costs

In modern production overhead or supplementary costs, which have been explained in an earlier chapter, are very important and in many industries they are very large in proportion to prime, or variable, costs. If a firm is working below full capacity, it can cut down its payments for wages and raw materials correspondingly; but its overhead charges are more or less fixed, and cannot be reduced at short notice, so that as output declines average costs of production rise, and profits either fall or are extinguished.

It is, in fact, a very difficult matter for a firm with high overhead costs to "damp" down output. Few firms care to face the heavy loss of scrapping capital equipment, for there is always the prospect of better times ahead; hence it is often a lesser evil to keep the plant working, as long as it can earn anything above the bare prime costs of production, and thus provide a surplus for overhead expenses, especially for the debenture holders, and the costs of depreciation of machinery. This explains why some firms will keep in business for years, and yet pay no dividends to their shareholders.

High overhead costs make the industrial structure much less flexible than what it was in Victorian days, and much more difficult to adapt to changing conditions.

In many cases, high overhead costs have an important influence on the price policy of a firm or industry, especially

when it is working in monopolistic, or semi-monopolistic conditions. Railways and public utility corporations, for example, have found it impossible in practice to apportion their overhead costs to unit outputs of service, and for that reason they often base their scale of charges, not on costs of the service, but on the ability of the consumer to pay. This is the reason why railway companies have a scale of charges that varies with the class of goods carried, and why cheap excursion tickets are issued, although such tickets are also issued with a view to using rolling stock that otherwise would stand idle. Another example of high overhead costs leading to charging according to ability to pay is the fixed charge usually made by electricity supply authorities based on the rateable value of the premises, and a charge varying with the number of units consumed.

4. Preparation for the Market

In these days, direct contact between the producer and consumer takes place but rarely, so that before anything can be marketed, information concerning it must be diffused among the public. The manufacturer and the wholesaler distribute this information through their travellers and representatives, and this practice is followed to some extent by the retailers.

Information is distributed in a variety of ways. The manufacturer and the wholesaler have representatives who diffuse information in respect of their particular products, and who, at the same time, collect information of the needs of the public, and of market conditions in general. Some large firms employ a research staff who utilise the information thus collected in various ways with the object of steadying or of increasing their sales.

The collection of information is also an important function of the retailer, who studies systematically, or instinctively, the tastes and the needs of the public, and passes back the knowledge thus gained to the wholesaler or to the manufacturer. The retailer diffuses information, partly by personal contact over the counter with his customers, and partly by his shop window displays.

Manufacturers, wholesalers, and even some retailers, spread information by means of printed price lists and catalogues, and in the case of branded and proprietary goods by special wrappings and containers.

But the most important means of diffusing information is by advertisement. Not all advertising is designed merely to transfer demand from one brand to a substitute. Much advertising aims at increasing the total consumption of a commodity, fish, or fruit, for example. Any new product to be marketed on a large scale must be widely advertised, and advertisement has undoubtedly brought many things into general use that otherwise would have remained unknown to large masses of people.

Even when a consumable commodity has been manufactured and the necessary information diffused, operations such as sorting, grading, dividing, and packing, must be performed before the goods can be marketed.

As a general rule, consumable goods are produced in bulk; they must be parcelled, therefore, in amounts suited to the needs of the customers. This operation and those of grading and blending are performed sometimes by the wholesaler and sometimes by the retailer. Some wholesalers and retailers offer their own particular brand of tea and tobacco; in a draper's shop much of the retailer's time is occupied with measuring off small quantities from bulk lots.

Some of this work is now being done by the manufacturers of branded goods which leave the factory in packets and tins of the size required by the consumers. These packets and tins are packed in containers of a convenient size.

Transport is also an important element in marketing. Goods have to be moved from the factory either to the wholesaler or the retailer, and in some cases transport costs are an important item.

Where a manufacturer sells large quantities to a few wholesalers transport costs are not a serious problem, as large consignments can usually be moved at low costs per unit. Manufacturers who sell direct to the retailers often find it necessary to establish depôts, which serve as storehouses for a certain area.

5. Market Research

When the question of putting a new line of product on the market is under consideration, a firm usually makes a very careful research with a view to ascertaining the classes of consumers who will use it; when and where they will buy it; for what purpose they will use it; the probable size of the purchases, and the probable demand price of the consumers.

Information on these vital matters will be collected from the experience of agents and travellers, from trade journals, from retail shop-keepers, and in various ways from the public. If the research suggests that the product is suitable, retail shopping areas can be marked out, and marketing or sales quotas can be determined.

Research of this kind will prevent a manufacturer from placing an unsuitable product on the market, and it will ensure that a new product finds the right market. It will prevent waste in advertising, and it will give the manufacturer some idea of the profit the new line is likely to yield.

6. Selling Costs

If the units of a product were identical, the product would more or less sell itself. The costs to the manufacturer would be his production expenses, and the costs of transporting the product to his customers. Such cases to-day are exceptional; most products placed on the market are branded in some way or other, and thus entail a special set of costs called selling costs, which are quite distinct from the costs of manufacture. Selling costs arise because, as Brown's product is peculiar to Brown, a demand for it must be created either by creating an entirely new demand or by attracting the purchasers of similar products.

Selling costs have various forms. Branded articles have their particular wrappings and labels; in some cases special shopping conveniences are provided for customers; large stores have their restaurants, and spend large sums on show-cards, catalogues, and window dressing; but by far the most important selling cost is advertising.

In normal times, vast sums are spent annually on advertising. In some cases the object of advertisement is to inform

the public of the existence of a new article. If Jones produces a new remedy for rheumatism it cannot be marketed on a large scale in the near future unless it is made known to the public through advertisement. If Jones began with local sales, and trusted to the virtues of his remedy to advertise themselves, in most cases a lifetime would be necessary to create a wide market. There are patent medicines which are advertised little, if at all, but most of such medicines have been on the market for a century.

Advertising is necessary not only to herald a new commodity but also to perpetuate it. The public memory is short, and if not continually stimulated it will quickly lose the habit of asking for the *Brown's* pills, or the *Jones'* ointment.

Much advertising, however, has a further object. It is designed deliberately to create a preference for the product of Smith, instead of that of Brown, and infinite pains and vast sums of money are expended to that end.

As things are in the business world, advertising is a necessity. If, in any line of production, all the producers produced an identical commodity, advertising would be a waste of money for them, for if Brown advertised his product he would be advertising those of all his rivals, but the members of the public do not regard the products of the different producers in the same form of production as identical. Each producer, therefore, must advertise the virtues of his particular product.

The question of whether advertising is beneficial or harmful to the community is often discussed. Advertising designed to create an irrational preference for the pills of Brown, rather than for those of Smith, is a waste of the resources of the community. Not only that, but competitive advertising keeps prices higher than they need be, as otherwise, Brown would be forced to reduce the price of his pills to attract the customers of Smith. Advertising, and selling costs in general, tend also to eliminate the small business as only the large firm has the capital necessary for these expenditures.

On the other hand, advertising that diffuses knowledge that otherwise could not be spread over an imperfect market, and that makes known the existence of a new commodity, or

of a cheaper substitute, is clearly a benefit to all. Advertising also tends to promote mass consumption, a necessary condition for mass production and lower prices.

7. The middleman

The middleman, or wholesaler, is the distributing agent between the producer and the retailer, and he has never been popular. It is widely believed that he performs no useful or necessary function; on the contrary, it is said that he merely buys from the manufacturer at one price, and sells to the retailer at a higher price, and that if he were eliminated, distribution costs would be greatly reduced.

A second objection sometimes voiced is that even granting that he performs some useful function, he does so at an exorbitant cost; that by some device or other, he is able to create artificial scarcities, and either to inflate prices to his advantage, or to appropriate profits that rightly belong to the manufacturer or to the retailer.

This mistrust of the middleman has a long history, and it arose in the first place because his function was not understood. If a man embodied his labour in a pair of shoes, or even if he transported such goods from one place to another, payment for such services was understandable. But why should the middleman who added no visible marks of value to the goods which he handled make a profit merely by buying from one person and selling to another?

The economic functions of the middleman are to carry the reserve stocks of industry, and to anticipate and stimulate demand, although this second function he shares with the producer.

In normal times, every shop-keeper must carry a stock of reserve goods, as he must be prepared to face unexpected demands either for goods usually sold or for occasional goods, for a customer unsatisfied may go elsewhere, and not return. But the power of the small retailer to carry reserve stocks is limited by lack of capital, and by lack of space, especially where rents are high. Many foodstuffs deteriorate if kept long in stock, and many other goods have an occasional demand only. It is, therefore, a great convenience to the

retailer to have someone able and willing to carry these reserve stocks from which he can replenish his supplies at short notice, and this convenience is supplied by the middleman.

The stocks kept by the middleman are a convenience not less important to the producer, and to the consuming public. Reserve stocks of commodities are of vital importance if sharp fluctuations in prices are to be avoided. If the supply of wheat is reduced by a bad harvest, the stocks of the wholesalers act as a buffer between the forces of supply and demand. Prices will rise, but more gently and more slowly than they would do if these reserve stocks did not exist. Conversely, in the case of a bumper harvest the fall in prices is checked to some extent by the draining off of a part of the surplus into the stocks of the wholesalers.

Most modern production is undertaken in anticipation of demand; supply and demand never synchronise perfectly. An excess of supply, if not too great, can drain into the dealer's stocks; a slight excess of demand can be met from their stocks. The stocks of the middleman thus act as a safety valve on prices; price fluctuations are not eliminated, but they are rendered less violent.

These services to society justify the payments made to the middlemen. In some cases the rewards may be unduly high but that is not peculiar to middlemen; it is simply a sign that marketing facilities are inadequate. As a rule, keen competition between the middlemen limits their profits.

The claim that prices can be lowered by direct contact between producer and consumer may be true in some cases, but there is no reason to suppose that it would hold as a general rule. It is the agent, and not the function, that the manufacturers would eliminate, and there are two reasons for doubting if distribution costs would be reduced.

In the first place the middleman is a specialist in his line of business, and the manufacturers would need to acquire, and to maintain, his specialised knowledge. Secondly, the organisation of the firm would have to expand to cover the extra function, and if it became unwieldy waste would creep in, costs would rise and any advantage to producer and consumer would disappear.

8. Different Types of Wholesalers

A study of the signboards, and nameplates of the wholesalers of any large town suggests many kinds of middlemen—wholesaler, merchant, commission salesman, manufacturers' agents, and so forth, but all middlemen fall within two broad categories. In the first group are the independent middlemen who buy and sell goods, and undertake the risks attached to the holding of them; in the second group are the middlemen who are merely agents for a manufacturer, or some other wholesaler.

Agents work either on commission, or on salary and commission, and they usually form a connecting link between the manufacturer and other wholesalers. The reason why there is sometimes more than one middleman between the producer and the retailer, is mainly a financial one. A small wholesaler may have to give long credit to the retailer; he works, therefore, on relatively small stocks, and buys from a large wholesaler, because the latter will supply him with smaller quantities than the manufacturer would be prepared to do. The manufacturer also often prefers to sell to an intermediary between himself and the actual distributive middleman as he can usually obtain more prompt payment from the former than from the latter.

In some cases additional middlemen is a matter of convenience. A large wholesaler will sell direct to the large retailer, but will supply the small retailer through a small wholesaler. In that way he avoids the trouble and expense of small orders. Where the producers are widely scattered, and the product is not standardised, so that it cannot be sold by description, a primary wholesaler often assembles the products and passes them on to other wholesalers who distribute them to the retailers.

9. The Elimination of the Middleman

Even before the first world war there was a tendency to eliminate the middleman, either by the manufacturer selling direct to the retailer, or by selling direct to the consumer. The great chocolate and tobacco firms and many producers of branded goods prefer to sell direct to the retailer, as by

that method, they can further the sale of their special products. When a wholesaler handles the similar products of a number of firms, he has no special incentive to push the sales of one firm rather than those of another; he is concerned with his total sales, not with those of a particular brand.

Direct contact between the manufacturer and the retailer is achieved in various ways. In some cases the producer sends out his own travellers to call on the retailers; sometimes the large retailer sends his own buyer to the manufacturer. The chain stores have their own buying and warehousing departments, and in such cases the wholesaler is merged in the retailer. The wholesaler himself sometimes becomes a producer by establishing his own brands, and then selling them to the retailer.

As has already been noted, the growth of direct selling to the retailer is largely a consequence of the development of advertising, and the branding of goods. By selling direct to the retailer, the producer is able to influence the sale of his product.

There is a close connection between direct selling and the scale of the producer's business. An elaborate sales organisation is possible only in a large-scale business, and also where the demand for the goods is fairly regular, so that the sales organisation can function throughout the year. A further condition for direct selling is the standardisation of the product; where the product varies in quality, the retailer prefers to buy from the wholesaler, who can combine and grade the outputs of a number of firms to suit his requirements.

Another limitation on direct selling is where the manufacturer's product is a specialised one and bought by each retailer in small quantities, because he must offer to the customer a range of similar products from which to choose. In such cases direct selling to the retailer would be costly, and for that reason is uncommon in the ironmongery trade.

Where the number of small retailers in a trade is very large, the wholesaler is not likely to be eliminated. Most producers manufacture one or two lines only; the wholesaler stocks a variety of lines which can be handled by one traveller, and in that way, marketing costs can be reduced. Direct selling is

most common between the manufacturer and the very large retailer, as special terms can usually be granted for very large orders.

Even the independent retailer is being eliminated in some cases, either by the manufacturer opening up retail establishments, or by selling direct to the consumers, by house to house canvassing, and by the mail order business. The canvassing method is an expensive form of distribution, and suited only to the sale of expensive articles on which high profits are realised. The mail order business is usually developed by merchants who can offer a large variety of goods, but as the costs of advertising, and the circulation of printed catalogues is very heavy, the success of the business depends on the possibility of securing repeat orders, not necessarily of the same goods, at frequent intervals.

Direct selling to the public, however, is done normally through a chain of retail shops, and certain conditions are necessary for success. The goods must be durable, and relatively expensive, and in consequence purchased by each customer only a few times each year, so that a single shop will serve the requirements of a district. The goods must also be of such a nature that expert service, and reputation, are factors in the making of sales. The above conditions are fulfilled by clothing, and by boots and shoes, the two most important lines sold by manufacturers direct to the public.

It is true that producers sometimes establish chain stores where the above conditions do not apply, but that is usually done in an attempt to break down the partial monopoly of the large buyers, who are often in a position to squeeze the producers.

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10. The Retailer

In spite of all the changes that have been, and still are, taking place in the marketing of consumers' goods, the independent retailer continues to hold an important position, and where the personal element is important the small independent retailer is likely to persist. Typical instances are the confectioner and the tobacconist.

Another type of shop that is difficult for the chain store to displace is the small shop where the shopkeeper, having other sources of income, is able to work on small profit margins, and to give long credit to poor customers. Even the large independent retailer can often hold his own with the chain store, owing to personal contact with his customers. Where he can give a better service, and is prepared to grant credit, he is likely to survive.

But the chain store is likely to be the typical form of retail distribution of the future, and such stores are of two main classes. In the first class is the small chain, serving a local district, with an organisation similar to that of any large retail business, and in the second class is the national chain with its hundreds of branches. These national chains, sometimes grow, or manufacture, a part of the product which they sell—Lipton's for example—and in all cases they have elaborate buying and co-ordinating organisations.

These large chain stores specialise to some extent in standard goods, the demand for which is regular, and which are sometimes sold, in normal times, at prices slightly lower than those charged by independent shops. Chain stores of this kind enjoy certain advantages common to all large-scale businesses. They can buy cheaply, and their organisation can be run on departmental lines, each in charge of a specialist; in this way standard methods can be employed and much of the waste inherent in the single shop system can be eliminated. Stocks can be kept at a minimum because the turnover is usually rapid, and also because the stocks at each branch can be renewed from a central warehouse.

The chain store is most common in the grocery and meat trades, primary necessities for which demand is regular. In most cases the goods can be standardised, and handled in bulk.

The independent retailer has to face the competition, not only of the private chains, and of the co-operative societies, but also of the large Department Stores which can be found in all the principal towns. The Department Store attracts customers not so much by cutting prices as by offering conveniences such as rest rooms and restaurants. Apart from these

amenities, the attraction of the huge Department Store is that almost everything the consumer requires can be purchased under one roof.

11. The Retail Market

The local retail market is an institution that will be familiar to all readers. It may be a continuous market, as in the case of a large city, or it may be a weekly market. In the case of most perishable goods, and sometimes with other commodities, it is a day-to-day market; supplies are brought in before the opening, and cleared before the market closes.

Within the limits of the square or building, it is a highly competitive market. Market prices may be higher in Manchester than in Birmingham, because the relations of supply and demand may differ in the two cases, and these relations cannot be equalised at short notice, owing to the time required and the costs of transport; but within each market one price must rule for each kind and grade of commodity. All the buyers and all the sellers are in close contact with each other. A person entering the market to buy plums will not usually purchase at the nearest stall, but will stroll round the market to ascertain the prices at which other dealers are selling. It would be impossible for one dealer to sell plums of the same quality at a higher price than the others; if he did raise his price he would do no business at all. On the other hand, if any seller offered his plums at a lower price than the others, he alone would be able to sell plums, but the rapidity of his sales would suggest the advisability of raising his price to increase his profits. At the same time, the other dealers, faced with the prospect of unsold stock, would be tempted to lower their prices. In these ways a uniform price would be fixed and maintained, and usually, at a level that will just allow a reasonable profit.

In the case of a perishable commodity, and indeed, in respect of any commodity of which the dealers do not wish to hold stocks, they will seek to fix a price that will just clear the market. If they find from the slowness of their sales that they have fixed the price too high, they will gradually lower it; if the rapidity of the sales suggests that the price is too

low, they will gradually raise it. By means of this "higgling" a price that is uniform for each grade of commodity, and one that will just clear the market is established.

The above description refers to the forces that determine prices in the market, rather than to actual procedure. Usually, when one enters a market, prices are already fixed, but that is because the dealers are specialists in their line, with an expert knowledge of pricing conditions and a keen sense of the psychology of the buyers; otherwise many of them could not remain long in business.

12. Grading and Standardisation

In a large wholesale market in which the value of the daily business transacted may be enormous, visible commodities cannot be handled in bulk as there would not be nearly sufficient space. In many cases, sales can be effected by samples, or by description, as well as by inspection.

The method of selling by sample and by description is one widely practised by commercial travellers; indeed, without this method, commercial travelling would be impossible. The traveller interviews prospective customers, and either displays samples of his wares, or else a description or specification indicating the precise nature, size, quality, colour, and so forth, of the goods he desires to sell. This method is possible only where an identity can be preserved between the sample or the description, and the goods in bulk, as otherwise there would be endless disputes and law suits.

An identity between a sample or description and the goods represented is made possible by grading, and by standardisation. Standardisation is a vital element in modern methods of production and marketing, for on standardisation depend mass methods of production and mass marketing.

Mass production of goods can take place only when the goods are made to standard patterns, or to standard shapes and sizes, and standardisation is equally important in marketing. In the first place standardisation greatly facilitates the packing and transit of goods. Packets, bags, boxes, and containers, can be made to standard sizes and shapes. Standardisation also facilitates the storage of goods as time

and space are economised in stacking goods of a uniform size and shape, and in a large business, time and space saved is money saved.

Secondly, standardisation makes possible large-scale advertising. The goods advertised must coincide with the advertisement, and in advertising a standard article, what is advertised is not one thing, but an endless duplication. It is true, of course, that hair cream is advertised and sold in more than one size of bottle, but that simply means that millions of bottles are standardised in three or four different sizes.

Thirdly, standardisation facilitates large-scale selling. In a wholesale market, a buyer can safely purchase large quantities on the inspection of a single sample or description. Standardisation also facilitates retail sales; once a sample of Brown's soap has been purchased repeat orders can be given without further inspection.

When manufactured goods are standardised, grading is unnecessary, except in the sense of quality. Raw materials, however, do not arrive from the field, plantation, mine, or forest, in uniform shapes and sizes. They can, nevertheless, be sorted into grades of the same size or quality; grading has the same function as standardisation in the machinery of marketing.

13. The Elimination of Risk

Where the production and marketing of raw materials is undertaken purely by private enterprise, some machinery for the elimination of risks is necessary, and that machinery is provided by an organised market. An organised market deals in one commodity only, and only members can operate on it. Membership is restricted to men of high character and standing, and in most cases the membership fees are very heavy. An organised market may combine the functions of trading in the raw material with that of risk elimination, or like the pre-war Liverpool Cotton Exchange, it may specialise in risk elimination only.

Under private enterprise, the prices of most raw materials would fluctuate widely without the existence of these markets. Most of the raw materials used in this country, metals, grain,

wool, rubber, etc., are produced or grown abroad, and without organised markets, periods of glut and scarcity would alternate, and cause market falls and rises of prices.

All agricultural products take a period of time to raise. However great the shortage of wheat, cotton, or rubber may be, and however many seeds or trees are planted, no further supplies are available until the next harvest, which, in the case of a tree may not be for years. On the other hand, once a crop is sown, or trees are planted, the supply cannot be reduced until after a period more or less long.

Time is not the only factor in supply; the size of a crop is affected by the weather, and by disease. Crops like wheat or cotton may be unexpected "bumper" crops, or failures, any year.

Widely fluctuating prices is a serious matter, not only for the grower, but in the case of cotton, for example, for all who must hold stocks for any length of time in a manufactured or in a semi-manufactured form, as if the price of the raw material falls, the price of the goods into which it enters falls in sympathy, thus involving the holder in a loss. An unexpected rise in the price of, say, raw cotton is an equally serious matter for the spinner or the weaver, as he may have based long period contracts on the assumption that he would be able to obtain his raw cotton, or yarn, at a certain price. What is true of cotton applies more or less to all raw materials that enter manufactures.

Risk of this kind is diminished, if not eliminated, by the method of future dealings, which include two different classes of transactions—dealings with the object of making a profit from price changes, and dealings designed to avoid losses from price changes. The former are called speculative dealings; the latter, "hedging" transactions. The procedure is the same in both cases.

Let us suppose that a dealer in wheat or cotton has reason to believe that the price of wheat or cotton will rise in, say three months' time. If he makes a large purchase now of wheat or cotton, at present prices for delivery in three months' time, and if the rise expected takes place, he will make a profit; on the other hand, should he have miscalculated, and prices

fall, he will suffer a loss. Conversely, if the dealer expects that prices will fall in three months' time he will sell wheat or cotton for future delivery at present prices.

Thus ~~h~~^{er} he is a speculator, and when a large number of speculators act in the same way, their actions have a steadying effect on prices. By buying now for future delivery, they tend to bring forward the expected rise of prices and to make it less sharp than otherwise would be the case. At the same time, the rise of prices is a signal to the producers to extend their area of cultivation, although for the reasons given above, it is easy to exaggerate the short period effects. Conversely, large future sellings tend to even out sharp falls of prices, and in some cases to restrict cultivation.

The average business man, however, is less keen on speculating than in eliminating risks, and this is done in the futures' market by the process of "hedging" which seeks to balance a loss in one direction by a gain in another. Suppose, for example, a merchant, or spinner, is holding a quantity of raw cotton which he will not sell or use for three months; if, during the interval, the price of raw cotton rises, he will make a "windfall" gain, but, on the other hand should the price of raw cotton fall, he may be involved in a heavy loss.

To protect himself he will sell futures, that is, he will contract to deliver an equal quantity of cotton to someone else in three months' time at present prices. If when the time comes the price of raw cotton has fallen by, say, 3d. per lb. he will lose that amount on every lb. of cotton he holds. But he has contracted to deliver that quantity of cotton to someone else at the old price. The spinner, unlike the merchant, would not want to hand over his cotton, but he could buy the cotton in the market at the lower price and make a profit on his future contract exactly equal to his loss on the cotton he holds.

In the contrary case of a rise in the price of cotton, there would be a gain on the holding, and a corresponding loss on the future contract.

In practice, future contracts are seldom delivered. Those who make them have no intention of either delivering, or receiving, cotton. On settlement days the contracts are fulfilled by the payment of differences in value.

A futures' market is bound up with private enterprise. Private trading in the raw materials is impossible without them. Since the outbreak of war in 1939, the futures' markets of this country have ceased to function, and the Liverpool Cotton Exchange, one of the most important in the world, has been closed, permanently. The reason for that is that during the war, the Government purchased all raw materials in bulk by periodical contracts, and in that way, risks of loss from price changes were shifted from the firm to the State. In war time bulk buying is a necessity, but whether the production of raw materials functions under it as well as it does under a free pricing mechanism, is a very controversial question, and one that can only be decided by the test of long experience.

A Bill was introduced into Parliament (Nov. 1946) to transfer the importing and distribution of raw cotton from the Board of Trade to a Raw Cotton Commission; on the other hand a free market for rubber has again been opened.

CHAPTER XIII

MONEY

1. Introduction

We have now arrived at what is perhaps the most interesting part of economics—the study of money, credit, banking, and foreign exchange or, more briefly, the mechanism of exchange. Though this section has come very much to the fore in recent years, Englishmen have not, generally speaking, taken a very deep interest in monetary problems. This is primarily due to the smooth working of the English banking system, and to the non-recurrence since 1866 of big financial panics in England. It is also to some extent due to the fact that English economists have not until recently given very much attention to monetary economics.

2. Inconveniences of Barter

In a modern industrial society, all sales and purchases are effected through the medium of money, or of substitutes for money that can be turned into money on demand.

A money economy is not the only economy possible. Goods were exchanged against goods by the process of barter long before money of any kind came into use, and barter transactions are not unknown even at the present day, although they usually take place in special circumstances only.

¶In a society like our own in which most people produce goods and services for exchange, barter would be highly inconvenient. A butcher, for example, would require to find a series of individuals willing to exchange bread, clothes, house-room, etc., against his meat, and much valuable time would be wasted.

In many cases a series of exchanges would have to be effected in order to achieve an objective. A farmer may need

a wagon and yet be unable to find any one willing to exchange a wagon for corn. He might have to exchange corn for meat, the meat for cloth, and the cloth for a wagon. These intermediate exchanges are eliminated by the use of money.

Many goods are indivisible; a cow, a horse, a house, a ship, for example, can be exchanged only as wholes. Money on the other hand is highly divisible.

Under barter, unless prices are rigidly fixed by custom, they are likely to fluctuate frequently and widely, for each act of barter is a distinct and local transaction and affected by local influences. A butcher, bartering his meat would be likely to exchange it one day on good, and another day on bad, terms. In bartering meat against cloth, the terms of the exchange would be influenced by the mental state of the vendor of cloth. If he had just dined well he would be likely to offer much less cloth for a given quantity of meat than he would if he were ravenously hungry.

In an industrial society based on the division of labour, a complex system of barter would be impossible. The production of most commodities involves the co-operation of many factors of production through a long chain of processes, and in most of these stages barter would be impracticable as most producers would have nothing to offer that a third party would be disposed to accept. A modern industrial society could not function without the use of some form of money.

Money has a great advantage over barter in another way. With barter, purchase and sale must, in most cases, take place at the same time. When money is used, one side of a transaction can be suspended until the most convenient time. Again, with barter, you must buy from your customer, but the use of money allows people to sell in one market and buy in another, a great economic advantage, because, even if your customer can offer you the goods you want, his terms may be much higher than those of the sellers in some other market.

The use of money greatly facilitates saving. Money can be stored indefinitely without deterioration, and it is always purchasing power. Goods, on the other hand, are expensive

to store over a long period, and in most cases, the costs of prevention of deterioration would be prohibitive. Many goods, if stored over a very long period, might lose their purchasing power through changes of habits, and tastes.

3. Money and its Attributes

At different times, and in various parts of the world, many curious things, among which, cattle, pieces of leather, shells, tobacco, and even playing cards, may be mentioned, have served as money, and for anything to function satisfactorily as money it must possess certain qualities, or attributes. The two most fundamental of these attributes are acceptability, and scarcity, for it is self-evident that no good could function as money unless it was generally acceptable, and it would not be acceptable if it existed in unlimited quantities. Acceptability and scarcity explain why, in special circumstances, sticks of tobacco, and packs of playing cards have served as money.

In normal circumstances, however, certain other attributes are necessary before a good can circulate regularly as money. The good must be durable, easily recognisable, divisible, and homogeneous, that is to say, that when it is divided the sum of the values of the parts must be equal to the value of the whole. Gold is a homogeneous substance; a diamond is not, for a large diamond loses much of its value when it is divided into a number of smaller pieces.

All the goods that have been used as money do not possess all the above attributes, and the development of money is really the history of a process of selection; articles used as money because they were prized for themselves, but which did not possess the qualities enumerated above, were gradually displaced by more suitable commodities.

Most goods that have served as money have been valuable in themselves, but that is not an essential characteristic in all circumstances. Modern paper money has no intrinsic value. The value of the paper in a British currency note is negligible, but paper money is possible only in a State which has an established government, and in which a high degree of confidence exists in the monetary system of the country.

4. The Precious Metals as Money

As soon as a city or a State reached a certain degree of civilisation, silver and gold gradually came into general use as money, for these metals have always been highly prized, partly for their beauty, and their utility as ornaments, and partly because of their rarity.

Both metals possess all the attributes recognised as necessary for a substance or commodity to function as money. Gold and silver are portable, and contain high value in proportion to their bulk. Iron and copper are also valuable, but their values are relatively low in proportion to their bulk, and for that reason, copper, although widely used as money, has never been on the same plane as gold and silver. A large sum of money in terms of copper would be inconvenient and costly to transport from place to place, and in a wealthy society it is used as small change only.

A satisfactory monetary material must be durable, as otherwise, it could not be used for the purpose of storing value. Wheat and cattle are perishable, and over a long period of time leather will rot and iron will rust, but gold is practically indestructible.

Gold has thus been a very convenient means of storing value, as it has in itself a value that fluctuates little, except over a very long period of time. Gold being practically indestructible, the total world supply, accumulated through the ages, is very large in relation to the annual output of the mines. Even a large increase, or decrease, in the annual output of the mines has little effect on the value of gold except over a long period. The contrast between gold and wheat, which may fluctuate sharply in value from year to year, is often expressed in the phrase—gold is a stock, and not a crop.

Gold and silver are highly divisible and homogeneous substances. If we divide an ounce of gold or silver into three equal parts, the value of each part is exactly one-third of the value of the ounce.

Gold, silver, and copper also, when used as money, can be put into an easily recognisable form by the method of coinage. A coin is simply a disc of metal of a certain weight and fineness on which a design is stamped by the Government that

certifies its weight and soundness, and modern methods of coinage have reached a stage at which counterfeiting can be readily detected, and satisfactory coins can be maintained in circulation. One great advantage of a coinage is that payments can be made by counting, instead of by weight.

5. Token Money

When the currency of a country consists mainly of metal coins, the primary, or standard, coin usually has a value equal to that of its bullion, or metal, value. Before the 1914-18 war, the metal in an English sovereign was a pound's worth of gold, and sovereigns could be melted down into bullion without anyone incurring any loss.

Coins are also used which are worth less as metal than their face value. Such coins are called token coins, and our silver currency is token money. In 1938, for example, our silver shilling contained rather less than two pennyworth of silver, yet these token coins circulate freely, because they are everywhere accepted in payment of small debts, and as small change. The Government is able to maintain the artificial value of these token coins by strictly limiting the amount of their issue.

As the range of possible payments is very wide, and as change must usually be given, it is necessary to have more than one type of money in circulation; if only the sovereign, or the £1 note circulated, all prices would have to be either £1, or a multiple of £1, but in these days, silver and copper coins are issued by the Government solely as a convenience for the public, and no one is obliged by law to accept silver coins in payment of a debt greater than £2, but in the seventeenth century, both gold and silver coins circulated in this country on equal terms so far as the payment of debts was concerned.

Until the year 1717 there was no legal rate of exchange between gold and silver coins, a state of affairs which must have caused grave inconvenience, but in that year it was enacted that a gold guinea should exchange by law for twenty-one shillings, and the currency system became what is called bimetallic.

Bimetallism, however, contains a difficulty not foreseen at the time, the problem of keeping the legal relation between gold and silver in harmony with the natural economic relation between the two metals. The relative values of gold and silver, depend, like the relative values of all goods and services, on their relative supplies. If the supply of gold remains constant, the opening up of new silver mines will lower the value of silver in terms of gold. Conversely, if the amount of silver remains constant, the discovery of new gold deposits will raise the value of silver in terms of gold.

If a debt can be paid in either metal, an increase in the value of one metal will cause all debts to be paid in the cheaper metal. The more valuable metal will be hoarded and disappear from circulation; indeed, the experience of the eighteenth century suggests that it is practically impossible to maintain gold and silver coins in circulation on equal terms.

In 1816, therefore, it was decided to put into circulation full weight coins of gold only; the guinea was substituted by the sovereign, and silver coins were issued as token money. This system is known as mono-metallism.

Token currency is not easy to regulate. If the difference between the face and metal values of the coins is very great, counterfeiting becomes profitable; on the other hand, if the difference is very small, a rise in the price of silver may induce people to melt coins and sell the bullion.

6. Seigniorage and Mintage

The issue of the coinage has long been the prerogative of Governments, partly because the coining of bullion can be a profit to the State, and partly as a preventative against fraud. When Governments issue token coins, the difference between the face value, and metal value of the coins is called seigniorage, and is a profit to the State. In this country in 1938, the seigniorage on a silver shilling was about tenpence.

Seigniorage in a certain sense can also arise when full standard coins are used. All coins are made in a State institution called a Mint, and in some countries a charge was made for turning bullion into currency, and this charge was called mintage, one of the objects of which was to discourage the

melting down of coins. In England, before 1914, there was no mintage on gold coins, anyone could take gold bullion to the Mint and have it coined free of charge, and there were no restrictions on the melting down, or on the export of such sovereigns. The value of the sovereign could never diverge appreciably from that of the metal which it contained. An ounce of gold of $\frac{1}{12}$ ths fineness was coined by the Mint into a value of £3 17s. 10½d., and this price was called the Mint price of gold, as it was the price fixed by law.

In practice, however, people did not take gold to the Mint, but sold it instead to the Bank of England, which acted as agent for the Mint, and for this service it charged the sellers a small commission of 1½d. per ounce. When England was on the gold standard the Bank of England price of gold was thus £3 17s. 9d. per ounce $\frac{1}{12}$ ths fine.

The Mint price of gold which operates only when England is on the gold standard, gives no clue to the purchasing power of gold over commodities. The Mint price merely states the number of units of currency into which an ounce of gold of a certain fineness must be coined by law.

7. British Currency in 1913

In 1913 the currency consisted, first of all, of sovereigns and half-sovereigns, and both coins were full standard coins, whose face value was identical with the value of the gold they contained. All debtors had the right in law to tender these coins in payment of debts of any size.

In addition to these gold coins, there was, as to-day, a silver and copper currency which was used as change, and for payment of small debts. Creditors, however, had a legal right to refuse to accept copper coins in payment of debts exceeding one shilling, and silver coins in payment of a debt exceeding £2.

The Bank of England issued notes, the lowest denomination of which was five pounds, and these notes were used for large payments which would have been inconvenient to make in gold. No one could legally refuse to accept them in this country, although they could in Scotland, and in Ireland.

These Bank of England notes differed fundamentally from those issued to-day as they were convertible notes; any person had a right in law to take as many as he pleased to the Bank of England and demand gold to the amount of their face value for them. A convertible note is a gold certificate and equivalent to a coin.

The changes that have taken place since 1913 may be summarised as follows: Gold coins have disappeared from circulation, and are no longer minted. The fineness of the metal in silver coins has been reduced, and a Government Bill has been introduced into Parliament (October 1946), to replace all existing silver coins with subsidiary coins of cupro-nickel owing to the rise in the value of silver since 1939. The gold coins have been replaced by paper notes of a corresponding face value, and most important of all, no Bank of England note is now convertible into gold on demand.

On the outbreak of war in 1914, the Treasury issued a paper currency consisting of one pound and ten shilling notes, and these Treasury Notes, which quickly substituted gold coins, remained in circulation until 1928. In that year a new Bank Act was passed which transferred the issue of these notes from the Treasury to the Bank of England.

8. The Gold Standard

The gold standard has two aspects, as gold may serve both as domestic currency and as international currency, but in this chapter we shall be concerned only with the domestic aspect.

From 1816 to 1914, England was on what is called a full gold standard. The gold sovereign was the standard coin, and although cheques and Bank of England notes of five pounds and upwards were used, cheques and notes could always be converted into gold on demand.

In 1925, we adopted a modified form of the gold standard known as the gold bullion standard. The sovereign was not restored to circulation, but, although a single Treasury note was not convertible into gold, the Bank of England was

obliged by law to exchange bar gold for Treasury, and Bank notes. These bars contained 4,000 ounces of fine gold, and were worth approximately £1,700, so that large amounts of notes only could be converted into gold. This system, known as the gold bullion standard, functioned until the Gold Standard Act was suspended in 1931.

When a country is on a full gold standard, and mintage is free, as was the case in England, coins and bullion must have the same value. If coins were more valuable than bullion, people would take it to the Mint, and the increase in the supply of coins would cause their value to fall; conversely, if bullion became more valuable than coins, coins would be melted down into bullion.

The above is also true of the gold bullion standard. Notes cannot diverge greatly from the value of the bullion they represent; otherwise, bundles of notes would be exchanged for gold bars, or gold bars for bundles of notes until the two values were approximately equal.

A third form of the gold standard in use in some countries before 1931 was the Gold Exchange Standard. On any form of the gold standard a country must keep reserves of gold. This was necessary, because, when our sovereigns circulated, gold was always liable to drain abroad. When notes circulate instead of coins in a gold standard country, gold reserves are equally necessary in order to cash the notes which may be presented at any time for gold payment.

But, instead of coins, or bars, claims to gold on some gold standard centre may be used as reserves—the nature of these claims will be discussed later, but they are interest bearing securities that can be turned into gold as required. When a country keeps its currency reserves in such a form it is said to be on a gold exchange standard, and that form of the gold standard is the least costly of the three. Gold is a costly commodity, and a large reserve is an expensive luxury for a nation. On the other hand, the gold exchange standard is possible only when there are countries on either a full, or a gold bullion standard.

9. The Significance of the Gold Standard

The really vital merits and defects of the gold standard are in relation to its function as an international currency, but the standard gives certain advantages to any country which adopts it even if that country has little commercial intercourse with the outside world. On a gold standard, the value of a country's currency is decided by some tangible object; with an independent paper currency, a Government can reduce the value of the currency unit almost to zero, either by borrowing from the banks to pay its debts, a practice which rapidly increases the quantity of currency notes in circulation, or by the cruder method of simply printing notes as was done in Central Europe between 1914 and 1929.

On a gold standard the value of the currency unit depends mainly on the supplies of gold, and, as has already been noted, owing to the almost indestructible nature of gold the world's total supply, as a rule, changes but slowly. It is true, of course, that the discovery and exploitation of rich deposits of gold such as took place in Mexico and Peru in the sixteenth century, and in California, Australia, the Yukon, and South Africa, in the nineteenth century, have a definite effect on the supply and value of gold, but such effects are small compared with those that can take place on a non-gold standard; violent inflation can occur only in a country on an independent paper standard.

The defect of the gold standard is not that there is any likelihood of too much gold, but the danger that the supply may fail to keep pace with the demand of the public for purchasing power. A shortage of purchasing power usually drives selling prices below costs, and that, in turn, leads to a curtailment of production and to unemployment. A shortage of gold in any particular country may also arise from hoarding, or from a flow of gold to foreign countries to pay for imports, or to purchase foreign securities. Many people thus argue the gold standard is incompatible with a policy of full employment.

The fact that gold has a relatively stable value does not mean a fixed price level in a gold standard country. Prices will vary with the supply of gold, although not necessarily in

a rigid relation. As we have already seen, if gold moves abroad, production is curtailed, and either wages must be reduced to lower costs of production, or unemployment is inevitable and for that reason the gold standard is disliked by the Trade Unions. There are certain advantages attached to the gold standard which some people think offset these defects, but those will be examined later in connection with international trade.

10. Devaluation

When a country is on the gold standard and finds it necessary to reduce the value of its currency it can do so by a process known as devaluation.

Devaluation simply means reducing the amount of gold in, or represented by the unit of currency. In 1913, the Mint price of gold was £3 17s. 10½d. per ounce; in other words, an ounce of gold was coined into rather less than four sovereigns. If, however, the Government in 1913 had decided to raise the Mint price to £4 10s. 0d. per ounce, that is to say, to coin an ounce of gold into four and a half sovereigns, the currency would have been devalued, as the sovereign would have represented a smaller quantity of gold.

Raising the Mint price, or devaluation, lowers the value of the currency unit, and raises the prices of commodities in terms of that unit. If in 1913 the Mint price had been doubled, a sovereign would have been a new name for a half-sovereign. An ounce of bar gold would have bought the same quantity of goods as before, but twice as many sovereigns would have been required to purchase that quantity of goods.

The value of the sovereign would also have fallen in terms of other gold standard currencies. Suppose that, before the devaluation, the sovereign had contained as much fine gold as five American dollars; it would have exchanged, therefore, for five American dollars. If the Mint price had been doubled the sovereign would have contained only as much gold as two and a half American dollars, and that would have been its new exchange value.

CHAPTER XIV

MONEY (*continued*)

1. Paper Money

The standard currency of to-day is the paper pound note, and experience since 1914 has proved that, if properly regulated, paper can serve as currency as effectively as metallic coins within the area governed by the issuing authority.

The issue of the emergency paper currency after the outbreak of war in 1914, was not a precedent in English monetary history. In the eighteenth and early nineteenth centuries, most private banks, as well as the Bank of England, issued notes, and during the Napoleonic Wars, we had for nearly twenty years a paper pound that could not be exchanged for gold.

This early experience of paper money was not a happy one, and so strong a prejudice in favour of the sovereign was created that it is doubtful if ever it would have been displaced but for the catastrophe of a world war; to-day, it is doubtful if any Government, or people, would prefer to return to gold money if the choice were possible.

Paper has several advantages over gold as money. From the standpoint of the individual a large sum of money can be carried about more conveniently in notes, for sovereigns are heavy; single sovereigns are liable to be lost through being mixed up with silver coins. Notes are numbered, and can be traced, so that the risks of loss from theft is less than with gold coins.

From the point of view of the Government a metallic coinage is expensive, and the coins gradually lose weight in various ways. A pound note costs very little to produce and torn and dirty notes can easily be replaced.

When paper money is used, as the amount of the paper currency depends on the will of the Government, it is possible

to so regulate the issue of paper money that the average level of prices can be stabilised with reference to an index number. Against this advantage it may be argued that there is always the danger that a Government will issue too much paper money, and cause a general rise of prices known as inflation. That happened in England during the Napoleonic Wars, and during the war years 1914-1918; and, between the years 1914 and 1924, to a very much greater extent in many European countries. Very extreme inflation, however, is less likely to occur in the future, as Governments have now mastered the technique of paper money.

The existence of a paper currency refutes the once widespread belief that only a good that is valueable in itself can function as money. On the other hand it has led many people to assert that anything can serve as money if it is decreed money, and made a legal means of payment by the Government. Such action by the Government does help paper notes to circulate, but it is doubtful if they could be kept in circulation unless the public had confidence that they would not lose their value in the immediate future.

2. Convertible and Inconvertible Paper

Paper money falls within two broad categories, convertible, and inconvertible, paper. Convertible notes, whether issued by a bank or a Government, can always be exchanged for their face value in gold on demand, so that fundamentally they are simply gold certificates. As we have already seen when a country is on a gold bullion standard, convertibility applies only to a large collection of notes, but although any individual note is not convertible the note issue as a whole can be regarded as convertible money.

The question of convertibility into gold arises only when a country is on a gold standard. England left the gold standard in 1931, so that our present paper currency, like that of most countries, is inconvertible into gold. When a country leaves the gold standard, there is no legal obligation on the part of the issuing authority to convert the notes into gold on request, although the pound note is still a promise by the Bank of England to pay the bearer on demand, the sum of

one pound. That, however, merely means now that the Bank would replace one pound note by another. As long as a note is convertible, its value cannot change appreciably from the value of the gold that it represents; on the other hand, an inconvertible note has a value determined largely by the number of notes in circulation. If all other things remain equal, an increase in the supply of notes will lower, and a decrease in their supply will raise, their value.

3. Gresham's Law

Sir Thomas Gresham was a financier who lived in the reign of Queen Elizabeth, and he was the first to draw attention to the fact that while bad money will always drive good money out of circulation, good money will never drive out bad money.

Gresham made this statement at a time of serious coinage difficulties. In the early part of Elizabeth's reign the coinage was in a very bad state; light weight and bad coins were very common, and every time a new issue of coins was put into circulation, the new and heavy coins quickly disappeared. The reason for this is clear. The new coins represented a greater value of metal; anyone having to pay a debt would be tempted to pay it in the lighter and less valuable coins; anyone wishing to hoard coins would naturally hoard the heavier and more valuable ones.

Gresham's Law explains the difficulty, already noted, of bimetallism, and why the sovereign disappeared quickly from circulation after the issue of Treasury notes in 1914. Many sovereigns were taken to the banks in answer to the appeal of the Government, but a large number were hoarded, as, at the time, the faith of the public in the value of these coins was much greater than in that of the new notes.

4. Money Substitutes—The Cheque

In the strict sense, money means notes and coins, but in a modern society, these are not the only forms of purchasing power; indeed a business firm now makes most of its payments, apart from wages, with money substitutes, the most

important of which is the cheque, although the Postal and Money Order are perhaps more familiar.

Anyone who requires to make a payment through the post can do so with a postal order if the amount is small, or with one or more money orders if the amount is large. For those who do not possess banking accounts against which cheques can be drawn, these methods are very convenient ways of remitting money, as the risks of loss are negligible. Postal and money orders can be made worthless to all but the person named on the order by simply drawing two lines across them, and writing "& Co." between the lines. When this is done the orders cannot be cashed at a post office, but only through a banking account.

The cheque, however, is the most important money substitute as it can be drawn for any amount.

In order to acquire the right to make payments by cheque, a person must open a current account at a commercial bank. A private person does this by paying into the bank funds that are credited to his current account; a business man also does this, but a large part of his current account is usually a loan from the bank, although that is not relevant to the present issue. The difference between a current, and a deposit, account is this: notice must be given before money can be withdrawn from a deposit account; a current account is payable on demand.

A cheque is a form issued by a bank, and, when drawn, constitutes an order to the bank to pay to a person or persons specified, a certain sum of money, the amount of which is written both in figures and in words on the cheque.

The cheque system can be traced back to the operations of the London Goldsmiths in the reign of Charles II, but it did not come into general use until the second half of the nineteenth century. To-day it is the main method of making large payments, and it is coming more and more into general use for even small payments. Speaking generally, we can say that all payments which a hundred years ago would have been made by Bank of England notes of five pounds, and the higher denominations, are made now by cheque.

The advantages of the cheque are very definite. A cheque can be drawn to any desired amount so that the inconveniences of counting and transporting notes are avoided. It can be crossed in such a way that it can only be paid into the account of the person or persons named on it, and the person paying it into the bank must endorse it, that is, he must write his name on the back of it. A cheque, therefore, is the safest and most convenient method of making a payment, and as evidence of payment would be accepted by a court of law.

From the standpoint of the community the cheque is a great currency saving device as when payments are made by cheque instead of by currency changing hands payments are effected by adjusting the credit balances of the persons concerned at their respective banks. When Brown draws a cheque on his bank, his balance is decreased by the amount specified on the cheque; and when Brown pays into his bank a cheque drawn by some other person, his credit balance is thereby increased. The development of the cheque has relegated the coin and the note to a secondary position as a means of payment.

5. Money Substitutes—The Bill of Exchange

Perhaps the oldest of the substitutes for money is the bill of exchange which, in substance, is simply a note from a creditor to a debtor, directing him to pay the debt to a third person. The bill of exchange is a very ancient method of payment and probably originated with the Jews, as in times of danger it provided a safe and convenient means of transferring wealth from one place to another.

The general principle of the bill can be illustrated as follows:—Let us suppose that London and Utopia have the same standard of currency, and that a London merchant has imported goods to the value of £100 from Utopia, and also that a second merchant in London has exported goods to Utopia to the value of £100. Clearly, a London merchant must send £100 to Utopia, and a Utopian merchant must remit £100 to London, but the transaction can be closed without any transfer of money across the ocean.

The London export merchant can draw a bill for £100 on the Utopian import merchant, which he can sell to the London merchant who has to remit £100 to Utopia, and he, in turn, can send the bill to Utopia, where the creditor merchant can collect the money from the merchant who requires to send the £100 to London.

The bill of exchange facilitates trade in a second and even more important way. In the illustration above, it was assumed that the bill was payable on demand but such bills are not usual. Most bills are drawn for a period of three or six months, and originate in the following way.

Brown, for example, has imported goods from abroad for which he cannot pay until he has sold them. The exporter, therefore, draws a three months' bill on Brown, and on this bill Brown writes "accepted", and signs his name. By writing "accepted" Brown acknowledges the debt, and agrees to pay the sum stated on the date the bill falls due.

The exporter can then sell the bill for its face value minus the interest on the sum advanced over the interval between the date on which the bill is discounted or sold, and the date when it falls due. If the discount rate for a three months' bill were 4%, then the discount, or commission charged by the person discounting the bill would be $\frac{£100 \times 4}{4 \times 100} = £1$. The person selling the bill would receive £99.

The person who orders the money to be paid is the drawer of the bill, the person to whom he addresses the order is the drawee, and the person who guarantees the payment is the acceptor. The drawee is seldom the acceptor; most bills are guaranteed by a third party.

A bill of exchange can be used only when there is confidence that it will be met, and that confidence depends on the standing of the acceptor. When a bill has been accepted by a person, or a firm, of financial standing, it can be easily and cheaply discounted. For that reason, the custom gradually arose of well-known merchants accepting bills for other merchants, and in this way the great London Accepting Houses developed. These Houses accept bills from all parts of the

world, although the London banks now do much of this business for their own customers.

A bill of exchange is merely a credit instrument and a person who discounts a bill simply advances a sum of money for a given period on which he charges interest. Bills accepted by a well-known institution are a very desirable investment as the money is locked up for short periods only.

The rate of discount, which depends on the relations between the supply of bills and the demand for them, varies from day to day, and it also varies with the class of bills presented for discount. A bill accepted by a person of unknown, or uncertain, financial standing will be discounted only at a high rate of interest, or discount; at the other end of the scale, a bill that bears the signature of an English joint stock bank will be discounted very easily and very cheaply.

6. Money Substitutes—The Finance Bill

The bill of exchange discussed above is a trade bill, because it originates in a genuine trade transaction and its value rests on goods which are expected to be sold before the bill matures. But bills of exchange can be drawn that are merely convenient methods of borrowing, and such bills are called finance bills. In the eighteenth, and early nineteenth centuries, borrowing by means of finance bills proved an easy road to ruin for many people, as when such bills became due and could not be met, they were often renewed at an extortionate rate of interest.

The Government borrows for short periods by means of finance bills called Treasury Bills. British Treasury Bills are never issued in denominations of less than £5,000, and never singly. The date of repayment is given on the bill itself. Treasury Bills are an absolutely safe investment, and they are redeemable at the end of three months.

Other forms of credit instruments sometimes used are the Promissory Note, and the I.O.U.. Both are documentary evidence of a debt, and as the name implies, a promissory note is a promise to pay a given sum of money on a specified date.

Specimen Bill of Exchange.

London, 30 July, 1946.

£2,000

Three months after date pay to John Johnson, or order, the sum of Two thousand pounds. Value received.

To Messrs. Thomas Robinson & Co.,
 Liverpool. Robert Smithson.

Specimen Treasury Bill.

Due 18th March, 19....

TREASURY BILL

Per Acts 40 Vict., c. 2 and 52 Vict., c. 6.

London, 18th Dec., 19.....

A

001706

£5,000

THIS TREASURY BILL entitles.....or order to payment of FIVE THOUSAND POUNDS at the Bank of England out of the Consolidated Fund of the United Kingdom on the 18th day of March, 19....

.....

Secretary to His
 Majesty's Treasury.

7. Standard Money, Money of Account, and Legal Tender

The definitions of standard money, money of account, and legal tender, which have already been touched upon incidentally, may now be clearly stated. The term standard money is used in more than one sense, but as a rule it refers to the primary currency of a country, the money in which debts are generally paid, and in which credits and debts are calculated. In 1913, the standard English money was the sovereign; to-day it is the £1 note.

Usually the money of account is also standard money, as the money of account is the same as the money in which the amounts of all debts are calculated, and in England, all business accounts are based on the £1 note, whether they are paid in notes or by cheques. It is true that debts may be of smaller amounts than £1, but these can be regarded as sub-multiples of the unit of account.

It is possible, however, for a money of account to be of a different denomination from that of the standard money. In England the guinea is still used as a money of account in the case of fees charged by certain professional men, and also for many subscriptions.

The use of the guinea as a money of account is merely an historical survival, but it does indicate that a price system is possible without actual money; indeed, any developed barter system would probably be based on some form of money of account, in order to limit exchange fluctuations. There would be a tendency to fix the rate of exchanges on a money of account based on custom. Even so, the main drawbacks to barter would still persist.

Legal tender is the money which a creditor is compelled by the law of the land to accept from a debtor in payment of a debt, and not all forms of payment are legal tender. Cheques are not legal tender, although a large proportion of the payments made in England to-day are made by cheques.

Some forms of currency are legal tender to a limited amount only. In this country, copper coins are legal tender to a nominal amount only; and no one is bound by law to accept silver in payment of a debt exceeding forty shillings. £1 and 10s. Bank of England notes are legal tender for any amount in Great Britain and Northern Ireland.

Legal tender is a device to protect the creditor, but in normal circumstances it is not a matter of importance, as is proved by the fact that cheques are as acceptable as cash in most business transactions. No rational person would attempt to force a debtor to accept a large payment in goods, or silver, or copper; on the other hand a shopkeeper, if he is short of change, will often accept much more than the legal tender amount of silver and copper.

It may be wondered why some forms of legal tender—silver, and copper coins, are issued in limited amounts only? In 1913, the number of sovereigns minted was limited solely by the supply of gold; to-day, the number of currency notes issued depends mainly on the policy of the Government; on the other hand silver and copper coins are strictly limited in quantity. One reason is to avoid the difficulties of a bimetallic

or double standard, which have already been noted. A second reason is that only by limiting the issue of the coins can their nominal, or face value, be kept above their metal value. If every person with bar silver could take it to the Mint, and have it coined free of charge, the value of the coins would fall to their bullion value, and the State would lose a source of income. What applies to silver coins will apply to the cupronickel coins when they are minted.

8. The Functions of Money

We are now in a position to examine the so-called functions of money. It is usually said that money has four functions—it serves as a medium of exchange; it serves as a measure of value; it serves as a standard for deferred payments; and finally, it is a means by which value can be stored.

Money is a medium of exchange, or a means of payment, and it eliminates the inconveniences of barter, as money is something that everyone will accept in payment for goods, and services, not necessarily because it is desired for its own sake, but because it enables its holders to acquire command over other goods and services. As money is general purchasing power, its use leads to market prices that avoid the waste of time inherent in individual bargaining.

Money is a common measure of the value of an article, as the exchange value of an article is reflected in its price. Price is simply a money measure of value. The use of money as a measure of value simplifies many economic activities. A housewife with a certain income, and a list of market prices can quickly decide the range of goods she can afford to buy. This function of money assists the business man even more than the housewife, for, as all things have a market price, he knows exactly what he must pay for each production factor he uses. This enables him to plan in advance, and to choose the cheapest combination of factors that will serve his purpose. But for this function of money the production of commodities would be more costly than is actually the case.

The use of money facilitates the making of deferred payments as, in normal circumstances, money remains relatively

stable in value over a short period. For that reason, all loans and contracts are made in terms of money, and if there were no such thing as money fewer loans would be granted, because of the risk that the commodity in which a loan was made would fall in value before the date of repayment. At the present time, this is equally true of money. A pound note to-day has lost much of the purchasing power it had in 1939, but the war years, 1914-18, and 1939-45, were periods of violent economic disturbance, and must be treated as abnormal. In ordinary circumstances, over a period of, say, ten years, the value of money is usually relatively stable, although its stability may at any time be upset by several factors, and for that reason many schemes have been advocated for stabilising the value of money.

Money enables value to be stored easily and without risk. Many goods that are not used as money could serve as a store of value, but the storage of real goods is costly, and most goods deteriorate if kept in storage a long time.

Further, over a long period, any good may lose its value through changes in the habits and tastes of the public, or because of the discovery of new substitutes.

9. Money as a Liquid Asset

The above functions of money are traditional, and developed at a time when money, in the strict sense, was the main medium of payment. But, as has already been noted, money, except in respect of the small wage earner, has ceased to be the primary medium of exchange; even among private individuals as distinct from business people, the cheque habit is growing rapidly.

All who make use of the cheque, however, still demand money, although not necessarily to spend immediately. The events of even the immediate future are very uncertain; hence there is always the possibility of an unexpected demand for cash. It is easy to imagine many situations in which a cheque book alone would be very inconvenient. For example, Mr. Brown may be suddenly called upon to make a long railway journey, or his car may break down in some

place where he is unknown. Railway companies, and garage proprietors, usually demand cash from strangers. Mr. Smith may have unexpected visitors, and decide to take them to some place of entertainment, and, if he were unknown by the manager, cash would be required to pay for the seats. The cheque system, although it greatly decreases the demand for cash does not eliminate it, but the demand is a demand for money, not so much to spend immediately, as to hold in reserve against emergencies.

The above, however, does not exhaust the demand for money. All people with surplus income have a choice of alternatives; they can keep that surplus in a liquid form, that is to say, as money, or they can invest it in Government bonds, land, houses, shares in a company, etc., all of which yield interest. If money is preferred, it is a matter of indifference whether the notes are hoarded in the house or deposited on current account in a bank. On first thoughts it may appear that every rational being will place his savings where interest can be earned. That he does not necessarily do so arises again from the uncertainties of the immediate future. Mr. Jones, for example, may be looking for a suitable house to purchase, and it may be months before he meets with what he desires; but he does not necessarily invest the purchase money during the interval for two reasons. Firstly because of the trouble involved in investing, and selling out; secondly he may have to sell out at a loss. Instances of this kind are very general. At any time the uncertainties of the business world may persuade a man to keep his savings in liquid form, rather than invest them.

In the case of Mr. Jones and the house, the question may be asked, could he not deposit his money in the Post Office or Trustee Savings Banks, or deposit with a Building Society, or buy Savings Certificates, instead of keeping the money in the house, or on current account at a commercial bank? He could do so, of course, but the alternative is less attractive than it may appear. There is a limit to the amount that can be deposited in the Post Office, and Trustee Savings Banks, in any one year, and to the number of Savings Certificates any person may hold. Secondly, Mr. Jones may require his money

any day so that the prospect of much interest is small. Above all, some notice is necessary before the money can be withdrawn, and Mr. Jones may want at least part of it on some particular day, and for that reason it is a great advantage to Mr. Jones to have his money where it can be withdrawn on demand.

10. Factors in the Value of Money

The theory of the value of money is too difficult for the scope of this work, but some factors that enter into it may be considered with advantage.

At one time it was supposed that the value of money depended mainly on its quantity, and that if the quantity of money doubled, prices would double. Conversely, it was supposed that if the quantity of money suddenly halved, that prices would fall correspondingly.

When this idea was first formulated, it contained a great deal of truth, but economic life was very simple. Gold and silver were the main means of payment, facilities for saving were non-existent, and production was carried out by such primitive methods that output changed very slowly.

To-day, the money problem has a setting that is much more complex. True money is only one form of purchasing power, and, as we have already seen, a very important part of the demand for money is not for money to be spent immediately, but for money to hold in reserve. Clearly, if the supply of money were suddenly doubled, and the whole of the increase passed into reserves, the immediate effect on prices would be nil.

In a modern society, the total amount of purchasing power in the country, as distinct from mere cash, is difficult to estimate, as a large part of that purchasing power consists of bank loans, which we have yet to examine. The production of most goods is now governed by technical progress, which makes possible a sudden, and great expansion of output.

The value of money is the resultant of too many forces for us to establish any precise relation between the quantity of money and the level of prices. It is true that an increase in the supply of money always has a tendency to raise prices,

but unless the increase is very large that tendency may be offset by other changes.

Money has several peculiarities, but there is one that has a vital bearing on its value, and that is its velocity of circulation. An increase in the demand for potatoes, or wheat, can only be met by an increase in their supply, but money is a more or less permanent good, passing from hand to hand, sometimes slowly, sometimes quickly, the actual rate being known as the velocity of circulation. It is possible for an increase in the demand for money to be satisfied merely by an increase in the velocity of circulation. If people hoard more money, or increase their emergency reserves, the velocity of circulation of money will slow down; if people have a wave of spending, the velocity of circulation will increase. When the velocity of circulation is low, prices tend to fall; when it is high, they tend to rise.

Changes in the quantity of money, or of total purchasing power, are not without influence on the velocity of circulation but they are not the dominant influence. The most important factor governing the velocity of circulation of money is the decisions of individuals to spend or not to spend, and these decisions are governed by a variety of circumstances.

It was noticed during the 1914-18 war that on more than one occasion an increase in the issue of Treasury notes had no effect on prices, the explanation being that for some reason or other masses of people decided to increase their money holdings; it was also noted that, at another time, when the note issue was fairly constant, prices rose sharply for no apparent reason. The probable reason was that a large number of people had decided to reduce their holdings of money, and to increase their stocks of goods.

CHAPTER XV

BANKS AND BANKING

1. Introduction

Though the law of England specifies what bankers are not allowed to do, and gives them certain protections in the course of their business, it does not explain the meaning of the term "bank." There is no clear definition of a bank in English law, but it is interesting to note that the Finance Act of 1915 refers to a bank as an institution "carrying on a *bona fide* banking business," which, of course, is simply another way of stating that "a bank is a bank." Any person, whatever his qualifications, is free to establish a bank in Great Britain or Northern Ireland. "It appears," states Dr. Leaf, "that it is open to anybody to take out at Somerset House a certain document known as a 'Banker's Licence'; it is only necessary to pay a fee, and no questions are asked as to the character of the business to be carried on under the licence."

2. The Importance of a Banking System

The practice of banking is very old, and it developed in most countries, in some form or other, as soon as credit instruments began to arise; indeed, a banker is often described as a dealer in credit. If every person engaged in business had always sufficient currency in hand with which to finance his purchases, the most important function of the banking system would cease to be necessary, although, even then, the banks would prove a great convenience for the purpose of storing surplus cash, and it was as a means for the safe deposit of wealth that many banks came into existence in days gone by.

Traders, however, have never always been in the position of being able to pay cash for their purchases. In the days when gold and silver were the sole means of payment, the

supply of the precious metals was never equal to the demand for them; coins, therefore, had to be supplemented with promises to pay, and in that way the foundations of a credit system, and in consequence a banking system, were gradually laid.

The first principle of a banking system is that certain institutions shall concentrate the savings of the general public by borrowing them at a low rate of interest—such borrowings are called deposits—and these funds are lent to traders, and to business men, at a higher rate of interest. These institutions are known as commercial banks, and in this country they are joint stock banks with limited liability. The commercial banks simplify the process of borrowing enormously, for they call into being a fund of loanable capital, available to every borrower who can give security. Without a banking system, business men would often have great difficulty in finding lenders of capital, and they would doubtless have to pay a much higher rate of interest than they do at present. The banks also stimulate saving on the part of the public by providing a receptacle in which these savings can be stored with a minimum of risk, and with profit.

It has been said above that the commercial banks lend to their customers the deposits made by the public, and that is true, but for reasons that will be discussed later, the commercial banks are able to lend far greater amounts than these, so that the total volume of purchasing power in a country that possesses a banking system is much greater than that of a primitive community.

The term banking system implies some degree of order and relation between the constituent parts, and in most advanced countries to-day, these functions are exercised by a central bank. In this country the central bank is the Bank of England, but, before describing this important institution, it is necessary to say a few words on central banks in general.

3. Central Banks

In a modern industrial community it is impossible for the State to view with indifference the working of its monetary system. Governments have always found it necessary to

exercise control and supervision over the coinage, and some control is equally necessary over the creation of credit, that is to say, bank loans. A great many people think that the control of the monetary system should be in the hands of the State, on the ground that the regulation of the price structure is a function of the State as much as the regulation of public health and housing, and there is a very strong case for this view.

On the other hand, many people in this country have argued that State control of the banking system is highly dangerous, and that such control must leave monetary policy at the mercy of party politics, but even the Bank of England has not been an independent private institution in anything but name for many years. Its connection with the Treasury has long been so close, that its nationalisation in 1945 was largely recognition of an established fact.

The functions of a central bank are broadly as follows:— In the first place the central bank controls the note issue of a country, whether the country is on a gold standard or not. The procedure followed is not the same in all countries but the principle is the same. The issue of notes is concentrated in a single institution, and the amounts of these note issues are controlled by all Governments.

Secondly, the central bank provides the mechanism necessary for the control of credit, that is to say, the loans issued by the commercial banks. The commercial banks, wherever a central bank exists, are not free to grant credits in unlimited amounts. It is very necessary, if a bank is to remain solvent, for it to keep a reserve of cash with which to meet all the demands of its customers for currency, as credits granted may be presented at any time to be cashed. But the central bank is the bankers' bank; the commercial banks keep their cash reserves there, and borrow from the central bank when necessary. That gives the central bank very strong control over the lending operations of the commercial banks.

Thirdly, when a country is on the gold standard, it is the business of the central bank to take such measures as are necessary to safeguard the gold reserves. Even when a

country is off the gold standard it is necessary for it to maintain gold reserves which are kept in the custody of the central bank.

The central bank acts also as the Government banker, and conducts its financial business. This fact alone makes for a very close connection between the bank and the Government. A central bank must also take such measures as are necessary to safeguard the value of a country's currency overseas, and it must strive to work in co-operation with the central banks of other countries.

4. The Bank of England

The necessity for a central bank in an advanced community is proved by the evolution of the Bank of England, which was founded by William Paterson in 1694, in the reign of William III. The original capital of the Bank, £1,200,000 was lent to the Government at 8 per cent. interest, and the subscribers received a charter permitting them to engage in the business of banking in this country, and to issue notes.

Since its foundation, the Bank has passed through many vicissitudes, but it faced its greatest crisis during the Napoleonic wars, when, owing to loans made to Prime Minister Pitt, with which to finance our allies, the Bank was forced to suspend the cash payment of its notes for nearly twenty years. That was our first experience of inconvertible paper currency, and it was not a happy one. The paper pound was gradually over issued, and, measured in terms of gold, its value depreciated both at home and abroad.

In 1810, a Select Committee of the House of Commons, known as the Bullion Committee, was appointed to inquire into this state of affairs and to seek a remedy for it. The recommendation of the Committee, which was that cash payments should be resumed, was not accepted by Parliament at the time, but in 1819, Sir Robert Peel carried through a bill which placed the Bank of England note on a gold basis once more.

The monetary troubles of the period 1819-44, due largely to the uncontrolled note issues of the private banks, led in

1844 to a new Bank of England Charter which contained the following provisions:—

The Bank was separated into two distinct departments called the Issue Department, and the Banking Department. The Issue Department only was to issue notes, and any person was given the right to exchange notes for gold there at the rate of £3 17s. 9d. per standard ounce.

Drastic regulations were imposed on the right of the Bank to issue notes. The issue of fiduciary notes, that is notes backed by securities only, was permitted to the amount of £14,000,000, but all notes issued in excess of that amount were required to be covered by gold, and, to a very small extent, by silver. The Bank note was thus turned into a gold certificate and the lowest denomination of notes that could be issued was the five pound note. The Bank was also required to publish a weekly statement of its position, known as the Bank Return.

The Act of 1844 gradually concentrated the issue of all notes at the Bank of England. No new bank was allowed to issue notes, and if any existing bank once ceased to issue notes its right of issue lapsed immediately. By 1921, the right to issue notes was vested solely in the Bank of England.

The Banking Department retained the right to engage in the ordinary business of banking, and by 1870 it had acquired all the duties and powers of a central bank. After 1870, it began to gradually discard its ordinary banking business, as it was not considered proper that a central bank should compete for business with the commercial banks.

The outbreak of war in 1914 threw the currency system into the melting pot. The sovereign was withdrawn from circulation, as the Government wanted all the gold it could command for payments abroad, and was replaced by notes issued by the Treasury. In practice these notes were not convertible into gold, and from 1914-25, for all practical purposes, we were off the gold standard.

In 1925, the gold standard was restored in a modified form, and in 1928, the issue of the standard currency was transferred to the Bank of England.

The main provisions of the Currency and Bank Notes Act of 1928 were as follows:—

The Act authorised the Bank of England to continue issuing its old notes of various denominations from five pounds to one thousand pounds, and, in addition, to issue one pound and ten shilling notes, which are unlimited legal tender in Great Britain and Northern Ireland. The maximum fiduciary issue was fixed at £260,000,000 in order to incorporate the Treasury notes in circulation and thus avoid the necessity of recoinng the sovereign.

Further, the maximum fiduciary issue was allowed by the Act, upon a request being made by the Bank, to be increased by the Treasury for a period of six months, a period which in exceptional circumstances may be extended to two years. This is termed emergency currency. Since 1939, the fiduciary issue has grown enormously, but with the sanction of Parliament.

The Act of 1928 marks a fundamental change in the attitude of Parliament towards the fiduciary issue, that is to say, the notes based on securities only. In the nineteenth century, the issue was regarded as something that must be kept fixed, except in very exceptional circumstances. In the future, the fiduciary issue is likely to be kept flexible, as an aid to a policy of full employment.

5. The Functions of the Bank of England—The Note Issue

The functions of the Bank of England have been outlined in connection with central banks but a more detailed account is necessary.

The Bank of England transacts all the banking business of the Government. The proceeds of taxation—income tax, customs, and excise duties, are all paid into the Government account at the Bank of England. The Bank also pays over the interest and the dividends on the various Government securities, and arranges for the sale of Treasury bills and other Government loans. The Bank of England is the custodian of the country's gold reserves, and is banker to the commercial banks, all of which keep their currency reserves there, and it is the agency, through the Clearing House, by

which all inter-bank debts in this country are adjusted. But the two major functions of the Bank are the issue of note currency, and the control of currency and credit.

A currency note has three main forms; it may be based on gold, or on securities, or be merely a promise to pay. Promises to pay can be issued in unlimited quantities; notes based on gold, or securities, cannot, although the quantity of notes that can be issued on securities is very great. All Bank of England notes are based on gold or securities, whether we are on the gold standard or not, as the Act of 1844 has never been repealed; in this connection, leaving the gold standard means that the Bank is not under a legal obligation to convert a note based on gold, into gold on demand. The point is not of great practical importance now as the main part of the note issue consists of fiduciary notes, but it brings to light the fact that so long as the Bank of England was an independent concern, its power to issue notes was limited by the will of Parliament and its power to acquire gold. The nationalisation of the Bank has not, so far, changed this situation. There is no reason to suppose that the relevant section of the Act of 1844 will be repealed, but it will lose much of its importance now that the size of the fiduciary issue, and the policy of acquiring gold are both governed by the will of Parliament.

Theoretically, the situation is this. The Bank of England can issue a quantity of fiduciary notes, determined by the will of Parliament. Notes in excess of this can be issued if they are fully backed by gold.

Bearing these two facts in mind it is not difficult to understand how new pound notes enter circulation or are withdrawn, for, if the Bank of England wishes to increase its note circulation, it can do it in two ways. In the first place it can expand its gold reserves, either by borrowing from foreign Governments, or from persons at home with gold to deposit, or it can sell securities in the market, and use the proceeds to buy gold against which it can issue notes which must be withdrawn from circulation, when, for any reason, the Bank loses gold.

Secondly, and much more important since the outbreak of war in 1939, the Bank can apply to the Treasury to sanction

an increase in the fiduciary issue. If the issue is subsequently reduced, a corresponding number of notes must be withdrawn.

During the war years the Government made large borrowings from the Bank in order to finance the production of munitions of war, etc. These loans were in the form of credits, against which the Government could draw cheques with which to pay its contractors. These, in turn, would require extra cash with which to meet their rising wage bills. Additional cash would also be required for payment of the troops, and their family allowances, and to meet this new demand for cash the Government had to sanction increase after increase of the fiduciary issue. Any reduction in the amount of Government borrowing in future years will probably be followed by a decrease in the size of the fiduciary issue, in which case a corresponding number of notes will be withdrawn from circulation.

The question is sometimes asked, what are the limits to the amount of new money that can be put into circulation without causing inflation? The answer is difficult and complicated, for, as we have already seen, the quantity of money is only one factor in price formation; but, so far as the issue of new notes is concerned, we can say that inflation is not likely to take place as long as there is under employment, because, if each new issue of money leads to an increase of employment, the output of goods will be likely to keep pace with the increase of money. Once the position of full employment is reached, further issues of money, unless offset by factors already discussed, would have a definite inflationary tendency.

The argument above must not be interpreted to mean that up to the point of full employment prices would necessarily remain constant. If production as a whole were in increasing returns, the increase of output would lower average costs, and if the community's ratio of saving to spending remained unchanged, an increase in the supply of money may be followed by a less than proportional rise in prices, if not by an actual fall. On the other hand, if production as a whole were in diminishing returns, and particularly if there was a general tendency for spending to outstrip saving, an increase in the note issue will be followed by a more than proportional

rise in prices, although the rise may not be sufficiently great as to merit the term inflation.

6. Functions of the Bank of England—Credit, and Currency Control

When we are on a gold standard, the quantity of currency in the country depends on the gold reserves of the Bank of England and these reserves need to be guarded carefully as a loss of gold, by reducing the amount of currency in circulation, has serious effects on prices, and on industry. Gold can drain from the Bank of England in two ways; it can drain into the Provinces and be hoarded there, or it can drain abroad. Provincial drains of gold are not serious, except in times of financial panic when everyone seeks to hoard gold, but foreign drains of gold are a constant source of anxiety to the Bank. They occur in various ways. If we are importing more from America than can be paid for by our exports, gold will drain to America. If foreign Governments, or private individuals, who have deposited funds in London suddenly decide to transfer them elsewhere, gold drains from London overseas. Drains of this kind are particularly troublesome, because they cannot always be foreseen.

It is possible for the Bank of England to counter the effects of these movements by borrowing gold from foreign Governments and Central Banks, but this is resorted to only in very exceptional circumstances, as borrowing, in itself, does not check the evil. The Bank, however, has a very useful weapon at its disposal known as the Bank Rate, which, in normal circumstances, can effectively protect its reserves.

The Bank Rate is the published rate at which the Bank is prepared to discount bills of exchange of first class security. The Bank does not normally discount bills now, as it has practically given up the business of ordinary banking, but it would do so if the public interest so demanded; hence the Bank Rate influences the rate of discount in the London bill market, which, before 1914 was the most important bill of exchange market in the world.

As we have already seen, the rate of discount is merely the rate of interest on investments in bills of exchange, and its

importance lies in the fact that it can be made to influence the rates of interest on all short term loans. The Bank of England has always had such prestige that all other financial institutions have usually followed its lead. When they did not the Bank could enforce its Rate by a device known as Open Market Operations, which will be treated in a later section.

When London was losing gold the Bank Rate would be raised; all short term interest rates would rise in sympathy, and the effects would be twofold. Those about to move gold from London would reconsider their decisions, foreigners would send gold to London to take advantage of the higher interest rates. Incidentally, people in the Provinces with hoarded gold would tend to deposit it with the banks.

Conversely, whenever the Bank felt that it could view the gold situation with indifference, there was a fall in the Bank Rate.

The reason was this. The Bank Rate was a double-edged weapon. If a rise in the Rate attracted gold into London, it also, by causing interest rates to rise, made borrowing dearer; hence a rise in the Bank Rate always had a strong tendency to curtail production, and to create unemployment. For that reason, the Bank of England was anxious, whenever possible, to lower its Rate so as to stimulate borrowing, and in turn, production and employment.

When we are off the gold standard one of the main functions of the Bank Rate is automatically suspended, but it is still a means of direct interest and credit control, very useful in national emergencies; but in normal circumstances we now make use of other methods of control of credit and the foreign exchanges, which will be discussed later in this book.

7. The Bank of England Return

Since the Bank Charter Act of 1844, the Bank of England has been obliged by law to publish a weekly statement of accounts. The accounts of the Issue and the Banking Departments are published separately and together, they constitute the Bank Return which is published every Thursday, and which appears in the morning newspapers each Friday.

The following is the Return for the week ending, 17th March, 1951.

ISSUE DEPARTMENT

Notes issued:—		Government Debt	£11,015,000
In circulation	£1285,819,409	Other Government Securities ..	1334,277,603
In Banking Department	64,537,414	Other Securities ..	692,405
		Coin, other than gold	4,014,992
		(Amount of Fiduciary Issue) ..	1350,000,000
		Gold coin and Bullion	356,823
	<u>£1350,356,823</u>		<u>£1350,356,823</u>

BANKING DEPARTMENT

Capital	£14,553,000	Government Securities ..	£311,916,441
Rest	3,870,000	Other Securities:—	
Public Deposits	22,247,123	{ Discounts and Advances ..	21,865,651
Other Deposits:—		{ Securities ..	25,651,284
Bankers ..	297,754,765	Notes	64,537,413
Other Accounts	86,088,166	Gold and other coin	542,265
	<u>£424,513,054</u>		<u>£424,513,054</u>

We shall examine the statement of the Issue Department first. The items under the heading of notes issued give the total value of the notes printed, and the total value of their backing is the Government debt, securities, coin and bullion.

The Government debt is the amount owed by the Government to the shareholders of the Bank. The original amount of the debt was £1,200,000, but that amount was gradually increased up to £11,015,100 by 1833, since which date it has remained unchanged.

The Government, and the other securities are part of the backing behind the fiduciary issue, and consist of Treasury Bills, consols and other British securities.

The fiduciary issue is represented by the currency notes that are not covered by gold. Down to 1928, the fiduciary issue was a relatively small amount, rising from £14,000,000 in

1844, to £19,750,000 in 1921, but under the Currency Act of 1928, the war-time Treasury notes were merged into the fiduciary issue, and the maximum limit was fixed at £260,000,000. Since 1939, it has been successively increased up to its present figure of £1,350,000,000 (March 17th, 1951).

The Bank need not issue notes to the full limit of the fiduciary issue, and for some years before the outbreak of war in 1939, the fiduciary issue stood at £200,000,000.

In the Banking Department section the first item on the liabilities side is the Bank's fully paid up capital, and the figure never varies. The Rest is a reserve fund of undistributed profits that has never been allowed to fall below £3,000,000. Public deposits are the balances of the various Government Departments such as the Exchequer, the Post Office Savings Bank, and the Commissioners of the National Debt. The Bank manages these accounts in its capacity of Government banker. Other deposits include the balances of the commercial banks, whose main business is carried on in England. Other accounts include the balances of the India, and Colonial Governments, foreign central banks, colonial banks, and old established financial houses.

On the assets side of the Banking Department's Return the item Government Securities refers to the Bank's investment in British Government stock, and in Treasury Bills that are acquired by investment. This is the item that expands, or contracts, when, as will be explained in the next chapter, the Bank regulates the credit policy of the commercial banks by means of open market operations. Other securities include loans to customers, and bills discounted.

The last two items on this side of the Return form the Bank's reserve with which it meets any sudden demand for currency, and the proportion which this reserve bears to the big liabilities, especially to the Other Deposits, is a weekly index to the position of the Bank.

8. The Commercial Banks

The ordinary banking business of the country is carried out by the commercial banks. In England the most important are the giant joint stock banks, the Midland, Lloyds, Barclays,

the Westminster, and the National and Provincial Bank. These banks receive money from depositors, and these deposits may be income savings, or the proceeds of business transactions, most of the latter being paid into current accounts. The funds which a bank acquires in this way, plus its own subscribed capital are lent to business men for short periods; money used for the purchase of raw materials, wages and salaries, rent, rates, and taxes, where such payments are not met by a firm's own income, comes mainly from this source.

A commercial bank may be either a private, or a joint stock bank, but the private bank has been practically eliminated by the financial requirements of large scale business. The existing joint stock banks, however, have developed during the last hundred years, out of amalgamations of private banks.

The Bank of England, which was founded as a joint stock bank, had a monopoly of joint stock banking down to 1826, when joint stock banks were allowed to operate in any place more than sixty-five miles from London. In 1833, that privilege was extended to the London area, and the subsequent history of English banking is a history of the amalgamations of hundreds of small private banks into a small number of huge joint stock concerns. The Midland, Lloyds, and Barclays, for example, are compounds of scores of small private banks, and some joint stock banks too.

Since 1863, Lloyds, alone, has absorbed 53 other banks; some of these were small private concerns, but some were joint stock companies such as the Worcester City and County Bank, the Birmingham Joint Stock Bank, the County of Gloucester Bank, and the Liverpool Union Bank. The other great joint banks have similar histories.

The amalgamation movement reached its climax just after the first World War. Since then, further amalgamations have required the approval of the Treasury.

Banking amalgamations have been of great service to this country. As business has grown in scale, the financial requirements have grown correspondingly, and such requirements can be supplied only by giant banks with huge resources. Banking amalgamations have given stability to the banking

system in two ways. The resources of a bank like the Midland, or Lloyds, are so vast that the bank cannot be made insolvent during a depression by the failure of a few large borrowers. Secondly, they are national, and not merely local banks; their resources are not locked up in one industry, or area; if, therefore, they are making losses in one part of the country, they may be earning profits elsewhere.

When the commercial banking business of a country is concentrated within the hands of a few large companies, some degree of co-operation is inevitable. If one of the great joint stock banks were in difficulties, it is most probable that the other banks would come to its assistance.

A few private banks still remain. Hoare's of London is older than the Bank of England, and one or two joint stock banks such as Glyn Mills & Co., are independent of the so-called "Big Five," or, including Martins Bank, the "Big Six."

9. Commercial Banking

It is sometimes said that a commercial banker is a dealer in money, but he is more accurately described as a dealer in credit, as what he lends is purchasing power rather than money.

Now that the issue of notes has passed from the hands of the commercial banks, the modern bank has three main functions, or, in other words, it renders three classes of services to its customers. It takes care of their surplus money by receiving deposits on which it pays an almost negligible rate of interest; secondly, it accepts and discounts their bills of exchange; and, thirdly, it makes advances to customers either in the form of loans or overdrafts. The bank will also render other services when desired. It will act as trustee, and as executor of a will; it will exchange foreign currency, and issue bankers' drafts and letters of credit on its foreign connections for the benefit of its customers who have payments to make, or who are travelling abroad.

The discounting of bills of exchange is still an important function of a commercial bank, and a safe and profitable investment as the advances are made for short periods only, and the bills become cash automatically as they mature. The

sum advanced on the bill is credited to the customer's account, from which it can be withdrawn by cheque.

The most important service now rendered by a commercial bank is the granting of short term loans, and overdrafts, that is, the right to overdraw a current account up to an agreed figure; in principle an overdraft is only a special form of loan. When a bank makes a loan to a customer, it does not pay the cash over the counter, it simply credits the customer's account with the amount of the loan; in other words, it creates a deposit. There is nothing peculiar in that. The loan in money could be handed over the counter to the customer, but in most cases, and for obvious reasons, the customer would immediately deposit the loan, or, at any rate, the bulk of it, back in the bank.

Bank deposits, therefore, include two very different things; they include savings deposits, and loan deposits, or, in other words, loans by customers to the bank, and loans to customers from the bank. An increase in bank deposits, then, does not necessarily mean that the public is saving more; it is just as likely to mean that the public is borrowing more freely. In order to ascertain if the public is saving more, we should have to examine the ratio of current, to deposit accounts, of the banks. A relative increase of total deposits accounts would suggest that people were transferring funds from current accounts, with the idea of saving, as notice is usually required for their withdrawal. Apart from that a business man naturally prefers to keep savings separated from his working capital. If the increase of total deposit accounts were accompanied by an increase in deposits at the Trustee Savings banks, we should be certain that a wave of saving had been started by the public.

The feature of commercial banking that has attracted most interest since 1920 is the power of the banks to create credit.

The great development of payment by cheque means that when the banks give credit, they create purchasing power; indeed, many people argue that modern money, for the most part, is bank credit, or bank money.

At one end of the controversy stand people who argue that just as a cloakroom attendant can only hand out as many overcoats as have been deposited with him, a bank can lend

out only such funds as have been deposited with it, plus its subscribed capital and no more. At the other end stand those who assert that there are no limits to the credit a bank can create. As usual, the truth seems to lie somewhere between these extremes.

Let us first suppose that this country is completely isolated from the rest of the world; that it has one bank only, and that every payment made in the country must be made by cheque.

In such a case there would be no limit to the credit the bank could create. As no hoarding of cheques would take place, the total value of all the cheques drawn on the bank must always equal the total value of the cheques paid in; the bank, therefore, could never be in difficulties.

Next, let us suppose that all banks are allowed to lend legal tender only, what would be the consequences? On first thoughts we may be tempted to say that in this case the banks can just lend the cash deposited, plus their own capital and no more, and on certain assumptions, that would be true. If all loans were made for one day only, and the depositors, and the borrowers, were at different counters of the bank, to put the matter as simply as possible, it follows that the bank could not lend more than was paid it, and what applies to one bank applies to all.

Actual practice, however, is a little more complex. Suppose that Brown has a bicycle which he contracts to lend to Smith every day Smith likes to use it, on condition that he stores it at Brown's shop when he is not using it. As Brown has only one cycle, can he make a similar contract with Jones? The answer would appear to be no, but in certain circumstances he can, and safely too. He may know from experience that Smith, who is a creature of very regular habits, never requires the cycle in the afternoons, and that Jones is a person not in the least likely to require the cycle in the mornings. He can therefore take a "chance" and contract to lend a bicycle to each of two men for their daily use. It would of course, be a little awkward if both men required the bicycle one morning, but his experience suggests that the danger is negligible.

Something like this takes place in the banking system, especially where the cheque is used, but it might possibly apply where all loans were made in cash, if when a loan was agreed to, it was not made in a single payment. At the same time we can concede, that, if banks were allowed to lend only cash, their lending powers would be drastically curtailed.

▲In reality, although the banks do not lend cash, they must be always prepared to meet a certain demand for it, and that demand limits their power to lend, and separates them from the hypothetical case of the single bank at which cheque payments only were made.

But the cheque system does make it possible for a bank to lend a great deal more than its cash reserves. If a bank starts the week with a cash reserve of £1,000 it can safely lend eight or nine times that amount in normal circumstances, simply because, in parallel with the example of the bicycle, only a small proportion of the cash reserve will be demanded at any one time. In the case of a large number of loans no cash ever will be demanded; the whole of the loan will pass to creditors in cheques. Cash will be demanded for wages, but cash circulates. A certain proportion will be hoarded, or kept in reserves of various kinds, but a large part of it will trickle back to the banks via the shopkeepers at the end of the week. Cash paid in salaries will usually have a longer circulation, indeed, there are many circulations in which a note may enter; but sooner or later, most notes return to a bank, although not necessarily to the bank from which they started.

The most important demand for cash, however, so far as a bank is concerned, is not from the public, but from the need to keep a cash reserve at the Bank of England with which to pay its debts to other banks. These debts arise in the following way. The cheques drawn on Lloyds, and paid into Barclays by its customers, do not necessarily equal the value of the cheques drawn on Barclays and paid into Lloyds. In the one case, a certain bank will be a creditor bank, and in the other case a debtor bank, in which case it must pay over the balance in the form of a cheque on its cash reserve at the Bank of England. As there are a number of commercial banks, the

settlement of inter-bank indebtedness is a complex business, and special machinery has been developed for that purpose.

A commercial bank, then, requires a cash reserve for two distinct purposes—to meet the needs of the public for cash, and to settle inter-bank indebtedness. The cheque system by greatly economising the need for cash, increases considerably, the power of a bank to make loans, but the necessity for a cash reserve puts a limit to that power. The limit, however, has an elasticity which varies with the state of mind of the public. When the general public is nervous in respect of the immediate future, the total demand for cash may be such that a bank cannot safely lend much more than its cash holdings, and a wise bank will always keep a margin of safety between its loans and its cash reserves. The bank failures of the past have nearly all been due to an inability to meet an emergency demand for cash.

The notion that banks create something from nothing is very misleading. When a bank makes a loan, it makes it against a security; in other words, it transforms non-liquid assets into cash. But anyone who grants a mortgage on a house, or on a piece of land does the same; and so does a pawnbroker. The only difference is that the cheque system allows a bank to cover a wider circle of loans with a given amount of cash; but if that is a convenience to the banker, it is also a convenience to the business public, whose usual complaint is that the banks grant too little credit.

Banking is a profitable business, but it does not appear to be unduly so; the bookkeeping, and organisation of a banking business is a costly charge which must be paid by those who make use of the banking system.

The advantages of a banking system to a business man should now be clear. The banks relieve him of all responsibility for the safeguarding of money not required for immediate payment. The cheque system facilitates the making of payments and the collection of debts. A business man can borrow working capital more easily and cheaply from the banks than from anyone else, and certain of the debts owed to him, payable at some future date, can be turned into cash immediately by the banks discounting bills of exchange.

CHAPTER XVI

BANKS AND BANKING (*continued*)

1. Relations between the Bank of England and the Commercial Banks

The credit system of every highly developed industrial and commercial country is a delicate mechanism that functions efficiently only when strictly controlled, and control must be exercised for at least two reasons.

In the first place the credit system cannot function efficiently unless the credit issuing institutions enjoy public confidence, and secondly, unless they issue the right amount of credit. When the banking system provides too little credit, business men are handicapped through lack of purchasing power; on the other hand a too lavish supply of credit leads to an undesirable rise of prices.

The credit system needs to be regulated by a central authority, as commercial banks are profit-making institutions. There is always a danger that they will lend in excess of the true requirements of industry, and more than corresponds with the real loanable resources available. What a business man really wants is the command over a certain quantity of the things he uses in his industry, but at any given time there is only a certain quantity available for use, so that, if the banks lend more credit than corresponds to the amount of this loanable capital, trouble follows inevitably.

The Bank of England controls the credit operations of the commercial banks by two devices—The Bank Rate, and Open Market Operations.

The function of the Bank Rate as the guardian of our gold reserves when we are on the gold standard has already been noted. Incidentally, the term takes us back to the days when the discounting of commercial bills of exchange was a normal business of the Bank; however fast gold was draining abroad, so long as we remained on the gold standard bills had to be discounted, that is to say, turned into gold on demand. In times of crises, therefore, the Bank of England became the

one place where gold could always be obtained on demand; in other words, it became "the lender of last resort." But if the Bank could not refuse to lend, or to discount bills, it could check the demand for loans and discounts by raising its interest charges, that is to say, its Bank Rate.

When we are not on the gold standard, the question of safeguarding the gold reserves does not arise, but the Bank Rate retains its importance, as, through its influence on interest rates, it regulates the demands for loans from the commercial banks. A higher Bank Rate makes borrowing dear; a low rate means cheap bank loans.

The Bank Rate is a drastic weapon, and invaluable in an emergency—on the outbreak of war, for example—but it has certain inconveniences. A sharp rise in the Bank Rate has a bad psychological effect on the business world; if people get the idea that business is uncertain, a trade depression is usually round the corner. On the other hand, a sharp fall in the Bank Rate tends to create in the minds of business men a feeling of optimism not always justified by the circumstances, and one which may lead to undesirable speculation.

Since about 1932, therefore, the policy of the Bank of England has been to maintain the Bank Rate at a low uniform level, except in special circumstances, and to use a method of control known as Open Market Operations.

The principle of Open Market Operations is simple in outline. The object of the Bank is to alter the size of the balances of the commercial banks kept with it, as it is the custom of the commercial banks to keep a more or less fixed ratio between their Bank of England balances and their commercial loans.

If those balances are increased it is to the interest of the commercial banks to expand their loans; if those balances are decreased, then for reasons of safety the banks must restrict their lending operations.

Let us suppose that the Bank of England wishes to increase the amount of credit in the country. It buys Government securities in the market and pays for them, not with currency notes, but with its own cheques which are paid into the commercial banks by the sellers. In that way the balances of

the commercial banks at the Bank of England are increased, and in consequence, they can expand their commercial loans in safety.

Conversely, when the Bank of England wishes to restrict the amount of credit in the country it sells Government securities which the buyers pay for with cheques drawn on their commercial banks. These payments reduce the balances of the commercial banks at the Bank of England, with the result that they are compelled to restrict their credit facilities.

Any slight change in the size of a commercial bank's reserve at the Bank of England has a marked effect on its lending operations, for, as has already been noted, a commercial bank can safely lend eight to ten times the amount of its reserve. Any expansion or contraction of a bank's reserve means, therefore, that credit may be expanded, or must be contracted by a multiple of that amount.

2. Inter-Bank Debts—The Clearing House

The commercial banking business of this country is in the hands of a small number of large banks in each of which a large number of cheques are paid daily, many of which are drawn on the other banks.

Consider the case of Lloyds, for example. Each working day its customers pay into its different branches cheques drawn on the Midland, Barclays, Westminster, etc., and at the same time, these customers pay to persons who bank with other banks cheques drawn against their accounts at Lloyds.

A settlement between Lloyds and the other banks could be effected by Lloyds collecting all the cash due to it from other banks, at the end of a given period, and at the same time paying its debts to each of the other banks in cash. •

Such a system is not followed for two reasons. In the first place an enormous amount of currency would be required. That, in itself, would not be a serious matter to-day, but our banking system developed at a time when gold coins circulated, and when it was necessary to find ways and means of economising the use of gold. Secondly, even when currency notes are used direct payment of large sums is a tedious and

troublesome matter. Notes would require to be counted and checked several times, and special precautions would have to be taken against theft during transit from one bank to another. If it so happened that the amount due from Lloyds to Barclays was equal to the amount due from Barclays to Lloyds, cash payments on that occasion would be an unnecessary and useless labour. Even when the debts on both sides do not tally on a day of settlement, it is clear that only a balance need be paid to a creditor bank to effect a settlement.

The method of payment of balances only in the discharge of inter-bank debts is the one followed, and it is worked through an institution called the Clearing House, of which all the important commercial banks are members.

All cheques paid into a bank find their way to a Clearing House, where each bank has an account, and in which all the amounts due to it from each of the other members banks are entered. If it is found, when the daily settlement is made that Lloyds owes the Midland £20,000, and that the Midland owes Lloyds £20,000, clearly, the debts cancel each other, and no payments are necessary.

If, however, Lloyds owes the Midland £10,000, and the Midland owes Lloyds £15,000, there is a balance of £5,000 in favour of Lloyds. Even then, however, no currency notes are paid over; the Midland pays Lloyds by a cheque on its account at the Bank of England. The reserve of Lloyds at the Bank of England is increased by £5,000, and that of the Midland is decreased by the same amount.

By means of the Clearing House system, a vast amount of inter-bank indebtedness is adjusted daily by book entries, and without the transfer of a single note. The London Clearing House is the most important, but not the only Clearing House; there are Clearing Houses in all the important provincial banking centres.

The Clearing system forms a connecting link between the member banks in another way, as it limits the power of a single bank to expand its loans. The reason for that should be clear from what has been said above.

If Lloyds alone began to greatly increase its loans, many more cheques drawn on Lloyds would be paid into the

Midland, Barclays, etc., than would be paid into Lloyds drawn on the other banks. Lloyds, therefore, would have to make payments to each of the other banks, and these payments would reduce its balance at the Bank of England, and, if the process were continued long enough, would exhaust it. In practice, excess lending by a single bank would not be carried far, as when its reserve at the Bank of England fell to a certain figure, the bank would restrict lending, and call in some of its loans.

If all the members of the Clearing system expanded their loans in the same proportion, the above problem of inter-bank indebtedness would not arise, but the loans that all the banks could make with safety would still depend on the size of their reserves at the Bank of England.

3. The Assets of a Commercial Bank

An asset is something that can usually be turned into cash, and that balances a debt; some incidental references have already been made to the assets of a commercial bank, but a more detailed examination is now necessary.

Assets fall within two broad classes, liquid and non-liquid assets. Liquid assets are those that can be turned into cash on demand; non-liquid assets are those that can only be turned into cash at some date in the more or less distant future. As we shall see below, there are various degrees of liquidity and non-liquidity.

Cash in hand in the safes of the bank and at the bank of England is the most liquid of all assets, and second to money comes the day to day loans made by the bank to the London money market; from the point of view of liquidity, such loans are hardly distinguishable from money.

Bills of Exchange for periods not exceeding three months are less liquid than money, but a highly liquid asset. On the day of their maturity they become cash at their face value. A three months bill does not become cash until after three months, but if necessary, it can be rediscounted in the interval. As bill discounting is a daily business of a bank, a proportion of the bills it holds arrives at maturity every day.

Land, buildings, and especially mortgages on land and buildings, are non-liquid assets. A mortgage may be arranged for a long period of years, and although land and buildings can be sold, they cannot always be sold on demand, except perhaps at a heavy loss.

The shares and debentures of a public company, and the various Government and municipal corporation securities, with the exception of Treasury Bills, are also non-liquid assets. The capital invested in Government Consols and in the shares of a company is never repaid, and most public loans and debentures, if redeemable at all, are redeemable only on a date that may be many years ahead.

These securities can be sold on the Stock Exchange, but only at their market value at the moment, and if a bank wished to realise them during a banking crisis, they would sell for much less than their face value.

Overdraft advances and loans occupy an intermediate position. They are much less liquid than bills of exchange, and if they all had to be called in at once, a bank would make serious losses, as at any given time, many business men would be unable to meet the claims of the bank, but when they are paid off, they are paid off at their face value.

The analysis above sheds high light on the distribution of banking assets in this country. It has long been the policy of the British banks to keep a large proportion of their assets in liquid form, so that if the occasion arose, they would be able to meet all demands for cash. For that reason a British bank has not, in the past, invested a large proportion of its resources in land and house property, long term mortgages, the shares of public companies, and in Government securities other than Treasury Bills. On the contrary, it has always invested large sums in bills of exchange, Treasury Bills, day to day loans to the London money market, and kept a large cash in hand reserve, and a large reserve at the Bank of England.

But it may be asked, does not the item "advances" on a bank balance sheet often prove to be the largest single item on the assets side? That is so, and the reason is that advances are the most profitable of all the forms of banking business.

so that to some extent even British banks sacrifice liquidity to profit, but a bank is usually fully secured, and when the trade barometer is falling, a proportion of the outstanding loans can be called in, either directly, or indirectly by raising the interest charges on them.

Apart from that, a bank's highly liquid assets are always sufficient to safeguard it against any strain. The British banking system has proved to be the safest in the world.

4. The Balance Sheet of a Commercial Bank

The following is the abbreviated balance sheet of the National Provincial Bank for the year ending 31st December, 1950.

LIABILITIES		ASSETS	
Paid up capital	£9,479,416	Cash in hand, and at the Bank of England ..	£72,390,703
Reserve Fund ..	£11,884,462	Cash at call and short notice	£83,962,000
Current and Deposit a/c	£838,902,666	Cheques in course of collection with other banks ..	£31,224,779
Acceptances on account of customers, etc. ..	£38,234,026	Bills of Exchange, discounted ..	£197,072,088
		Investments:—	
		British Government securities.	£164,469,648
		Foreign, Colonial Government and corporation securities.	
		Advances on Current a/c ..	£246,019,204
		Treasury Deposit Receipts ..	£59,000,000
		Liabilities of customers for acceptances ..	£38,234,094
		Bank Premises ..	£6,128,122
	<u>£898,500,638</u>		<u>£898,500,638</u>

On the liabilities side of the sheet, the first two items, Paid up capital, and Reserve Fund, have been explained in an earlier chapter. The item Current and Deposit accounts represents the sums for which the bank is liable to its customers, either for cash deposits received, or for loans credited to their accounts. A business firm not only borrows from the bank, but it also pays cash into its current account, as money cannot be withdrawn by cheque from a deposit account.

The item Acceptances on account of customers refers to bills of exchange that have been guaranteed for customers by the bank. It will be noted that an item of the same value occurs on the assets side of the sheet; the reason for that is that the customers whose bills have been accepted have contracted to place the bank in funds before the bills mature.

The first item on the assets side is the reserve held against loans and the claims of depositors. This reserve consists of cash in hand, and a reserve at the Bank of England, which is equivalent to cash. The second item, Cash at call and short notice represents loans made for periods ranging from a few hours to a few days and can be turned into cash almost immediately. The item, Bills of exchange, represents securities held by the bank against longer but still relatively short loans, as the majority of the bills discounted become cash in about three months from the date of their discount. If the first four items on the assets side are added together, it will be seen that an English bank maintains a large part of its assets in a highly liquid form.

Since July, 1940, the commercial banks have held a new form of liquid asset entered as Treasury Deposits, and in this particular sheet it is easily the largest single asset. Most of the increase of bank deposits due to Government expenditure has been borrowed by the Government in that form, and when a bank needs more cash these deposits can be withdrawn. One result of the war, therefore, has been a very great increase in the proportion of liquid to total assets held by British banks.

The item, Investments, indicates the long term loans made by a bank to British, foreign, and colonial governments, and to

railways and municipal corporations. These are not liquid assets in the banking sense, but they are profitable investments. Cash in hand and at the Bank of England earns nothing, and short term loans are usually made at a low rate of interest. The long term securities held by a bank, however, always yield an income guaranteed by some public body.

One of the largest single items in the assets return is that marked Advances to customers, and these advances to business firms are the most important branch of the business of a modern bank. They are also the most profitable work undertaken by a bank.

As has already been noted, large assets of this kind are of varying degrees of liquidity, and if everybody were short of cash many advances would be highly non-liquid, but even a bank must take a certain amount of risk, and these advances to business men are necessary to the economic well-being of the community. On the whole, however, banks use great discretion in the matter of advances, and they keep a margin of liquid reserves sufficient for most emergencies.

5. The Organisation of a Commercial Bank

To the individual making a deposit at any of the great commercial banks, the business of banking may appear simple; actually it is intricate, and complex, and requires a highly efficient organisation.

The actual administration of a commercial bank is under the control of the General Manager, who administers the policy of the Board of Directors, at the Head Office, which is in London, and is divided into two branches, the administration proper, and the executive branch. Each of these main branches is divided into departments according to the main subdivisions of their work.

The principal administrative departments of a modern bank are the Accountants' Department, which is responsible for the auditing of all accounts; the Staff Department, which deals with all its matters relating to the employees of the bank, their appointments, dismissals, salaries, promotion, and so forth; the Credit Department which deals with the lending operations

of the bank; the Legal Department; the New Issues Department which assists customers to raise new share capital; and the Executor and Trustee Department which executes wills and manages trusts.

The executive departments which may be noted are the Cashier's Department which supervises all matters relating to receipts, and the payment of cash; the Bills of Exchange Department which discounts bills, and collects the amounts as they mature; the Securities Department, which advises customers in respect of their investments, and which has charge of all the securities deposited with the bank. All large banks have now a foreign department, which, before the war, made provision for customers who had payments to make abroad. All foreign exchange is now controlled by the Government.

In a large office these departments function side by side, but in a small branch bank, one man may have to handle the business of several departments. Each aspect of the business, however, is under the supervision and control of the different departments of the Head Office.

6. Other Banking Institutions

The Bank of England, and the joint stock commercial banks, do not exhaust the banking system. There is another type of bank known as a savings bank to distinguish it from a commercial bank. It is true, of course, that savings are paid into a commercial bank, but as a rule not small savings; commercial banks are used primarily for business purposes. Private persons who pay their salaries and other receipts into commercial banks, because they make most of their payments by cheque, are acting as business people. Such people, of course, may have both current and deposit accounts at the same bank.

The savings bank proper was originally instituted for the purpose of collecting very small working class savings, and even to-day their average deposit is much smaller than those made at a commercial bank. The best known of these savings banks are the Post Office Savings Bank, and the Trustee Savings Banks scattered up and down the country. The Post

Office Savings Bank is, of course, a Government bank, and the Trustee Banks are Government controlled; all their receipts are invested in Government securities.

The Building Societies are really a form of savings banks as they receive money on deposit, on which interest is paid, and which can be withdrawn at short notice. The most recent type of savings bank, The Birmingham Municipal Bank, has something in common with both a trustee bank and a building society. This bank, and also the building societies, may be regarded as a form of mortgage banks, as their primary business is to collect deposits which are advanced to customers as mortgages on property. Banks and institutions of this kind differ from a commercial bank on two fundamental points. In the first place their investments are mainly in long term securities, and secondly, they do not create credit—money cannot be withdrawn from them by cheque. Their lending powers are limited to their deposits plus their own capital. Money cannot be withdrawn from the Post Office or Trustee Banks by cheque; these banks open deposit accounts only.

7. The Nationalisation of Banking

Since about 1920, the question of nationalising the banking system has excited much controversy, and banking nationalisation has probably a far wider circle of adherents than those who support nationalisation of coal, iron and steel, or even transport. The subject is too complex and difficult to be probed very deeply in a work of this kind; all that is possible is to cite a few of the arguments, and outline some of the possible consequences.

When people discuss banking nationalisation they have in mind the Bank of England and the commercial banks. The Bank of England was nationalised in 1945 with very little opposition, largely because it had long ceased to be a private bank in anything but name, and also because the Government made it clear that it did not intend the Bank to be merely a part of the Treasury. It is possible, therefore, that the practical effects may be negligible; more probably, however, a long period of time will witness a gradual revolution in the

practice of English banking. Fundamental changes, however, will not make their full impact until nationalisation embraces the commercial banks, hence this aspect of the problem is likely to enter the political arena sooner or later.

Nationalisation of the whole banking system is advocated by many people on the principle that the creation of purchasing power should be in the hands of the State alone, and that it should not be left to private enterprise. This argument need not detain us as nationalisation as an abstract principle will always have followers and opponents.

A more common argument is that under nationalisation great economies would be effected. The moderates argue that under private banking there is an unnecessary duplication of branches, and that it is a fact of experience to find branches of all the great banks almost next door to each other. Under a nationalised system many of these branches would be redundant, would be closed down, and great economies would be effected.

There may be some truth in this claim, but on the other hand it seems unlikely that any joint stock bank would long maintain a redundant branch; it is possible, therefore, that economies from this source can be greatly exaggerated.

Business, and other people applying for bank credit would undoubtedly stand to lose. Under the present system, if, say, Lloyds refuse a credit, it may be possible to obtain it from the Midland, or from Barclays; indeed, it is probable that this possibility would influence Lloyds when considering the application. If a credit were refused by a State bank, there would be no alternative, within the banking system at any rate.

A more extreme school of thought argues that under State banking, credit could be issued interest free, but its varied forms of argument have yet to convert a single recognised monetary authority. Unless the State confiscated the commercial banks, which is unthinkable in this country, it would have to meet the annual charges on the stock representing the purchase price, and also the costs of banking administration. The State would also have to be wary of any scheme that might endanger the value of our currency abroad, dependent as we are on imports of food and raw materials. In short, there

seems to be no reason to suppose that if the present Government, or any Government likely to be elected in this country, nationalised the whole of the banking system, that there would be interest-free loans for all business men who applied for them.

The real core of the nationalisation issue has two distinct threads, for nationalisation of banking is advocated by many business men who are not socialists, on the following grounds:—

As we have already seen, under the present system, the bulk of the loans supplied by the banks to business men are short term loans—loans used mainly for wages, and for the purpose of buying raw materials. The permanent capital of industry has been supplied by the investing public, and in recent years by the undistributed profits of the big joint stock companies, at least to some extent. Many business men argue, therefore, that if the banks furnished industry with its long term, as well as with its short term capital, that the financing of industry would be cheaper, and certainly much easier, and in consequence, one of the main limitations on the growth of a business would be removed. The argument is perfectly sound, but the reason why the banks have fought shy of long term advances, is the necessity of keeping a high proportion of their assets liquid. That is inevitable under private enterprise if the banking system is to remain sound under all stresses, and strains. The banks may, and probably have, attached undue importance to the doctrine of liquidity, but their point of view has been justified on more than one occasion.

Under a nationalised system, the question of liquidity would become a secondary matter, as the money of the depositors would be guaranteed by the State. We can say, therefore, that if the commercial banks were nationalised, most of the permanent capital required by industry would gradually be supplied by the banking system.

The change, however, would not necessarily react in favour of private enterprise, because of the second thread to the matter. Socialists aim at a fully planned economy, and a nationalised banking system would make such an economy

possible. Under the present system, a bank is not concerned with the purpose of a loan, but only with the standing of the borrower; hence there is some truth in the assertion that under a system of private banking, the goods produced are not always those most socially desirable.

If the commercial banks were nationalised, credit would be rationed, not according to the security offered by the borrowers, but according to the needs of the State. Under private enterprise the consumer may not be a complete king, but he does decide, to a large extent, through his demand prices, which goods, and how much of each, shall be produced. Under State banking, the Government would have the power to make those decisions through credit rationing. We have now reached a very grave and controversial issue, and one that can be settled only by the test of experience.

8. Inflation and Deflation

Inflation, a term of which we have heard much in recent years, means a very sharp rise in prices due to an excess of money in circulation. In this country prices have risen considerably since 1939, except, of course, those prices that have been rigidly controlled by the Government; but it is not easy to estimate how much of this price rise has been due to monetary causes, and how much can be attributed to circumstances connected with the war. Examples of extreme inflation were the astronomical rise of prices that took place in Central European countries after the First World War. Something like that appears to have happened in Hungary in 1946.

The most extreme form of inflation occurs when a Government attempts to pay its debts by simply printing currency notes. When this procedure is followed, prices can rise without limits, and the value of the currency quickly falls to zero abroad.

A more moderate form of inflation takes place when a Government continues to spend more than its current income, and borrows from the Central Bank to make up the deficit, especially when the excess expenditure is on non-productive

objects, at any rate, so far as the consuming public is concerned.

Inflation, to some extent, can also arise through the actions of the workers themselves. If, during a time of great labour scarcity, the trade unions succeed in forcing up wages to a point at which business becomes unprofitable on the existing level of prices, prices must rise if production is to continue. But the higher prices provides justification for further wages demands, and a vicious circle begins.

It is only fair to add, however, that the vicious circle can also begin by wages chasing prices, and in many cases it is impossible to say which is cause, and which is effect.

The evils of violent inflation are very definite. In the first place business becomes disorganised; no business man can be certain what he will have to pay, and what value he will receive in the near future, as when prices on the average are rising rapidly particular prices do not rise evenly; hence, during a period of inflation, the relations between prices, or the price structure, continually changes with changes in the average price level.

Secondly, the value of the country's currency falls sharply in foreign countries, and that increases the difficulty of procuring the necessary imports, a fact which has adverse reactions on home production.

Thirdly, inflation redistributes the national income unfairly in respect of certain classes. People in receipt of incomes more or less fixed, that is to say incomes from pensions, annuities, investments in Government stock, and in some cases from land and house property lose heavily. People whose incomes are derived from business profits gain unfairly at the expense of the fixed income receivers, although, as has been noted above, all business men may not gain by inflation. People in receipt of salaries that are not easily changed also lose, and so do the wage earners on the whole, although wages are more easily adjusted to changing conditions than are salaries. The effect on wages will depend to some extent on the cause and on the degree of the inflation.

Deflation is the converse of inflation, and the experience of the years 1918 to 1925 suggests that after violent inflation

deflation is inevitable if the economy is to be restored to a workable condition, especially if the countries concerned are striving to return to the gold standard, as in that case they want the value of their currency abroad to make some approach to its pre-inflation level.

Violent deflation can be as painful as inflation. If the value of the currency is raised at home, or, in other words, if the price level is suddenly and sharply scaled down, all in receipt of fixed incomes will gain at the expense of the easily adjustable incomes, especially incomes from profits. Wage earners may lose more from deflation than from inflation. It is true that falling wages may be balanced by falling prices; indeed, those who can keep in work may gain as prices are likely to fall more sharply than wages in these days of highly organised labour; but deflation is likely to lead to widespread unemployment, partly because all a manufacturer's costs do not fall evenly and at the same time, and partly because when prices begin to fall buyers hold back in the hope of a further fall. Trade Union leaders dread deflation as much, if not more, than they fear inflation.

9. Monetary Policy and the Price Level

Inflation and deflation are serious evils, but gently rising or falling prices, over a long period, is a different matter, and the question is often raised—which is preferable in the public interest, a rising price level, a falling price level, or a price level that is kept stable by the Central Bank?

Most business men support a gently rising price level on the grounds that it is good for trade, and experience lends some support to this view. The real advantages can be easily exaggerated, but gently rising prices create a feeling of optimism in the business world. Profits seem to be assured; people are encouraged to invest their capital in the hope of "windfall" gains. Gloom and doubt disappear, and employment is maintained in the capital goods industries, and when the capital goods industries are prosperous, the consumer goods industries share in their prosperity. The workers lose to some extent as wages tend to lag behind prices, but they gain from greater prospects of employment. The danger of

a rising price level is that, by encouraging undesirable speculation, it will get out of hand and end in trade collapse.

Every one as a consumer, stands to gain from falling prices, but business men believe that they are bad for trade, and if prices are falling because of a scarcity of money, or a contraction of bank credit, their fears are not without reason. When selling prices are falling, business men find that their costs cannot be reduced proportionally, at least not in the immediate future, as certain costs such as rent, interest, and debenture charges, and even wages now that they are fixed by national agreements in so many cases, are regulated by long term contracts. Falling prices thus tend to make business unprofitable, and to create unemployment.

Another argument sometimes advanced is that falling prices increase the real burden of the public debt. When prices are falling, the value of money is increasing, so that debtors repay a greater real value than that which they borrowed. When prices are rising, the contrary is the case.

But it is sometimes overlooked that prices can and do fall because technical progress is reducing costs, and if technical progress lower costs in the same proportion as prices fall, the consumers gain without the producers suffering losses.

The third possibility, of course, is stable prices, a commodity price level kept stable by the action of the Central Bank. The advantages of a given quantity of money always purchasing a given basketful of goods seem very obvious, especially to those who have lived through a period of violent price fluctuations. Unfortunately, a stable price level is not without difficulties. As we have already seen, prices can fall because technical science is reducing costs, independently of any shortage of money, and technical progress is never uniform at any time over the whole field of industry. If the prices of goods are fixed, there is a danger of over production in those industries in which technical progress is very active. Stable production, therefore, would seem to demand the raising of wages, to offset the fall in costs, in those industries in which technical science is very active. The practical difficulty is that if wages are raised in those industries, there will be claims for higher wages in industries in which costs have not been reduced.

We all want to spread the fruits of technical progress as widely as possible, and theoretically, at least, we can do that in two ways. We can fix commodity prices, and raise wages as technical costs fall; or we can stabilise wages and allow commodity prices to fall with technical costs. Trade Unions seem to prefer rising wages for rising wages is a fact for which the unions can claim the credit. But the worker gains from rising wages only as long as he is in work; when he is out of work, and more important still, when he draws his retirement pension, he reaps the benefit from prices that are allowed to fall with technical improvements. It is true of course, that pensions can be raised with wages, but experience suggests that pensions are difficult to raise, except in abnormal circumstances.

CHAPTER XVII

THE MONEY AND CAPITAL MARKETS

1. The Meaning of a Money Market

The money market is a misleading term as it does not relate to a market in the usual sense, but to the financial activities of a number of institutions that are separate, and distinct, although their activities are closely connected. The term money is also used in a special sense. It does not refer to coins or notes but to short term credit, that is to say, to loans made for short periods only. When it is said in the money market that money is cheap or dear, what is meant is that short period loans can be obtained at low, or only at high, rates of interest.

When we use the expression money market, we refer primarily to the London Money Market, which was, down to 1914, the most important money market in the world. The London Money Market began to assume its present importance in the early years of the nineteenth century, owing to the enormous development of international trade which had to be financed by means of bills of exchange.

Until 1914, the primary business of the money market was the discounting of trade bills of exchange. Between 1914 and 1939, for various reasons, the volume of international trade dwindled considerably, and much of the money that formerly was invested in trade bills of exchange was invested in Treasury bills.

The present export drive, which will have to be maintained in the national interest, must have a favourable reaction on the money market, as the bill of exchange, although not the only method, is the cheapest method of financing international trade.

It cannot be too strongly emphasised, that the loans made in the money market are short period loans. Down to the present time, loans for long periods have been made mainly in a separate market known as the capital market.

2. The Importance of the Money Market

A money market is an invaluable institution in a country with an important foreign trade, as such trade must be financed, and the bill of exchange is the cheapest method, but the bill of exchange serves a useful purpose only when it can be discounted promptly and cheaply, and that is possible only when there is an organised money market. Without a money market, discounting would be a slow and uncertain process, and the price of bills would fluctuate widely from day to day, and from place to place. A market for bills is as necessary, and as useful, as a market for commodities and for the same reasons.

A money market also provides an outlet for the surplus funds of those who wish to invest them in such a way that their investments can be turned into cash without loss, practically on demand. A money market is thus extremely useful to the commercial banks, and other institutions and persons that wish to keep their assets liquid, but not idle.

The importance of the London Money Market in the nineteenth century was due to three causes. From 1816 to 1914, London was the only market in which there were no restrictions on the export of gold. A bill of exchange payable in London was thus equivalent to a payment in gold, and for that reason bills drawn on London developed into an international currency.

Secondly, down to 1914, England had the largest volume of foreign trade of any country in the world. After 1880, our supremacy was challenged by Germany and America, but until 1914, we held a predominant position with the result that, not only were there more bills drawn on London than on any other financial centre, but the London bill was preferred above all others.

Thirdly, English banking methods assisted the development of the London Money Market by providing the funds necessary for its working. English banks concentrated on deposit banking, not on industrial banking or the provision of long period capital to business firms. The money resources of the saving members of the public were concentrated in London, and were made available for investment in bills of exchange,

both directly, and through the bill brokers. The above factors, which were peculiar to London, explain the importance of the London Money Market in the pre-1914 years.

The institutions and individuals whose activities make up the money market are as follows: The Bank of England, the commercial banks, the accepting houses, the discount houses, and the bill brokers. Each of these institutions may now be examined in turn.

3. The Bank of England and the Money Market

The Bank of England was once described as the pivot of the London Money Market, and in a certain sense that is true even to-day, as the amount of business that can be done in any market depends on ruling prices, and in the money market the prices which govern transactions are the rates of discount, or interest. When the rates of discount are high, the seller of a bill receives less cash in exchange than he does when the rates are low, so that high rates check, and low rates stimulate, business in the market.

At one time the business of discounting was done mainly by the bill brokers who borrowed funds from various sources, but who, in times of financial stringency, were compelled to raise funds by re-discounting their bills at the Bank of England. When we were on the gold standard the Bank could not refuse to discount perfectly safe bills, but it had to keep a watchful eye on its gold reserves, and it protected itself by raising the official rate at which it was prepared to re-discount approved bills. When the Bank of England raised its Bank Rate, all the other lending institutions did the same.

As a general rule, any change in the Bank Rate was faithfully followed by the other institutions of the money market, collectively referred to by many writers as "Lombard Street," from the fact that the head offices of most financial institutions are situated there, but in the course of its experience the Bank of England evolved a special device for making its rate effective called open market operations, but this method has been examined elsewhere.

In these days the discount market is less dependent on the Bank of England, and the bill brokers have lost their monopoly

of discounting bills, as the commercial banks now discount for their customers, but the Bank of England, through its Bank Rate, still exercises a general supervision of the money market.

4. The Commercial Banks

The main, although not the only, source of funds available for investment in the money market is supplied by the commercial banks. Anyone with surplus funds can deposit them at one of the commercial banks, and these deposits are repayable either on demand, or at short notice. The banks must therefore hold considerable sums of ready cash with which to meet these demands. But, from the standpoint of a bank, money in the till or strong room is idle money earning no interest. The banks, therefore, developed the practice of keeping their holdings of cash at the minimum amount required for ordinary business, and of investing a large part of their remaining resources in such investments as could be turned into cash without loss at short notice.

The London Money Market, with its demand for funds provides an outlet for the resources of the banks in two ways. The banks can invest their resources in bills of exchange, which automatically become cash on the day of their maturity, and as the process of investment is a continuous one, a certain proportion of the bills held by a bank mature each day. Secondly, the banks can lend funds to the bill brokers, the discount houses, and to members of the Stock Exchange, for periods varying from day to day—call money—or weekly, fortnightly, or monthly, according to the needs of the borrowers. The commercial banks thus occupy an important position in the money market in several ways.

5. The Accepting Houses

The London Accepting Houses are a vital cog in the machinery of the money market. A bill of exchange is a credit instrument and no person or institution will advance money on a bill unless they have some guarantee that the bill will be met on the due date.

Whoever writes his name and the word "accepted" on a bill becomes liable, if necessary, for its payment, so that the ease with which a bill can be discounted depends mainly on the financial standing of the person who has accepted it.

The London Accepting Houses, the most important in the world, originated in most cases in the foreign trade activities of certain London merchants in the early nineteenth century. The accepting houses do not loan money; they merely lend their names to the bills of other persons for which service they are paid a commission.

Let us suppose, for example, that an Indian exporter of tea is going to make a large shipment to London, for which he will be paid in the first instance by a bill of exchange. To facilitate the transaction, the importer in London arranges with an accepting house to lend its name to the bill. When that has been done the bill is drawn and the exporter will discount it at his local bank, which in turn, will send the bill with the necessary shipping documents attached, to the accepting house in London, which retains these shipping documents either until the importer has paid over the amount specified on the bill, or has guaranteed to remit the funds before the date of the maturity of the bill. The commercial banks now accept bills for their customers.

Incidentally, it may be noted that acceptances in the import trade have made London an important centre for the holding of foreign balances. The bank in India, in the example above, would not necessarily withdraw the money when the bill was finally met; on the contrary, it is more likely to leave it in London where it would be available for investment.

The acceptance of bills is a less risky business than at first sight may be supposed. The houses are able to obtain full information on the financial standing of their customers in various ways. Most of them have connections with similar houses in all the important financial centres, as well as correspondents in all parts of the world.

6. The Bill Brokers

Bill brokers, who at one time did most of the discount business of the market, are of two classes, the "running"

broker, who is really an agent, and the broker proper, who acts as a principal in all his dealings.

The "running" broker visits the banks in turn to ascertain the types of bills that some banks are willing to buy, and those that other banks are willing to sell. Bills enter the London market from all parts of the world, and are of various kinds, both in respect of their standing, and value, and the length of the time before they mature. Banks, therefore, are usually willing to dispose of some bills, and to take up others, and the "running" broker brings these two aspects of the market together. As a rule, the "running" broker has little capital, so that the bills he buys he must sell again at a small profit.

The broker proper acts as a principal, and not as an agent. He buys the bills from the merchants, and also from the "running" brokers, and sometimes he keeps them until they mature, and sometimes he re-discounts them with the commercial banks. In the latter case he usually gives an undertaking to the banks that he will recompense them for any bills that are not met.

7. The Discount Houses

Much of the work of discounting has now passed from the bill brokers into the hands of large institutions called the discount houses.

The discount houses discount bills partly with their own capital, but more often with money borrowed for short periods from the commercial banks.

It may perhaps be wondered why the banks, now that they do a large amount of discounting, do not undertake the whole of that business instead of financing other institutions. The discount houses, however, are an advantage to the commercial banks in various ways. By lending to a discount house, instead of buying bills, a bank shifts some of the risks of loss to the discount house.

Secondly, the banks are relieved from a large amount of specialised work. Bill discounting demands a specialised and varied knowledge and experience, and institutions that possess that knowledge and experience relieve the banks of considerable labour. Bills of exchange, too, fluctuate in

value with changes in the supply of, and demand for, bills, and any loss from that source falls on the discount houses.

The discount houses form a connecting link between the commercial banks and the Bank of England. In times of financial stringency, when a commercial bank wishes to increase its cash reserves, it calls in its loans to the discount houses, and these houses, in turn, most borrow as a last resort, from the Bank of England by re-discounting their bills there.

In the interval between the two world wars the London discount houses experienced bad times, for, as has already been noted, the great decline in the volume of international trade led to a corresponding decline in the number of foreign trade bills offered for discount. The great increase in the quantity of Treasury Bills on the market offered some compensation, but this business, which does not require special knowledge is open to the competition of the commercial banks.

8. Rates of Discount

Strictly speaking, there is not one money market but a series of markets; loans are made for varying periods, and each of these periods corresponds to a separate market.

In each of these markets there is a rate of discount peculiar to that market, and, as a general rule, these interest rates are governed by the length of the period of the loans. A loan made for a period of three months will be made at a higher rate of interest than a loan made for one month, and a fortnightly loan will command a higher rate of interest than a loan made for a day.

The reason for that is that one factor determining the rate of interest is the degree of risk attached to a loan, and, other things being equal, the degree of risk varies with the time of the loan. The longer the period the greater is the risk that the loan will not be repaid on the appointed day.

The time factor is not the only determining one. The rate of interest also depends on the value of the security offered. A bill of exchange accepted by a well-known accepting house, or a bank, can be discounted at a much lower rate than would be the case if there were any doubt about its security.

The rate of interest is also influenced by the fact that the supply of funds, and the demand for loans in the different sections of the market is not uniform. A bank, for example, wishes to arrange its assets in a certain order of liquidity, and for that purpose, it may, at a particular time, have a preference for day to day, instead of for three months' loans, and if the bank is a large dealer in the market, its preferences will have an influence on the rates of interest. In any market, a sudden increase of buying or selling will have some influence on prices.

9. The Capital Market and its Institutions

The capital market is the market for long period loans; it must be clearly distinguished, therefore, from the money market, as it serves a different purpose.

The capital market has two distinct sections, the market for new capital, or new securities, and the market for existing securities, that is to say, the Stock Exchanges.

Both aspects of the capital market, like the money market, developed in answer to a felt need, and, as long as private enterprise functions at all widely, they are necessary institutions, as provision must always be made for the raising of new capital, and for the transfer of existing securities.

The new capital market first became important during the canal and railway construction age, as the amount of capital required was so great that a very large number of subscribers was necessary, but the main impetus to its development was given by the Limited Liability Act of 1862, in which the modern joint stock company was born. As long as the business unit remained small, its capital could be provided by a single proprietor, or by several partners; but with the growth in the size of the business unit in the second half of the nineteenth century, it became necessary to appeal to wide sections of the saving public in order to raise funds. The passing of the Limited Liability Acts, by limiting the liability of the shareholder to the nominal amount of his shares, made it possible for business enterprises to "tap" a very wide circle of small savings. The connection between the market for new capital and the Stock Exchanges is very close, as they

provide a means by which capital invested in shares can be liquidated when desired. Without the Stock Exchanges, the raising of large amounts of new business capital, would, in many cases, have been impossible.

As we have already seen, a capital market is not the only means by which industry can be financed. Joint stock companies now provide much of the capital required for extensions out of their own savings, that is to say, out of undistributed profits, and it is possible that some of the work of the market for new capital will be gradually taken over by the commercial banks.

The capital market as a whole has three main functions. It provides the capital for new undertakings; it provides the capital necessary for the expansion and development of existing businesses, and it provides facilities for the transfer of long term securities from hand to hand.

The institutions of the capital market include the company promoting institutions and the issuing houses, the underwriters, the investment trusts and the finance companies.

10. Company Promoting, and the Issuing Houses

New capital issues, like a great many other things, are now controlled by the Government, and it is no longer possible, as in the nineteenth century, to raise funds in the capital market for any and every purpose; but within these limits, a company promoter is an independent financier who usually buys up a business, and forms a company, selling the shares at a profit to the public. When the owner of a business seeks to turn it into a limited company he becomes a company promoter if he initiates the operation himself, and so do the directors of a company registered for that purpose.

The shares can be offered to the public in various ways the most important of which is through an issuing house—many of the leading accepting houses also act as issuing houses.

The function of an issuing house is to offer such securities to the public as will satisfy its demand for investment facilities, and to assist the flow of capital into these securities.

In many cases the house buys the securities that are issued, and sells them to the public at a profit; and no issuing house

of standing will issue shares in a new concern until it has made a thorough examination of the assets and prospects of the company.

An issue of shares is an expensive business, and if the issue fails the promoters or the issuing house may be involved in heavy losses. To protect themselves, therefore, they pass this risk over to underwriters, who, before the shares are placed on the market, agree, for a commission, to take up all the shares not applied for by the public. Such shares as are left with the underwriters are placed on the market later, and gradually disposed of to the public. By this method, the promoters obtain the capital required, less the commission paid to the underwriters, at the outset.

11. Investment Trusts

An investment trust is a company which raises capital for the purpose of investing it in such a way as to yield the maximum of income with the minimum of risk, and the risk is minimised by spreading the investments over a wide circle. The promoters of these trusts are specialists in investment, and they operate scientifically on the market.

These trusts are a great advantage to the small investor who has not, as a rule, the knowledge necessary for the safe disposal of his capital. At the same time, the average costs of administration of these trusts is low. Investment trusts are an advantage, not only to the small saver, but also to industry, as they are one of the channels through which, in the aggregate, a large amount of small savings trickles into industry. Not all of these trusts, however, invest their capital in industrial shares; some of them confine their investments to "gilt-edged," that is to say, absolutely safe securities, such as Government, and municipal corporation stock, and bank shares.

12. Stock Exchanges

A stock exchange is primarily a market for the transfer of existing securities; its function thus differs from that of the institutions described above, which is that of raising new capital. The dividing line, however, between a new and an

old security is not rigid; as soon as a security is issued it becomes available for transfer and thus passes into the category of old, or existing securities.

Although the term stock exchange has a sinister sound in many ears, it is an indispensable institution in every industrialised community, especially where production is in the hands of private enterprise. The London Stock Exchange developed in the eighteenth century with the growth of the National Debt, and grew in importance with the coming of the canal, and the railway, but the greatest impetus to its development was the Limited Liability Act of 1862, which resulted in the modern joint stock company.

The main reason for the growth of stock exchanges is that company shares, and in many cases debentures and Government consolidated stock, are not redeemable; other Government loans, and all municipal corporation stock, are redeemable only after a long term of years. Few people, however, wish to lock up their capital permanently, so that without some device by which securities can be turned into cash when required, investment would have been greatly restricted. It is true, of course, that such securities may be sold at a loss, but there is an equal chance of a "windfall gain" if the investor can choose the time of selling. The fact that a security can always be sold on the stock exchange with the chance of a "windfall gain" greatly assists a company trying to raise new capital.

A stock exchange also assists investment in exactly the same way as a commodity market promotes buying and selling. Without an organised capital market, the price of any class of security would vary widely from place to place—on any particular day, the shares of a given company, would sell at one price in London and at another in York. Stock exchanges make possible a standard price for each class of security all over the country, and beyond. A stock exchange is also a protection to the investor in two ways. In the first place it will not allow doubtful securities to be included in its quotations, and secondly, its prices are the considered opinions of experts. The London Stock Exchange has been aptly described as "the barometer of the financial world."

The term stock exchange suggests a single institution, the London Stock Exchange, and that institution is one of the most important exchanges in the world, but there is a stock exchange in the capital of every country of importance, and a minor one in most of the chief provincial financial centres, *e.g.*—Birmingham, Manchester, etc.

These stock exchanges are separate institutions; each has no direct control over the working of the others, but as each is an element in a national, and on international markets, any important operation on one exchange finds echo, sooner or later, over the whole world.

When we use the term Stock Exchange most of us think of the London Stock Exchange; it is necessary, therefore, to examine the working of that institution in some detail.

13. The Constitution of the London Stock Exchange

The London Stock Exchange is an institution of long standing, although in its present form it is comparatively modern, having been reorganised in 1886.

In some respects the Exchange resembles a club, as membership is by election only, and all members, including the committee of management, have to seek re-election in the March of each year. By this means, a strict control over membership is maintained, and no person of doubtful reputation is likely to remain a member long. During the year, too, any member of the Exchange may be liable to expulsion by the committee of management for conduct prejudicial to the good name of the Exchange. The committee of management is elected annually in such a way that no important interest in the Exchange is unduly represented.

The members of the London Stock Exchange are divided into two classes, the brokers, and the jobbers. A broker is an agent of a buyer, or a seller, of shares, and he may act for another member, including a jobber, as well as for any outside investor.

Any person who has shares to sell, or who has capital which he wishes to invest in shares through the London Stock Exchange, must sell, or buy, through a broker.

A jobber is not an agent; he is a trader in securities which he buys from, or sells to the brokers, and like an ordinary trader, he will take orders for securities which he has not in stock at the moment. The London jobbers cannot do business directly with the public, but only through those brokers who are members of the London Stock Exchange.

14. The Business of the London Stock Exchange

A security is simply a document representing a title to property in the wide sense—the title deeds of houses and land are securities, but we are only concerned here with shares, and loans. Securities are sometimes classified as “gilt-edged” or trustee, and ordinary securities. A gilt-edged, or trustee, security is one of a class in which trust money can be invested without any legal liability on the part of the trustee should the investment fail. British and Dominion Government stocks, and municipal corporation stocks are the most familiar, but not the only examples, of “gilt-edged” securities.

The securities bought and sold on the London Stock Exchange are thus of two classes. In the first class are the loans issued by the various public bodies, Government and municipal corporations in England and overseas, and in the second class are the different kinds of shares of the limited liability companies.

The Government and the incorporated public bodies borrow large amounts from the investing public, and in many cases, the debts are acknowledged by some form of document. When these documents are negotiable instruments, that is to say, when they can be passed from hand to hand like currency notes, they are called bearer certificates, and their possession is a legal proof of ownership. When securities are not negotiable they are registered by the granting of a certificate to their owner. Such securities are registered securities, and when they are sold the certificate of registration must be surrendered, and a new one issued. Where no documentary evidence of a debt is issued to the lender, the securities are said to be inscribed, which means that the name of the owner is inscribed in the books of the bank acting as

registrar of the stock. Many British and colonial government securities are inscribed stock, and the words bearer, registered, and inscribed, are familiar financial newspaper terms.

Under the Foreign Exchange Control Bill, 1946, British bearer securities must be lodged with an approved bank chosen by the owner of the security. The ownership of such securities will not be affected and the bank will collect dividends, etc., for the owner, but the document title will not pass out of the keeping of the bank, whatever may be the changes of ownership, until it is finally presented for redemption. The intention of this is to provide a safeguard against a transfer of British-owned securities to foreign ownership, save in approved transactions, and for value received.

The different kinds of limited company shares have already been noted, and all such shares may be bought and sold on the London Stock Exchange.

Each day the London Stock Exchange issues its official list of prices of the different securities. This list circulates among the members of the Exchange, and in the case of public securities the Exchange will not quote a price for the securities of any State which has defaulted in the payment of interest. In respect of an industrial company an official quotation will not be given unless the number of shares in the concern are relatively large, and unless the shares have been publicly advertised, and at least two-thirds of them have been allotted to the public.

Not all the business transacted on the Exchange is done in shares that are on the official list, and there is nothing in the rules of the Exchange to prevent members dealing in shares that are not on the official list, but as a rule securities on the official list are most easily marketed.

15. The Buying and Selling of Shares

Let us suppose that John Doe wishes to buy certain shares. He can do this only through a broker who may refuse, or accept, the order at his discretion. If the broker accepts the order he at once incurs certain legal obligations. In the first place he becomes liable to a jobber for any contract entered into on behalf of John Doe. Secondly, although he is not

legally liable to John Doe for any default or failure of the jobber to carry out his contract, it is a Stock Exchange convention that the broker must assume such liability, and any broker who failed to do so would not be re-elected a member of the Exchange at the following annual election. For the above reason only men of approved financial standing are elected members of the London Stock Exchange.

The broker, having agreed to act as agent to John Doe, then goes to that part of the Stock Exchange where the jobbers meet who deal in the class of security he desires to purchase. Having met a jobber, the broker asks for a quotation, and the jobber quotes him a double price—the price at which he is willing to sell, and the price at which he is prepared to buy a reasonable amount of securities, and the quotation must be accepted, or rejected, at once. It is not possible in practice for a broker to visit several jobbers before making a decision.

If a jobber makes an agreement it is binding, and as he does not always hold the securities he has contracted to sell, he has often to buy them himself, and sometimes at a loss.

The contract between the broker and jobber is recorded in pencil in a little book carried by each, which is called a bargain book, and all agreements are checked by the clerks of the broker and the jobber on the following day. If any disputes which may arise cannot be settled by the parties concerned they are referred to the management committee whose decisions are binding.

Although business between the broker and jobber is conducted in a very informal manner, this is not the case with the broker and his client. These parties make contracts on paper which are signed and stamped and can be enforced in the Law Courts.

16. Stock Exchange Settlements

Before the war settlements between members of the London Stock Exchange were not made with each transaction but on periodical settlement days, usually fortnightly. The settlement lasted four days. The first day was known as *contango* day; on the second and third days the receipts for the delivery of the securities were collected, and the necessary documents

were prepared; and on the fourth day the contracts were completed. In the case of registered stock the jobber gave the broker a certificate of transfer, which he presented for registration, and then sent the certificates to the purchaser. If the stock was inscribed the broker and the jobber went to the Bank of England where the transfer was registered in the name of the purchaser.

The broker did not hand over any securities to the purchaser until he had received the money for them, and the normal procedure was for the investor to pay the broker in advance, so that the latter could meet the claims of his jobber on the appointed day.

Settlement on the appointed days was not always practicable, so one of the parties concerned had to ask that the settlement be carried over until a later date. This was called *contango* settlement.

A carry over was necessary for various reasons. John Doe bought shares in the belief that he would be able to pay for them on the due date, but when settlement day arrived, payment was impossible. Richard Roe was anxious to buy shares in the belief that their value would rise in the near future, but had not the money to pay for them for several weeks.

Technical reasons sometimes prevented a settlement on the appointed day—it was impossible to get the necessary signatures in time. The carry over was often necessary, too, from the side of the jobber who had contracted to deliver certain shares, but for some reason was unable to do so.

The method of the carry over was roughly as follows:—Let us suppose that John Doe had bought from his broker shares for which he could not pay on the appointed day. The broker, therefore, had to find someone who would advance the money with which he must pay the jobber, and interest had to be paid on this loan. The broker, therefore, charged Doe with a payment high enough to cover interest charges, and to compensate himself for the risk and trouble of the transaction. These charges were called *contango* payments, or more briefly, *contango*.

On the other side, if Doe had paid over his purchase price, and the broker had been unable to obtain the securities, he borrowed the stock from some other member, and deposited their purchase price as security, until such times as he could buy the necessary stock. When he obtained the equivalent of the stock borrowed, he received back the money deposited, but he had to pay the lender a commission on the transaction. The technical term for this commission was backardation.

The outbreak of the war did not affect the routine procedure of the transfer of stocks and shares, but the fortnightly settlements, including the system of carry over noted above, were suspended and replaced by daily cash settlements. The Stock Exchange has recently restored the pre-war system of fortnightly settlements of bargains done with one important exception. The contango system under which speculators could carry over bargains from one settlement day to the next has not been re-introduced, and in this way speculating on the floor of the Exchange with borrowed money will be made more difficult than it was in pre-war years.

17. Speculation on the Stock Exchange

Stock Exchange speculation has a sinister sound, but the dividing line between legitimate speculation and pure gambling is not always easy to draw. Both the speculator, and the gambler hope to make money from price changes, but the speculator is usually defined as one who operates on the market with specialist knowledge, whilst the gambler is supposed to work blindly. A speculator, however, may easily become a gambler.

Similarly, the difference between speculation and investment is not rigid. An investment is a purchase of shares in order to obtain an income; in a true investment the shares are bought to hold more or less permanently. A speculation, on the other hand, is a purchase of shares not primarily to obtain an income, but in the hope of re-selling at a higher price. Any investor, however, may be a speculator to some extent.

Another point to note in connection with speculation is this. The declared rate of dividend on an investment is not the same thing as the rate of yield. This is very clear in the case

of fixed income stock or bonds. If they are issued at 5 per cent., the annual income on each £100 certificate is £5, and that can be regarded as the declared rate of dividend. The actual rate of interest, or yield, on the investment will be 5 per cent. only when the purchase price of a certificate is £100. If the stock or bonds can be bought for less than their face or nominal value, the rate of yield is higher than the issued rate of interest.

Similarly, in the case of company shares, the declared rate of dividend is based on the nominal value of the stock; the rate of yield of a share varies with its purchase price. For any investor, the declared rate of dividend and the rate of yield are identical only when the investor has bought his shares at their face value.

Speculators on the Stock Exchange are grouped into two classes, the "bulls," and the "bears," and both sections usually enter the market without any intention of completing transactions in the sense of handing over, or of receiving securities. Their object is to buy or to sell at a profit securities which they believe will rise or fall in price, and with that end in view they seek to manipulate the market.

The operations of the "bears," who contract to sell securities which they do not possess tend to force down prices by apparently increasing the supply of securities. The operations of the "bulls," who contract to buy more securities than they can pay for, work in the opposite direction.

On settlement days, the securities bought and sold are not handed over, but the credits and debits are calculated, and the differences only are paid.

Differences are paid over as follows:—Let us suppose that John Doe sells to Richard Roe Government stock of face value of £100, for £92, and that on the day of settlement, the stock has fallen to £91½. In that case, Roe has lost on the deal as if Doe bought the stock and handed it over to Roe, he would make a profit of five shillings. As Roe does not want the stock, he merely pays over the difference in price to Doe.

Conversely, if, on the day of settlement, the stock has risen to £92½, Doe must pay over to Roe the difference of five

shillings. Where the amount of stock involved is large, these differences may be a considerable sum.

“Bull” and “Bear” transactions have been sharply criticised; on the other hand, it is argued that they help to smooth out violent price fluctuations. Let us suppose that shares in a company are rising in value, but that the “bears” expect them to fall sharply in the near future. The “bears” begin to sell, and their sales check the rise, and they may even bring forward the anticipated fall. When prices fall, the “bears” buy back the shares at the lower prices, and these purchases arrest the fall. “Bull” and “Bear” operations probably confine the fluctuations of Stock Exchange prices within narrower limits than would be the case if these operations were prohibited. Any individual may be a “bull” on one occasion, and a “bear” on another.

CHAPTER XVIII

INTERNATIONAL TRADE AND THE BALANCE OF PAYMENTS

1. Why International Trade Takes Place

Trade between different countries is as natural, and originates from exactly the same causes, as trade between different parts of the same country. Oil, coal, and gold for example, are found in certain localities only; products such as tea, coffee, cotton, and rubber, can be grown without artificial aids only in certain climatic conditions. Many manufactured goods can be produced much more cheaply in one place than in another, and that leads to specialisation and localisation of industry. International trade, therefore, leads to the relatively scarce production resources of the world being used to their maximum advantage.

Most countries have some trade with other countries. England imports foodstuffs, and raw materials, from all parts of the world, and exports her manufactured goods to a large number of countries, and in this, and the following chapters, we shall briefly examine some of the problems which arise in the course of trade between countries.

All countries do not benefit equally from international trade, but all derive some gain; trade between countries is never wholly one-sided. It follows from what has been said above that, through international trade, a country obtains raw materials, and foodstuffs that it cannot produce itself, and other goods more cheaply than it could produce them at home. Without international trade a small highly industrialised country like England would be unable to enjoy the full advantages of large scale production, as the home market alone would not absorb a sufficiently large output. International trade, then, gives to most countries, if not to all, a higher standard of living than would otherwise be possible.

Trade between England and America does not differ fundamentally from trade between London and Glasgow, but

there are certain differences, some of which are important, between the conditions of trade between countries, and those of trade between different parts of the same country.

Trade between different parts of the same country is not subjected to duties, but there is now little, if any, free trade between countries. Secondly, transport costs may be a more serious item in foreign than in domestic trade. Thirdly, most means of production move less freely between countries than they do between different parts of the same country. Finally, and this is perhaps the most important point of all, different countries have different currency systems, and in consequence, problems of currency exchange arise in international trade.

2. Comparative Costs

The answer usually given to the question as to what determines the lines of trade between any two countries is that such trade is determined by comparative costs. The principle of comparative costs, which is not peculiar to foreign trade as was at one time supposed, is quite simple. Consider, for example, a doctor whose working day is fully employed with his patients, and who is at the same time a good gardener. Clearly, it would not be profitable for him to withdraw himself from his practice for two hours each day in order to cultivate his garden. The most profitable course for him to follow is to devote the whole of his working day to his patients, and to hire a man to cultivate his garden.

Similarly, in international trade, a country has only a limited quantity of the means of production. These can be distributed between many forms of production, but it follows from what has been said above that the most profitable course to follow is to concentrate those means of production on lines in which the country has some special advantage, even if that means importing goods it could produce at home. To take an extreme case, it would be very absurd in this country to shift capital and labour from the production of cotton goods, and coal, in order to produce oranges under glass, but there are many cases in which the absurdity is less obvious. On the principle of comparative costs, which is only another way of

saying that a country should specialise in the line, or lines of production, which it can produce most cheaply, it is often sound business to import articles which can be produced even more cheaply at home. A greater loss would be incurred by shifting capital and labour to a less profitable line of production.

The principle of comparative costs can be illustrated concretely as follows: let us take, for example, two countries, *Y* and *Z*, under conditions of free marketing, and wheat and cloth as two commodities in which they trade. Now if we assume that *Z* produces wheat at 10s. a bushel and cloth at 5s. a yard, and that *Y* produces wheat at 20s. per bushel and cloth at 10s. a yard, it will be observed that *Z* possesses an advantage in both these commodities. But in both instances the advantage is the same, the ratios (1 to 2) between the costs of production are identical or, in other words, comparative costs are equal, therefore, though it is possible that a small trade may arise it will not last long. There can be no permanent trade between *Y* and *Z*, because *Z* with its lower costs of production will export both wheat and cloth to *Y*, and, sooner or later, as a result of the influx of money into *Z* prices will begin to rise in this country and fall in *Y* until ultimately the costs of production of wheat and cloth in both countries will be equal.

But if, in the first instance, the ratios between the costs of production of wheat and cloth are not equal, then a permanent trade will arise between *Y* and *Z*. If, for example, *Z* produces wheat at 10s. a bushel and cloth at 5s. a yard, *Y* produces wheat at 18s. a bushel and cloth at 7s. a yard comparative costs differ, and *Z* possessing an advantage in both commodities will immediately commence to export wheat and cloth. Here again the result will be that, as the exports of both commodities from *Z* increase and the transference of money from *Y* to *Z* continues, the cost of production of both wheat and cloth will gradually increase in *Z* and decrease in *Y* until wheat will cost, say, 12s. a bushel in *Z* and 16s. in *Y*, and cloth 6s. a yard in both countries. Therefore cost of producing cloth being now equal in both countries, and *Z* still having a lower cost of production in wheat, *Z* will commence to concentrate on the export of wheat, a concentration which will

result in the trade in wheat between the two countries becoming permanent. Y, on the other hand, will gradually reduce its production of wheat and become more and more dependent on Z for its supplies.

A qualification, however, is necessary. The principle of comparative costs assumes that all means of production are fully employed. If there are unused resources, it may be a sound policy to employ them producing goods that can be imported a little more cheaply. It should also be noted that comparative costs do not remain constant for all outputs. Suppose, for example, that the cotton export industry is expanded up to the point of diminishing returns, average costs will begin to rise, and it will become profitable to transfer some capital and labour from the cotton industry to some other export industry, if such transfers are possible.

It should be understood, however, that comparative costs only determine the general channels of international trade. In any short period of time actual trade is governed by money costs, and money costs may diverge from real comparative costs through the influence of the foreign exchanges, and of Government trade policies.

3. Free Trade

As a general principle, the argument for free trade is almost unanswerable, at any rate so far as the argument is confined to economic grounds only. Free trade assumes the world to be an economic unit, and that its economic resources are scarce in relation to the desires and needs of the inhabitants.

Under free trade, the principle of comparative costs would function almost unimpeded, for as goods would sell at a world price, allowing for costs of transport, every form of production would be forced on to sites of minimum average costs. Under free competition the selling price of goods tends to equal their costs of production, so that if an industry tried to develop in a place where its average production costs were higher than world selling prices, the firms composing it would be quickly driven out of business, unless, of course, they were subsidised by their Government.

Free trade would not make all countries rich. The wealth of any country would still be largely determined by its natural resources, but in the abstract, the world as a whole would enjoy a higher standard of living. The world would gain from specialisation as much as the individuals now do in any particular country.

The question may now be asked, how is it that free trade does not rule the world? Why have all countries, including Great Britain, turned to protection? The answer opens up a wide subject of which we can touch only the fringe.

In the first place, in the nineteenth century free trade created a very unstable world, as the terms of trade were continually changing through unforeseen circumstances. Let us suppose that Smith and Jones each have a garden, that both men like apples and pears equally, and that Smith can grow apples but not pears, and that Jones can grow only pears. We can further suppose that in both gardens the fruit is grown without any trouble or expense. On these assumptions we can say that the terms of trade between Smith and Jones will be that an apple will exchange for a pear.

But such terms of trade may not continue indefinitely. Smith may lose some of his fancy for pears and acquire a taste for oranges. If, therefore, Jones desires the same number of apples as before, and Smith has the only supply he will have to tempt Smith by offering more than one pear for an apple, or alternatively, by exchanging pears for oranges and then oranges for apples with Smith, on terms that may mean that he is really offering several pears for each apple.

Something like this may happen at any time in foreign trade. England and France may be exchanging cotton goods against wine on terms determined in the first instance by comparative costs. After a time, for various reasons, France's intensity of demand for cotton goods may diminish in which case England may have to offer more cotton goods than before to obtain a given quantity of wine. The cotton export trade with France may thus become unprofitable, and if a new market cannot be found, there will be unemployment, and wastage of capital in the cotton trade.

Changes in the terms of trade take place in various ways—changes in tastes and habits and changes in the population in the importing country; changes in technical efficiency in the importing country may make it profitable for the importing country to produce at home a part of the supply which it had previously purchased abroad. Similarly, improved technical efficiency in a third country may bring in a new competitor. In the nineteenth century changes in the terms of trade were largely offset by the fact that the world economy was in rapid development, and new markets were continually being opened up. The great expansion period is now over, and new markets can no longer be easily exchanged for old.

A second difficulty in connection with free trade is that under complete free trade, in accordance with the principle of comparative costs, certain countries will specialise in manufactures, and others will be countries producing raw materials only. But the demand for raw materials, and especially for foodstuffs, is much less elastic than the average demand for manufactured goods. A series of “bumper” harvests, or technical improvements that greatly expand output, may alter the terms of trade greatly to the disadvantage of the countries producing raw materials. On the other hand, harvests are always liable to suffer from unfavourable weather and insect pests. Fluctuations in prices and their attendant evils are much more pronounced in the countries producing raw materials than in the manufacturing areas, and for that reason most of the countries which, in the nineteenth century, were purely producers of raw materials have developed manufacturing industries.

Thirdly, under complete free trade, it is difficult for a single country to isolate itself from world currents; a depression starting in one country tends to become world wide. Many people argue that, now that the world has been practically developed, it is impossible for any single country to implement a policy of full employment under free trade.

Finally, it is held that complete free trade demands a world of countries with some approach to a uniform standard of life, otherwise, countries with a high standard of living will be faced with a competition impossible to meet.

These difficulties, although real, are not impossible at least to mitigate. Free trade developed in the nineteenth century at a time when it was generally accepted, especially in this country, that the economic functions of the State should be limited to the maintenance of order at home, and to protection from aggression from abroad.

But free trade need not mean that the State must play no part in industry, and trade. If, in the nineteenth century Governments had assisted capital and labour to move without loss, whenever they became redundant in one industry, to industries that were in process of expansion, tariff history since 1890 might have been very different. In the nineteenth century, too, economic co-operation between nations was non-existent.

4. Protection

Protection is argued on many grounds, sometimes in general terms, and sometimes with reference to a particular aspect of economic life. It has been often argued, especially since the first World War, that our goal should be economic self-sufficiency. Arguments of this kind have weight, of course, but they rest on political and not on economic grounds.

A much older general argument is that known as the cultural argument. Briefly, this argument does not deny the economic advantages of free trade, but claims that we pay too high a price in over-specialisation. An over-specialised country is as undesirable as an over-specialised individual; the State, therefore, should regulate economic activity with the object of maintaining a just balance between manufacturers and agriculture, and that balance is impossible under free trade. This argument cannot be lightly dismissed. It has been used in England as a reason for protecting agriculture, and in some countries to justify the protection of manufactures, although as has already been noted, the argument for developing manufactures in the raw materials producing countries has been mainly economic and not cultural.

It is true, of course, that under nineteenth century free trade the English country side languished, but for the country as a whole, the concentration on manufactures was a sound business proposition. The economic evils of the nineteenth

century were a problem of distribution, not of production. The concentration of the population on the coalfields, the over-crowding and the slums were due to some extent to the fact that transport development lagged behind industrial development. Industry can now be diffused, and the population spread, as well under free trade as under protection. How far a country gains a better mental balance from apportioning its energies between agriculture and industry is difficult to determine, and in any case the main grounds of the cultural argument are social rather than economic. The main arguments for tariffs, however, are based on particular aspects of our economic life.

In the first place it is sometimes argued that, by means of a tariff, we can change the terms of trade in our favour; in other words, we can make the foreigner pay the duty, and in certain circumstances that is true, at least for a time. Let us suppose that England is the only possible market for Argentine wheat, an import duty on Argentine wheat would be paid by the Argentine exporters, and the burden would be shared between them and the Argentine farmers, but the burden of the tax would remain with the foreigners only if they had no alternative markets, no alternative uses for their land, and if wheat production were still possible at a profit. Such conditions are rare, except perhaps in a short period, and in any case this exercise of monopoly buying power runs counter to the spirit of the age.

Secondly, it is argued that if a number of countries adopt protection, the other countries must abandon free trade, but the argument is unsound. If France imposes a tariff on all imports from Britain, British export trade is injured, but the imposition by Britain of a duty on all imports from France would not improve matters, as the volume of trade between the two countries would be still further reduced. Some people argue that in the above case a retaliatory tariff by Britain would provide us with a good bargaining weapon. Experience however, does not suggest that tariffs are very successful in forcing nations to lower their trade barriers. If France, in the example above, thought that England was going to impose a tariff in order to force her to bargain with England she would

be likely to raise her duties still higher so as, at the moment of bargaining, to be able to pretend that she was making concessions.

Thirdly, protectionists have argued that tariffs are necessary to protect the standard of living in a high wage country against the competition of the low wage countries of the East. This argument was very popular in this country between 1920 and 1930, when the cotton trade of Lancashire was being challenged in the Eastern markets by Japan.

But tariffs imposed by England against Japan had no power to keep Japanese goods out of the Chinese market, or any other market of a neutral country; and it is easy to show that it is impossible for England to be undersold in her home market in all lines at the same time. No country can permanently buy without selling; imports must be paid for, and if they are not paid for in goods, they must be paid for by transfers of gold or currency. If the countries were on a gold standard, transfers of gold would lower prices in England and raise them in Japan. Similarly, on independent currency standards, if English currency were offered for Japanese currency on the foreign exchanges the lack of demand for English currency would so depreciate its value that in effect, the prices of English goods to the Japanese importers would be reduced and England would be able to export some goods at least.

Currency movements of this kind, however, would not take place to any marked extent for two reasons. In the example above Japan might have no use for English currency, and in any case the fall in its value in Japan would raise the prices of all goods imported into England. Purely one-sided trade between two countries would quickly create impossible conditions in a world of tariff restrictions.

The relation between exports and imports in international trade was brought into high light in 1946 by the problem of our payments balance with America. Cigarettes, and other imports from America were in short supply because we were not exporting sufficient goods to pay for all our requirements and, but for the American loan, imports from the United States would have had to be drastically curtailed.

Under a complete system of free trade international trade tends to follow multi-lateral lines in which case visible imports and exports between any two countries need not balance. Imports from America into England may be paid for by the proceeds of exports from England to, say, Brazil, but we shall return to this point in connection with the foreign exchanges.

Apart from the above, if high wages are related to high efficiency, high wages do not mean high labour costs per unit of output; and, moreover, wages are only one item in total costs; high wages can be offset by high technical efficiency. Again trade between two countries, unlike competition between two competitors in a neutral market is in complementary, rather than in competitive goods, so that there is no reason why wages should be equalised before trade can take place. Before the war, trade was possible between United States and Italy, although wages were much higher in America than they were in Italy.

5. Tariffs as a Means for Curing Unemployment

The most widespread of all the arguments for protection is that it can cure unemployment, and this argument was the corner stone of the Chamberlain campaign in the early years of the present century, for it was easy to argue with some show of plausibility that, if the prices of foreign imported goods were raised, there would be an increased demand for home products, and in consequence less unemployment.

As far as a single industry is concerned the argument is not without truth provided that prices in the protected industry do not rise. If they do, the demand for its products is likely to fall away, unless the demand for other things is curtailed, in which case a reduction of unemployment in one industry will be offset by an increase of unemployment in some other industry. Apart from that, if we buy less from the foreigner, we may reduce his power to buy from us so that the gain to any particular trade may be offset by a loss to the community as a whole. Indeed, as the protection granted to one industry is invariably extended in an ever widening circle, the final

result is likely to be a smaller total volume of imports, gradually followed by a smaller total volume of exports.

One point in this argument of which much was heard between 1903 and 1914, is that tariffs can at least prevent unemployment due to "dumping."

"Dumping" means exporting goods abroad at prices below their costs of production in the importing country under the most favourable conditions, and it usually originates as follows:—In some lines of production the costs per unit are very low if a large output is produced, but if the whole of that output is placed on the home and on the usual export markets, a large reduction of selling prices may be necessary. It may be more profitable, therefore, to restrict the supply in the regular markets, and to "dump" the surplus in some other country at a price at which the producers in that country cannot possibly compete.

Forty years ago the tariff reformers argued that unemployment in the iron and steel trades was being caused by the steel trusts and kartels of the United States and Germany dumping their products over here at cut-throat prices. The free traders were not slow to point out that the "dumping" of raw materials and semi-manufactured goods, was hardly a disadvantage to the industries which consumed those products. Temporary, or sporadic "dumping" is a different matter and it may cause grave dislocations in industry, but it is doubtful if anything short of absolute prohibition will keep such goods out.

6. The Infant Industries Argument

The infant industries argument for protection has been accepted by many free traders who regarded it as an exception to the general rule, and in certain circumstances the argument has foundation. A new undeveloped country, lacking capital of various kinds, experienced entrepreneurs, technicians, and skilled workers, cannot embark on manufacturing enterprises without a measure of protection. Under private enterprise, at any rate, new industries necessarily start on a small scale and with high average costs of production, due to a shortage of the factors noted above. Protection, during the period of growth, would gradually bring these factors into being, and

would prevent the industries from being driven from production by the competition of large-scale foreign industries.

On this argument, when the new industry is able to stand on its feet, the protection would have served its purpose and should be withdrawn. In practice, however, that seldom, if ever, happens; countries such as Australia, and Canada, which protected their industries in their infant stage have retained that protection.

A country already fully industrialised is in a different position. It does not lack the necessary production factors, indeed, in times of depression they are often in superabundance. It is doubtful, therefore, if there are any economies of large-scale production possible under protection that are not equally possible under free trade in an industrialised country.

7. Imperial Preference

In a mild form, Imperial preferences have been in force since the Ottawa Conference of 1932. As a result of the agreements then reached the Dominion and Colonial producers enjoy a position in the British market as favourable as is compatible with the interests of the home producers. In return the British manufacturers were given a preference over the foreigner in the Dominion markets.

Imperial preference of this kind, however, falls far below what Mr. Joseph Chamberlain, its great advocate, had originally in mind. He wanted free trade between all the members of the Empire, or, as we now say, the British Commonwealth, and in return he was prepared to impose light duties on all foreign imports, which competed with the staple industries of the Colonies and the Dominions—on cereals, meat, sugar, and wool.

The plan failed for two reasons. In the first place the Dominion manufacturers invoked the infant industries argument as much against British, as against foreign competitors—under the Ottawa agreement, British goods have only a preference over the foreigner; they are not admitted free of duty, so that at any time, the concession can have a negligible

value. Secondly, British farmers wanted protection against Dominion and Colonial imported foodstuffs equally against those from foreign countries. This clash of interests seems impossible to reconcile.

Another objection sometimes urged against Imperial preferences is that, if developed on any appreciable scale, it would gradually lead to a world divided into economic blocs, a potential source of international discord, if not war.

8. The Quota System

The quota system is a much more drastic form of regulation than the tariff, as a quota in respect of any particular commodity means that only a fixed amount of it is allowed to be imported, or produced.

Between 1930 and the recent war, the quota system was applied in this country in various ways, and for different purposes. In 1930 it was applied to the coal industry with a view to maintaining prices by limiting output. A Central Board allocated the maximum amount of coal that could be raised in any one district; a District Board then allocated the maximum output that could be raised by each mine.

In 1932 a wheat quota was instituted to provide British wheat growers with a market for a certain quality of wheat at remunerative prices, without bringing into cultivation land not normally suitable for wheat. The quota system was also applied to other agricultural products—the main object of the bacon quota was to limit imports of bacon; the primary object of the potato quota was to force the growers to limit their acreage.

Quotas in respect of production only arise in times of depression. At the present time, we want more coal, wheat, potatoes, etc., rather than to limit their output. Since 1930, however, quotas have played an important rôle in international trade. Governments have entered into bi-lateral trade agreements with other countries on the principle of admitting a certain quantity of imports as a condition of being allowed to export a given quantity of certain goods to the other contracting party. The principle is sometimes expressed as “we must buy only from our customers.”

To this principle there are certain objections. International trade, if left to take a natural course, will flow along multi-lateral, not bi-lateral channels; in other words, we shall buy in the cheapest, and sell in the most favourable, markets. In that way, we promote, and take advantage of, international specialisation.

It must be strongly emphasised that on all these questions there is great diversity even of expert opinion. These questions are not simple economic issues, they are political and social ones as well, and the economic aspect is not necessarily the most important in every case.

9. International Indebtedness

International payments originate in various ways. All exports from Britain, and all imports into Britain must be paid for in currency of some kind, either British or foreign, but although the export and import of goods are very important items of international indebtedness, they are not the only ones.

In addition to her exports of goods, Britain has always exported large quantities of services of various kinds—invisible exports, as they are usually called. The most important of these services are our shipping services. Down to 1914, the major part of the goods transported across the oceans was shipped in vessels flying the British flag, and as recently as 1939, a large part of our imports was paid for by the services of our ships.

Other important invisible exports are the financial services of our bankers, accepting houses, and insurance companies. Foreigners pay these firms and companies large sums every year for the acceptance of bills, and in insurance premiums, for London is the world's headquarters of fire and marine insurance business.

Another item of international indebtedness is the expenses incurred by tourists, and other travellers. Foreigners spend large sums annually in countries such as Britain, Switzerland, and Italy, and these expenditures constitute an invisible export for those countries. The money spent in this country every year before the war by American and European tourists enabled us to acquire foreign currency with which we could pay for a part of our imports.

Down to 1914, international lending led to international indebtedness on a large scale. In most normal years after about 1825, the total value of our exports exceeded the total value of our imports, and a large part of these balances was invested overseas in development work of various kinds—in railways, and mines, in banking and industrial concerns, or lent to foreign, and colonial Governments. Every year, therefore, foreigners, and colonials remitted to this country large sums in payment of interest on those investments. During the two world wars, the greater part of these foreign investments had to be sold, hence the present export drive to acquire the means to pay for our imports.

All of the above kinds of payments create a demand for the currency of the creditor countries. If foreign trade debts, and the interest on foreign securities are payable in sterling, foreigners must buy British money with their currency; if, on the other hand, such payments are made in foreign currency the British recipients will find it necessary to exchange their holdings of foreign currency into sterling; but, before we examine the mechanism of the foreign exchanges, it is necessary to consider in some detail a statement known as the balance of payments between countries.

10. The Balance of Payments

The balance of payments, or the balance of indebtedness, must be distinguished from the so-called balance of trade which seldom balances, as there is no necessary reason why it should. The balance of trade is simply the Board of Trade returns of the annual value of the goods imported into; and exported from, this country. If the value of the exports exceeds the value of the imports, the balance is said to be favourable; in the contrary case, the balance is said to be unfavourable.

The terms favourable, and unfavourable, came into use because it was believed at one time that an excess of exports must be followed by an inflow of gold, and an excess of imports by a drain of gold; an inflow of gold was regarded as a blessing, and a drain of gold as a national misfortune.

This belief was not altogether founded on unreason. Before the development of credit instruments a serious drain of gold would have played havoc with prices, and although the gold standard contains the necessary corrective tendencies, adjustment would have been a slow and painful process. The advantages of an influx of gold were over-rated, but, in times of war, as we know from experience, an abundant gold supply has advantages.

In some circumstances when a country is on a gold standard, an excess of imports will lead to a drain of gold, but it is incorrect to suppose that a country which has a permanent unfavourable balance of trade must necessarily be losing its gold. If that were the case, Britain would have been denuded of its gold long ago.

The reason why this country was long able to maintain her unfavourable balance of trade was that her excess of imports was more than paid for by her invisible exports. Instead of growing poorer every year since the mid-Victorian period, she was growing richer down to 1914, by investing her real annual trading balances overseas. What has real significance then is not the balance of visible exports and imports, but the balance of total indebtedness. The British balance of payments as estimated by the Board of Trade may be presented as follows:—

PAYMENTS: £M	1938	1946	1947	1949
Imports (f.o.b.)	835	1092	1574	1970
Govt. Expenditure Overseas ..	16	290	211	141
Miscellaneous	47	43	63	4
Total	<u>898</u>	<u>1425</u>	<u>1848</u>	<u>2115</u>
RECEIPTS				
Exports and Re-exports ..	533	888	1125	1790
Shipping (net)	20	9	17	88
Interest, Profits (net)	175	75	51	56
Miscellaneous	100	73	—20	111
Deficit	70	380	675	70
	<u>898</u>	<u>1425</u>	<u>1848</u>	<u>2115</u>

From what has been already said most of the items are self explanatory. Government payments are transactions between Governments in respect of loans or of services rendered by Government departments. The income from overseas investments is income from long term capital loans, minus the interest paid to foreigners who have invested capital in the United Kingdom. The item includes the repayment of loans, and the interest on fixed income securities, as well as the profits on capital invested in industrial enterprises.

The receipts from commissions represent the earnings of the London houses in respect of acceptances, the discounting of foreign bills, insurance premiums from abroad, and so forth; and the receipts from others sources include such items as tourist expenditures, sums remitted to Britain by emigrants, and the sale of second-hand ships.

The values of the items are estimates only, and as such are liable to margins of error. Sometimes goods are valued incorrectly. In the case of imported goods, payment is not always made in the year of their import; goods imported one year may not be paid for until the following year. A comparison between the balance sheets of different years is complicated by price changes; an increase in the number of tons of coal, or yards of cotton exported may be more than offset by a fall in their prices.

A balance sheet, must, of course balance, and in a certain sense the balance of payments necessarily balances. Fundamentally, we make our payments by selling our currency in the foreign exchange markets, and the amount of our currency that is sold must equal the amount of our currency that is bought, but a balance in that sense does not carry us far.

On the total transactions of any one year the people of Britain may have to pay more or less to people abroad than the inhabitants of foreign countries have to remit to Britain. The question arises, therefore, how can the balance sheet be made to balance?

On paper, the account can be balanced by inserting a credit, or a debit item indicating the amount owed to us by foreigners, or the amount we owe to them and this would be recorded by an increase in our short term foreign lending, or borrowing.

All the important countries with which we trade have banking houses in London, and these banks hold sterling balances. A balance of payments favourable to us would have the effect of lowering those balances and an unfavourable balance would increase them. A favourable balance simply means a surplus available for investment abroad. An adverse balance is a more complex problem. It may be adjusted temporarily by short term borrowing, but that cannot continue indefinitely; if the causes of the deficit are of more than a temporary nature remedies must be applied.

11. The Correction of an Adverse Balance of Payments

An adverse balance of payments may arise in several ways. In a country like Britain where the standard of living is relatively high, imports are difficult to reduce, indeed, they tend to increase. If, therefore, the export of goods plus the total of invisible exports remain constant, or if one or more of these items decline in value, the payments balance becomes adverse. The balance may become adverse because of a decline in the physical quantity of visible or invisible exports, or because of a fall in their values—steamship freights may fall sharply from new foreign competition, or interest rates on foreign investments may be reduced. On the other side, without any change in physical quantities, prices of goods imported may rise sharply relatively to the prices of goods exported.

Adjustment can be made in almost as many ways. If it is desired to maintain imports at their former level, either, or both, the export of goods and services must be increased, but if that is unpracticable, imports must be reduced. In many instances measures will be taken to increase some forms of exports, and at the same time to reduce certain imports.

The export of goods from Britain can be stimulated and the import of goods into Britain can be restricted, either by lowering prices in Britain, or by allowing the value of British money to depreciate abroad. In both cases our export goods are cheapened, and imports are made more difficult.

The first remedy, deflation, is effected, when on the gold standard by a drain of gold, and on an independent paper

standard by a contraction of credit. The second remedy, exchange depreciation, which indirectly cheapens exports by cheapening the currency required to pay for them is possible on a gold standard only by devaluation, which reduces the value of the gold represented by a unit of currency. On an independent paper standard, if no restrictions are imposed, an adverse balance of payments will cause the currency to depreciate abroad because the demand for it in the foreign exchange markets will be correspondingly reduced, and the cheaper a country's currency is, the cheaper are its goods to foreign buyers. More direct methods of restricting imports are the tariff and the quota.

A direct method of stimulating exports is by means of subsidies, or bounties on export. A subsidy may be a grant to an industry from the general revenue of the country, or it may be raised by taxing that part of the supply that is consumed at home, but in any case a subsidy to an export branch of an industry makes it possible to sell goods abroad at lower prices than those ruling at home.

Subsidies can be granted to ship owners so as to enable them to lower freights, and the State can assist the other invisible exports in various ways.

Finally, an adverse balance of payments can be adjusted by foreign exchange control. Foreign exchange control, which is a recent innovation, will be examined in another chapter.

CHAPTER XIX

FOREIGN EXCHANGE

1. Introduction

Foreign exchange is usually regarded by the beginner as a tedious and complicated section of economics, where the pitfalls are many and the labyrinths long and mysterious. It is true that certain difficulties are encountered in studying this important subject, but it must be emphasised that they are neither so numerous nor so troublesome as they are generally thought to be.

It is, in the first place, obvious that international trade would have to be carried on by bartering unless the traders of one country were able by means of certain media to settle their debts in another country. But though we possess the necessary media for the settlement of international debts we must also be able to estimate the purchasing power of the currency of one country in terms of another. It is with the comparisons of the purchasing power of the currencies of nations that foreign exchange is concerned.

The most frequently used instrument for settling international debts is the bill of exchange. But such debts may also be settled by means of gold, if, of course, there is no embargo on its export from the debtor country. Then again, bank drafts in foreign currencies, such as drafts for so many dollars in settlement of an American debt, may be sent. These can be bought in banks which possess balances in the country to which the remittance is to be sent.

All the London banks normally keep balances in the important financial centres overseas, and against these balances the bank can draw drafts, which, in effect, are cheques, and which they can sell to merchants who have payments to make in those centres. A merchant in London who has dollars to send to an exporter in New York could buy a draft from a London bank that had a balance in some

American bank and send the draft through the post; alternatively he could arrange with the London bank to cable to its American agent, or banker, to pay the debtor from its account there. Such payments are called telegraphic transfers. This is the quickest way of making a payment, although the bill of exchange is normally the cheapest method.

Nor are these three methods the only ones. A draft in the home currency may be sent to a foreign creditor. Thus, for example, British Post Office money orders or sterling drafts, which entitle the holder to so many pounds, were frequently sent from Great Britain to other countries, particularly America, in settlement of debts, and these orders and drafts were changed into the currency of the country concerned by the creditor's own bank.

Another method is the sending of interest coupons to a foreign creditor. Such coupons on the bonds of another country would be immediately accepted in settlement of a debt in the country issuing the bonds, and also in many other countries, and they are, therefore, sometimes used for settling international debts.

And there is yet another method of remitting money from one country to another. A merchant may keep an account in one of the banks of the country with which he trades, and settle any debts in this particular country by drawing on his account. Before the war Americans frequently settled their English debts in this way by drawing cheques on their balances in English banks, and Englishmen often sent their American creditors cheques drawn on American banks.

Of these media, by means of which international debts are settled, two are of outstanding importance. These are the bill of exchange and the banker's foreign currency draft.

There are two types of bills of exchange: the inland bill, drawn and payable within a country and used in connection with its internal trade, and the foreign, or "outland" bill, the instrument, so indispensable to the external trade of a country, and which is drawn in one country and payable in another.

A bill of exchange is an order, payable on demand or in a certain fixed period, made by a creditor to a debtor in which

the former, termed the drawer or maker of the bill, instructs the latter, termed the drawee, to pay a sum of money to himself, or to another person, termed the payee. A drawee is termed an acceptor after he signifies that he is willing to pay the bill by writing on it his signature, which is usually accompanied by the word "accepted" and the name of the bank where the bill is payable.

If a bill is drawn "at sight" it is termed a "sight draft," and must be paid as soon as it is presented for acceptance, but more frequently bills are drawn at 60 or 90 days' sight. Thus, if a bill commences with such a phrase as: "Ninety days after sight . . . pay . . ." it means that the 90 days run from the date the bill was "sighted" or presented for acceptance, while such a phrase as: "Three months after date" means that the period specified commences with the date of the bill. Three days' grace, however, are always allowed in each case. A sight draft requires only a 2d. stamp, but all other bills have to be stamped *ad valorem*.

A bill of exchange is an instrument which can be passed from hand to hand. Any person who takes the bill in this way is entitled to payment. If, for example, Z sells a bill accepted by Y, he writes his name on the back of the bill. This is termed an indorsement "in blank" and though the acceptor Y is liable on the bill if he fails to pay when the bill is due, the person who holds the bill can sue either Y or Z or any other person who has indorsed the bill.

An indorsement, however, may be of a special nature. Z may not only indorse a bill by simply writing his name on the back, but he may also make the bill payable to a definite person by writing on the back thus: "Pay B or order," and then adding his signature. In this case the bill cannot again be negotiated unless B indorses it, that is to say, unless it is given an indorsement in blank. Bills indorsed in blank can be transferred from hand to hand without any additional indorsement. Such bills, are, therefore, transferable by mere delivery.

We are now in a position to examine the nature of a transaction in foreign bills of exchange. Suppose that John Robinson, an English merchant, sells to De Morer, a Bordeaux

importer, cotton goods worth 25,000 francs. Robinson exports the goods, draws a 90 days' bill of exchange on De Morer for 25,000 francs payable to himself or order, and forwards the bill and the shipping documents to his agent in Bordeaux, who gets De Morer to accept the bill.

After De Morer's acceptance has been secured there is more than one method of dealing with the bill. It may be immediately discounted in France by Robinson ordering his agent to sell the bill to a French bank. It may, on the other hand, be returned to Robinson, who may then either hold the bill until its maturity at 90 days after its date, or sell it to a bill broker.

If the bill is sold to a bill broker this specialist may in turn sell it to an English bank, and thus give the bank power to draw drafts on its French agents. A bank possessing a number of such bills of exchange drawn on French importers would, by sending them to its French agents to await maturity, be in a position to enable its customers to remit money to France. The money would be remitted by the bank drawing drafts on its French agents, and selling these drafts to its customers at prices which vary for reasons which will be explained later. The bank's customers could then send these drafts to France as debt payments.

But there is yet another way in which a bill of exchange may be dealt with. Robinson may hand the bill of exchange to his bank with authority to collect the amount specified when payable, and credit his account with the same. Upon receiving the bill the bank would send it to its agents in Bordeaux who would obtain De Morer's acceptance, and then hold the bill until its maturity. Immediately payment was secured they would inform Robinson's bankers in England, who would thereupon credit Robinson's account with the British, or sterling as it is termed, equivalent of the 25,000 francs.

This brings us to the next problem, a problem which needs very careful examination. How is the sterling equivalent of the francs arrived at? How do we know the relative value of the sovereign and the franc, the dollar and the franc, or the mark and the franc?

2. Foreign Exchange and the Gold Standard

When countries are on the gold standard the exchange value of their currencies can be compared without difficulty. It will be convenient to assume that gold coins are used but paper currencies that are freely convertible into gold must always exchange in the same ratio as gold coins exchange. When it was a matter of payment between London and Sydney there was no question of a difference in currency—the unit of currency had the same gold content in both places. But when a draft on London had to be sold in America the relative value of the sovereign and the dollar came into calculation.

Now in comparing currencies gold is the measure, because on the gold standard gold is the recognised international currency. The comparison is based upon the weight and fineness of the gold contained in the standard gold coins of the countries concerned. It depends, of course, upon the Mint regulations of each country, and it expresses the exact relationship between the metallic contents of the standard coins.

By this means we know the rate at which the standard coin of one country can be exchanged for the standard coin of another on a fixed metallic basis. This is termed the Mint par of exchange, often referred to briefly as par. The Mint par of exchange, may be described as the rate at which the standard coin of one country is convertible into that of another country according to the terms of their respective Mint laws.

As an illustration we may calculate the Mint par between the United States and England, between the nine-tenths fine American golden eagle and the eleven-twelfths fine British sovereign, thus—

Weight of the British sovereign = 113·0016 troy grains of pure gold.

Weight of the U.S. golden eagle (\$10) } = 232·2 troy grains of pure gold.

$$\therefore \text{£1} = \frac{113\cdot0016}{232\cdot2} \text{ of an eagle;}$$

$$\therefore \text{£1 (as the dollar is } \frac{1}{10} \text{ of the eagle) } = \frac{113\cdot0016 \times 10}{232\cdot2} \text{ dollars,}$$

$$\text{i.e. £1} = 4\cdot8665 \text{ dollars.}$$

The London-New York or sterling-dollar Mint par of exchange is therefore 4·8665.

Such is the method of comparing the currencies of two countries whose standard coins are gold. If, however, in one of the countries, say Great Britain, the standard coin is gold, and in the other, say China, it is silver, there can be no fixed relationship or Mint par between these two countries, and the rate of exchange depends on the fluctuations of the market price of silver. There is also no Mint par of exchange between a gold standard and an independent paper currency. The rate of exchange will be determined by the number of units of paper currency required to purchase a certain quantity of gold at the ruling market prices.

Before 1914 the exchange rates never varied very much from the Mint par. In the case of Paris, for instance, such variations never exceeded a few centimes. The reason for this was that there were certain limits in the rise, or the fall known as "gold" or "specie points," and if these were exceeded then debts were settled by payments of gold. The outgoing gold point was the rate of exchange at which gold was exported from a country for the purpose of debt settlement, and the incoming gold point was the rate at which gold came in for a like purpose. In both cases it was cheaper to pay in gold than with a bill of exchange.

The gold points, therefore, depend on the cost of transmitting gold between the two countries concerned, which before 1914 was not an expensive item. The cost, for example of sending gold from London to New York was only $\cdot 024$ cents per sovereign for insurance, commission and freight. Thus, when this was added to the Mint par (\$4.866 plus $\cdot 024$) the total of \$4.89 was the limit so far as the American debtor was concerned in the buying of bills of exchange. This was the incoming gold point, the point at which gold would be sent to Great Britain. Beyond this point an American debtor would not go when buying bills, because it would be cheaper to send gold.

Similarly, for every sovereign sent to New York a London remitter would receive \$4.866 - $\cdot 024$ cents, and the outgoing gold point would be \$4.842. Therefore if the London remitter could not obtain dollars payable in New York at a

better rate than 4.842 per £1 it would be cheaper for him to send gold for the settlement of his debt.

This is the gold point theory. During the 1914-18 war as a result of the excessive use of paper money, and the prohibition of gold export, gold points disappeared, but after the resumption of a free gold market in Great Britain, following the Gold Standard Act of 1925 gold points again began to operate in connection with the London-New York exchange until the suspension of the Gold Standard Act in 1931. Owing, however, to the increase in the charges for transport, the limits were not the same as the pre-1914 ones. The incoming gold point of the London-New York exchange was \$4.906 in the early part of 1928. Gold points vary with the cost and difficulty of moving gold. If, for any reason the cost of transmitting gold, or the difficulty of obtaining it, increases, the gold points may alter considerably. That is likely to happen in times of war and financial crises.

3. Foreign Exchange and Independent Standards

When countries are on the gold standard there is a tangible link connecting their currencies; when countries are on independent standards, that link is absent. How, then, are the currencies of different countries brought into relation when the gold standard is suspended?

The answer usually given is the purchasing power parity theory, which states that the value of one currency in terms of another depends mainly on the relative purchasing power of the two currencies in their respective countries.

As a first approximation, let us suppose that coal only is traded between Britain and America, and that a ton of coal costs £1 in London, and 5 dollars in New York, that trade is perfectly free, and that there are no costs of transport.

On these assumptions a £1 must exchange for 5 dollars, as, if it would exchange for 6 dollars it would be profitable for people in New York to buy a ton of coal for 5 dollars, sell it in London for £1, and then by converting the £1 into 6 dollars to make an exchange profit on the transaction.

On the other hand, if the rate of exchange were £1 = 3 dollars, it would be profitable to buy a £1 with 3 dollars, then

buy a ton of coal in London and make a profit by selling it for 5 dollars in New York. Transactions of this kind would quickly fix the rate of exchange between the £1 and the dollar at $\text{£}1 = 5$ dollars, that is to say in the ratio of the relative values of the two currencies in their respective countries.

It should be noted that the theory sketched above is a first approximation only. Goods do not necessarily move freely between countries without restrictions. Transport costs cannot be neglected; in many cases they restrict the movement of goods as much as tariffs do. Thirdly, not one, but many goods are traded between countries, and that makes a comparison between the purchasing power of pounds in Britain and dollars in America, or francs in France, a matter of great difficulty. People in one country do not necessarily consume all the things that are consumed by the people in another country. Internal conditions differ so between countries that at any current rate of exchange it is possible for the price of some things to be higher in one country than in another.

We can apply the purchasing power parity theory, however, to relative changes in price levels. If, when the rate of exchange between London and New York had settled at $\text{£}1 = 5$ dollars, prices doubled in America, and everything remained unchanged in Britain, the sterling-dollar exchange would tend to settle at $\text{£}1 = 10$ dollars. But the theory must not be regarded as a foot rule; in concrete cases, all that we can safely say is that if the price level in country *A*, rises relatively to that of country *B*, then the currency of country *A* will depreciate in terms of the currency of country *B*.

At any given time, however, the actual rate of exchange between sterling and dollars in the foreign exchange markets will be determined by the relative supply of, and the demand for each currency. The actual sterling-dollar rate on any day will be that which just equates the supply of sterling with the demand for it. The purchasing power parity theory explains the equilibrium or normal rate, that is the rate that must rule when the fluctuations of the moment have been smoothed away.

4. Forces that Govern Free Exchange Rates

It has already been noted that changes in relative price levels affect the rates of exchange, and they do this by changing the relations of demand for, and the supply of currency. If the price level in Britain rises in a greater ratio than the price level in America, the American demand for pounds would decrease, because British exports would have become relatively dearer; in other words, sterling would have lost purchasing power in Britain. The sterling-dollar rate of exchange, therefore, would have to fall until the supply of, and the demand for, sterling on the foreign exchanges were equalised.

The rates of exchange are also affected by changes in the supply of, and the demand for goods between countries. These changes may be due to changes in relative prices, but there are also other causes. If the British demand for American cotton increased, and the American demand for British goods remained unchanged, extra dollars would be required by the British importers. In order to obtain these dollars, more pounds than before would have to be offered for a given number of dollars—in other words, the sterling-dollar rate of exchange would have to fall. Incidentally, that would have the same effect as a fall in the price of British exports, which, in consequence, would be increased to America.

A third factor influencing the rates of exchange between independent currencies, is movements of capital. Capital may move from one country to another for permanent investment, but it also moves for short periods for greater security, or to earn a higher rate of interest, or in the hope of making a profit from exchange fluctuations, and although all movements of capital affect the foreign exchanges, short term movements have a marked effect because large amounts of such capital may move suddenly, and unexpectedly. •

A balance in London can only be moved to New York by exchanging pounds for dollars, and any sudden demand for dollars will raise their value in terms of pounds. A movement of capital from London to New York will cause a fall in the sterling-dollar rate of exchange, and a movement of capital from New York to London will have the contrary effect.

5. Exchanges on Gold, and Independent Standards Compared

The question of the relative advantages of gold standard and independent currencies is often discussed.

Both currency systems contain forces which, if allowed to work freely, tend to adjust the balance of international indebtedness, but in different ways. When countries are on the gold standard, the exchange value of their currencies is fixed within definite limits, and as the exchanges are not free to move appreciably, the balance of payments is adjusted by gold movements, or by changes in ownership, which lower prices in the country of export, and raise them in the country of import.

If Britain has an adverse balance of payments with America, either gold is exported from London, or is transferred to American ownership. Prices fall in Britain, and rise in America. Exports to America increase, imports from America decrease until the payments balance is brought into equilibrium.

These results, however, assume that the gold standard is worked according to certain "rules," although, as they cannot be enforced, the term is inexact.

These so-called "rules" are that gold movements must be allowed to exert their natural effects on prices in both countries. A country losing gold through an adverse payments balance, must allow its income and price levels to fall in proportion. Similarly, the country gaining gold must use it as a basis for the expansion of credit. If these rules are not observed, if the country losing gold prevents the fall in incomes, and prices, and if the country gaining the gold fails to use it to expand credit, these gold movements will not adjust the balance of payments.

The above applies to any form of international currency—a country with an adverse balance of payments must deflate its price and income structure.

When countries are on independent currency standards, the balance of indebtedness is adjusted by the foreign exchanges which are free to move to any extent.

If a country's total imports greatly exceeds its total exports, its demand for foreign currency will greatly exceed the foreign

demand for its currency; the exchange value of its currency will fall; that, in effect, will make its exports cheaper, and its imports dearer; exports will therefore increase, and imports will decrease until equilibrium is restored.

It is not an easy question to answer, which is the better currency system. Stable foreign exchanges do promote international trade, but falling prices due to gold drains is a serious inconvenience. It damps down industrial activity, and leads to grave discontent in the labour world.

An independent currency system avoids this difficulty in the first instance, as such a currency can have a lower purchasing power abroad, than at home, but an unfavourable foreign exchange will gradually raise the cost of living by raising the prices of imported goods. Many people, however, believe that a fall in real wages arouses less opposition in the labour world than a reduction of money wages.

Most people agree that fluctuating exchange rates hamper international trade, as importers are uncertain of what they will have to pay, and exporters are uncertain of what they will receive on the future date when payment is made—in both cases, currency will have to be exchanged. These evils can be lessened to some extent by “future” dealings in the foreign exchange markets, and by direct foreign exchange control.

The relation between the Bank Rate and the foreign exchanges may now be briefly noted.

On both currency standards, a rise in the Bank Rate, is, in effect, a rise in the rate of interest, and a rise in the rate of interest tends to attract foreign balances to London. This movement of funds creates a demand for British currency which turns the exchanges in our favour. Conversely, a fall in the Bank Rate will have the opposite effect.

When we are on a gold standard a change in the Bank Rate has only a slight effect on the exchanges, as if they move beyond a certain point, gold will move in or out of London; but when we are on an independent standard the Bank Rate can exercise a marked effect on the exchanges.

6. The Exchange Equalisation Fund

When a country is on an independent currency standard the exchange value of its currency, as has already been shown,

is free to fluctuate to almost any extent. These fluctuations, as far as they arise from normal conditions of trade, are necessary, for a country cannot import indefinitely more than it can purchase with its total exports.

But exchange rates can fluctuate temporarily through movements of short term balances, and through the actions of speculators in currencies, and exchange variations of this kind are harmful to trade. An influx of foreign capital into London may mean a demand for sterling which may send up its value, and indirectly send up the prices of British goods overseas. A temporary movement of foreign capital to London may thus damp down our export trade.

On the other hand, a movement of balances from London to New York may depreciate the value of sterling, and raise the cost of importing our raw materials. Similar effects may result from the actions of currency speculators seeking to influence the rates of exchange in order to reap exchange profits.

To eliminate the above inconveniences, Great Britain, in 1932, instituted an Exchange Equalisation Fund, with assets of about £150,000,000 mainly in Treasury Bills, and since 1932, the assets of the Fund have been increased enormously.

The Exchange Equalisation Fund smooths out temporary fluctuation in foreign exchange rates in the following way. Let us suppose that there is a sudden movement of capital from New York to London. As extra sterling will be demanded to effect the transfer, the Fund sells Treasury Bills, which are claims to sterling, for dollars, which can either be kept in stock, or exchanged for gold. This increase in the supply of sterling prevents its price from rising.

In the case of a movement of capital to New York the Equalisation Fund will assist the transfer by selling dollars for sterling, or by selling gold for dollars, and dollars for sterling.

In substance, the operations of the Exchange Equalisation Fund provide the currency for purposes other than those of actual trading, so that the normal relations of supply of, and demand for currency, are not interrupted.

The Exchange Equalisation Fund does not render the Bank Rate superfluous. The Fund is not a suitable means for

adjusting the trade balance of payments, as it contains within itself no credit corrective. The Bank Rate does.

7. The Foreign Exchange Market

The foreign exchange market, like the money market within which it is sometimes included, is simply a collection of institutions which deal in foreign exchange. Before the war, the London market was controlled jointly by the foreign exchange bankers, and the Foreign Exchange Brokers' Association. The dealers in the market were those banks, and financial houses that maintained foreign exchange departments.

Business in the market was transacted by the brokers, who acted as agents for the dealers and did not deal directly with the public. All the brokers and dealers were connected with each other by telephone, and telegraph, and by cable with the exchange markets of the world. Each broker usually specialised in a small circle of currencies only.

In an organised market which exists to provide facilities for trade payments, claims to currency, rather than currency itself changes hands, and, down to the outbreak of the war, through the operations of the market, recognised rates of exchange were established daily between British currency and the currencies of the other commercial countries of the world.

In all organised markets speculative dealings take place. When the leading nations of the world adopt independent monetary standards, exchange rates can fluctuate widely, and this opens a field for the currency speculator who buys such currencies as he thinks will rise in value in the near future, and sells those currencies he believes will depreciate.

When a foreign exchange market is working free of Government control, a forward exchange section in which future dealings take place usually develops, and these dealings smooth away sharp fluctuations in exchange rates.

The exchange market in London, like the foreign exchange markets of most countries, is now rigidly controlled by the Government.

8. The Bill on London

Down to 1914, and to a lesser extent between 1919 and 1931, London played an important part in the financing of international trade by means of what was termed the bill on London, although the goods concerned did not necessarily enter Britain.

The function of the bill on London will be better realised with the help of an illustration, which will also show why the wealthy London accepting houses were of such importance in the trade of nations.

Let us suppose that a Brazilian coffee planter was anxious to sell a large quantity of coffee berries to a Lisbon merchant. If, however, the Portuguese importer was not known to the exporter it would not be wise for the Brazilian to ship the berries to Lisbon and then draw a bill of exchange on the importer. A method of payment must therefore be arranged which will satisfy both parties, and this was usually done by means of a London accepting house.

For a certain commission the accepting house guaranteed, on behalf of the Lisbon merchant, the amount due to the exporter, the commission being paid by the importer, who, in addition, supplied the accepting house with certain securities. In brief, the accepting house lent its credit for a consideration, by accepting bills drawn on themselves by the Brazilian exporter.

The acceptance of a British financial house was regarded by the world's traders as the hall mark of security, as the finest guarantee that the bill would be met when it matured. The Brazilian exporter, therefore, did not hesitate to draw a bill of exchange on such an institution, that is to say, he drew what was called a bill on London, while the accepting house not only got a commission from the Lisbon importer, but also secured possession of the shipping documents relating to the coffee berries.

The shipping documents would, of course, ultimately reach the Lisbon importer. If the accepting house had had many transactions of a similar nature with this particular importer, and found him prompt and meticulous in the conduct of his affairs, these documents would be sent to him at once, because,

he in turn, would, before the bill matured, forward to the accepting house a draft on a London banker in settlement of his account. On the other hand, the accepting house might send the shipping documents to a Lisbon bank together with a bill of exchange for the amount due drawn on the Lisbon importer, who accepted the bill, which then remained in the Lisbon bank until it matured.

The bill on London drawn by the Brazilian coffee planter might therefore result in the Portuguese importer buying a draft on London in order to settle with the accepting house, or in the accepting house drawing a bill on the Portuguese importer.

It is thus quite evident why the bill, or draft, on London was of such outstanding importance in international trade, and why London as a monetary centre was supreme among the world's money markets. The bill on London was immediately taken as payment for commodities in any part of the world; in every market it was regarded as the highest form of international currency. It was the real cash of international commerce and finance, because gold or its equivalent, was only to be had, always and without question, and to any amount, in London, when we were on the gold standard.

9. Foreign Exchange Control

Government control of the foreign exchange market in a complete form is a recent innovation, and was first developed into a system by Germany during the crisis of 1931. Even under the nineteenth century gold standard the foreign exchanges were controlled to some extent by central bank rates, but such control was of a mild order; drastic exchange and price controls are incompatible with the gold standard.

Exchange Equalisation Funds are a means of indirect control of foreign exchange rates, and, to some extent, so are tariffs and quotas, but the direct control of the foreign exchange market is on an altogether different plane, for, unless a country is largely self-sufficient, direct control of the foreign exchange market gives the Government a dictatorship over the economic life of the country.

Under a complete system of foreign exchange control, the free market in foreign exchange is suspended, and all foreign exchange transactions must take place, directly or indirectly through the Central Bank. All exporters, and other persons acquiring foreign exchange, must sell it to the Government through the Central Bank, or its agents, but the Central Bank will sell foreign exchange to importers only for such imports as are approved by the Government. In this way, a Government can control not only the kind and quantity of the goods imported, but also the place of their origin. Imports which the Government consider undesirable, can be virtually prohibited by a refusal to sell the foreign exchange with which to make payment for them.

Similarly, if the Government, through the Central Bank, refuses to sell the necessary foreign exchange, capital cannot be moved out of the country. When a socialist Government first became a possibility, it was usually argued that, if a socialist Government were ever established, there would be an immediate flight of capital from the country with paralysing industrial effects, and before 1914, that would probably have taken place. Now that the free foreign exchange market has been suspended, that could not take place, unless the Government control could be evaded by some form of "black" market.

The principle of foreign exchange control, is, as we have seen above, very simple, although its administration need not be uniform in all places. You can still buy foreign currency in this country through a commercial bank, but you would require a permit, just as you would have required a permit before you could purchase new wire-netting, or new motor tyres in 1946.

The objects of foreign exchange control are to prevent movements of capital, to adjust the balance of payments, to regulate the course of foreign trade, and to maintain the exchange value of the currency.

Foreign exchange control in this country is a product of the war; indeed, it is obvious that in a total war, the Government must rigidly control imports, exports, and movements of capital, as everything must be sacrificed to the interests of the war

effort; but whether foreign exchange control is desirable as a permanent peace time institution is a question on which there is room for differences of opinion. Speaking generally, socialists favour it; believers in free enterprise reject it. The advantages and the dangers will be evident to the reader.

In Germany, before the war, foreign exchange control led to what were called "blocked accounts." If a German importer imported goods for which he was refused foreign exchange, he paid the debt by opening an account in favour of the foreign exporter, at the Reichsbank.

This account was a "blocked" account because the money could not be taken out of the country, so that if the foreigner did not want to go to Germany to spend the money, he had no alternative but to sell the account to the Reichsbank for what it would fetch, and that, as a rule, was a small percentage of its value.

In self defence, therefore, countries exporting to exchange control countries began to insist on what are called clearing agreements.

Let us suppose that Britain made a clearing agreement with, say, Poland. All British importers of goods from Poland would pay the price of their imports into a special account at the Bank of England, and this fund would be used to pay the British exporters of goods to Poland. A similar system would operate in Poland, and if at any time the funds at the disposal of either central bank were insufficient to meet the claims of exporters, the exporters would be paid in rotation as soon as funds were available. Before the war, clearing agreements, or a variation of them, had been instituted in many European countries.

One great objection to all such devices, as has already been noted, is that they force nations to buy mainly from their customers, but where exchange is free, the natural tendency is to sell in one place and buy in another. Trade is naturally multi-lateral, and the trading account between any two countries need not balance directly. Before the war we bought far more from the United States than we sold there; on the other hand, we sold goods to Brazil of a much greater value than the value of the goods we bought there. The result

was that part of our imports from America were really paid for by the goods we exported to Brazil. That was possible because America imported much coffee from Brazil and exported little there in exchange.

10. Some Foreign Exchange Rates

The following are a few of the exchange rates between sterling and foreign currencies fixed by the Bank of England 17th July, 1946, compared with the free exchange rates ruling on 31st of January, 1938.

PLACE	METHOD OF QUOTING	PAR OF EXCHANGE	RATE OF EXCHANGE	
			17TH MAR., 1951	31ST JAN., 1938
New York	\$ to £	4·86½	2 79-2 80	5·00½-5·00½
Canada	\$ to £	4·86½	2 90-2 97	5·00½-5 00½
Paris	Fr. to £	124·21	979 98-980	152½-153½
Stockholm	Kr. to £	18·16	14·47-14·50	19·35-19·45
Prague	Kc. to £	164·25	—	142½-142½
Lisbon	Escu. to £	110·00	80·35-80 75	110-110½
Amsterdam	Fl. to £	12·11	10·63-10 65	8·96-8·97

The quotations above all represent the amount of foreign money which will be received in exchange for sterling. As these quotations rise, their rates of exchange are really falling, and becoming more favourable to England. Quotations are sometimes given in the reverse order and represent the amount of sterling that must be given in exchange for the unit of currency of another country. In these cases a rise in the quotations means that the rate of exchange is becoming more unfavourable to Britain. Before we can pass judgment on the exchange between England and any other country, we must know the method of quoting. The double quotations in the rate column, usually called "double-barrelled" rates, represent on a free exchange market, the prices at which sellers offer to sell, and buyers offer to buy. The range is usually very small, and in any particular transaction, the rate will be fixed between the two. Even when rates are fixed by the Central Bank it is convenient to give supply and demand a little play.

CHAPTER XX

THE ECONOMIC ACTIVITIES OF THE STATE

1. Introduction

During the nineteenth century it was generally accepted in this country that the economic functions of the State should be kept at a minimum. It was recognised that there were certain things that the State must do; it must preserve order at home, and protect the country from aggression from abroad, but beyond that point, it was accepted by all save a few heretics that everything else was the responsibility of the individual. For the statesmen of the Victorian era, true economy was not a wise spending of the public money, but spending as little of it as possible. Down to about 1880, the aim of every Chancellor of the Exchequer was to get rid of income tax, and the goodness of his Budget rested not on its contents, but on the smallness of its figures.

After 1880, a new outlook began to develop; the State, instead of being regarded merely as a means of protection, began to be viewed as a means for creating the conditions of a good life for all citizens. This new idea of the State developed slowly until after 1906, but before the end of the nineteenth century, death duties on the estates of the well-to-do, and the rich, had been enacted. This was a revolutionary change, and a milestone in the theory of using taxation as a means of redistributing national wealth.

The development of the social service State, as opposed to the individualist State, was given a tremendous impetus by two world wars, and to-day it is impossible to say where the economic activities of the State should begin, and where they should end. If there is any criterion at all, it can only be that of expediency, and such a criterion will be interpreted differently by different classes of persons.

2. The Necessity for Taxation

A tax has been defined as a price paid for the services of the State, but such a definition suggests a relation between the amount paid, and the benefit received, and it is obvious, on reflection, that at no such relation exists. A tax, therefore, is better defined as a compulsory contribution made by each citizen towards the expenditure of the State. In every modern community the State has to provide services which either could not be provided by private enterprise at all, or could only be provided less efficiently.

Private enterprise could not provide an army, navy, and air force, or even a public health system; such services are indivisible, every benefit provided for some is incidentally provided for all.

Private enterprise could not regulate monopoly, or the conditions of work in factories and shops; such functions must be undertaken by the State.

The State does provide certain services—education, poor relief, social insurance, etc., which could be provided in part, at least, by private individuals, and by voluntary associations, but it is desirable in the national interests that the State should provide these services in order that they may be provided either free, or at a price within the reach of all, in accordance with the accepted principle that it is the duty of the State to provide the services necessary for every citizen to lead a decent life.

But the State requires money to carry on its functions; taxation, therefore, is necessary.

Taxation on the scale in vogue in the modern State, affects the life of the people in many ways. Heavy taxes means large transfers of purchasing power from one class of persons to another—the education and public health services, the Government contribution to the social security scheme, are paid out of taxation raised mainly on higher incomes; such, at least, has been the case in the past. In general, heavy taxation is likely to mean a smaller demand for the goods and services consumed by the well-to-do classes, and a larger demand for those consumed mainly by the lower income groups.

3. The Kinds of Taxes

Taxes fall within two broad categories, direct and indirect taxes. A direct tax is one levied on the person whom it is intended should pay; an indirect tax is one levied upon persons whom it is not intended shall bear the burden, or incidence, but who will shift it to other people. The classification is a little arbitrary, because contrary to intention it is possible for an indirect tax not to be shifted. Suppose that a taxed good is produced by highly specialised equipment, and that the demand for it suddenly becomes very elastic—perhaps a substitute becomes available—a new tax on this good would tend to remain with the producers. An extreme case like this would not occur in practice, but it is always possible that the whole of a so-called indirect tax will not be shifted to the consumer.

The principal direct taxes are the income and sur-taxes, and the estate, legacy, and succession duties, collectively known as the death duties. The indirect taxes are the customs and excise duties, and since 1940, the purchase tax. The customs duties are the import duties, and they are of two kinds, specific, and *ad valorem*, duties. Specific duties are duties charged according to weight; *ad valorem* duties are duties regulated by the value of the import.

Specific duties are easier to collect; *ad valorem* duties lead to fraud and false declarations of value, the prevention of which requires a costly organisation. Specific duties, however, press hardly on the poorer classes.

Excise duties are duties on goods manufactured within a country. In England the most important excise duties are the taxes on beer and spirits, and the entertainments tax, which is classified as an excise duty.

Thoughtful people have long sought for the principle of justice in taxation, and to the question of what constitutes justice in taxation, different answers have been given at different times. At one time it was thought that justice was satisfied when each person paid a fixed tax, but fixed taxes take no account of ability to pay, and ability to pay gradually came to be recognised as a sound criterion of justice in taxation. Until the second half of the nineteenth century it was

supposed that ability to pay could be expressed by proportional taxation which also had the merit of leaving the relative positions of persons and classes the same after, as before, the tax. If two men had incomes of £100 and £200 per annum respectively, a tax of 10 per cent. would reduce those incomes to £90 and £180, but they would remain in the same proportion as before.

The principle of proportion is not accepted as a criterion of justice to-day. Justice demands that the broadest backs bear the greatest burden. The principle of taxation now adopted in the direct taxes is that of progressive taxation under which the rate of taxation varies with the income and wealth of the taxpayer. The income tax, in practice through the system of reliefs, is graduated indirectly; the sur-tax is graduated according to income, and the death duties according to the value of the property.

Progressive taxation has been adopted for other reasons as well as to achieve justice. In these days it is a necessity as the expenditure of a modern State is now so great that it can only be met by placing heavy burdens on the richer classes.

Necessity and convenience are the primary reasons for the retention of the indirect taxes. It used to be argued that every citizen should contribute something to the revenue of the State, and in normal circumstances the very low income groups, owing to the system of reliefs, do not pay income tax. It was also argued, before the recent changes in the collection of income tax, that income tax was very difficult to collect from the small wage earner, and that it aroused much more discontent and resentment among the workers than taxes on commodities which, being paid as it were, in small instalments are less noticed. Under the present system the collection of income tax presents no difficulty, but it is believed that it tends to discourage output and earnings, among certain classes of workers—some men with a low standard of living will keep down their earnings rather than pay income tax.

The great objection to many taxes on commodities is that their incidence tends to be regressive, that is to say, the smaller the income, the greater is the proportion of income that is paid in taxation. A bread tax would be a very

regressive tax as bread is the staple food of the poorer classes with large families. All taxes on goods in general consumption tend to be regressive when the taxes are specific, but commodities such as tobacco need not be consumed.

On the other hand, taxes on commodities are a means by which the Government can regulate production. Unless the demand for a good is highly inelastic, taxation reduces consumption. That, of course, was the object of the purchase tax instituted during the war. At the same time, however, anything that checks consumption limits production.

Another objection to taxes on commodities is that a tax yields little income unless levied on a good that is widely used and which cannot be easily substituted, hence, in practice, the so-called indirect taxes discriminate against certain classes of consumers—the smoker and the beer drinker are familiar examples.

It has been suggested by many people that the present system should be replaced by a single tax, but a tax on commodities, that is to say, a tax on expenditure, would tend to be regressive, not progressive. A single tax on land values was widely argued at one time, but such a tax, apart from difficulties of assessment would discriminate against one form of property, and in any case it would not produce sufficient yield. These objections do not apply to a single graduated tax on all incomes, but such a tax would arouse more resentment, and the yield would be more uncertain in bad times than under the present system.

4. The Direct Taxes

Theoretically, all incomes are liable to the British income tax, but in practice, owing to reliefs, allowances, and exemptions, very low income groups are excluded, and some others pay a small amount only. Each person receives a personal allowance—the allowance for a married man is always higher than that of a single person—and allowances are given in respect of children, dependent relatives, and others. The tax is levied at a standard rate, but the first so many pounds of taxable income are taxed below the full standard rate, and, where the income is wholly earned, small incomes receive

an additional relief. This system of reliefs and allowances lightens very considerably the tax burden on married couples with families.

The allowances, reliefs and the standard rate are decided annually by the Chancellor of the Exchequer, and sanctioned by Parliament.

The sur-tax is a steeply graduated tax, additional to the ordinary income tax, levied on all incomes over £2,000 per annum, and a large proportion of all very big incomes is now taken by sur-tax. The estate duty is a tax that must be paid before the executors of an estate can enter into possession, and the tax is graduated so that the rate of taxation increases with the value of the estate. The legacy duty is paid by persons benefiting under a will, on a scale which varies with the relationship of the legatee to the deceased person. There is, however, a minimum below which duties are not chargeable, and in the 1946 Budget, the Chancellor made an important concession to small estates. As with the income tax, the exemption and the rates of the Death Duties may be revised annually.

The effects of a high income tax are complicated. A man cannot evade the tax directly by changing the form of his production or employment. It may make some individuals less inclined to earn quite so much as before; on the other hand it may make other people work harder and save more than before in order to maintain their standard of living. A high income tax reduces the power to save, and strikes at the accumulation of private capital; on the other hand, the Government may use the proceeds of the tax to better economic advantage than if the spending power had remained in the pockets of private individuals.

Two important changes in income tax collection were made during the war of 1939-45. In the first place the tax on wages and salaries was deducted at the source, and secondly, the principle of "pay as you earn" was instituted. The latter is a great advantage to workers with a fluctuating income, as, under the old system, the tax paid in any year was based on

the earnings of the previous year. A sharp and sudden fall in earnings in any one year greatly increased the burden of the tax during that year.

5. Taxes on Commodities

It is not the intention of the Government that direct taxes shall be shifted by those on whom they are levied to other persons; but with taxes on commodities the reverse is the case. These taxes are levied on the producers, but it is expected that they will shift them to the consumers. An increase in the price of commodities is possible because taxes are laid only on goods with a relatively inelastic demand. A slight increase in the price of tea, sugar, beer, or tobacco, will not reduce the demand for them. The consumer, therefore, can be made to pay the tax.

But the consumer cannot be made to pay a tax on every commodity. If a tax were levied on beef only, and the butchers raised the price of beef by the full amount of the tax, many of their customers would eat mutton, or pork, or perhaps fish, instead.

Until supplies in hand were exhausted the butchers would have to bear most of the burden, though not the whole of it, as some customers would prefer beef at the higher price to any substitutes; prices of beef, therefore, would rise a little less than the full amount of the tax.

As soon as existing stocks were sold butchers would offer farmers lower prices for their cattle, and over a longer period, the tax would be divided between the farmers and consumers, the farmers most probably paying the greater share.

In the long run the farmers would try to escape the tax by using less of their land to rear cattle, and more of it for other purposes. How far they would succeed would depend on the ease with which they could reduce the supply of cattle, and on the extent demand would remain unaffected by a rise of price.

The incidence of taxes on most commodities are divided between producer and consumer, in the ratio of elasticity of supply to elasticity of demand, which merely means that if the necessity of the producer to sell is much greater than the

inclination of the consumer to buy, then the greater part of the tax will be paid by the producer, and *vice versa*.

The consumer bears the incidence of taxes on tea, sugar, tobacco and beer, because his demand for them 'is inelastic. Rather than reduce his consumption of them, he will, if necessary, restrict his purchases of other things. The sellers can, in effect, quickly reduce supplies, because these goods can be stored without difficulty.

Before the war, most people would have said that the Chancellor of the Exchequer did not impose taxes on manufactured goods because the supply of them was less elastic than their demand. When goods are made by expensive specialised machinery, it is difficult to reduce their supply, hence a tax might be difficult to shift to the consumer. The purchase tax would appear to run counter to this, but it must be remembered that, so far, the purchase tax has operated in special circumstances. On the one hand, wages and incomes have been rising, and on the other, goods have been in abnormally short supply.

6. Local Taxation

Like the Central Government, all the local authorities, county, borough, and district councils, incur expenses that must be met by contributions raised from the inhabitants of each locality.

The objects of local expenditure are the provision and maintenance of schools, roads, a system of public health, parks, public libraries, and so forth. Local taxes are called rates because the method of estimating expenditure, and the calculation of the amount in the pound necessary to cover it is called rating.

Not all local expenditure is paid from the rates. Part of it is defrayed from grants-in-aid from the national exchequer. These grants are made, partly to assist local authorities with a low rateable value, and partly because much local expenditure results from Government legislation, and when the State imposes a special duty on local authorities, it usually contributes towards the expenditure. A large part of the cost

of public education is defrayed by State grants to administrative authorities.

Rates are levied on the annual value of land and buildings—there are certain exemptions, land and buildings used solely for agriculture, for example, are relieved of rates—and the rates are calculated at so much in the £1.

Unlike the taxes, which are uniform all over the country, rates vary from district to district, and until recent years, a comparison between the rates paid in two towns could easily lead to wrong conclusions. A high rate did not mean that a person necessarily paid more than someone in a district where the rates were nominally low. What a man pays in rates depends, not only on the rate in the £1, but also on the assessment, that is the value of the property as estimated by rating authority. In one district the rate per £1 might be high, and the assessment very low; in another district, opposite conditions might rule. Since 1925, efforts have been made to secure much greater uniformity between areas in the matter of assessments.

Rates are levied on the occupiers of land and buildings, and it is intended that the incidence shall remain with them, as local rates are expended mainly on local objects. Where all land and buildings are in use, an increase in the rates would fall on the occupiers, but if there is vacant land, or buildings, which means some competition for tenants by landlords, some part of the burden of rates will probably fall on the landlords in the form of reduced rent when the land or the buildings are again tenanted.

7. Public Debts

Most countries now have a large public debt, and the major part of most public debts has originated in war expenditures, although in many countries some public borrowing has been done for developmental work.

In times of war a Government must acquire resources adequate for all war purposes, and it can do that in two ways; it can raise the funds by taxation, or it can borrow them. Both methods are employed. An outbreak of war is followed

by a general increase of taxation, but a modern war is financed mainly by borrowing, for the very good reason that it would be impossible to raise the funds necessary to finance a war by taxation alone. In addition to that, taxation arouses much more resentment than a rise of prices due to borrowing. High taxation also leads to labour unrest, and to demands for higher wages in an attempt to shift the burden. Most people have a certain conventional standard of life, and organised labour will fiercely resist any encroachment on it. The Trade Unions will seek to enforce a wage such that when taxation is allowed for, the standard of living will remain unimpaired. In this sense, organised labour will always try, even in peace times, to shift income tax.

Borrowing has certain advantages over taxation even in respect of funds required for peace time purposes. A housing scheme by the Government can be financed either by taxation or by borrowing. Borrowing has the disadvantage that it tends to raise prices against the Government; on the other hand it spreads the burden. As only the interest on the loan need be raised by taxation in any one year, the economic life of the country is much less dislocated by a loan than it would be by raising a very large sum by taxation. Loans for purposes of production have little permanent effect on the national debt as they are used by the Government to acquire a profit earning asset which will redeem the capital expenditure over a long term of years. Unfortunately, nearly all of the public debt of most countries has been incurred, for non-productive purposes, and is thus a "dead-weight" charge on the national income.

It is sometimes argued that taxes impose a burden on the present generation, and that borrowing transmits that burden to posterity, and in respect of a foreign loan as long as interest is paid, or until the capital is repaid, the borrowing country is so much the poorer.

That, however, is not the case with an internal debt. The country as a whole is not poorer. Interest on the debt has to be paid periodically, but that only means that a part of the national income is paid by the taxpayers in general to the holders of the Government securities.

It is sometimes argued, therefore, that although it is desirable that the foreign, or external part of a public debt should be reduced whenever possible, the internal part of the debt affords no cause for anxiety.

That is an over-statement. A huge internal debt is a hardship for those taxpayers who do not own Government securities, and secondly, this transference of income may deprive industry of capital needed for expansion. A large public debt tends to create a large class of people who live on the interest on Government securities. Such people will spend most of their income on consumption goods. A huge national debt embarrasses a Government in various ways; it increases the difficulty of finding the money for social services, and in times of depression falling prices increase the real burden of the debt.

There is, however, a certain advantage to the business community in a public debt. A public debt provides investors with a perfectly safe security, and one that can be turned into cash on demand. When a business man can invest a part of his capital with perfect safety, he is more likely to invest the remainder in speculative enterprises. The same advantage accrues to private persons who wish to invest their savings so as to yield a guaranteed income. As saving depends partly on the facilities for saving, a public debt probably assists saving.

8. Funded and Unfunded Debt

National debts are made up of two parts, the funded and the unfunded debt. A funded debt is made up of loans on which the State pays an annual interest, but does not undertake to pay back the principal. Two large parts of the pre-1914 British Debt, known as consols, are examples of funded debt.

Unfunded debt, sometimes called floating debt, consists of short period loans repayable on or before a definite date. Treasury Bills are unfunded debt.

The unfunded, or floating debt, is a more serious menace to a Government than the funded debt. In the latter case only the interest need be paid, but in the case of unfunded debt the principal as well might have to be repaid at an

inconvenient date. This has special force in respect of a large mass of outstanding Treasury Bills, and redeemable war bonds.

9. Methods of Reducing Public Debts

Even in the early years of the eighteenth century some anxiety was felt over the growing weight of the public debt, and Sir Robert Walpole tried the experiment of earmarking or the setting aside of certain taxes for the redemption of the debt—the money so raised was used to buy up stock and cancel it.

In the nineteenth century, terminable annuities were instituted. These annuities were paid by the Treasury to those holders of the national debt stock who agreed, under certain conditions, to accept repayment of their capital and interest.

The main method employed in this country before 1939 was the Sinking Fund. A sum was set apart each year, out of the taxes, for the purpose of cancelling stock.

After the 1914-18 War a capital levy on all wealth created solely by the war effort was widely advocated as a means of reducing the public debt. The proposal did not mature, partly because of the "bogey" of confiscation, and the difficulty of isolating wealth due solely to the war effort, and partly because of the administrative difficulties. A long and tedious valuation would have been necessary, and the conversion of large amounts of various forms of wealth into cash would have caused a slump in their prices. A capital levy in these days of nationalisation would avoid this last difficulty as the bulk of the assets taken over would be used directly by the Government.

A method of reducing interest charges, as distinct from the capital of the debt, is that known as conversion. Conversion is achieved by offering the debt holders the alternatives of a repayment of capital, or a reduction of the rate of interest. Conversion is practicable only in certain conditions—one of them is when the average rate of interest earned by all other securities is definitely below that paid in Government stock. The stock holders accept conversion when it is roughly a

profitable as repayment, as it is free from the inconvenience of finding new safe investments.

Conversion took place more than once in the nineteenth century; in 1932 the Five Per Cent. War Loan stock of the first world war was converted into three and a half per cent. stock, and in 1946 into two and a half per cent. stock.

10. The Budget

The Budget is the national balance sheet. Towards the end of every year, the administrative departments of the Government, the War Office, Admiralty, Ministry of Health, Ministry of Education, and so forth, prepare their estimates of expenditures for the coming financial year.

These estimates are submitted to the Treasury, and when they have been approved, the Budget is prepared and presented to Parliament in April each year by the Chancellor of the Exchequer, on behalf of the Cabinet, which is responsible for its accuracy, and for any changes that are made. The Chancellor gives the totals of the three great sources of revenue, the direct taxes, the indirect taxes, and the revenue not raised by taxation. He shows how all this revenue has been expended, and gives the estimated revenue and expenditure for the coming year.

Reference has been made elsewhere to the direct and the indirect taxes, but the revenue contains important receipts known as the non-tax revenue. This is made up of receipts from the Post Office, Telegraph and Telephone Services, the Crown lands and an item known as "Miscellaneous receipts."

The expenditure is grouped under two big branches, the Consolidated Fund services, and the Supply Services. The latter branch includes the expenses of the army, navy, education, and so forth, and the expenses of the Civil Service. These expenditures are voted annually by Parliament. The Consolidated Fund expenditure is a permanent charge on the revenue, and includes the national debt charges; payments to local taxation accounts, which are grants to local authorities for the purpose of easing the burden of the rates; and the Civil List, which relates chiefly to the expenses of the Royal Household.

Budget day is awaited eagerly, not only in the House of Commons, but outside it, and in peace times the Budget speech is perhaps the most important one of the year. If the previous year's Budget has just balanced, everybody is pleased; if it shows a surplus of receipts over expenditure, everyone is happy; but if the Budget fails to balance, most people become alarmed, and not without reason, for it has always been an axiom of sound finance that the Budget must be made to balance and the consequences of adjusting an unbalanced budget are unpleasant.

The balance can be effected in three ways—by borrowing, or by applying the “axe” to expenditure, or by a mixture of these two methods.

Cutting expenditure may mean the indefinite suspension of some necessary development in the social services; or it may mean a reduction of salaries and wages of workers employed directly, or indirectly, by the State. Apart from the question of hardship to particular classes, a drastic reduction of Government expenditure, especially in a trade depression may make things worse instead of better, and increase the difficulty of balancing the Budget in the following year.

Borrowing, too, has its difficulties, as Government borrowing to balance the Budget is likely to be inflationary, hence no country can hope to balance its Budget indefinitely by so simple an expedient. The broad principle, that current expenditure must be met by current income, applies to the State as much as to the individual.

But that does not mean that the Budget must necessarily balance in any one year, for a year is an arbitrary period. Even with a private individual, items of income and expenditure may overlap the boundary of a single year. A Budget may fail to balance in any particular year, and yet without any changes in income or expenditure it may balance over a longer period, say three years, as over a longer period disturbing influences would tend to cancel out.

There is another reason why a Budget need not balance in any particular year. If the budget of Mr. Smith, with a salary of £500 a year shows an expenditure of £1,500 in a particular year, the deficit does not necessarily indicate that

Mr. Smith is at the door of the Bankruptcy Court. If the money has been spent on extravagant holidays, racing, etc., it would do; but Mr. Smith may have borrowed £1,000 for the purpose of making a perfectly safe investment which in future years will yield a surplus above the interest he has to pay.

This applies to Government capital expenditure, and some people think that the time has come when the Chancellor should present two Budgets, one dealing with expenditure that should be balanced by current receipts; and a special Budget, not necessarily an annual one, limited to expenditure on capital account only.

11. The Nationalisation of Industry

The economic activities of the State no longer end with the Budget, for nationalisation of industry has ceased to be an academic problem only; it is now a reality, and the main issue is what should be, and what will be, its scope.

The nationalisation of industry first became a problem of wide interest and discussion about sixty years ago, but in those days the programme was very modest, being limited mainly to the municipalisation of gas, water, and local transport; indeed, the programme was often described as "gas and water socialism." It is true that the nationalisation of the railways and the mines was advocated, but with little support, outside the workers concerned, down to 1914. Nationalisation owes its present strength less to abstract principles than to circumstances arising from the two world wars.

Down to 1914, nationalisation of industry was usually advocated on three grounds. Firstly, through external and internal economies the State would be able to give better wages and conditions of work to the worker; secondly, that the State would supply better services and cheaper commodities to the consumers; and thirdly, that the profits of a nationalised industry would fall to the community, and not to fortunate individuals.

Opponents of nationalisation were not slow to seize upon possible incompatibilities in the above arguments. Between

the rival claims of the workers and consumers, it was objected, the probabilities of a loss were greater than those of a profit, in which case the position of the consumer would be worse than before, and if the industry must be made to pay its way, better conditions for the workers can only be given at the expense of the consumers.

Down to 1914, nationalisation was also opposed on a somewhat different argument. Socialists, of course, invariably pointed to the Post Office. But, objected their opponents, there is no real parallel. The Post Office occupies a special position. It is an inevitable monopoly. Postal business is of a routine nature; the demand for the service is fairly regular, and fluctuation can be foreseen, and estimated. Above all, the service sells itself; the Postmaster-General has no need to advertise his wares, or to send out travellers into the market to rake in business. In most forms of business, so ran the argument, goods do not sell themselves, a market for them has to be created, and market creation depends on initiative, enterprise, foresight, and quick decisions. Post Office organisation would break down if applied to most forms of business in private hands.

Before 1914, this argument seemed unanswerable to most people. It contains truths, and warnings, but since 1914, two conditions have developed that have diminished their value.

In the first place, when people first put private enterprise in contrast with State ownership, they thought in terms of the nineteenth century small business, built up by the enterprise of a single entrepreneur, and financed by family thrift and abstinence. That, of course, is not the private enterprise of to-day. The issue now is between privately owned big business in its varied forms of combination and partial monopoly, and complete State monopoly; and some of the objections brought forward against State ownership forty years ago can be, and, indeed, have been, used against modern big business.

Secondly, State ownership of an industry need not, and, in fact will not, mean a civil service organisation. In the interval between the wars of 1914-18 and 1939-45, a new type of organisation was developed known as the Public Corporation.

12. The Public Corporation

It is not without interest that important new national undertakings developed between the years 1919 and 1939, such as wireless broadcasting, and the organisation of a national electricity supply, although they fall within the sphere usually considered as suitable for State management, have not been undertaken by the State directly, but have been entrusted to what are called public corporations, which are semi-public authorities, organised on the lines of commercial joint stock enterprise, but not worked for the purpose of divisible profit, and under varying degrees of State control and supervision; in other words, the public corporation is an attempt to fuse the particular advantages of State and of private enterprise.

The Central Electricity Board was instituted by Act of Parliament in 1926 to co-ordinate the national supply of electric power, and its members were appointed by a Government Department on the advice of representatives of such interests as industry, commerce, local government, agriculture, and labour. The function of the Board, under the Act, was to organise the electricity supply, but not to provide it directly, the power being supplied to the consumer by distributing authorities. The organisation was divided into areas controlled by eight district managers, and by means of the Board's grid system a much cheaper power service was made available to the public.

The B.B.C. is a publicly owned national organisation under a Board of Governors, appointed on behalf of the Crown by the Postmaster-General in consultation with the Prime Minister. Its peculiar feature is its relative freedom from Government control, and freedom from Parliamentary interference. The Postmaster-General is responsible for matters of general policy, but not for the details of the service.

Other important public corporations are the London Passenger Transport Board, and the Port of London Authority. Unlike the first two examples, the London Passenger Transport Board, and the Port of London Authority, which was formed as early as 1908, were set up to take over existing institutions.

In addition to the public corporation, public service boards, or boards of control, crept into a number of industries with

the object of setting them on their feet between 1930 and 1939. Part I of the Coal Mines Act of 1930, set up a Central Council and District Executive Boards for the purpose of regulating the output of coal. The function of the Central Council was to assign a maximum output for each district; each district board determined the "quota" each mine might produce.

Part II of the same Act provided for a Commission of five members, appointed by the Board of Trade, for the purpose of reorganising the coal mining industry, and of preparing schemes for the amalgamation of undertakings, where such amalgamations appeared to be in the national interest.

The Agricultural Marketing Act of 1931, provided for Marketing Boards for each of the main agricultural products, and the object of these Boards was to regulate the output, prices, and distribution, of their respective products.

The significance of these corporations, and boards, is that they have furnished the State with invaluable experience, and information, and they may rightly be regarded as a transition stage between purely private enterprise on the one hand and State enterprise on the other.

Under the recent Act for the nationalisation of the coal mining industry, the mines will not be operated directly by the State, but by a National Coal Board, a corporate body consisting of a chairman and eight members appointed by the Minister of Fuel and Power. The Minister, at any time, may make regulations affecting the Board, but apart from that the Board will regulate its own procedure. The Board will take all measures necessary for the mining and distribution of coal, and it will furnish the Government with such returns, and information, as the Minister of Fuel and Power may require.

The Act provides for two councils, the Industrial Coal Consumers' Council, and the Domestic Coal Consumers' Council to safeguard the interests of the coal consumers.

Similarly, the nationalised Bank of England will not be a mere branch of the Treasury. The Governor, Deputy Governor, and Court of Directors will be appointed by His Majesty, most probably on the advice of the Chancellor and

Prime Minister; and the Treasury, after consultation with the Governor, may give, from time to time, such directions to the Bank as may seem necessary in the public interest.

Future nationalisations will doubtless follow the same pattern, and it is clear that nationalisation has reached to a plane far removed from that on which it stood in the nineteenth century.

13. When is an Industry Ripe for Nationalisation

In respect of particular industries, the controversy is by no means settled, and it is likely to be a burning one for some years. On the question of whether a particular industry should be nationalised or not, something can always be said on either side, but certain statements can be made which are widely accepted.

Most people agree that an industry is ripe for nationalisation when it has reached the monopoly stage. The transition from private monopoly to State ownership is an easy administrative step. Where an industry consists of a large number of relatively small firms, each producing a variety of products, the administrative difficulties of State management are great. That is one reason why the engineering industry is not on the present nationalisation schedule.

For somewhat different reasons, few people advocate the nationalisation of such industries as the clothing, or the boot and shoe trades, which cater for fashions and individual tastes. The State is likely to give a less satisfactory service in the production of a highly variable product, than it can give when the product is standardised.

It is widely believed that a private monopoly will always exploit the public, but that is not necessarily the case. One of the incentives to private monopoly is to take advantage of increasing returns, and where the demand for the product is elastic, it is often a better business proposition to sell a much larger quantity at slightly lower prices than it is to curtail output and exploit the public.

And it must be remembered, that the public is protected in two ways. In the first place, if a private monopoly forces up prices too high, there is always the danger that a substitute

product will appear on the market. Secondly, in these days, price exploitation would be likely to lead to a public outcry for the State to take over the industry. It is possible, therefore, to exaggerate the dangers of private monopoly, although it needs to be watched by the State with a very careful eye.

An industry that must function in the national interest, whether it can work at a profit or not, is ripe for nationalisation. It would be against the national interest to allow the railway system to become derelict, and this holds, too, in respect of the coal mines.

An industry is ripe for nationalisation when it is being worked contrary to the public interest. On this count, many people would nationalise the armament and liquor trades, and one of the arguments long urged in favour of nationalisation of the coal industry is that, under private ownership, the best economic use has not been made of our greatest national asset.

Lastly, nationalisation seems the only alternative when an industry has fallen into such a condition that it cannot be extricated by private enterprise. This was probably the immediate reason for the nationalisation of the coal mining industry.

The experience of the public corporations, and service boards, suggests that the old argument that the State cannot run an undertaking in which initiative and quick decisions are at a premium is an exaggeration, but it remains to be seen if that driving force, so necessary in certain industries, will be as strong in a State undertaking as in private enterprise. Many people, therefore, still hold that the most suitable field for State enterprise is the industries of a more or less routine nature, which cater mainly for the home market.

14. Some Possible Consequences of Nationalisation of Industry

Any definite statement is impossible at present, for the effects of nationalisation will depend on its scope, and the way in which the system is administered. Some people fear that it is a long step on the road to the authoritarian State, but English people have a genius for compromise. As, however, the matter is one that must affect the economic lives of all of

us, it is not without interest to speculate briefly on what may happen should the majority of our industries pass, directly, or indirectly into the hands of the State.

In the first place the sovereignty of the consumer, if not lost entirely, will be modified considerably. In an economy based on private enterprise, market prices, and the course of production, are determined by the demand prices of the buyers. What is produced, and how much of it, is decided by the consumers, even though the sellers can, and often do, influence the buyers by means of propaganda. Costs, therefore, adjust themselves to market prices.

Under a nationalised industrial system the position would probably be reversed; the basis of price would be costs. Money wages would be much less liable to fall, but what would happen to prices would depend on the efficiency of State organisation. Unlike the private firm, the State cannot be forced out of business. Would it always have the same incentive to keep down technical costs as the private firm has?

Whether or not, under complete State enterprise, the consumer, having been dethroned, would always get just what he wanted, and in the quantities desired, is a question that cannot be answered in advance. When production is governed by the price mechanism, producers must always work with a finger on the pulse of demand. Under State ownership, production might be swayed by other motives; there might be a tendency for production to be determined by the needs of the State rather than the desires of the individuals.

It is sometimes objected that the theory that the consumer is king under private enterprise is an illusion except for those people who have the money to indulge their desires, but that is a question of distribution, and not of production.

A change over from a price system based on consumers demands to one based upon costs is not necessarily to be deplored. Under a competitive pricing system, the worker will get roughly about what he is worth to the product, and if the demand price for the product is low, wages will be low irrespective of any exploitation by the employer. Under a

price system based on costs, it may be possible to pay some regard to the moral worth of the worker. State regulation of wages is possible, however, by means of trade boards, without nationalisation.

The second consequence follows from the above. Each of us can be considered in a dual aspect, as a producer, and as a consumer. Under a system of direct production, in which each worker produced for his consumption only, the interests of the producer and the consumer would be identical. In an exchange society that is not so. Under private enterprise, the worker as producer is subordinate to the worker as consumer. The evils of competition strike the worker as a producer, not as a consumer; the consumer never complains that prices are too low.

Complete nationalisation of industry would probably reverse the above positions. It is true that in a nationalised industry, councils would be set up to safeguard the interests of the consumers, but the consumers are not organised, the producers are, and usually very strongly. A powerful trade union would be likely to influence the State much more effectively than a consumers' council. Under private enterprise, potential foreign competition limits the power of the producers, whether employers or workmen, to force up prices. When an industry is nationalised that safeguard disappears, as, in respect of prices at any rate, the State is not likely to import goods that compete with its own industries.

Nationalisation, then, may lead to a system of high prices, and high money wages, in contrast with that of low prices, and low money wages met with usually under private enterprise. That may be a matter of indifference to the worker as a producer, but it is not a matter of indifference to the worker after retirement. It may be argued, of course, that the State will continually adjust retirement pensions to changes in the cost of living, but experience suggests that the adjustment of pensions is always a matter of great difficulty.

But the problem uppermost in the minds of most people is whether a nationalised industrial system will end unemployment. There seems no reason why, under such a system, any man able and willing to work should remain idle.

Men redundant in one industry, or district, could be trained by the State and transferred to other industries, or removed with their dependents to some other area. If necessary, work could be made, either by the State developing new industries, or by launching a programme of public works. In practice, the State would not be able to command unlimited resources, for England is not a self-contained country, but within limits, the State, when in command of all the means of production, could eliminate unemployment.

In the extreme case, the State might need to direct labour to industries and areas, and even to limit the powers of all lesser associations, for complete planning would seem to demand unlimited State authority; but England is the land of compromise, and the Government would doubtless rest content with keeping unemployment within insurable limits, and avoiding the use of drastic measures.

Mass unemployment is not necessarily inherent in private enterprise. It is difficult to draw a comparison between the nineteenth century and the interval between the world wars, as in the nineteenth century, the world economy was in rapid expansion, but speaking broadly, in those days wages were fairly flexible; a period of bad trade was accompanied by falling money wages, which tended to arrest the upward trend of unemployment. If money wages varied automatically enough and widely enough with the conditions of trade, there would be no mass unemployment.

That system has been discarded by organised labour and for strong reasons. In the first place, the worker is apt to feel exploited, and secondly, he wants wage stability. His real wages are governed by circumstances beyond his control, but his union can influence his money wages. Thirdly, there is a psychological loss in a smaller wage packet, even if, through falling prices, his real wages do not suffer.

In the interval between the world wars, the trade depressions struck at employment to a far greater extent than they did at wages.

Under State ownership of all industries, unemployment would be eliminated without interfering with money wages.

What would happen to real wages would depend on circumstances. If it so happened that by taxation, or rising prices, the real wages of those in work were spread over those for whom employment had to be made, then the real wages and incomes of a large part of the community would be lowered. This is what some people claim has happened wherever a policy of full employment has been followed; that the trade depression has not been eliminated, but only disguised. Even so, it can be argued that there is nothing unjust in that. Many people believe that, where unemployment arises from circumstances beyond the control of the individual, the cost should fall on the community as a whole.

It need not necessarily follow that full employment under socialism will mean lower real wages. The workers may give more loyal service to the State than to the private firm. The State may be able to organise more efficiently, and to eliminate the frictional waste that seems incidental to private enterprise. Above all, the State may be able to utilise the fruits of technical progress to a far greater extent than private enterprise can do with its more limited resources.

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