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FULL EMPLOYMENT
AND
FREE TRADE

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FULL EMPLOYMENT
AND
FREE TRADE

BY
MICHAEL POLANYI, F.R.S.

CAMBRIDGE
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To
M., G. & J.

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P R E F A C E

The dawning of all great truths on the consciousness of humanity has usually to pass—says Tolstoy—through three characteristic stages. The first is: ‘This is so foolish that it is not worth thinking about.’ The second: ‘This is immoral and contrary to religion.’ The third: ‘Oh! This is so well known that it is not worth talking about.’ For many people Keynesian economics have already passed into the third stage, but for the vast majority they are still in the first or the second. To those who would complain that my book is labouring the obvious I would say, therefore, that it is not concerned with elaborating the Keynesian theory further, but with its conversion into a matter of common sense. The atomic theory of chemistry may serve as a parallel. It was established by John Dalton in 1809 and henceforth generally recognised and applied; to-day every child learns it at school. Yet for about fifty years after its first acceptance the theory never became clear to scientists. It was a revelation to them when in 1858 Cannizzaro set out the whole matter once more—without any important addition—in a new, more straightforward fashion. Keynesian economics must be made much simpler and clearer before they can become the common property of all thinking citizens. Being principally devoted to this purpose, this book cannot claim substantial originality; but neither can it be said to represent exactly what Lord Keynes or any other economist has definitely said before. I have done my best to refer at every point to the sources from which I have borrowed. Yet on a few occasions I had to omit an acknowledgment where I was uncertain whether an author would recognise my version of his thoughts. If I have failed in this matter, and my attention is drawn to it, I shall be pleased to make amends at the earliest opportunity, should my book be reprinted. I regret being unable to procure the American book literature published on my subject during the last two years of the War. To my friends among economists whose help I have enjoyed I owe much gratitude. Professor T. S. Ashton, Professor John Jewkes, Professor J. R. Hicks, Professor Stanley R. Dennison and Professor Lionel Robbins were good enough to read my manuscript before publication and to advise me on a number of points. I wish to thank them very much; but this should not imply that they endorse the contents of my book: there is no question of any such responsibility

on their part. My thanks are due also to Mr Walter James who revised my manuscript from the literary point of view. I gratefully acknowledge further a set of important data placed at my disposal by Mrs Ursula K. Hicks in the form of the Table reproduced in Appendix II. Mr R. Jeffryes made an admirable job of the illustrations and I am particularly grateful to the Cambridge University Press for their permission to make my arrangements in this matter directly with the artist of my own choice. My thanks are due also to Miss Erika Spitzer, who very effectively assisted me in collecting statistics and elucidating various points of their interpretation, and to Miss Olive Davies for her secretarial help throughout, which included the reading of proofs and the composition of the Index. May I recall also that my son George first suggested to me to write this book and started me on it in 1942, and that the help of my wife and son John at the earlier stages of its composition was invaluable to me.

Writing this Preface to-day, five months after sending off the manuscript for publication, I feel uppermost a sense of great urgency. In these five months the spreading of Keynesian ideas has made but little visible progress, while the conclusion of the War in Europe has brought within sight the return of Unemployment. It seems very unlikely now that the United States will yet accept and resolve to apply effectively modern employment policies in time to avoid the next great Depression, and nothing can then prevent such a Depression from engulfing Britain and all other capitalist countries in their turn.

And yet, would it not seem that one slight effort of thought, followed up by resolute action, could still avert the disaster; this perhaps final blow?

M.P.

NOTE TO THE SECOND EDITION

It will soon be two years since the War ended, yet we are still troubled by over-employment rather than unemployment. That is the situation at any rate in Britain. As the Keynesian theory was first discovered in response to a state of unemployment, people now begin to say that there is no longer any use for this theory. But actually a Keynesian analysis of our troubles was never more necessary. While readers of this book will have little difficulty in applying to the present situation the Formula: $\text{Tax} + \text{Gap} = \text{Budget}$, they might yet be interested to see how I have done this myself. I have reprinted, therefore, in the Appendix to this edition—by courtesy of the Editor to whom I express my thanks—an article on this question recently published in the *Manchester Guardian*. .

M.P.

March 1947

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INTRODUCTION

The riddle of recurrent economic depressions in which there is over-production in all branches of industry has vexed the minds of men since the very beginning of modern capitalism almost 150 years ago. The socialists bitterly exposed this distressing phenomenon as an internal contradiction of the capitalist system, which would presently lead to its final collapse. In reply, orthodox economists denied that any general over-production could exist at all, since this would be contrary to 'Say's Law'.

The Keynesian discovery in 1936 of the mechanism by which the level of employment is determined revealed that conditions of over-production are actually quite common. But it showed at the same time that, far from representing a necessity inherent in capitalism, this evil is due rather to an incidental defect attached to the system. The capitalist system has grown up apparently without having been properly understood, and a small but indispensable element of the mechanism was left out in its making.

The fact that both ardent defenders and bitter critics of the capitalist system should have missed this essential point throws a curious sidelight on the process of history. It is difficult to see any reason why the Keynesian mechanism should not have been recognised, say, in the year 1800—or at any time between that date and the year 1936—except for the fact that men were not clever enough to see through the puzzle which was facing them. Thinking takes time. It is accelerated, no doubt, if you are pressed for the result; and the crisis of the 1930's was bound to speed up the process. But the fact remains that for more than a century wrong answers were given to a sharply contested and vital problem by both sides, while it would have been in the interest at least of one side, if not of both, to find the truth.

The course of past history thus appears to have been determined to a fateful degree by the slowness of human thought, and the same may be expected to hold for the future. Our fate may largely depend on the speed at which we shall prove capable of absorbing a certain set of current ideas on the nature of a particular economic process.

This is a most curious, and perhaps unprecedented, condition; rendered even more curious by the fact that the Keynesian theory is really quite simple—perhaps difficult to grasp at first, but once

understood quite easy to handle and to keep in mind. It is like the solution to a riddle which once you have seen it you cannot miss any more; a veritable egg of Columbus.

When a fairly simple concept is found difficult to grasp merely on account of its novelty, a suitable method of presentation may speed up understanding decisively. I have been searching for such a method ever since the publication of Keynes's theory and have made for this purpose a diagrammatic film which I have myself demonstrated and explained to nearly a hundred popular audiences in the last six years. The pictures in Figs. 1 and 2 are taken from this film,¹ and my whole introduction to the Keynesian mechanism is based on my experience with my film audiences. The discussions which I had on these occasions have convinced me that this mechanism can be understood in an hour or two by any person of normal intelligence, if he or she is sufficiently interested in the matter. It should be possible therefore, I think, to base, even in the near future, a democratic process of discussion on Keynesian conceptions; provided that an early and energetic effort is made to disseminate them by suitable methods.

In the last 15 years the opposition to capitalism, intensified by resentment against the protracted economic depression, has taken the form of a widespread movement for 'economic planning'. The Keynesian ideas have hitherto been taken up rather by the 'planners' and ignored or even sharply opposed by the 'anti-planners'. I think this was based on a misconception. In view of the Keynesian theory all efforts to eliminate unemployment by direction of trade must appear futile. False moves of this kind were hardly avoidable so long as the correct cure of unemployment remained unknown; but the application of the right cure and the establishment of Full Employment should put an end to them. A correct Keynesian policy should regenerate free competition and re-establish capitalism on renewed foundations.

¹ The film is called *Unemployment and Money*. In making it I was helped by Miss Mary Field, Mr R. Jeffryes and Prof. J. Jewkes. For its description and theoretical analysis see *Review of Economic Studies*, Vol. 8, p. 1, 1940.

CHAPTER I

THE ELEMENTS OF FULL EMPLOYMENT

The Understanding of Money. Great social evils have arisen in the past from a mistaken handling of money and much future misery may be avoided by a better insight into its functions, wisely applied to the management of economic affairs.

The main point to understand is that the possession of money is not of the same, or even remotely similar, value to a nation as it is to the individual. By acquiring money an individual becomes rich, but even though the acquisition of more money may be of advantage to a country, it cannot be considerably enriched through it. This fact was of course recognised and proclaimed by Adam Smith in his *Wealth of Nations*, and his teachings have been widely applied ever since to the great benefit of civilised mankind; but alas, Adam Smith attacked and dispelled only one form of the central fallacy of money, and his influence actually caused some of his followers to perpetuate other forms of it into our own days.

The past 25 years offer ample examples of deception and error in the handling of monetary matters. The German inflation and other great Continental inflations are cases in point. The practice of financing the expenditure of the State by inflation was made possible only by the fact that shopkeepers were regularly deceived into accepting money of rapidly dwindling value in exchange for goods; once they realised the deception they ceased to sell goods to the public and forced the way to a stabilised currency. The deception here practised by the Governments was probably largely involuntary and rooted in ignorance. Indeed the next piece of monetary mismanagement which a number of them embarked upon certainly suggests that they hardly knew themselves what they were doing in these matters. They undertook a forced revaluation of money, causing a sharp fall in exports and a general decline of business activity. The strong protests voiced by France and Italy at the Genoa Conference of 1922, demanding their right and announcing their intention to revalue their currencies from about 20 % to gold parity, seem absurd to us to-day when we see most countries struggling hard for the right to *devalue* their currencies when they think fit; but in the early twenties the revaluation of national currencies was quite generally accepted as a means of enriching a

country and restoring its prosperity. Yet another disastrous policy generally practised in the inter-war period was that of exacting reparations and the repayment of large international debts in terms of money: ignoring the fact that this involved the receipt of an equivalent quantity of imports.

The ineffectual and often perverse measures taken against unemployment present further examples of major monetary errors. We remember how Governments responded to the great depression of 1930-2 by sharply retrenching public expenditure and by other deflationary measures—which we should consider to-day as so many injections of poison; and how vigorously such measures were supported, for example in Britain, by a patriotic public lining up in queues to make early tax payments; hoping to do a public service by supporting the national Exchequer while actually depleting even further the already dangerously ebbing flow of monetary circulation.

Fortunately, the understanding of money and of the proper handling of monetary matters has made great progress in the past quarter of a century. At the beginning of that period the general public and even the most highly educated people thought of money in terms of coins having a stable intrinsic value and never realised that its buying power can fluctuate within the widest limits; that a plenitude of buying power can make business prosper and even run wild, while a scarcity can cause it to fall into paralysis. They had not yet thought of money as an instrument which could go wrong, and be again mended and readjusted to its proper purposes. Nor did expert economists themselves possess a sufficient understanding of monetary affairs. The blunders of Governments to which I have referred were often emphatically supported by authoritative representatives of economic science. But since the early 1930's a new and more enlightened opinion has begun to dawn upon economic science, and through the publication in 1936 of *The General Theory of Employment, Interest and Money*, by J. M. Keynes, the light finally broke through. To-day economists are very largely agreed on the Keynesian theory of unemployment, and the general public is also rapidly modernising its attitude to monetary affairs. Yet in spite of the great recent progress, current popular ideas about the nature of money are still very vague and must be clarified even further if they are to form a firm basis for a rational policy of economic expansion.

The Money Circle. Money is not wanted for its own sake but merely for the things you can buy with it. People are anxious to

get money, but only in order to pass it on again. Thus money is kept circulating most of the time.

The picture overleaf (Fig. 1) recalls this well-known process. It shows how people take their money to the market-place and leave it there in exchange for their purchases; and how they pick it up again, as they earn their living in field, factory and commerce.

The money spent at the retailer's shop is partly brought home from there by the earnings of people who make their living in the retail trade. Another part of it percolates further to the manufacturers. When the manufacturers take home their earnings, they must leave behind enough money to pay the primary producers. As the latter in turn collect their earnings, this last residue of money is also returned back to the spenders at home. The circle is thus completed.

We may wonder what it is all for, this sowing out of money by man the consumer, and the collecting of it again by man the producer—this going round and round in a circle. No direct reply is given to this question in this book; but the attitude taken up in it towards the central direction of economic life indicates the answer: the practicability of central economic management is denied altogether, because modern economic life involves, and must involve, circular exchanges so complex that they cannot be arranged without the intermediation of money. Man the consumer must go to the market and send his money as a signal to man the producer who must keep looking out for it behind the scenes of production. Thus man the spender governs man the earner who depends for his livelihood on spotting the points at which the stream of money is thickening, and on hastening to apply his activities to increasingly profitable lines, at the expense of others which show signs of failing to pay their way. That is the only possibility for conducting a modern industrial system of production.

Our picture is over-simplified by the fact that all private incomes are supposed to be spent, and spent without delay, on goods for individual consumption, and all business receipts are assumed to be laid out, again without delay, to pay wages and other current production costs. Thus it omits all reference to private savings and to business investments, as well as to taxes and public expenditure. Nor does it assign a clear place to foreign trade, particularly if the latter gives rise to an appreciable balance of foreign payments. All these points will be set right later.

The flow of money going round in the picture represents the total earnings of the population, that is, the National Income in

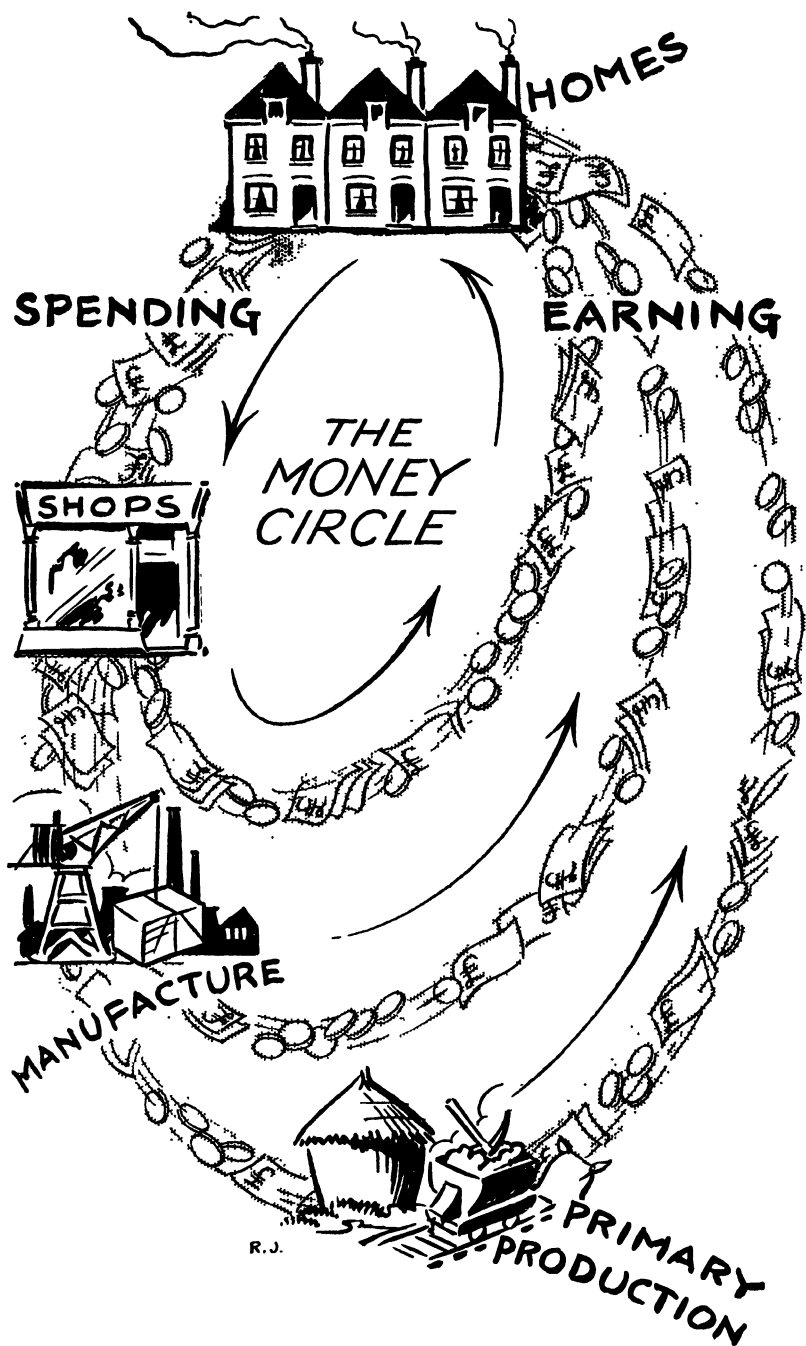


Fig. 1. The Money Circle.

the form of money. In view of our simplified assumptions the National Income consists here entirely of goods destined to the use of individual consumers. We shall have to amplify this conception of the National Income in order to bring it nearer to reality.

Expansion and Contraction. So long as the Money Circle is maintained in the above simplified form, there can occur no general recession, and indeed no general change, in the volume of business activities. No goods that are produced will remain unsold. The money which daily goes buying to the market will be just sufficient to buy on the average the whole daily production of the community at reasonable prices.

This should not exclude, of course, variations of production as between different lines of goods, nor the changing over from old lines of production to new ones. Such changes may hit hard the individual producers who are forced out of business and also labour which is displaced in the process, but they would little affect the total volume of employment. Moreover, each change of this kind should lead to a further development of productive technique or at least to its new adaptation to changing conditions of available materials and of the consumers' tastes. Productivity would thus be continually improved (or at least maintained to the extent that conditions permit) while the volume of production as expressed in terms of money would remain unchanged.

This is a satisfactory state of affairs, provided that the volume of production happens to involve the complete utilisation of national labour. But it may not. Some of the population may be unemployed and would then remain so, in the supposition of the picture, indefinitely. While there would be no danger of any general slackening of business, there could be no hope either of any general expansion of employment, through restarting unused capacities.

In order to represent the expansion and contraction of employment, we have to broaden the basis of our scheme. We must consider what happens if, for whatever reason, people decide to increase their daily expenditure. They can do that in various ways which we shall discuss carefully in due course. Assuming, for the moment, that expenditure is increased in whatever manner, the consequences follow obviously enough. Shops are being sold out before demand is satisfied. Stores are depleted, prices and profits tend to rise, and presently production is expanded. If the increased daily expenditure is stably maintained, the higher level of circulation and production thus established will continue to prevail indefinitely.

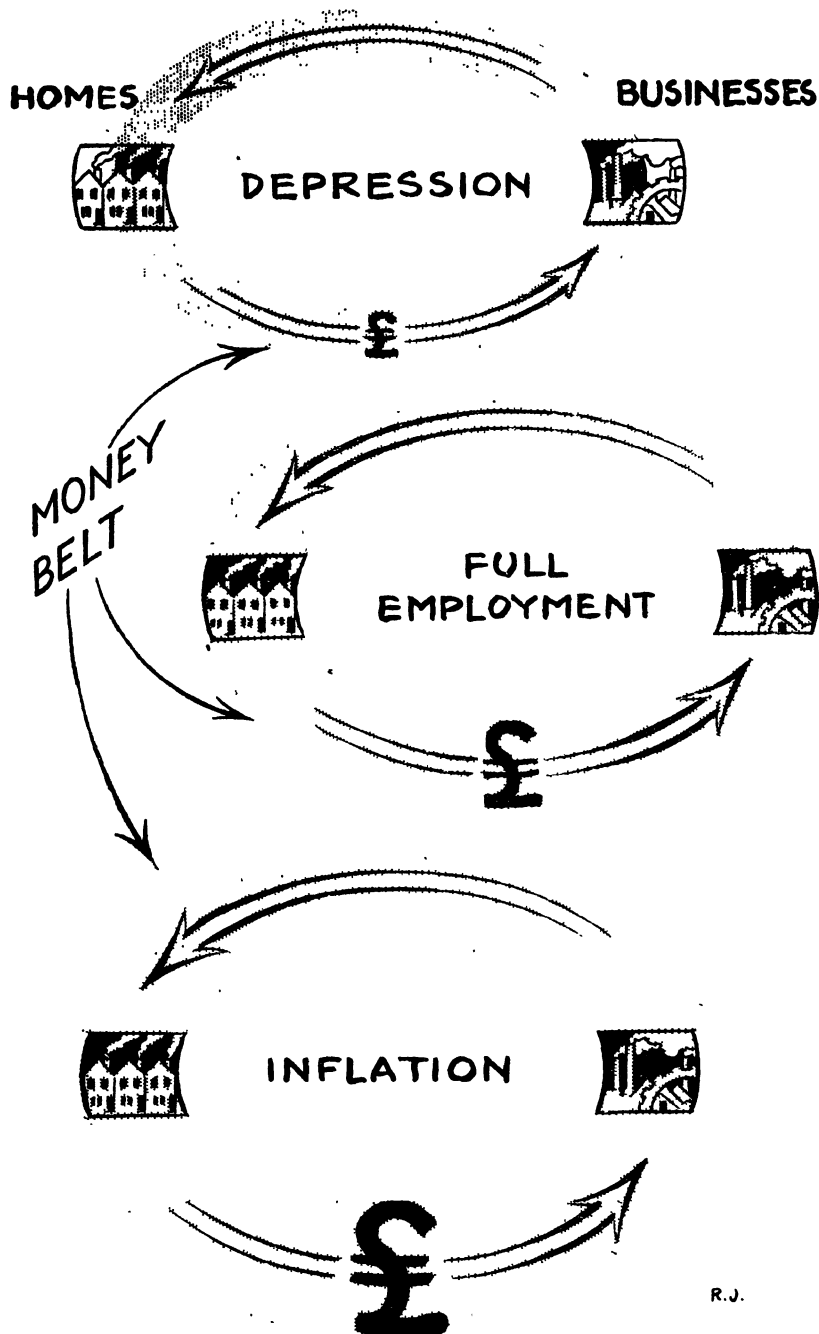
A process of contraction can be represented on similar lines by making the reverse assumption of a reduction in daily expenditure. If for any reason people decide to reduce their daily expenditure, shops will find stocks accumulating on their shelves, prices and profits will tend to fall, and presently production will be curtailed. If the reduced rate of expenditure persists, business activity will remain on its reduced level.

These processes of expansion and contraction can be visualised, and discussed further more easily, by the use of the following simplified symbolism. In Fig. 2 there are two rectangles to represent the Homes on the one hand and the totality of Businesses on the other. The revolving ribbon or belt passing through both symbolises the flow of money. When the Money Belt is narrow ('Depression') only part of the Homes and of the Businesses are traversed by it. Only these are supposed to be engaged in production, while the parts which are bare of money are supposed to be left out of the process of production. Unemployed people in the moneyless section of the Homes are facing idle factories in the moneyless section of the Businesses.

In this picture the level of employment expands and contracts automatically with the width of the Money Belt. The position of full employment is fixed at the point where the Money Belt just equals in width the rectangles symbolising the Homes and Businesses ('Full Employment'). If the Money Belt is expanded beyond this—as it well may be—no further additions can arise to the number of employed people, and hence the level of production undergoes no further expansion. In this case the National Income expands only in terms of money but not in terms of goods, and the result is a general, inflationary, rise in prices ('Inflation').

The main conception to fix upon is the variable Money Belt determining variable levels of employment: the level of production expanding and contracting with the rise and fall of the National Income expressed in money. This fundamental picture will yield a multitude of important conclusions before we find it necessary to extend and correct it—as we eventually shall in Chapter IV. The picture of a state of Full Employment which is reached at a precise point of expansion, and of Inflation which sets in beyond that, will also serve us well, in spite of its crudity, until we come to revise it in the same chapter.

Savings and the Spending of Savings. There are a hundred ways in which a citizen—be he engaged in business or merely conducting his private affairs—can affect the circulation of money. Every



R.J.

Fig. 2. Expansion and Contraction.

time he chooses to spend money rather than to leave it unspent—or the reverse—his choice will affect the total circulation of money. It is the same with the State or other public authorities. Every decision of theirs to collect taxes, to raise a loan, to spend public money, or to handle finance in any other particular way, has its effect on the general circulation. This book is largely concerned with tracing the channels through which money is brought into circulation or withdrawn from circulation. As the flows passing through these channels are decisive for the expansion or contraction of employment, our purpose must be to control them in the interests of a good and steadily expanding level of employment and production.

The simplest process which can cause monetary contraction has already been pointed out. Whenever a consumer sets aside part of his earnings, rather than spend it in the market, he reduces to that extent the circulation of money. Suppose a wage earner who hitherto has been in the habit of spending his whole income week by week, decides to set aside a single sum of, say, 10s. and keep it back indefinitely from the market. This action takes off a slice from the Money Belt and—unless there occurs some other independent offsetting action elsewhere in the economic system—the income represented by the Money Belt is permanently reduced to the extent of approximately 10s. per week.

It matters very little whether the 10s. that was left unspent is locked in a drawer or put into a bank. Whatever the bank may do in the course of its customary operations with the additional cash, its action will not materially affect the circulation of money. We need not trouble therefore at this stage with the question where and in what form the money set aside as Savings is actually deposited. We shall take it that it is stored up at some place which we will call The Bank.

The obvious counterpart to Savings is the expenditure of sums previously saved and set aside in the Bank. Such sums when again brought to the market and spent there will cause a permanent addition to the Money Belt. This represents a process of monetary expansion which, when occurring in a state of partial employment, would carry with it a rise of employment and an extension of production. If the expansion occurs at Full Employment the additional circulation can of course lead only to a general inflationary rise in prices, which is altogether harmful.

It would thus almost seem that Thrift is the bane and Prodigality (if not excessive) the salvation of economic prosperity. But we

must draw no such hasty conclusions, based on a fragmentary picture. In actual life the withdrawal of private savings from the Bank and their expenditure on the market rarely plays a dominant role. The amount of money which people bent on saving are setting aside day by day is almost invariably in excess of the sums which others simultaneously withdraw from the Bank and spend at the shops. In our further discussions we shall consider only the balance of the two processes, and that balance will be taken to be usually on the side of savings.

Expenditure on New Investments. Now if the process of saving is always in operation, what prevents it from draining away the whole circulation of money? The answer is that the effects of savings are counteracted by the money invested in new business enterprises. When the construction of a new factory is taken in hand, the workers hired for the purpose, and all others participating in the business of construction, will start receiving payments of money under various titles, such as wages, interest, rents, profits. All these earnings become immediately available for spending at the Shops, while no addition is being made at this stage to the goods for sale in the Shops. The earnings which the people engaged in constructional activities take to the Shops thus form a net addition to the money already being spent there and will have the same effect on the market as if money were withdrawn from the Bank for expenditure at the Shops.

Here is the process which normally balances savings. So long as the money which is removed day by day from circulation, through the process of saving, is balanced by the sums which are continuously flowing into new business investments, the width of the Money Belt will remain unchanged. We shall call the flow of money spent on the creation of new commercial enterprises or the enlargement of existing enterprises by the name of New Investment, or Investment. This does not quite coincide with the popular use of the term 'investment'; but we shall clear away any possible misunderstanding which may arise in this matter when we deal with the purchase of government bonds, which is commonly included in (but is excluded from our own use of) the term 'Investment' (see pp. 32-6).

We note also for later extensive discussion that current expenditure of public authorities, which is not covered by taxation but by 'loan' (and represents therefore a Budget Deficit), has the same effect as an expenditure on New Investment. We shall see that it does not matter in this respect whether the Budget Deficit is

incurred for constructional purposes or simply to cover the current needs of communal life.

The precise meaning of the processes covered by the terms 'Investment' and 'Saving' will actually be developed further throughout this chapter. The statements made provisionally in its earlier parts will thereby undergo some further refinement.

The Two Pumps. Meanwhile we have before us the picture of a steady level of employment depending on the balance of two apparently quite independent activities, Saving and Investment. It is as if two pumps were acting simultaneously on the circulation of money—a sucking pump (Savings) and a squirting pump (Investment)—and were preserving its level by acting at the same rate in opposite directions. It follows that if the two pumps are *not* in step there will be expansion or contraction. Excess of Savings will drain the Circulation, narrow down the Money Belt, reduce employment and depress the level of national production. Excess of Investment will replenish circulation, widen the Money Belt, increase employment and raise national production; and if it continues to operate beyond the stage when Full Employment is reached, it will cause Inflation and a fall in the value of money.

We are faced here with the factors primarily responsible for the occurrence of business fluctuations and realise that our aim must be twofold: to adjust the two pumps so that their actions should balance, and to secure this balance at a level of monetary circulation sufficiently high to sustain a state of Full Employment, and not so high as to produce undesirable inflationary effects.

Self-sealing Gap between Savings and Investment. The next point of the argument contains the central principle of Keynesian economics which, though it may sound puzzling at first approach, is really quite simple once its main idea has been grasped. We approach this idea by asking the following question: If the two pumps are out of step, will they go on draining—or, alternatively, swamping—the circulation of money indefinitely? The answer is No; there will be set up counter-forces—and quickly too—which will set a limit to either of these tendencies.

Suppose that Savings are in excess of Investment. As the ensuing sucking effect drains circulation, depresses employment, strangles production and reduces the National Income, the people will set aside less money from their shrunken incomes. Savings being reduced, the 'sucking' becomes weaker and the gap between the performances of the two pumps is reduced as well. This process will continue so long as any excess of sucking is left over. Eventually

incomes are forced down to the point where the rate of sucking has become equal to the rate of squirting, the gap between the two having vanished. Thus the gap between Savings and Investment can be seen to possess the capacity of sealing itself automatically.

The self-sealing mechanism works naturally also with respect to expanding incomes. When Investment is in excess of Savings, circulation grows, employment and production rise, the National Income reaches a higher level. From expanding incomes people set aside more money: sucking becomes more effective and the 'gap' is reduced. Hence presently sucking will come up to squirting and the gap between the two will be closed again.

At this stage when we talk of National Income we must naturally include Investment in addition to production for current consumption. The construction of new plant must be taken to form part of the National Income, which should represent the total accession of wealth during the year, both that which was actually consumed and that which has been stored up in the form of new equipment (or of increased stores of merchandise) in expectation of future benefits to be derived from it.

The fluctuations of the National Income, defined, as above, in terms of money, are usually larger than the corresponding fluctuations of the *real* National Income. The reason is that, even within the range of partial employment, prices rise somewhat during a business recovery and go down during a process of contraction. (More about this in Chapter iv.) Naturally, once a business expansion has reached the point of Full Employment, any further rise of the National Income can only be nominal, expressing merely the rise in prices which marks the progress of inflation.

The principles of the 'self-sealing gap' remain in operation over all ranges of expansion or contraction of the National Income, whether these occur below or above the level of Full Employment. The process of self-sealing occurs fairly rapidly.¹ On account of this fact the time involved in the process is, more often than not, altogether left out of account by economists, and the self-sealing nature of the gap between Savings and Investment is then expressed as a necessary *identity* of both these magnitudes. This is rather misleading and should preferably be avoided.

New Investment determines National Income. All these ideas become much more definite if we now try to work out in detail the way in

¹ For an analysis of the time sequence see R. F. Bretherton, F. A. Burchardt and R. S. G. Rutherford, *Public Investment and the Trade Cycle in Britain* (1941), p. 323.

which the National Income varies with changing flows of Investment. We will first approach the matter in a rough way—just to get the general sense of it—and fill in our picture later.

Suppose people in Britain were in the habit of saving 10 % of their incomes, persisting in this habit regardless of whether their earnings rise or fall. And let us start at the pit of a bad depression with the National Income, say, at £m.3000 instead of £m.6000, which we shall assume it would be at Full Employment. Savings in this condition would be £m.300 p.a. and, according to the conclusions drawn in the foregoing section, we must assume of course that Investment is the same, i.e. £m.300 p.a. Let us now watch what will happen when the coincidence of Savings and Investment is thrown out of balance (see Table 1). Suppose, for some reason,

TABLE 1. *Assumptions:* Savings always at 10 %.
National Income at Full Employment £m.6000

			Volume of Savings	Investment	National Income
1. Begin with steady National Income at	...	...			£m.3000
then Savings would be	...	...	£m.300		
to balance an Investment of	...	...		£m.300	
2. Raise Investment to	...	...		£m.400	
then National Income rises to	...	...			£m.4000
so that Savings may become	...	...	£m.400		
			and again balance Investment		
3. Raise Investment to	...	...		£m.600	
then National Income rises to	...	...			£m.6000
so that Savings rise to	...	...	£m.600		
			and once again balance Investment		

Investment suddenly rises by £m.100 p.a. to £m.400 p.a. There is a 'gap' now of £m.100 p.a., since Investment has become by so much in excess of Savings, and this predominance of 'squirting' will cause a rapid expansion of the National Income. But as incomes expand the volume of Savings increases apace and this sets a limit to expansion, which will progress only up to the point where the 'sucking' has caught up with the 'squirting'. The production of £100 p.a. additional Savings, at the assumed rate of 10 %, must mean that the National Income has increased by £m.1000 p.a. The rise of Investment by an annual sum of £m.100 therefore will increase National Income from £m.3000 to £m.4000. Clearly, to achieve Full Employment in these conditions we should have to add (if we could) another £m.200 p.a. to the flow of Investment. This would bring National Income to Full Employment level. If Investment were to rise still further, the self-sealing

mechanism would continue to operate, while monetary circulation would attain inflationary levels.

The process just described is completely reversible so that, for example, by reducing Investment to nothing we should, according to this picture, reduce employment and income also to zero. This obviously absurd result is a consequence of our unrealistic assumption that people always save at the same rate of 10 % whatever level their income may happen to attain. That is definitely not how they behave. We may assume instead that there is a rock-bottom level of income at which people spend all that they get and that they start saving only from what they earn over and above this basic level. We will assume that the basic level for Britain is £m.3000 p.a. and that people save $33\frac{1}{3}$ % of all incomes above that. This probably is not very far from the truth.

If we start now, as before, from the bottom of a depression at £m.3000 p.a. National Income, Savings and Investment must be taken to be both zero. Suppose that Investment is started at a rate of £m.100 p.a. How far will the consequent expansion go in the present conditions? Clearly, this time, National Income will increase only by £m.300 p.a., this being the addition from which the current rate of thrift will extract Savings at a rate of £m.100 p.a. In order to achieve expansion of the National Income to £m.6000 it is this time necessary to make total Investments rise to the level of £m.1000 p.a.

We can sum up this scheme as shown in Table 2.

TABLE 2. *Assumptions:* Full National Income £m.6000. Rock Level £m.3000. Rate of Savings 6s. 8d. in the £ from income above Rock Level

	Volume of Savings	Investment	National Income
Starting at Rock Level	0	0	£m.3000
1. Begin Investment at		£m.100 p.a.	
then National Income rises to...			£m.3300
so that Savings may become	£m.100 and balance Investment		
2. Raise Investment to		£m.200 p.a.	
then National Income rises to...			£m.3600
so that Savings may become	£m.200 and again balance Investment		
3. Finally raise Investment to		£m.1000 p.a.	
then National Income rises to...			£m.6000
so that Savings may become	£m.1000 and, as always, balance Investment.		

At which stage Full Employment is attained. If Investment rises

further the self-sealing mechanism would continue to operate, while monetary circulation would attain inflationary levels.

Richard Stone's Figures for U.S. 1929-41. Actual figures to illustrate the operations of the Keynesian mechanism are not available for Britain, and detailed calculations for this country would in any case have to be supplemented by somewhat complex reservations concerning the effects which monetary expansion would have on the level of imports and exports, a point which cannot be usefully discussed until later. But a striking confirmation of this mechanism can be obtained for the U.S. from a study of the period between 1929 and 1942 which was published about 2 years ago by Mr Richard Stone, of the Central Statistical Office, London.¹ In order to present his results, we have first to characterise the part played by taxation and by public expenditure made from taxation in the circulation of money.

The State customarily appropriates part of our income in the form of taxation and then proceeds to spend it on our behalf in the form of public expenditure. The money thus spent trickles back to the Homes in the usual way, through the earnings of people employed by the State or engaged in production the fruits of which are purchased by the State. Year by year money is thus taken away by taxation, and spent on our behalf. A circulation is kept up in this fashion which differs in no essential way from the Money Circle described before. In fact, we may think of taxes as a part of our personal expenditure for the spending of which we use the State as our agent. The circulation of taxes and public expenditure can then be included in the Money Belt pictured in Fig. 2.

For the period reviewed by him, Mr Stone has found that public expenditure made from taxation varied in a regular fashion with the total private consumption of the U.S. This connection will interest us later; for the moment we shall lump together public expenditure derived from taxation with private expenditure on consumption, to form the sum of total consumption, public and private. In this sense the National Income must be henceforth defined as the total sum of consumption (both public and private) and of new commercial investment. In the chart (Fig. 3) showing the variations of the National Income in the U.S. during the period 1929-41 the term is used in this sense.

¹ Richard Stone, 'National Income of the United States', *Econ. J.* 1942, pp. 154-75; also *National Income in the United Kingdom and the United States of America*, Manchester Statistical Society (1942). See also *Review of Econ. Studies*, vol. 10, 1942-3, p. 1.

Investment, we may remark, includes the building up of stores of goods. If during any one year stores are being depleted, Investment, to that extent, becomes negative. The same is true if machinery is generally allowed to run down or—to be more precise—if at any time current replacements of machinery fall short of the average required to keep intact the existing stock of capital. Such shortcoming of replacement again represents negative investment (just as any excess would be counted on the positive side of investment). If for any single year Investment becomes as a whole negative, the National Income will be smaller than the annual consumption. In such a year the nation will appear to have eaten up some of its capital. This is what the chart indicates for the years 1932 and 1933.

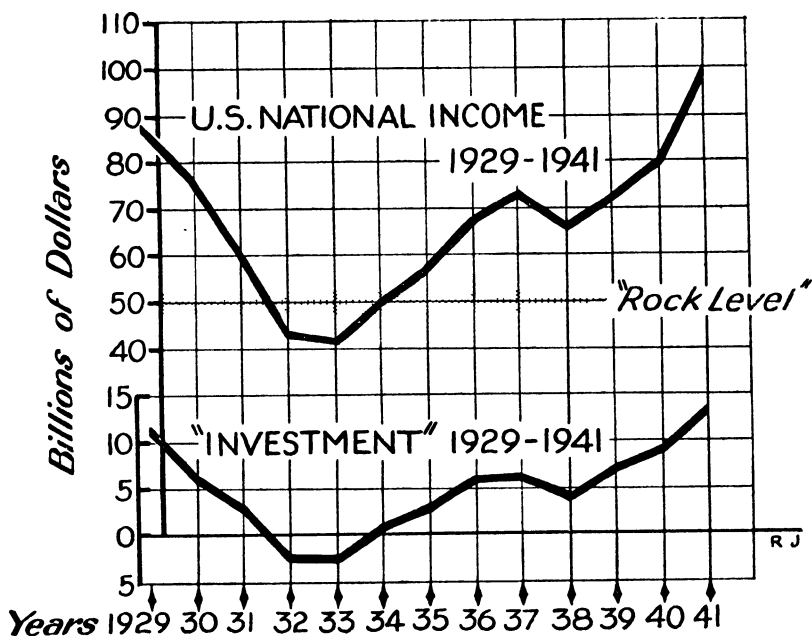


Fig. 3. National Income and Investment in U.S. 1929-41.

We have said before that a Budget Deficit has exactly the same effect on the Money Belt as an equivalent flow of private investment. Accordingly, 'Investment' in the figures taken from Mr Stone includes the sum of public expenditure covered by loan. We again mention this important fact only in passing here, while once more postponing its more detailed discussion.¹

¹ What the chart calls 'Investment' is to be found under the term 'net investment' and the deficit of public authorities' in Mr Stone's paper.

The wide variations of the National Income shown by Mr Stone's figures are striking—even though they would be somewhat less than shown in the figure, if price changes were eliminated (see Appendix I). Starting from the peak year 1929 we see the progressive fall of National Income running its course till 1933, when it reached its lowest point. The steady improvement which took place during the following 4 years did not take the National Income up to the 1929 level, yet in 1937 and 1938 there occurred a renewed fall which was only reversed in 1939 by the effect of the beginning British rearmament boom. In 1940, when American rearmament started, expansion became violent. It has continued to advance after that towards steadily rising inflationary levels.

We have noted already that in the worst years of the American depression Investment became negative. Stocks were being bought up for consumption with money withdrawn from the Bank—or by diverting to consumption sums that were due for repayment (particularly as Depreciation Allowances) to the Bank. In reading the chart we must remember that current Investment is always practically equal to current Savings. At the points of time on the lower chart where Savings thus appear to be zero the National Income (upper chart) is about \$50 billions. This sum appears therefore as the 'rock level' for the United States during this period. A further examination of the chart shows that additions made to Investment have caused a roughly fourfold increment of National Income. This means, in the light of Table 2, that incomes above the 'rock level' are subject to Saving at an approximately steady rate of 25%.

The main point which the chart demonstrates is the dominant part played by the rate of Investment. The variations of Investment are seen to drag the National Income up and down in a series of wide fluctuations. No more manifest confirmation by experience could be demanded of the Keynesian speculations which, long before this material was available, led to the postulate of this functional dependence.

It is not claimed that the rate of Saving on increments of income (usually called 'marginal rate' of Saving) must in general remain steady, as is approximately the case in Mr Stone's material, over a wide range of National Incomes. The argument requires only that each level of income should be accompanied by a fairly characteristic rate of Saving. But the observed approximate proportionality between Saving and National Income does, of course, make Mr Stone's demonstration particularly striking.

Budget Deficit. The figures for Investment quoted above include

government expenditure, financed by loan. Over the period from 1929 to 1941 about \$36 billion, i.e. 55 % of the total sum of 'Investments', consisted of expenditure from government loans.¹ We must now explain why these two items, Investment and government expenditure from loans (Budget Deficit), are lumped together as equal partners in the function of squirting money into circulation.

We have hitherto assumed the Bank to be a cloakroom where cash is deposited for safe keeping. Actually, of course, it is more than that; it is a machine for making payments from one customer to another. Money stored in the bank is not, as we have hitherto supposed, out of circulation. In fact, we could imagine the whole circulation of money replaced by the transfer of credit accounts inside the Bank. From the point of view of our previous discussion this would make little difference, as it would only transpose the 'Money Belt' into the interior of the Bank. The picture of Saving would have to be modified, as people, when saving, would not 'take money to the bank' but merely leave it idle in the Bank. Nothing essential would be changed thereby.

It is justifiable then to simplify matters by retaining as our guide in this argument the more vivid picture of a circulation based wholly on cash and to allow for the ability of the Bank to create credit by imagining that it has a very large, practically inexhaustible, reserve of cash at its disposal. This is a good picture of real life, since so long as banks are held to the strict obligation of preserving their assets they cannot extend their operations beyond the limits set thereby—however large the sums may be that their vaults enclose; while on the other hand, unlimited cash reserves are available to the banks—should they need them—for proper purposes by the Central Bank issuing notes as legal tender.

Consider now the process of new business investment. A private investor draws money from the bank, either against his own deposit or on credit. In the first case the bank would pay out cash or transfer an existing deposit; in the second it would create a new (credit) deposit and then proceed as in the first case. Whether the creation of a new deposit leads to payment in cash or only to a transfer of the deposit, makes little difference to the bank. It can proceed in either way if and only if it has reason to assume that the loan is secure and will be repaid with interest. We may take it that whenever this is true the money is made available to the

¹ Richard Stone, 'National Income of the United States', *Econ. J.* 1942, pp. 154-75, Table 3/1.

investor, one way or another. When the investor starts paying wages, etc., for the purpose of a new construction, this money is sent into circulation.

Compare with this the process of government expenditure, financed by loan. The Government obtains the money in the first place by incurring a 'Floating Debt'. It issues a certificate which it deposits with its own Central Bank or with the commercial banks which accept this document on the strength of a promise of redemption. The actual cash is in either case supplied by the Central Bank which issues the requisite notes, and the part played by the commercial banks in making the money available is little more than a formality. Their real function lies in acting as bankers for the ensuing monetary transactions and in helping with the second stage of government lending by which the loan is 'consolidated'. The latter process consists in the sale of government bonds to the public. The bonds may be taken up by the banks or sold by the banks to the public. In the former case the liquidity of the banks may be somewhat reduced and with it their readiness to give credits to their customers. Similarly, in the second case, if a customer has converted his deposit into a government bond, he may find it less easy to spend its equivalent, since he would have first to sell the bond which he had acquired. In either case, therefore, the Government may feel somewhat more safe from a danger of inflation (if such a danger exists), since the potential spending power of the public has been reduced.

Thus at the first stage of deficit spending the full sum of the 'loan' is issued as new money and sent into circulation by the Government in making payments financed from this source. The process exerts exactly the same effect on general circulation as the same sums of new commercial investments would exert. This expansionary effect may be reduced by the subsequent funding process which from the monetary point of view amounts to the same thing as if a fraction of the deficit had been subsequently covered from taxation. It is uncertain by what fraction the monetary expansion caused by deficit spending is reduced, in any particular case, by consolidating the loan, but it is unlikely to be very large. Mr Stone is probably right therefore in altogether disregarding the effect and equating throughout governmental spending from loans, from the monetary point of view, with the process of new commercial investments.

Comparison of Public and Private Expenditure. I have shown before (p. 14) that when the authorities levy taxes in order to spend them

on the satisfaction of communal needs, the process can be described as 'communal shopping' on behalf of the public. Another way of looking at the same process is to regard the State as the shopkeeper (and often also the producer), who in exchange for payment by taxation provides the public with communal benefits.

This point, though perhaps obvious enough, requires emphasis so as to forestall one of the most tenacious fallacies current in this field. The public authorities—let us repeat it—provide for us, in exchange for our taxes, certain benefits of a kind which we use in common. They provide, for example, the services of teachers and of public health officers, and provide likewise the use of school-houses and public clinics; they construct our roads and run our diplomatic and defence services. All these benefits we purchase through our taxes, and the circulation of money which sustains this process must therefore be simply included—as we have pointed out already on p. 14—in the Money Belt representing current circulation. It clearly makes no difference in this respect what kind of expenditure is being defrayed from taxation; whether the money is being spent for current consumption—say as unemployment benefit—or for the construction of durable equipment—say for the building of new roads.

I have previously described expenditure on new factory construction as New Investment and have shown that it performs the functions of a 'squirting pump', which has played a fundamental part throughout the argument. But I was always referring quite clearly to a commercial process. The money was to be handed out to the workers, and to other people who receive payment in the course of the process of investment in the prospect of its subsequent recovery from the sales of the newly founded enterprise. There was no question of the invested money having been collected beforehand, as it is when expenditure is financed from taxation, and the products of the enterprise being given away free of charge to the users, as they are when the government provides the public with roads, parks or battleships financed from current revenue. Constructional expenditure has the effect of squirting money into circulation only if undertaken as commercial investment, while payments made from current taxation have no such effect, however durable the construction may be which they help to create.

Naturally, the State, or some other public authority, may decide to engage in commercial, or at least semi-commercial, enterprise. But then any sums invested in this fashion would be raised by loan and not by taxation. They would constitute a current Budget

Deficit having the same 'squirting' effect as an equal flow of private commercial investment. The final total of squirting remains unaltered whether expenditure on, say, the construction of a communal electricity plant is classed as 'commercial investment' or as 'public expenditure from loan'; we must only take care to list it either under one or the other of these headings.

At the same time it is very important to remember that *all* state expenditure financed by loan, irrespective of its allocation, has the same general monetary effect as a loan spent on a commercial enterprise. While expenditure financed by taxation must always be included in the Money Belt, i.e. be considered as forming part of current monetary circulation and causing neither an expansion nor a contraction of existing circulation, every expenditure financed by budgetary deficit must be classed as a process of 'squirting', which tends to widen monetary circulation—until its own augmenting effects are offset by the rising flow of private Savings. (These matters are discussed further on pp. 54–59 below.)

Renewals, Depreciation Allowances and Business Fluctuations. Mr Stone's chart (Fig. 3, p. 15) reveals, at a glance, two serious economic evils. Throughout the 13 years which it reviews, production was less—for most of the time considerably less—than would correspond to the full utilisation of productive capacity; and, moreover, there occurred violent fluctuations of business activity which must have meant grave anxiety to numberless people earning their living as workers or businessmen. In order to discuss these features further, it will be useful to take into account the processes involved in the inevitable running down and the necessary renewal of plants, houses, etc.

The process could be neglected altogether, if renewals were always made at a steady level. They could then be included among production costs. The fact that these particular costs are paid from special funds, set aside by the business manager as Depreciation Allowances, would not matter, since on the yearly average the national total of Depreciation Allowances would just cover the national total cost of renewals. The money going round in this fashion could be included in the circle represented by the Money Belt.

However, though a steady flow of renewals is undoubtedly present, the aggregate of payments for renewals does fluctuate to a not inconsiderable extent in the course of time. Depreciation Allowances, on the other hand, are allocated more steadily, and if their allocation shows a rhythm, this rhythm is usually just the

opposite of that exhibited by renewals. There is thus a tendency for 'gaps' to make their appearance between payments for renewals, which act as a squirting pump, and payments to Depreciation Funds which have the action of a sucking pump. The gaps arising between the action of the two pumps will, as usual, cause the Money Belt to widen or to narrow down, depending on the sense in which a gap has formed.

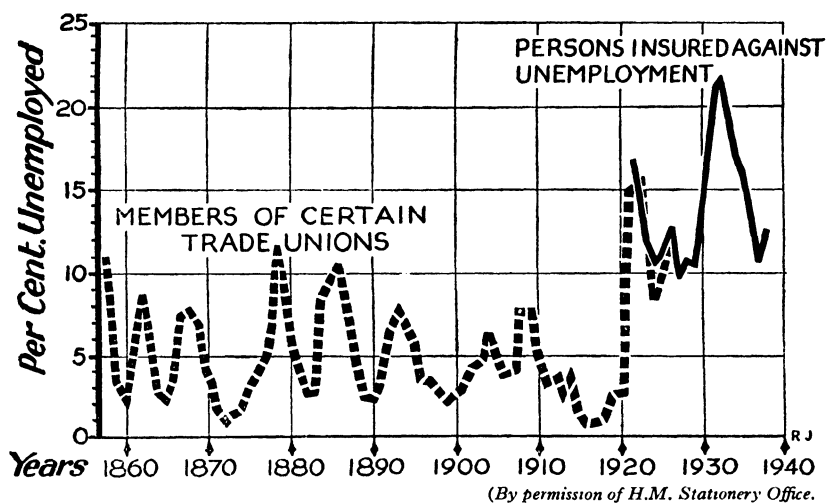


Fig. 4. Trend of unemployment in Britain during the period 1858-1938.

Figures before 1921 are based on statistics covering the members of a large group of trade unions. These figures are shown up to 1926. From 1921 onwards a much more complete and reliable index is available, based on the numbers of unemployed among persons insured against unemployment.

Events may often take roughly the following course. Suppose a campaign of new construction has created a considerable block of new capital of all kinds, and constructional activity is now losing impetus. At this stage profits are usually high and businessmen will tend to make large allocations to Depreciation Funds. Renewals of the new block of capital have, on the other hand, scarcely started, and payments for renewals will be small. A large gap of a sucking, deflationary character is likely to arise. Its strong contracting effect may precipitate a trend towards depression.

Suppose a depression actually follows, and consider the situation after it has lasted for a while. Sufficient time may have elapsed for much of the new plant to be 'fully depreciated' (i.e. its past and prospective loss of value to be fully covered by payments made for Depreciation Allowances). On the other hand, the urgency of renewals will make itself increasingly felt. Thus, while 'sucking'

is declining, the urge towards 'squirting' increases and will eventually outweigh the former. The gap thus opened up between the two will tend to cause expansion and may stimulate a general business recovery.

The two phases described in the two preceding paragraphs may jointly form a Business Cycle; which is the name for the more or less regular fluctuations of business activity, the peaks of which are known to recur at about 7-9 years' intervals. Within the period reviewed by Mr Stone there have appeared two such peaks, namely, in the years 1929 and 1937. The employment figures for Britain over the 80 years' period 1858-1938 show a number of business fluctuations recurring in a fairly regular fashion (Fig. 4, p. 21).

Payments for renewals and allocation of depreciation allowances cannot fail to complicate the picture outlined in Tables 1 and 2. The general mechanism of 'self-sealing' remains in operation and will apply to any gaps arising between the expansionary effect of payments for renewals and the contracting effect of payments for depreciation, but the details of the process may not be quite so simple as Tables 1 and 2 would suggest. The deviations originating from this source have, however, not yet been explored by economists, and Mr Stone's results pictured in Fig. 3 so much resemble the conditions represented in our Table 2 that no grave error seems involved in accepting that simplified scheme. We shall retain it therefore as the basis for our subsequent argument.

Capital Saturation. All man-made capital equipment needs some renewal and repairs. Much of it runs down fairly quickly and has to be renewed at frequent intervals. A renewal period of, say, 10 years may not be far wrong for the average of existing capital equipment. As the amount of houses, plants, roads, railways, ships, harbours, and installations of all kinds goes on increasing, the burden of upkeep and renewals increases apace. There is a limit to what society may reasonably wish to take upon itself in this respect, and there is therefore a limit also to the amount of capital equipment it would wish to acquire.

At the present moment our planet as a whole is probably a long way from having reached capital saturation. But there are definite indications in the highly industrialised countries of the West that the acquisition of further capital equipment is becoming a less urgent necessity. This may be partly due to the fall in the rate of human reproduction, which in many instances has already brought populational expansion to a standstill.

Signs of approaching capital saturation may be seen in the

figures collected by Colin Clark in *The Conditions of Economic Progress* (1940, p. 406) for the proportion of National Income invested in different periods of history and in different countries. They show that whereas in earlier periods, even as late as the end of the last and the beginning of the present century, countries like Great Britain and the United States used to invest as much as one-sixth of their National Income, there has occurred since a steady decline of this fraction to about one-fourteenth to one-twentieth. Countries like Japan, on the other hand, which are still at the early stages of industrialisation, have maintained in our days a steady fraction of more than one-fifth. The process on which our economic system relies for squirting back the money sucked away from circulation by Savings is thus seen to have suffered a definite weakening in the modern industrial countries. We shall take up this point once more and consider its possible consequences in a moment.

Rate of Savings. A glance at our Tables 1 and 2 (pp. 12 and 13) shows the significance for economic life of the rate at which the public produces Savings from additional earnings ('Marginal Rate of Saving'). In Table 1, where we have assumed this rate to be 10%, an additional £m.100 p.a. of Investment caused an expansion of the National Income by £m.1000 p.a.; while in Table 2, under the more realistic assumption of a rate of $33\frac{1}{3}\%$, the expansion for a similar additional Investment is only £m.300 p.a. Clearly, the Multiplier, i.e. the expansion of National Income measured in terms of the underlying process of Investment, is 10 in the first instance and only 3 in the second. Also, it is seen to be always equal to the reciprocal of the 'Marginal Rate of Saving'. It follows that any influence which increases this rate—the rate of thrift—makes it necessary to use a larger flow of additional Investment in order to expand the National Income by the same amount.

Prosperity is such an influence; it is a powerful agent in stimulating thrift. As people find themselves better provided with the first necessities of life, such as food, clothing and housing, they feel more and more willing to forego current enjoyment in favour of increasing their sense of security. They indulge to an increasing extent in that great luxury: a bank account—which sets you free from anxiety about the adversities of the morrow, and which makes you free to choose future pleasures yet unknown and unthought of. This is clearly shown by the household statistics presented by Colin Clark¹ in which the fraction set aside as Savings is seen to

¹ *Conditions of Economic Progress* (1940), p. 437.

increase from 13 % at an income of \$4000 p.a., to 25 % at an income of \$8000 and to 38 % at an income of \$18,000 p.a. Many other observations confirm this conclusion.

We may safely assume on this basis that the most prosperous countries will tend to show the highest Rates of Saving, and that those of the Western, highly industrialised countries where prosperity on this planet has reached its highest peaks, will be particularly high. Thus it is in the same countries in which, owing to approaching capital saturation, the rate of New Investment tends to fall, that the Rate of Saving is likely to show the most marked tendency to rise (J. M. Keynes).

Chronic Depression. The conclusion seems inevitable that our economic system has a tendency to pass into a state of chronic unemployment. The weakening urgency of additional business investment combined with an increasing preference for the accumulation of Savings leaves a 'gap' between these two processes which is being automatically closed (self-sealed) through a steady depression of National Income.

It is plain that we cannot plan for the future without recognising this tendency. There is, in fact, grave evidence to indicate that the trends in question have already intensely affected the highly industrialised Western countries. Mr Stone's study proves that even the American boom of 1929, which was one of the biggest within living memory, fell far short of achieving full employment. The position seems similar in Britain, where, according to the chart reproduced on p. 21, the average rate of unemployment, which stood at 5 % from 1858 to 1919, rose to the level of 14 % for the period 1920-38. It seems clear that both in Britain and in the United States a state of chronic depression has been prevailing for some time past. The often, rather vaguely, made statement that Western capitalism has entered on a 'period of contraction' is true in this particular sense.

Our task therefore to-day, especially in the more highly industrialised countries of the West, cannot be limited to a levelling out of trade fluctuations, which would leave the average level unaffected. The average level itself has proved unsatisfactory and must henceforth be permanently raised to a considerable extent. Trade-Cycle policy—that is, the avoidance of business fluctuations—has now become a secondary matter; our primary aim having shifted to the raising of the general level of employment. Once a reliable method has been found to expand the volume of employment, it should not be difficult to vary its application so as to eliminate all major variations in the level of trade.

The Trade Cycle. Yet the tendency towards sharp business fluctuations, as illustrated, for example, by the data in Mr Stone's chart, deserves our detailed attention. For one thing, their existence limits the choice of remedies to measures which can be applied in a sufficiently rapid fashion—rapidly enough to follow effectively on the heels of the quick spontaneous fluctuations which they are meant to control or counteract.

The following rough analysis of these fluctuations—amplifying what was said on p. 21 above—may be usefully borne in mind.

During a general expansion of business activity prices tend to rise, and such a tendency makes prospects of further new business investment appear profitable. This will cause more new business investment to be undertaken—which will cause additional monetary expansion, in consequence of which prices will tend to rise still further. A business expansion is therefore a self-accelerating process, gathering momentum as it advances towards the boom. And an analogous argument can be applied to the process of contraction; it is easy to see that every fall in business investment activity tends to depress investment further and thus to carry contraction to a further stage.

But neither the process of expansion nor that of contraction goes on progressing ever further, indefinitely. As to the first, there are many reasons—mainly connected with the concurrent exhaustion of employable resources—which will tend to slow down at some point the process of expansion. Once a retardation has set in the contracting forces may gain the upper hand. Increased depreciation allowances allocated with respect to the increment of constructional equipment which was created in the upswing, combined with a comparative dearth of renewals (as to be expected in the immediate wake of a wave of new construction), will tend to produce a down-turn. Such a downward trend will go on self-accelerating for a while, but the process will scarcely tend to go beyond the point at which all new investment has been discontinued ('rock level').

Coming to rest eventually at some low level, the economic system will undergo a process of internal maturing. The gradual completion of payments for depreciation will tend to reduce the flow of business savings. The repayment of other debts which were called in at the first signs of a down-turn—and which by this time may have caused the liquidation of many insolvent business concerns—will also be coming to an end. At the same time the renewal of machinery throughout the plants in operation, and the restocking

of warehouses everywhere, will become increasingly urgent. Eventually a situation arises in which the renewal of machinery and the refilling of stocks will tend to be energetically resumed; and will create, when resumed, a new self-accelerating wave of business expansion.

Thus a new Trade Cycle will be set on its course once more.

The Problem Summarised. Two opposing forces are acting in our economic system, as at present constituted, on the Money Belt. When people set aside part of their income in order to increase their security, they suck money out of circulation; when business people pay for the construction of additional stores or durable equipment, they squirt money into circulation. Both of these processes appear equally justified and reasonable—indeed, they are both indispensable. The trouble is that they depend on two sets of independent decisions and that hence every now and then *gaps* open up between the two opposing processes of sucking and squirting. Expansions and contractions of monetary circulation arise in consequence.

The gaps are self-sealing. As the National Income expands or contracts it carries with it, up and down, the volume of Savings. So that Savings always rapidly catch up with a larger, or shrink to the volume of a smaller, Investment flow.

This process of self-sealing, however, is achieved at the cost of adjusting Employment and National Income to some level which is not likely to be a desirable one. In fact, advanced industrial communities tend to adjust the level of employment well below full capacity.

Our purpose must be to prevent the gaps from thus closing automatically. We must fill them *artificially*; and so apportion our remedy that the National Income be sustained at a level corresponding to Full Employment.

We shall now turn to the task of elaborating this programme.

The Gap at Full Employment. First of all we must find out how much of the gap-filling remedy will be needed. Here again Mr Stone's studies supply a useful basis of discussion.

We may ask: 'How much Investment would have been required in the United States during any particular year of the period 1929-41 to maintain a state of Full Employment?' We cannot answer this question unless we can tell exactly what we mean by Full Employment and how much the National Income should have been in that state of employment. Such a question may become a thorny problem in a future society which must make up

its mind on the precise measure of employment which it desires to maintain. But we may disregard these intricacies for the moment, because whatever the difficulties involved in choosing the right level of employment we must first discover the means by which we can get away from a thoroughly unsatisfactory level. A patient paralysed by emaciation will not postpone his cure because he does not know the exact degree of corpulence which he would prefer to attain. We shall accept therefore without further query Mr Stone's estimate that at Full Employment the National Income of the United States in the period 1929-41 would have amounted to \$125 billion p.a.

Next we read from Mr Stone's chart (as the author himself has done) that in order to maintain circulation at this level, the flow of Investment would have had to be \$17.5 billion p.a. Or that—looking at the matter from another angle—if the people of the United States had disposed, during the period 1929-41, of an income of \$125 billion p.a., they would have left unspent from it the sum of \$17.5 billion p.a.

We are faced further with the patent fact that the investing public of the United States have actually at no time of the period in question invested any sum approaching \$17.5 billion p.a. in new commercial enterprises. It is true, of course, that a higher circulation does in itself stimulate business investment, and that if Full Circulation had ever been achieved in the period under consideration the rate of such investment might have risen to otherwise unattainable levels. Yet it is still reasonable to assume that even if some powerful expansionist action (e.g. a large flow of deficitary government expenditure) had raised circulation and kept it at the level of \$125 billion p.a., the rate of commercial investment would not by any means have kept up with Savings. There would have remained a big gap between the two.

The problem of maintaining Full Employment can now be seen to consist in the task of filling this gap. *In other words: to achieve Full Employment it is necessary to fill the Gap at Full Employment—the gap by which Savings exceed new commercial investment when Full Circulation is maintained.*

Stimulate Investment? Discourage Saving? Faced with this state of affairs many people unhesitatingly suggest certain remedies.

If a higher rate of private investment will secure Full Employment, then let us encourage such investment. Let us, for example, lower the rate of interest and remit taxes on reinvested profits. We may even consider the granting of State loans or subsidies for the

construction of new plants and give them protection by tariffs and marketing schemes.

Or else, why not reduce the Rate of Saving? We may put a tax on undistributed business profits or heavily tax the rich who save a greater part of their income, for the benefit of the poor who would save less.

Some of these measures have much to recommend them on other than monetary grounds. It may be argued that the rate at which private investors are adding to the nation's industrial equipment is insufficient, and that its increase would ensure greater prosperity. A policy of equalisation of incomes by taxation has been widely advocated for the sake of social justice. Such arguments and such motives must, however, be rigorously set aside in the context of employment policy. There is, of course, nothing wrong in observing that a policy of increased private investment or of equalisation of incomes, which is justifiable on its own merits, will have the consequence of expanding monetary circulation. *But to advocate such a policy for the sake of these monetary consequences can only mean that it should be pursued beyond the limits which would otherwise be set to it.* In other words, if you want to advocate a policy of increased private investment on the grounds that these measures increase the circulation of money, then the recommendation must frankly state: That business enterprises shall be established or new machinery installed in circumstances in which this would otherwise be unjustifiable, for the sole reason that by doing so money will be brought into circulation. And a policy of equalisation of income when advocated on grounds of employment policy must be expressed as follows: That incomes shall be equalised beyond what appears equitable and otherwise reasonable for the sole purpose of handing the money to people who would spend it more readily.

In certain instances of proposed employment legislation this attitude has in fact been quite openly adopted. When in 1937 President Roosevelt imposed a special tax on undistributed profits, or when in 1944 Sir John Anderson in his Budget Speech denied tax relief to such profits while promising a remission of 20 % for funds reinvested into new equipment, these measures were based on no other than monetary considerations. No attempt was made to deny that they would impel businessmen to conduct their affairs in a way which would otherwise be considered imprudent and ill-advised.

I am opposed to all policies of this kind. I think it is unreasonable that real wealth or any other real advantages should be sacrificed

and real burdens of any kind should be shouldered for the purpose of putting money into circulation. I hope I have explained clearly enough that I am not opposed to any of the measures in question when undertaken on their own merits. But I protest against any deliberate misdirection of human efforts, or human relations, for the purpose of filling a gap in the money circle. I am convinced—and I shall argue this later more fully in various instances—that the perversity of any such policy would quickly become generally apparent and would be but little less resented than the evil of unemployment for which it would serve as a remedy. I also believe that the confusion caused by a principle which can justify intervention with respect to almost any kind of economic transaction—since none can be without some effect on monetary circulation—would constitute an invitation to such universal wire-pulling as would inevitably reduce public affairs to a state of confusion and corruption. All this will be argued more fully in Chapter VI.

The Principle of Neutrality. Let me briefly formulate my attitude in a positive form. I suggest that there is no difficulty in remedying a defective monetary circulation without incurring any real sacrifices for this purpose. We shall meet plenty of difficulties in conducting the affairs of society at a state of ample employment. These troubles may be rightly considered as the price of ample employment. But the process undertaken in order to create sufficient circulation need involve and must involve no material sacrifice to speak of. *It should be, and can be, carried out in a neutral form, i.e. in a way requiring no materially significant economic or social action to accompany it.* Perhaps the main purpose of this book is to demonstrate this 'principle of neutrality', and to give warning of the dangers accompanying any deviation from it.

Budget Deficit to fill the Gap. My suggestion is that the State should fill the 'Gap' by expenditure from loan. In other words, that there should be maintained a Budget Deficit of a magnitude equalling the difference between the flow of new commercial investment and the flow of Savings prevailing at Full Circulation.

We have shown previously that a Budget Deficit produces exactly the same monetary effects as would result from a flow of new private investment; we can take it therefore that the proposed measure, if carried out, would be fully effective. But can it be carried out? And if so, can it be carried out in accordance with the 'principle of neutrality', i.e. without involving any real sacrifice?

On the face of the matter the answer seems obviously, Yes. Supposing that the normal rate of public expenditure equals or

even surpasses the flow of money required to fill the Gap at Full Circulation, this naturally offers a sufficient opportunity to incur a Budget Deficit of the necessary size, while no real sacrifice should be involved in doing so. The first question is therefore: Does the normal rate of public expenditure equal or exceed the Gap at Full Circulation?

Let us examine the position for the case of the U.S. with reference to the period studied by Mr Stone. He estimates that Full Circulation during this period would have amounted to \$125 billion, of which \$17.5 billion would have been saved. We do not know of course how much the Gap would have amounted to, since we cannot tell how much new commercial investment would have been undertaken at a state of Full Circulation. It seems safe to assume, however, that private investment in such favourable business conditions would have certainly not fallen below and would have probably ranged well above the value observed in the boom year of 1929, when it amounted to \$9.4 billion.¹ In that case the Gap would have amounted at the most to \$8.1 billion, and probably to a good deal less. This is to be compared with the rate of public expenditure that would have been concurrently undertaken—entirely on its own merits, regardless of any desire to pump money into circulation. Again, we cannot tell exactly how much the people of the United States would have allocated to the satisfaction of their communal desires in a state of Full Circulation; but we may assume that they would have felt able to afford rather more in that respect than in the more or less depressed conditions which prevailed in fact. One may even go so far as to suggest from Mr Stone's data that a simple proportionality exists between total circulation and the rate of public expenditure; from which it may be concluded that over \$25 billion of public expenditure would have been incurred in the period 1929-41 if Full Circulation had prevailed at the time. But it is not necessary to speculate on these lines in detail. The fact that in 1939 the figure of \$14.5 billion was reached, though there was no Full Circulation, is quite enough to prove beyond a doubt that the volume of public expenditure which would have been undertaken on its own merits would have greatly surpassed the Gap at Full Circulation.

Common experience makes it also fairly obvious that this would hold quite generally for modern industrial nations. For it will hardly be doubted that any modern country attempting to finance

¹ Richard Stone, 'National Income of the United States', *Econ. J.* 1942, pp. 154-75.

its entire normal public expenditure by incurring a Budget Deficit would inevitably cause a state of violent inflation; and there must therefore always exist the possibility for incurring a Budget Deficit of a lesser size which would just restore Full Circulation, while it falls short of causing inflation.

(Details of this policy will be discussed later (pp. 49-54).)

What is a Loan? I have mentioned before at various points that the financing of a budget deficit is normally undertaken by a process of borrowing. It is of decisive importance for the rational handling of monetary affairs that the nature of such loans should be clearly understood. I shall give here therefore a brief outline of the various forms in which loans are raised in private and public life.

Our economic system is based on the fact that you starve unless you can get into the possession of money. Thus all of us, except the very rich, are forced to work and produce something that we can sell for money. That keeps the wheels of industry going.

If people could print their own notes and help themselves to goods on the market, the system would not work, therefore the printing of money by private people is punished as forgery. Yet there are occasions when it is desirable to allow people to acquire goods on the market without having earned the money by which such goods have to be paid for. Such is the case when they are acting as investors. They should then be allowed to use up goods and repay their equivalent afterwards, with added profit. There is therefore in general no objection to the private creation of money for the purpose of commercial investment. A bank may grant the investor a credit which he can use for making payments, and which thus forms in effect an addition to the quantity of money in circulation.

But this is permissible only because the money is received by the investor under the strict injunction not to use any of it to buy things for his own enjoyment but to apply it entirely to financing a process of construction, from the fruits of which he must repay the money with added interest charges.

In order to make certain that he uses the resources invested by him to the best economic purpose, the investor must be kept under strict obligation to prove that he can sell the resulting products remuneratively in the public market. Therefore, whether the money invested has been originally the property of the investor or not it is essential to the economical functioning of the process of business investment that he should consider the money as a loan, which is

returnable in the end and involves the payment of an interest charge during its use.

There are certain cases in which the process of public borrowing bears close resemblance to its private counterpart. This is obviously so when a public body undertakes the construction of commercial enterprises like the building of railways or of post offices. Similar conditions may hold for other only half-commercial investments such as when the construction of waterworks is being financed by loans which are repaid later by a kind of taxation in the form of water rates. It is reasonable that borrowing of this kind should in general be made subject to conditions of repayment and interest payment such as obtain in the case of loans for investment. Yet relaxations of this rule may often be justified, as the public interest might demand the continued operation of certain public enterprises irrespective of the fact whether they continue to prove profitable or not; it being understood that the public authorities will normally undertake only investments for such socially important enterprises which will have to be kept going, even though they temporarily fail to make a profit on their sales.

Setting aside, however, for the moment any 'social returns' of an investment, we may sum up the mechanism of borrowing, investment and repayment, both private and public, as follows. The machinery of credit allows a private person or a public corporation to help themselves to resources which do not belong to them and use them for constructional purposes under the strict understanding that they shall restore the equivalent of these resources, and more than their equivalent, from the fruits of the enterprise undertaken; these fruits being subject to valuation by the same independent authority which had first valued the invested resources—namely, by the authority of the public market.

Needy Government Borrowing. In many cases of public borrowing certain parts of this mechanism are inoperative, and in consequence the process of borrowing becomes less clear-cut. This is particularly true where public borrowing is undertaken for the purpose of expanding monetary circulation, in which case the term 'borrowing' does in fact become a complete misnomer which can be most seriously misleading. Before discussing the last case, however—which forms one of the principal subjects of this book—it will be useful to give a brief account of other forms of public loans where the process of borrowing, even though considerably attenuated, may still be thought to deserve its name.

Public borrowing for other than commercial purposes will

resemble real borrowing, i.e. private borrowing, in its principal features most closely when a country raises a loan abroad. Suppose a nation at war is covering part of its military costs by external loans, as Britain has been doing in this war when importing munitions from Canada. In the course of this process Britain is using up resources which do not belong to her and applying them for purposes which are somewhat similar to those aimed at in the construction of a new commercial enterprise. She may be said to be building a dam against aggression. However, the parallel to the ordinary process of investment goes no further. The undertaking of this war can bear no fruits from which a loan can be repaid and charges of interest be met. The obligation to repay loans of this kind cannot assure the economical utilisation of the borrowed sums. For the achievements of the war cannot be sold in the markets but can be judged only by public opinion. In so far, then, as public opinion participates in the government of the country (and may be largely responsible for the country's decision to go to war and to incur foreign debts to cover its war costs) it is left as it were to the 'investor' himself to judge of the results of his own enterprise. In such cases repayment is made and interest is paid simply in order to fulfil a promise which had formed a condition for obtaining the loan. The enforcement of such promises may be regarded as a check on irresponsible foreign borrowing by the State; beyond that it fulfils no economic function.

The term 'borrowing' is even further depleted of its usual meaning when it is applied to the raising of internal public loans. In this case—as distinct from foreign borrowing—the resources to which the Government wants to help itself are within its own command. The public decision to undertake the building of a dam, or the construction of a system of roads, or the conduct of a costly war, means precisely this: that the country is offering some of its own resources for the purpose of satisfying a public need. Why should the Government seek a loan in order to carry out such an enterprise? What meaning can be left in the process of borrowing in such cases?

The answer may be given in replying to a series of questions.

First: Why does the Government not help itself to the resources which it needs, directly, without troubling to find the money to pay for them? *Answer:* Because only thus can it make use of the market and achieve its purpose in the cheapest fashion. Moreover, only by counting up the various items of its expenditure, in terms of money, can the country compare these items with one another

and compare also the total value of its public expenditure with that of its expenditure on individual consumption.

Second question: Is there any reason for not raising these sums in the form of taxation? Does the method of financing from loan in effect spread out the expenditure over a number of years? *Answer:* Any public expenditure amounting to a considerable sum must in effect be incurred at the time when the work is being carried out. Postponement is possible only to that comparatively small extent to which existing stocks can be depleted or existing machinery left to run down unrepaired, such inroads on existing capital being left to be replaced at a later date. Nevertheless, the raising of a government loan does perform, as between one person and another, a measure of adjustment between the present and the future. For example, the purchaser of a Savings Certificate in wartime does keep a certain amount of purchasing power off the market while another citizen may go and spend all his income. Thus the former incurs a momentary sacrifice for the benefit of the latter and may claim readjustment at a future date. The government bond which he acquires provides him with an instrument by which he will claim this readjustment from future tax revenue. In this fashion the raising of the government loan and its repayment allows people to adjust conveniently between themselves the time at which they prefer to shoulder their particular share of a common sacrifice.

Is this (we may ask next) the rational ground on which Governments usually get the costs of war and of major public works financed by loan? Yes, up to a point that is true. When the Government wants to avoid immediate taxation or is forced, as in wartime, to increase expenditure before it has time to collect sufficient revenue from taxes, it will use borrowed funds to fill the gap and thus impose the initial burden—to some extent at least—on the willing subscribers of government loans, whom it assures of the right to claim repayment later.

But why does the Government go to all this trouble? Having been empowered (as we must assume it to be) to lay hands on a portion of the country's wealth in order to use it for a national purpose, why does it not simply print the money required for the purchase of the resources in question?

The answer to this last question must be given in some detail. In the first place we observe that this is precisely what the Government will usually do to start with. If it finds itself unable to cover an approved expenditure from current revenue, it will in effect

order the Central Bank to issue the necessary money. The Bank accepts a certificate by which the Government promises to pay it back at an early date. This is called 'short-term borrowing', and the sums issued are described as a 'floating debt'.

The next step should, in a rational conduct of affairs, depend on the state of employment. If there is general unemployment, the expansionary effect of the additional money brought into circulation by the new issue will exercise the altogether welcome influence of raising the level of employment. In this case—as I shall emphasise with all the force at my command in the following sections—the promise to repay the money is contrary to common sense. The term 'borrowing' as applied to the operation of issuing this money is misleading and carries with it some most pernicious implications.

But suppose that our financial operation is being performed—as in wartime—in a state of Full or even over-Full Circulation and employment. In that case the Government must, of course, try to balance the issue of new money by an early increase of taxation, from the proceeds of which it can repay the floating debt. Or, alternatively, it may take the path of somewhat lesser resistance by trying to 'consolidate' the debt. It will invite the public to subscribe to government bonds and thus add to the long-term public debt. From the proceeds of the loan it will repay the floating debt.

Applied in respect to the floating debt the term 'borrowing' may thus be said to describe the fact that the Government, when forced to issue money in a state of Full Circulation, is under obligation to withdraw such sums from circulation again as soon as possible. As applied to a long-term debt the meaning of the term is somewhat ambiguous. The public may make subscriptions to government loans from idle cash balances which their owner never intended to spend and never would have spent, anyway. In that case the Government gains nothing from the subscription to the loan, since the process in no way offsets the monetary expansion due to 'short-term borrowing'. On the other hand, of course, a certain number of people, and most people to some extent, will spend less if they have tied down some of their cash in the form of government bonds; and the Government may feel also that this assures it—to some extent at least—against future bursts of spending. The restrictions accepted by the subscribers of loans do thus make it possible for the Government to issue more money without causing increased repercussions on the level of circulation;

and in this sense the subscriber may be considered to be lending money to the Government.

We may sum up our analysis of internal loans contracted by a Government up to this point as follows.

Borrowing in the proper sense of the word—in the sense in which the canons of commercial prudence, foresight, soundness, etc., are properly connected with the act—signifies the process by which an investor helps himself to a parcel of wealth belonging to other people while undertaking to restore it with added profits from the marketable fruits of a proposed new enterprise. When a Government resorts to ‘borrowing’ for communal (not commercial) purposes, none of these elements is present in the process. The wealth on which it lays its hands is its own—it has been lawfully empowered to make use of it; and it is under no obligation to earn on the market the means for repayment and profits, but is merely responsible for applying the resources of which it has taken charge to the national advantage as approved by public opinion. The sole purpose of the process is to provide money to pay for certain authorised expenditure which the resources of current revenue have failed to cover. If this process is undertaken in a state of depressed circulation, the notion that it constitutes an act of borrowing is clearly irrational, since it is undesirable that the money thus issued should be withdrawn from circulation. If, however, the process occurs in a state of Full Circulation, the money must be withdrawn from circulation as early as possible, and in this very peculiar sense the term ‘borrowing’ may be applied to the Government’s action of issuing it. When the Government consolidates a floating debt by placing government bonds with the public, it does somewhat reduce thereby the circulation, or the potential circulation, of money. To that extent again the operation does represent a process of borrowing in which subscribers to the loan lend money to non-subscribers and acquire a claim to be refunded and recompensed from future taxation which will mainly fall on the latter.

‘*Borrowing for Purposes of Expansion.*’ This finally brings us to the main argument for the purposes of which the previous survey of loans has been undertaken. I have repeatedly expressed already in a preliminary fashion the point which I shall urge here further; namely, that if, employment being depressed for lack of circulation, the Government covers some of its expenditure by the issue of new money in order to supplement circulation and to restore employment, this must not be looked upon as a process of

borrowing: but that the operation must, on the contrary, be regarded as a definitive financial act by which the Government discharges for the time being its obligation, as guardian of the level of monetary circulation. Since such a view is bound to arouse deeply rooted apprehensions among wide circles of the public, it seems desirable to go into the whole matter once more here in detail, bringing to bear on it the results derived from our previous survey of various kinds of loans.

Let us start from a state of business depression. The Money Belt (in Fig. 2) is not broad enough to cover the whole population; part of the people are unemployed, and there are factories standing idle. Our task is to eliminate these anomalies by broadening the Money Belt to the point of Full Circulation. I have suggested that the Government should remit taxes and create a Budget Deficit to a sum equalling the Gap at Full Circulation, the necessary cash being issued by the Central Bank and used to meet normal public expenditure to the extent of the proposed deficit.

We know what happens to the money thus issued. It serves to fill the Gap at Full Circulation: the gap by which private saving would at Full Circulation exceed new private investment. The money, as it is issued by the Central Bank, goes into circulation and replenishes its flow; while some of it is, of course, immediately withdrawn again from circulation to build up the reserves of business enterprises and the cash reserves of private persons. The money is fully accounted for and is being put to entirely rational use.

Whence, in these circumstances, the idea that the Government is ‘borrowing’ money? Whence the notions of a financial burden shouldered, of an interest charge incurred? Whence the warnings that the dictates of sound finance must be observed by recognising these burdens?

The origin of these ideas lies clearly in the fact that a Government *in need* may sometimes issue money, even though it thereby adds to an already replete circulation, and that in such case it must be compelled to make every effort to withdraw, i.e. ‘repay’, the money again as fast as possible. It is true also that a weak Government may prefer to spare the sensibilities of the taxpayer and go on covering its expenditure from the printing press. Such laxity has occurred with disastrous consequences more than once before, and it is reasonable to guard against it by keeping a strict watch on the issue of money by the Government. Even in this case it is hardly a suitable way of enforcing this control if the Government

is made to play the part of a private investor responsible for loans to his bank—since the obligation incumbent on the Government to refrain from causing an excessive circulation of money is of a different kind from the entrepreneur's obligation to make his investment bear fruit: the two having, in fact, nothing in common beyond the point that both the needy Government and the businessman have to repay the money which they have used. But in any case, the conception of a debt being incurred to the Central Bank when the Government puts new money into circulation can certainly not apply to the very opposite circumstances; to a situation in which the money was issued *not because the Government was in need of it, but because the public required it*—in fact, urgently needed it in order to make full productive use of its resources of labour and equipment. Such a construction could only reveal the complete absurdity of the picture in which the State plays the part of a private capitalist financially depending on its own Central Bank which acts towards it as a cautious moneylender.

When the money issued for the purpose of expanding circulation is regarded as a loan, its true economic function is denied and threatened. The purpose of the new issue *requires* in this case that the money should remain in circulation; or, more precisely, that such part of it should remain circulating—after private savings have been deducted from it—as will keep monetary circulation at a proper level. If the money is regarded as a loan, this implies the very opposite tendency. It impels the Government not to feel satisfied that it has fulfilled its proper obligations or to regard its position as financially sound, so long as the money issued by it remains in circulation. A Government can accept such a role, in such circumstances, only if it does not know what it is doing—or else is sufficiently lacking in candour to pretend that it is adhering to a certain code of behaviour while actually acting by principles which deny it. The Government is either groping in the dark or, being itself enlightened, is keeping its people in the dark and preventing them from understanding their own affairs. The outcome can in either case be only disastrous to the country.

When the true purpose for which the Government is undertaking the issue of new money is forgotten, and an imaginary obligation is accepted to repay such 'loans', it is only natural to extend this construction further and to postulate *fictitious purposes* which the 'loan' is supposed to serve. I believe this is the reason why almost every plan that has yet been published for the expansion of currency and the restoration of employment by means of

an unbalanced budget, is at pains to define certain aims for which the Government might undertake to ‘raise’ the requisite ‘loans’. Haunted by the conception that the Government is really a businessman investing money and the Central Bank its financier, most of these plans propose that the State should undertake vast constructional programmes for the express purpose of using these supposed loans. The obvious and only reasonable idea that the Government should first of all cover its normal current expenditure from the newly issued money seems to have been rejected *in limine*, from a feeling that the State—similarly to a businessman—would be guilty of fraud if it used a business loan to cover daily household expenses.¹

The truth is—as I have already pointed out before (p. 28) and shall argue once more at greater length later—that it is precisely when a Government undertakes large constructional tasks—or indeed any significant material changes—for the sole purpose of carrying money into circulation, that it is squandering the resources of the nation. Quite apart from the fact that by the fallacious appearances for the sake of which this is done it cannot fail to confuse and paralyse the minds of the people.

The confusion thus created will be further increased if the Government proceeds, in accordance with existing rules of public finance, to consolidate the ‘floating debt’ incurred by the issue of new money. The placement of bonds converting a short-term debt into long-term debt would, in the circumstances in question, be exactly contrary to the purpose of the monetary issue. So far as such a conversion has any effect on circulation it consists in reducing it; while it also reduces the sense of security of people who have exchanged their cash for bonds and hence increases their desire to save. Thus it doubly counteracts the expansionist purpose of the financial measure to which—in the eyes of a mistaken idea of sound finance—it is supposed to form the necessary sequel.

The process of consolidation would actually result in the need for a further expansionary issue; and once this second issue (and its successors) were also consolidated, the sum total of issues would have increased perhaps substantially beyond the value of the original floating debt. This larger debt would be a real debt, to the extent at least that interest would have to be paid on it. The Government would thus have to use public money to pay bondholders for a service which they should never have been asked to perform. It is

¹ A noteworthy exception is Sir William Beveridge’s proposal ‘Route III’, which was published after this was written and is discussed on p. 134 below.

almost inevitable in view of the general depressionist trend prevailing in the highly industrialised countries that the Government *would have to keep on pumping new issues into circulation even while it would be paying its bondholders for having restricted—and continuing to restrict—their spending power.* The extravagance of regarding an expansionist monetary issue as a loan can hardly be more starkly exposed.

Yet one more of the curious features involved in the construction placed to-day on governmental monetary issues remains to be discussed. Existing rules of finance require that the government should pay interest to the Central Bank on a floating debt. Naturally, it is fitting that where there is a debt there should be an interest charge to be met. But there is no debt here. The Central Bank does not part with any buying power that it could otherwise utilise in a different way. Nor is the Government entering into competition with other investors for the use of available resources: or interfering with the market for commercial loans. It is merely discharging its responsibility for the level of monetary circulation and directing the Central Bank to issue certain sums of money for this purpose. Once these sums have been put into circulation by the Government, their existence does not affect the Central Bank any more. Any continued payment of interest to the Bank in acknowledgment of an imaginary debt can therefore only satisfy an entirely irrational sense of propriety which has no roots in reality.

The only way to avoid all this confusion and to lay down the basis for a clear, rational financial policy—without which the conduct of public finances can be neither honest nor responsible—is to eliminate radically the supposition that the issue of money by the Central Bank at the orders of its Government constitutes a loan by the Bank to the State. We must break completely with the analogy between the State issuing money and a capitalist financing a new enterprise. In a period of depression, with which we are concerned here, there is no vestige of resemblance left between the obligation of the two types of 'borrowers'. The terms 'borrowing', 'debt', 'loan', must hence be rigorously avoided in connection with the functions of the State issuing money as a remedy for an insufficient circulation, so that the idea of an obligation to 'repay', or to pay interest on, the sums used up should be entirely eliminated. The money thus issued should be described as the 'expansionist issue' or the 'stabilising issue', or the 'employment issue'. (We shall use the latter term.) The total sums issued up to any particular date should not be stated as forming part of the National Debt (a term

which would properly apply only to foreign obligations), but should be recorded simply as the total value of certain past, now completed, financial operations.

The existing consolidated internal debt of the State should be bought up at the earliest opportunity by the issue of new money; it should be converted into a floating debt—as the old terminology would call it—as soon as occasion arises for the application of an expansionist policy. No government bonds should be issued internally unless the situation described in the previous section under the title ‘Needy Public Borrowing’ arises and makes it necessary.

Should New Money be Issued Indefinitely? But if the new money issued for the purpose of stabilising employment is never returned to the Central Bank, where does it all go? Can it go on flowing indefinitely, without swamping the economic system?

These and similar questions will be asked from a feeling of uneasiness which we must try to allay, even though the points raised have to some extent already been answered before. We have already said where the money goes. It goes into circulation to replenish the dearth caused by withdrawals made towards the building up of cash balances, in excess of the money commercially invested during the same period of time. Thus it fills the Gap and maintains Full Circulation. And if after a little while the issue of more new money is required to continue to fulfil this purpose, the reason is that Savings have continued at a volume in excess of new business investment; that the process of ‘sucking’ still predominates over ‘squirting’; and that hence further issues of new money are due in order to replace the sums once more taken out of circulation. As this process is continued money is being pumped into circulation all the time and being simultaneously removed all the time. As circulation is being held at an even level, the sums flowing into it week by week will equal the sums simultaneously added week by week to accumulated Savings, in excess of the total of new Investments made. The stream of money flowing in by new government issues will be steadily balanced by money flowing out to build up idle cash balances. The Government will be steadily providing the public with the means for increasing its stores of safety.

Shall this go on indefinitely, without limit? Indefinitely—perhaps; without limit—certainly not. There is every reason to assume that people will not go on stacking up unlimited idle deposits at the expense of current enjoyment. There is a balance between all the needs of man; and when a certain measure of

financial security is attained, the desire for more will be abated. Then the (marginal) rate of Savings will fall off; and as it falls, the rate at which it depletes circulation will fall too. And gradually, as the cash balances of the public in general approach a final level, the Rate of Saving will fall to the point at which it no more exceeds current Investment. Then the Gap vanishes—and we have, in the end, Savings balancing Investment at Full Circulation, without any kind of intervention by the Government.

The process of filling the Gap at Full Circulation by a continued issue of new money thus not merely maintains circulation and employment for the moment, but as time goes on it changes the structure of the economic system so as to render its own application superfluous. 'Employment issues' thus appear to act as a permanent cure, which gradually tend to eliminate the occasion for their own further administration.

It would be idle to speculate how long it would take for the public of Britain or the United States to accumulate the requisite level of cash balances (given a continued policy of Full Circulation) which would cause Savings at Full Circulation to be reduced to the level of commercial investment. It has been generally noted that the balances accumulated during the course of this war are likely to reduce the rate of thrift considerably for a time after the return of peace, and that their possession may even cause the public to spend at a rate which may threaten inflation. In the light of such suppositions it may appear likely that the chronic excess of Savings over Investment and the consequent state of permanent depression, which have so sorely tried the highly industrialised countries in this century, could have been all avoided merely by allowing the public to accumulate cash balances during a period of perhaps not more than 10–15 years, at the rate at which the public would be normally inclined to do so in a state of Full Circulation.

However—though it may to-day appear foolish to have followed a policy preventing the accumulation of these desired cash balances—we must avoid laying much emphasis on the attainment of a state where Savings would equal Investment at Full Circulation without any new issues of money. We cannot tell whether it would not take a very long time to approach that state, the final achievement of which may be almost indefinitely delayed by the gradual saturation of capital which is slowly reducing the demand for new business investment. Nor is such a state, once achieved, likely to persist without constant government checks. Fresh expansionist issues will be required from time to time to counteract temporary

ebbs of circulation, and at other times special deflationist taxation will be needed to curb the tides of excessive circulation. In any case the fact that additional issues of new money may cease to be required should not be regarded as a significant advantage. By considering it as such we should be giving countenance to the same harmful prejudices which it is our principal task to eliminate.

Danger of Inflation. The proposal of issuing new money to replenish a deficient circulation is frequently opposed by the objection—'Surely, that would lead to inflation!' Apprehensions of this kind must be dealt with in some detail even though the principal reply to them has already been given before.

The principal reply is simply this: that if money is being issued for the purpose of *supplementing a deficiency*, this cannot mean *the creation of an excess*. A certain amount of new money is required in order to maintain a level of Full Circulation while supplying the public's need for additional cash reserves; the policy of giving that which is demanded for this purpose can surely not imply giving more than is thus demanded. An issue of money which ceases the moment a state of satisfactory circulation is reached cannot cause an expansion *beyond* that stage.

I think the reason for the anxiety arising in this respect is due once more to the historical associations already referred to before. In the past the operation of covering current public expenditure by the issue of new money has invariably been used by Governments in urgent need of money who were unable or unwilling to raise it by taxation. Often enough it has been practised by weak and reckless Governments, unable to control the taxpayer or themselves attempting to escape public control. Whenever a Government issues new money while circulation is at a high level, the operation is bound to be dangerous and may often be pernicious. It cannot fail to cause a measure of excessive circulation, and if pursued long enough may induce an inflation of an extreme, self-accelerating, character.

Such historical recollections, however, are hardly relevant to the issue. It would clearly be folly to forgo a remedy, and the only available remedy, against a social evil, because it is known to cause trouble if applied in different circumstances—in circumstances in which that evil is totally absent. The apprehension that the Government could use its powers for issuing new money to avoid control over its expenditure is wholly unfounded. The Government could not undertake any but authorised expenditure; and its powers to issue money would be guided and checked by its responsibility

for maintaining the stability of monetary circulation. This lays down its obligations in a definite fashion; nor would much new machinery be required, as we shall see in the next section, to assure the performance, and the democratic control, of these functions.

Naturally, any expansion of currency can be justly regarded as 'a movement towards inflation'. A state of Full Circulation represents the borderline between too little and too much of circulation. It borders on Depression on the one side and on Inflation on the other side. If we want Full Employment, it is inevitable that we should cause circulation to expand to the point where we reach the borders of inflation. If we are not prepared to approach the proximity of inflation, we must give up Full Employment.

It is, of course, true also that a state of Full Circulation is in greater danger of slipping into inflation than is a state of insufficient circulation. But does that say more than that Mass Unemployment is safe against inflation while Full Employment is not? Is there, in particular, any reason to assume that one method of achieving Full Employment would be more likely to entail the danger of inflation than would another, alternative, method?

Suppose for the sake of argument that Full Circulation could be attained by inducing a sufficient amount of new private investments. (The actual impossibility of this assumption can be judged by the fact (cp. p. 30) that in the United States, for example, such investment would have had to be maintained in the period of 1929-40 at a rate equalling almost twice that of the boom year of 1929.) Would Full Employment, thus achieved, prove particularly stable and free from the danger of slipping into inflation? Surely there is every reason to suppose the contrary. The impossibility of keeping the monetary consequences of a vast flow of commercial investments within any particular desired bounds should be obvious enough. It would be extremely difficult to adjust the volume of constructional tasks involved even approximately to the requisite level. Nor could the immense aggregate of private constructional enterprises which would be required be expected to remain adjusted at any particular volume. A torrential flow of this kind, weighted by massive interests and forced on by a thousand inexorable commitments, would follow its own course and could not be deflected from it without a general sharp and painful crisis.

Clearly, the smaller the amount of private investment going on, the less will be the uncontrollable and unforeseeable fluctuations of such investment; and the easier will it be to counteract the monetary consequences of these fluctuations. The more readily,

in particular, will the waves of excessive monetary expansion originating from these fluctuations be checked by increases in taxation. We may leave this question at that for the moment: it will come up presently once more in the discussion of our proposed Trade-Cycle Policy, where the general technique for counteracting inflationary tendencies will be discussed in its proper place.

Meanwhile, let us answer further questions and allay further apprehensions. Can we count on it (we shall be asked) that the balances which people would accumulate from the proposed flow of newly issued money would be sufficiently firmly held? Will they not threaten the economic system with a sudden release of purchasing power, causing a wave of inflation?

In answer to this query we must remember that those who accumulated these Savings have done so at a continuous sacrifice of current advantages. As private persons they have foregone pleasures which were within their reach; as business firms they have curtailed their distributed profits. There is no reason to suppose that they will lightly throw away a treasure which they have laboured so hard to accumulate.

It is true that in the (actually impracticable) supposition that Full Employment in a modern country could be achieved and maintained by a sufficiently large flow of commercial investments, there would exist an alternative path to Full Employment which would not involve the accumulation of cash balances on an unusual scale. But their place would then be taken by private holdings of industrial shares, which would reach levels of unprecedented height. Owing to the particularly intensive fluctuations in the volume of private investment, corresponding to its large size, unusually sharp fluctuations in the value of shares would be inevitable. It can hardly be doubted that the sharp oscillations of stock exchange quotations would, in these circumstances, cause an exceptional instability of private spending.

A contributing element of instability connected with a great volume of private investments consists in the complex network of commercial debts incurred to finance investment. Waves of pessimism which depress the stock market also cause wholesale retrenchments of credit. Loans are called in or are left unrenewed, and this causes liquidations and sudden contractions of spending power; while again waves of confidence may exercise the reverse effect on credit and thus start a fever of speculation and spending.

The instability of spending habits due to these disturbing factors, connected with a great volume of commercial investments, would

probably be much greater than would arise from the mere presence of large cash balances, held by a public which is safe from sharp changes in its economic prospects. It seems obvious, in fact, that a flow of new commercial investments represents a most clumsy and ungovernable method for the recirculation of Savings.

The possibility that people may suddenly change their habits and start a wave of spending which may threaten to swamp the whole economic system cannot of course be excluded. No economic machinery can be made secure against sudden massive changes in the habits of buying or spending. The whole of the banking system, for example, rests, and must rest, on the assumption that people will not suddenly all ask for the liquidation of their deposits in cash. Events like the American Bank crisis of 1933 may be unavoidable on rare occasions; and yet they are not considered as a sufficient reason for abandoning the process of banking. Society would be robbed of its most indispensable institutions if it were to exclude all economic machinery which relies on a reasonably steady set of public habits.

Finally, we should cease to regard Inflation as something in the nature of a bottomless abyss into which the economic system may suddenly stumble and become irretrievably engulfed. There are many degrees of expansion and of inflation, and, as I shall explain at a later stage, it is quite possible that people in future, at least for some time to come, may prefer to live in a situation which may be termed a state of mild inflation. Whether this be wise or not, need not concern us here; I am mentioning it only as an illustration for the view that the state of Full Circulation is not defined by a sharp line at the edge of a precipice, but lies within a broad region, in which various levels may more or less equally appear as ideally suited to the requirements of society.

The policy advocated here for the maintenance of an adequate monetary flow will not by itself solve all problems of unemployment. But the difficult questions which will remain to be tackled—and which I shall discuss at a later stage—cannot be approached unless this policy is made clear first. The irrational anxieties discussed in this and the preceding sections must be thoroughly dispelled, not only in order that this policy may gain acceptance, but no less in order to establish a firm basis for handling the great difficulties which lie beyond.

A Modern Budget. There remains the question how the issue of new money for the stabilisation of Full Employment is to be fitted into the Budget. The following procedure seems to offer itself quite naturally for this purpose.

The Budget ought in the first instance to represent a programme of expenditure. Its function is to declare the people's decision to spend a certain agreed part of their income communally. The decision is arrived at by balancing a large number of rival claims. Expenditure on the various items of communal expenditure must be so adjusted as to secure a maximum of satisfaction in the communal field. Total public expenditure must be balanced against the total private expenditure so that the joint satisfaction derived from both fields should be a maximum. This involves comparing the advantages of having a little more to spend on all communal items (and even perhaps to add some new items to their list), as compared with the advantage of having more to spend for individual consumption. Thus a rational decision on Budget expenditure must be based on an estimate of the total income that is available to the community both for individual and communal purposes. It can be taken only with a full knowledge and in due consideration of the expected National Income.

The National Income that can be produced is, of course, limited by the technical resources available to the nation. But these resources can be utilised to different degrees, according to the extent of employment in which the nation chooses to engage. Each degree of employment requires a characteristic level of monetary circulation, which has to be decided upon jointly with the desired level of employment.

The fixing of the desired level of employment and the corresponding level of National (money) Income ought, strictly speaking, to be made in conjunction with the decisions on collective expenditure incorporated in the Budget. But we shall simplify our discussions (and at the same time probably bring our proposals nearer to what is actually feasible) if we imagine the money income of the nation to be fixed first, and the Budget to be decided upon afterwards. The first of these decisions represents largely a new kind of governmental function which we shall be in a position to discuss better at a later stage (Chapter IV), after surveying some of the practical problems which have arisen—in Soviet Russia as in Nazi Germany, as well as in other countries in wartime—wherever a state of Full Employment has been maintained. At the moment we shall assume that the desired level of monetary circulation, expressed in a proposed figure for the National Income, has been fixed somehow; and that the total public expenditure to be incurred has also been decided, with due reference to the National Income, as chosen previously or concurrently.

The Budget having been set up by Parliament in terms of expenditure, the next step—which fixes the level of taxation—is a matter for the experts. They must be in possession of two reasonably reliable forecasts; one relating to the fraction of the National Income which the public is likely to save, the other to the amount of commercial investment which they are likely to undertake. The difference between these two forecasts represents a forecast of the *Gap*, which determines the amount of new money to be issued and applied to the financing of the budget. The new issue must equal the *Gap*, and Taxation must obviously be fixed so as to cover together with the new issue the total proposed public expenditure: $\text{Tax} + \text{Gap} = \text{Budget}$. The distribution of the tax-burden thus fixed over the various forms of taxation is another decision for Parliament. It may involve some revision of former estimates of the future rate of savings, investments, etc., as discussed presently on p. 49.

A more important point is to provide for adjustments of taxation during the fiscal year for the purpose of counteracting unforeseen fluctuations of private investments. An unexpected lag of investments should be met by a remission, or repayment, of taxes, coupled with a corresponding increase of the Employment Issue. An unexpected buoyancy should call forth the opposite measures. It may be desirable to collect some part of the tax revenue in quarterly instalments so as to facilitate such supplementary adjustments.

The citizen will achieve the maximum possible stability of his financial prospects and will see his reasonable financial expectations most effectively secured, if he agrees in advance—as this system requires—that any windfalls accruing to him from an unexpected buoyancy of general circulation should be surrendered in the form of supplementary taxes; just as any unexpected dullness of general demand should be made good to him in the form of tax repayments. Such adjustments, of course, represent mere refinements which form no essential part of the proposed scheme. They are mentioned here only to illustrate the principles which would guide the new system in handling details of this kind.

The proposed budgetary machinery entirely satisfies the ‘principle of neutrality’ as previously defined. The intentions of the public are carried out both in the collective and the private sphere of economic life without subjecting them to any modification for the purpose of maintaining Full Employment. Thus it is left to the public, as represented by the body politic, to decide the level of employment which it wishes to establish, while the decision of

the individual citizens and firms is accepted with respect to the acts of Saving and Investment which they wish to undertake. The function of the expert is limited to the task of evaluating: first, the level of national money income which will maintain the desired level of employment, and second, the level of taxation which corresponds to the aggregate of Savings and Investments decided upon by the public.¹ A further, political, decision is invoked in order to determine how the burden of taxation is to be distributed; and finally, a schedule according to which supplementary taxes or tax remissions shall be effected is also laid down by the political authorities. The machinery thus faithfully carries out at every point the intentions both of the body politic and of its constituent economic units (private individuals and firms)—while allowing to each the full and proper share of economic jurisdiction which it is competent to exercise.

Some Problems of Detail. In this book I am trying to lay down a broad principle for a broad public. Let me insert here a few pages of details, partly to avoid certain misunderstandings, and partly to indicate the kind of spadework that remains to be done towards a practical realisation of my suggestions.

I have said that after deciding on the size of the proposed public expenditure for the fiscal year and incorporating it in the Budget, the legislature would draw up a schedule of taxes, but leave it to the governmental economists to fix the actual level of taxation. In making this decision the economists would have to take into account the effects of taxation on Savings, so that the formula $\text{Tax} + \text{Gap} = \text{Budget}$ would refer to the Gap at Full Employment as arising in conjunction with the taxation eventually decided upon. Different forms of taxation will vary considerably in their effects on the Gap. A tax on tea, which falls most heavily on the poor, will have little effect on the savings of the community and leave the Gap almost unaffected; while an income tax which cuts primarily into the marginal incomes of the rich will somewhat reduce Savings and narrow the Gap down to that extent. This will have to be taken into account in fixing the level of taxation so that $\text{Tax} + \text{Gap} = \text{Budget}$.

Complications may arise from the fact that taxes are often raised for other than revenue purposes and can therefore not be readily

¹ The decision which the public is making in these respects is being interpreted in the following sense: Savings, so far as left unbalanced by Investment, constitute an allocation of an equivalent slice of the real National Income for the purpose of communal consumption.

dispensed with. Thus: (1) direct taxation of high incomes and of inheritance is necessary in order to restore social justice; (2) indirect taxes on spirits may be levied as a curb on drinking; (3) a motor tax may be imposed to enforce payment for construction and maintenance of roads by those who principally use them.

In the first of these cases the difficulty is only on the surface. In order to equalise incomes it is not necessary to raise any revenue in the proper sense of the word—i.e. money to be spent by the State on goods and services for public use—either from income tax or death duties. Equalisation can be achieved—and achieved most straightforwardly and therefore best—by pure transfer payment from the rich to the poor. There is no reason, for example, why—if this be considered just—each citizen over 21 should not receive annually a payment of, say, £10 from a pool collected from income tax and death duties; or, alternatively, each child should not receive £200 at birth from the same source.¹ Such schemes could redistribute income to any desired extent while requiring no taxation in the sense of our formula $\text{Tax} + \text{Gap} = \text{Budget}$; in which, naturally, 'Tax' is not meant to include mere transfers of cash from one citizen's pocket to that of another. The principle of neutrality would be satisfied, whatever part of the revenue previously derived from income tax and death duties was supplied by the issue of new money, if only the redistributive effect of the thus reduced income tax was restored by transfer payments of the kind just described.

We do not know how much redistribution is actually desired by society to-day because demands for redistribution have in the past always been linked to proposals for increased collective expenditure or for increased appropriations to cover insurable risks. In this way the equalisation of incomes occurred more or less accidentally as a concomitant of mounting public expenditure (most strikingly, for example, in wartime). However, whatever measure of equalisation should appear socially desirable and politically feasible, it could be effectively carried out without any addition being made to the item 'Tax', as defined above, in the equation $\text{Tax} + \text{Gap} = \text{Budget}$.

Next we come to taxes on spirits and tobacco, which form a considerable part of indirect taxation in modern countries. We must not be found encouraging the habits of drinking or smoking

¹ While these particular figures form no part of the argument, they do illustrate the result of an equal redistribution of all available incomes over £500 in Britain of 1938 (cp. J. R. Hicks, *The Social Framework* (1942), p. 190).

for the sake of avoiding the reduction of monetary circulation caused by the levying of taxes on spirits and tobacco. But how much of the present taxation is levied with the intention of discouraging drinking and smoking? The United Kingdom collected in 1938 17 % of its total taxation from taxes on alcohol and tobacco, while in the same year the quota was 9 % in the United States.¹ Per capita the levy was less than half in the United States than in Britain, and, considering the income level of the working classes in both countries, it may be estimated that the deterrent effect which the United States thought proper to exercise in respect to drinking and smoking would have been attained in Britain by about one-eighth to one-tenth of the tax levied in 1938. There is no reason to assume that the voters of Britain would not have been satisfied with the same degree of discouragement of drinking and smoking as those of the United States. Thus the item entering as 'Tax' into the formula $\text{Tax} + \text{Gap} = \text{Budget}$ merely for the purpose of discouraging drinking and smoking in Britain would presumably be quite small (particularly if we consider that there are other means of reducing this kind of consumption) and leave us free to replace, if we wish, almost the whole of existing indirect taxation by the issue of new money.

Thirdly, we come to a group of taxes—of which motoring taxes are the most important example—which are intended to enforce economy (for example, of the use of roads by motorists) by making the primary beneficiaries of a public service repay its costs. We note that the principle of such repayments is extremely uncertain. Take the case of motoring taxes. The benefit derived from road transport by the general public is most widespread. In highly automobilised countries motoring for individual enjoyment is responsible only for a fraction of the consumption of road surface, as compared with motoring for business and for carriage of goods. In these circumstances the maintenance of roads must be regarded largely as an item of 'social costs' which the community as a whole incurs, and has to shoulder, in order to keep its productive apparatus going; and once this is recognised, motoring taxes tend to go the way of the now abandoned road tolls and bridge tolls. It can hardly be doubted that even to-day motor taxes are levied primarily because they offer a convenient source of revenue, and that their abandonment, wholly or in part, would cause no noticeable wastage of road surface, through releasing motorists from primary responsibility for road maintenance.

¹ For the data on which the discussion in this section is based, see Appendix II.

It is important to add also that all social insurance contributions could be paid by the Government from newly issued money, if necessary. In Britain this channel of expenditure alone may prove sufficient to maintain circulation. Under the Beveridge Social Security Plan the contributions of workers and employers would amount to £m.300 p.a. which equals the amount estimated to be approximately required (on the average) to fill the Gap.¹

Next we shall deal with difficulties arising from the existing division of finance into central and local branches.

I have hitherto talked of the decision to spend money for public purposes as resting entirely with the national Government. That is, of course, not true; in Britain about 20 % of public expenditure is normally based on rates which are collected and spent under the authority of local governments; in the United States the Federal Government is normally responsible only for about 40 % of the national public expenditure, while the States and local corporations jointly levy and dispose of the other 60 %. It is clearly undesirable to limit the infusion of money for employment purposes to the channels of expenditure that are open to the central government. For one thing, in some important countries, as in the United States, these channels may conceivably prove insufficient. Moreover, it would be undesirable that the Central Government should be given all the advantages of an easier method of finance—consisting in the issue of new money—while the State Governments and corporations would have to raise their funds laboriously by levying taxes in the usual way. Finally, it is questionable whether a Federal Government could spread out the infusion of new money sufficiently for trade not to be distorted by its flow.

But can a suitable part of the newly issued money be set aside and placed at the disposal of regional authorities without impairing their independence or weakening their sense of financial responsibility?

To this I would answer by the following suggestions. Local authorities should be jointly given a legal claim to an appropriate part of the annual issue of new money. The fraction in question should be fixed by the national legislature, acting in the light of certain (more or less obvious) considerations, such as, particularly, the relative financial size of the tasks customarily undertaken by the central and local governments respectively. Decisions of this kind—for which the division of public funds between the Reich and the Länder under the Weimar Republic provides an example

¹ See Chapter VI, p. 128 below.

—could be taken without in any way compromising the independence of the regional authorities. It would seem desirable that the fraction of the newly issued money to be annually allocated to regional authorities should remain fixed for a period of 10–20 years.

More serious difficulties are involved in dividing up the part of the annual issue allocated to regional authorities between the latter. It is of great importance that a rational and objectively ascertainable criterion should be found to guide this division. The most reasonable starting point would seem to lie in assessing the local Gaps. The national excess of Savings over Investment at Full Employment is the sum total of such excesses arising in each local region. The total amount of newly issued money is most rationally distributed if it is allocated to each region in proportion to its share in that excess; or, in other words, if each is given a sum proportionate in size to the sums which are being currently withdrawn from circulation in that region, and added to the idle balances of its inhabitants. Such a distribution of new money would be most likely to maintain Full Employment equally everywhere and would reduce to a minimum the chances that the payments of new money would upset the balance of trade between the various regions.

Budgeting by regional authorities should be based on an estimate of the Regional Income in a state of (national) Full Employment, allowance being made for the possible presence of ‘depressed areas’ (see p. 98 below) within the region. Taxes should be first fixed (as in the case of the central authority) only in the form of a schedule and the actual taxation finally decreed on receipt of a legal share of newly issued money from the central government: at such a level that $\text{Tax} + \text{New Issue} = \text{Budget}$.

This scheme is admittedly vague in some particulars. But I think it clearly indicates the possibility of finding criteria for the distribution of the newly issued money which are sufficiently reasonable to command assent and sufficiently objective to eliminate the danger of lawless tussles between rival regional authorities. The proposed procedure can also claim that it fully safeguards the autonomy and financial independence of existing self-governing regions.

At any rate, the points still left open in our scheme can give rise to no serious doubts about the feasibility of a ‘neutral’ policy of Full Employment. There is little taxation left, either central or regional, which could not be readily replaced by newly issued money, and the scope of public expenditure, undertaken on its own merits, thus

appears amply sufficient to serve as a channel for newly issued money to fill the Gap.

Tax Remission. It is important to recall here also that a neutral policy of Full Employment is *not* simply a policy of tax remission. The public expenditure to be envisaged is considerably greater than that which is undertaken in the usual depressed state of economic life. For the United States, for example, we have estimated that for the period of 1929-39 at least 50% more would have been spent on public requirements than was at the peak of such expenditure in 1939 (see p. 30 above). A neutral policy is a policy of tax remission plus an increase of public expenditure up to the level that would be undertaken on its own merits—i.e. regardless of considerations of employment—in a state of Full Employment.

But even though tax remission is not the proper starting point for setting up a budget of Full Employment, it is interesting to note the way it affects circulation. Suppose a Gap of £m.100 p.a. is to be filled by remitting taxes and financing by the issue of new money the public expenditure thus left uncovered. How much tax remission is required?

This depends on the size of the Marginal Rate of Saving. If the rate of saving is one-quarter (as it was for the U.S. in the period 1929-41), then the amount of tax remission required is £m.133 $\frac{1}{3}$; since one-quarter of this being saved, there remains £m.100 to fill the Gap. When, as in Britain, changes of circulation strongly affect foreign payments, this fact has to be taken into consideration. This can be done—as can be seen from the fuller analysis of the Multiplier given on p. 59 below—by replacing the rate of saving by the reciprocal of the Multiplier. Thus if the Multiplier is taken to be 2 for Britain, the amount of tax remission, coupled with an equivalent issue of new money, required to fill a Gap of £m.100 will be £m.200.

The amount would be reduced if all other countries would also expand their circulation. A simultaneous expansion, carried out in pursuit of a concerted international policy for raising employment, would leave the balance of payments between countries virtually unaffected; in which case the Multiplier would increase well above 2 in Britain and the amount of tax remission necessary to fill a Gap of any particular size would be correspondingly smaller. For example, if conditions in Britain were similar to those in 1934-7 (discussed by Colin Clark in his paper quoted on p. 59 below), the Multiplier would increase from 2 to 3.22, and the amount of tax remission required to fill a Gap of £m.100 would fall to about £m.150.

Taxation increased. I have mentioned before that there is a widespread inclination to cure, or at least to mitigate, unemployment by taxing away incomes from which savings are being made and bringing the proceeds into circulation by allocating them to additional public works. I have denounced this method as irrational and wasteful and have laid down my principle of neutrality which excludes such forms of employment policy. But it yet remains interesting to examine how such a method would work; the more so since the influence of taxation on the Gap has to be taken into account by the government economists every time they calculate the correct volume of new money to be issued during the following fiscal year.

We may recall to start with the various stages by which the National Income expands in Table 2 (p. 13) from 'rock level' to Full Circulation and Full Employment. Each additional or 'marginal' slice in the table is subject to saving at the rate of one-third. Suppose now that a tax is imposed which cuts off a marginal slice from the top of the National Income and that the money thus collected is forthwith laid out for purposes of additional public expenditure. We may ask first: How much will be the 'squirting' effect of this process?

The answer is that from the point of view of monetary circulation the process is equivalent to a cancelling of the Savings which would have been made from the slice of income lopped off by taxation. These potential Savings are now put into circulation along with the rest of the slice transferred by taxation into public expenditure. This amounts to a cancellation of sucking (or an addition to squirting) to the extent of the cancelled Savings. In the conditions assumed in the table it equals one-third of the additional taxation.

Consider the matter further by analysing the following example. Assuming the National Income at £m.4100 p.a., let us increase taxation by £m.100 p.a. and spend the proceeds on additional public works costing £m.100 p.a. What will be the resultant total National Income?

It will consist of the following items: (1) £m.4000 left over untouched; (2) £m.33 $\frac{1}{3}$ of new investment, present before, which was holding the balance to the Savings made from the slice of income lopped off by taxation; (3) £m.100 of public expenditure; and (4) an increment to the National Income resulting from the cancellation, i.e. recirculation, of £m.33 $\frac{1}{3}$ of Savings; which, being equivalent in its effect to an equal amount of additional squirting,

will cause an addition of £m.66½ to the National Income (the Multiplier being 3). Thus the new National Income will be

(1)	£m.4000	present before
(2)	£m. 33½	investment present before
(3)	£m. 100	public expenditure from additional revenue
(4)	£m. 66½	secondary expansion caused by additional squirting
Total	£m.4200	

That is to say: the National Income is increased in the end by a sum equal to the additional tax.

Let us see how far a policy of Full Employment could be based on such a method of increasing the National Income, setting aside altogether for the time being the requirements of the 'principle of neutrality' which would exclude any such policy.

Take the example of the United States in the period 1929-41. We have concluded from Mr Stone's figures represented in Fig. 3 that during this period the National Income had its 'rock level' at about \$50 billion. We note also that in the pit of the depression the National Income was well below the rock level; so that at first sight there would appear to be no scope whatever here for an employment policy based on the taxation and recirculation of incomes from which savings are being made. A closer examination, however, would show that considerable sums were still being saved by some people while the dissavings made by others (particularly by business corporations) were levelling out the total balance. Thus it appears that even below the rock level there is some scope for increasing employment by taxation; while it also seems that it would require a rather meticulous analysis to find out exactly how much could be achieved in this direction.

Fortunately, a crude estimate will enlighten us, reliably enough, about the main point of the matter. In 1933 the national income of the U.S. was \$42 billion, of which \$8.6 billion was being taxed away: leaving \$33 billion for private consumption. (This was less than one-half of the private consumption of \$68 billion enjoyed at the boom level of 1929.) We may ask: How much could have been taxed away of these \$33 billion? A doubling of the burden of taxation, raising it to \$17 billion (i.e. 40 % of the National Income) would certainly be an extravagant estimate; but even so, what would it have achieved? According to the foregoing theoretical analysis—which, with all its simplifications, does represent the gist of the matter quite well—the additional taxation of \$8.6 billion, when recirculated through additional collective expenditure, would

augment the National Income by about the same sum, bringing it up only to about \$50 billion.

Clearly, this kind of policy is no remedy for a state of severe unemployment. Even though the effects may be enhanced by letting additional tax fall most heavily on incomes from which Savings are made at the highest rate, and directing the public spending of the proceeds on lines which result in the least accumulation of Savings, this cannot alter our verdict. The less so since we have yet to add to our picture the depressing effect of additional taxation on the rate of new private investments. To assume that this effect could be avoided, as Mr Kalecki seems to suggest,¹ by remitting taxation on reinvested income, is hardly acceptable. Capitalists will not desire to risk their liquid capital with a view to making profits which they can use only (or in the main only) for purposes of reinvestment. That is useless to them.

We may conclude that only in times of comparatively good business activity could a policy of additional public expenditure financed from additional taxation raise the level of the National Income to its full value. It is incorrect therefore to describe such a policy—as Sir William Beveridge does in referring to his 'Route II'—in general terms as a policy of Full Employment.² It can be used as such only in exceptional circumstances.

In any case, of course, a policy of additional public expenditure from additional revenue undertaken in a depression would most extravagantly offend against the principle of neutrality, and in fact against the most obvious dictates of sanity. Private consumption, painfully curtailed already by the existing state of unemployment, would be sharply reduced further by additional taxation, while at the same time provisions for the collective needs of the community would be increased to a multiple of what had been previously thought worth while.

One more remark may be added about the comparative volume

¹ *The Economics of Full Employment*. Six studies in applied economics prepared at the Oxford University Institute of Statistics (1944), p. 46.

² Sir William Beveridge, *Full Employment in a Free Society* (1944), p. 142. On p. 144 the author describes the policy as 'a theoretical rather than a practical possibility', and sets it aside on these grounds. It is most important to realise that it is *not* a theoretical possibility. The calculation of Route II for 1938 (by Mr Kaldor) given in Appendix C on p. 363 of Beveridge's book is open to grave doubts in assuming that private investment would be fully maintained under a system of taxation confiscating the major part of profits; and it represents in any case a possibility which (even in this doubtful form) is present only in a comparatively prosperous year.

of additional public works that would be needed, with different methods of financing, in order to achieve the same rise in the level of employment. We have seen that to achieve £m.100 p.a. of additional circulation an additional taxation of the same amount is necessary. The amount of additional budgetary deficit which would achieve the same rise depends on the size of the Multiplier. With a Multiplier of 4, as can be derived from Mr Stone's chart for the U.S. 1929-41, the amount required would be £m.25; with a Multiplier of 2, as quoted above for Britain, the amount would be £m.50. Thus additional public works financed from additional revenue must be applied in twice to four times greater volume to eliminate a given amount of unemployment than if the source of finance is an additional budgetary deficit. This should utterly condemn the former method even within the narrow limits in which it is applicable at all.

Multiplier and Foreign Balance—Sucking and Squirting redefined. In this section a brief reference will be made to certain topics which will be explained further in later chapters.

In the section on the Rate of Savings (p. 23 above) I have explained how the Marginal Rate of Savings determines the Multiplier, i.e. the rate at which the National Income is increased by a unit increase of 'squirting' (or decreased by a unit of additional 'sucking'). The Multiplier is so far simply the reciprocal of the Marginal Rate of Savings; so that, for example, for the period studied by Mr Stone, where the marginal Savings were made at a rate of about 25 % (p. 16 above), the Multiplier was about 4.¹

It may appear curious in these circumstances that the Multiplier has been estimated to be usually rather less than 2 for Britain.² Does this mean that the Marginal Rate of Savings is as high as one-half in Britain in contrast to one-quarter in the U.S.?

No, there is a complication to be taken into account, at which I have already hinted earlier (p. 14). Any expansion of circulation in Britain—unless accompanied by a similar expansion abroad—greatly increases the flow of imports while exports are depressed at the same time. The result is that a large part of the additional circulation overflows into foreign markets and is lost for the home trade. In other words, any increment of 'squirting' leaks out to a considerable extent in the form of increased foreign payments

¹ A more detailed examination reveals a multiplier of 3 for 1929-32, 5 for 1932-8 and 3 again for 1938-41.

² See, for example, Bretherton, Burchardt and Rutherford, *Public Investment and the Trade Cycle in Britain* (1941), p. 92, quoted in detail below, on p. 83.

which exert no 'multiplier effect' on the National Income at home. That is the main reason why the observed Multiplier is smaller in Britain than in the U.S.¹

In order to deal with such matters it is necessary to amplify our picture of 'sucking' and 'squirting'. A sucking effect can also be exercised by foreign payments for imports, unbalanced by payments received for exports. A full list of 'suckings' would then normally include: (a) private savings, (b) business savings and particularly depreciation payments in excess of actual devaluation of equipment, (c) excess of taxation over public expenditure, and (d) any existing negative balance of foreign payments. The word 'normally' is put in as a reminder that private savings may conceivably be negative for a time, while people over-spend their current incomes by drawing on idle balances, though this will be exceptional.

And accordingly a full list of 'squirtings' would normally include: (a) new private investment, (b) any excess of payments for renewals over average rate of depreciation, (c) budgetary deficit, (d) any positive balance of foreign payments.

All the processes of 'sucking' have it in common that they are drawing money from circulation without being linked to any process which would bring it back into circulation again. 'Squirting' is defined, symmetrically, as a process taking money into circulation without being linked to any process which removes it again. The day-to-day buying of consumer goods in the market does not fall under the description of squirting because such buying is linked to the receipt of incomes by the consumers, which takes the money from circulation again. The same is true of the outlay on wages, etc., for production of consumer goods, since this outlay is linked to receipts from the current sale of such goods. Similarly, public expenditure from current revenue does not represent squirting, as the outlay is linked to an equal amount of receipts collected currently. The processes in which outlay is linked to receipts form the current circulation of money which we have represented by the Money Belt in Fig. 2, p. 7. The distinction between current circulation on the one hand and 'squirting' and 'sucking' on the other is quite essential to the Keynesian theory of employment.

¹ Colin Clark (*Econ. J.* 1938), who corrects the multiplier for leakages through increased imports, obtains the value of 3.22 for 1934-7 in Britain. (For a discussion of this see Burchardt, Bretherton and Rutherford, loc. cit. pp. 317-18.) Note that the equation Multiplier = reciprocal of Marginal Rate of Saving will hold for the corrected and not for the directly observed Multiplier.

Wartime Finance as a Counter-Example. In times of war the problem of finance lies in the opposite direction of that in a depression. This gives us an opportunity to observe the operation of modern monetary principles for an alternative purpose: namely, to prevent—rather than to induce—the expansion of monetary circulation.

The task of war economy is to release—as quickly as possible—the productive forces of the nation from the service of civilian aims and to harness them to the purposes of war. The rapid building up of an armament industry and the forcing of its output calls for a sudden large increase in government expenditure, in view of which government spending must inevitably go on increasing rapidly for a number of years. It is impossible to meet these increments of public expenditure currently from equal increments of tax revenue, and hence the latter will always lag far behind. As a result there must arise a large budgetary deficit, causing a powerful expansion of the circulation of money. In time of war all governments must resort to ‘needy borrowing’: to the use of the printing press for covering a considerable part of their current expenditure—even though circulation is already at a high level and would require to be reduced, rather than expanded.

It is true that a certain amount of monetary expansion is justifiable and perhaps even indispensable in wartime. The measure of ‘over-employment’ required for the war effort necessarily entails a considerably expanded circulation of wages and other incomes. A further expansion may be justified to help in throttling—by the rise in the cost of living—the consumption of earners of fixed incomes and also to allow for wage increases in war industries, which greatly facilitate the transfer of workers into new wartime occupations.

But there must be no yielding even in wartime to the easy course of unlimited inflation. In war, as in peace, a wide measure of inflation must inevitably lead to a general relaxation of contractual honesty and to a similar deterioration of business practices and production methods. It cannot fail to confuse and distort every phase of business life and to pervert all human relationships which depend on trust and on the responsible exercise of prudence. No Government, therefore, can properly allow inflation to take its course if this can possibly be avoided.

In considering the problem of how to keep monetary expansion in wartime within reasonable bounds, we may use the following simplification. Whether war factories are built by the Government or, as it sometimes happened, particularly in the U.S., by private

firms working under government contracts, we shall include the expenses of their construction among current war costs. If this classification is applied, there is practically no commercial investment left over in wartime. In fact, since commercial stocks are ruthlessly depleted and machinery is allowed to run down badly, there results (reinforced by the liquidation of foreign assets and the taking up of foreign loans) an excess of total current consumption over the level of current home production. Investment, in this sense, becomes negative in wartime and a process of disinvestment takes place instead, which contributes to no small extent to the supply of wartime consumption. For the purposes of our discussion, however—as for most discussions dealing only with the main features of the situation—we may be permitted to neglect this disinvestment, and to consider commercial investment in wartime as non-existent.

In circumstances of this kind the whole sum of current Savings made in wartime can be considered as being in excess of current new commercial investment. Instead of talking of the 'Gap' we may then simply talk of 'Savings'. Circulation will remain steady so long as public expenditure does not exceed the sum of current Taxes and current Savings; or in other words, so long as the wartime issue of new money is balanced by the process of current Savings.

These principles—which represent the application for times of war of the general policy advocated in this book—are recognised in the wartime budgeting practice of the Governments of Britain and the U.S. The prevention of an excessive expansion of circulation has become their dominant point of view in fixing the level of taxation. Taxes are being levied at such a rate as to prevent—in conjunction with the expected level of Savings—the occurrence of inflation. Taxes and Savings are thus treated on terms of equality for the purpose of balancing public expenditure; and the responsibility of the Exchequer consists in assuring that the sum of current Taxes and Savings will come up to the level of Budget Expenditure.

Desiring to reduce the necessity for taxation—or having reached the limit to which taxation can be usefully raised—the Government must press for more Savings; and to induce more saving it will offer interest-bearing government bonds to the public. The function of this operation is primarily to augment Savings; but the placing of bonds also increases the stability of accumulated Savings, which, once they have been converted into bonds, are less likely to be spent again on the various occasions when their owner might otherwise

be inclined to release them. It is important to note, however, that the government's financial requirements are satisfied by any kind of savings, so long as these are permanent. A saver who keeps his money tucked away in his desk makes the same contribution to the balancing of wartime finances as does his neighbour who invests it in War Loan. In fact (provided his savings are firmly locked up) he is the more useful citizen, as he spares the Government the trouble of issuing loans, paying interest, etc.

All this is clearly recognised by the Treasury in Britain and similarly by the Treasury Department in the U.S. to-day. If only these government authorities were prepared to generalise the principles under which they are acting during the war so as to include the converse case of peacetime conditions, the adoption of my proposals for the operation of a Modern Budget would inevitably follow.

Let us compare and contrast briefly the proper ways of budgeting in the two converse cases of war and peace. Both in wartime, when there is a tendency towards excessive circulation, and in peacetime when the opposite tendency is usual, any new money currently issued by the Government must equal the Gap—which is the excess of current Savings over current Investment. (In wartime we may set $\text{Investment} = 0$ and the $\text{Gap} = \text{Savings}$.) Both in war and in peace the equality of the new issue to the Gap keeps the level of circulation stable: protecting the economy against inflation in war and against depression in peace. In wartime the Government's hand is forced by the necessity of issuing new money which it cannot currently recover from taxation; it must therefore exert itself to open the Gap far enough to absorb this whole flow of new money. In peacetime the problem is set by the existence of a Gap at Full Circulation which tends to reduce the monetary flow and bring about depression, and the Government's task is then to adjust taxation at a level which will leave over a sufficient flow of newly issued money to fill the Gap.

Trade-Cycle Policy. We have yet to consider a little further how circulation is to be stabilised against the fluctuations of business activity involved in the Trade Cycle. The solution of this problem will involve another, ultimate, generalisation of our principles.

Up to a point the Trade Cycle has already been dealt with. Budgeting was to be guided by a forecast of the rate of private investment, so that the apparent trend of the Trade Cycle should be taken into account and allowed for in the fixing of taxes. It was proposed also (p. 48) that a subsequent readjustment of taxation—

and of the issue of new money—should be provided for in order to compensate for any unforeseen jerks of the investment curve.

We may look forward to the stabilising effects of this method with even greater confidence when taking into account the damping effect which a stable circulation is bound to exercise on the oscillations of the Trade Cycle. Ordinarily such a cycle contains—as we have described above—self-accelerating phases of expansion and contraction. An increase of private investment causes monetary expansion which in its turn stimulates such investment further; and, whenever private investment takes a downward turn, the reverse form of self-acceleration takes place. Clearly, none of these cumulative processes can gather momentum in any economy in which the level of circulation is kept reasonably stable, and the problem of compensating for the oscillations of investment is thus made correspondingly easier.

While fluctuations in the flow of private investment are bound to take place even though the total level of employment is kept stable, we may expect in the light of this analysis to find them much reduced. The demand for new capital equipment will continue to vary as new opportunities arise in consequence of technical progress and in connection with changes in the size of population and the level of general education; but these variations, when precluded from affecting the level of circulation, will lack the amplifying mechanism which at present increases their range far beyond the strength of the primary oscillations. It seems scarcely too sanguine to expect that in these conditions the Trade Cycle will lose most of its now usual turbulence and vigour.

We have hitherto assumed that the fluctuations caused by the Trade Cycle are submerged throughout by a state of general depression, so that Full Employment is not reached even at the peaks of business activity. We have seen this type of 'submerged' Trade Cycle represented in Mr Stone's chart of economic activity in the United States from 1929 to 1940, as well as in the chart given by the White Paper for the course of employment in the inter-war period in Britain, and we have taken it to represent a characteristic feature of a modern economy. By looking further ahead, however, we may discern a point at which this picture may need modification. I have explained earlier (p. 42) that the continuous flow of fresh money carried into circulation by successive Employment Issues may, within a comparatively short time, lead to an accumulation of liquid funds in the hands of the public which may cause the rate of saving gradually to fall and eventually to become equal, even

at Full Circulation, to the rate of new private investment. When through such accumulations of Savings the habitual Gap is eliminated, the fluctuations of the Trade Cycle will not occur any more in a medium of insufficient circulation but will represent oscillations both above and below the level of Full Circulation. Booms would then constitute excesses of circulation which would have to be met by deflationary measures. We have now to show how, exactly, our modern budgetary principles should be applied in a state of this kind.

(We may note that this question applies also to the more primitive economies in which the demand for new capital has not yet fallen to the level which is usual in the relatively saturated West and Savings are still being made at a comparatively moderate rate, so that the steady excess of Savings over Investment at Full Circulation which causes the chronic depressive tendency prevailing in the modern West has not yet set in. In such cases the Trade Cycle would still represent—as it did, of course, in earlier phases of the now gradually saturated West—a series of alternations in which the peaks are real booms, carrying an excessive, inflationary flow of money into circulation.)

The answer to the problem thus raised can be readily found by applying the principles already set out before. Clearly, when at Full Employment new private investment exceeds Savings there is a tendency present towards undesirable monetary expansion which requires to be checked. For this purpose taxation will have to be imposed in excess of Budget Expenditure. If necessary, such excess taxation has to be maintained indefinitely, until the tide turns again and Investment once more recedes to a level lying below that of Savings at Full Employment. When this happens, the situation must again be dealt with on familiar lines: money will have to be issued to the extent required to fill the Gap and to readjust circulation upwards again.

Summary and Prospects. The three main situations of the economic system with which Governments have to deal are:

1. The normal peacetime tendency of a modern economic system to produce an excess of Savings over Investment at Full Circulation. This excess, which we have called the Gap at Full Circulation (or Full Employment), is narrower in time of booms and wider in time of slump, but it is hardly ever absent altogether and steadily requires to be filled by the issue of new money.

2. An excessive circulation caused by the forced issue of new money in time of war; requiring the utmost possible widening of the Gap in order to absorb the excessive flow of new money.

3. A position lying in the neighbourhood of Full Circulation, with an alternation of slumps in which current Savings exceed current Investment, and of booms in which the reverse is true. This situation is usual in an early phase of industrialisation and may establish itself also in an advanced economy when the public has been sufficiently supplied with cash balances. The task in a position of this kind is generally to stabilise circulation; booms must be depressed by taxation and slumps levelled up by issue of new money.

We may now generalise the use of the word 'Gap' so as to cover both the case when Savings at Full Circulation are in excess of Investment and the opposite case when Investments outrun Savings. Such usage requires that opposite signs be attributed to the two kinds of Gaps which it introduces. We may call the usual Gap, when Savings > Investment, a *positive* Gap, and the opposite kind, when Investment > Savings, a *negative* Gap.

The rules for balancing the budget can then be expressed for all possible positions of the economic system in the form

$$\text{Tax} + \text{Gap} = \text{Budget.}$$

In this formula 'Budget' means Budget Expenditure. When the Gap (as usual) is positive, taxes must be fixed at less than expenditure; the difference which is equal to the Gap being filled by an equal issue of new money. In wartime, when government expenditure necessarily outruns taxation, the Government must try to widen the Gap to equal the excess of expenditure. Finally, in a state which tends on the average to maintain itself automatically at Full Circulation the Gap will become negative in times of boom, and during such times taxes must be levied in excess of budget expenditure to the extent indicated by the Gap; when, on the other hand, there is a slump the procedure is to reduce taxes again below expenditure to the extent of the Gap, the difference being filled by the issue of new money.

There is no suggestion anywhere of 'balancing' the sums newly issued in a slump by the sums withdrawn from circulation in a boom. The pernicious notion of the state acting towards its Central Bank the part of a commercial investor borrowing from a money-lender must be rigorously banished.

Before closing this preliminary presentation of the proposed policy of Full Employment, a glance may be permitted at the long-term expectations to which such a policy looks forward. The principal economic troubles of our day are caused by the gradual saturation of capital, coupled with an increased rate of Savings.

To these troubles, mainly consisting in a tendency towards chronic mass unemployment, are added the anxieties of business fluctuations, known by the name of Trade Cycle. We have proposed to remove chronic depression and to stabilise employment by carefully applied doses of money issued for the purpose. If that is done, the Trade Cycle loses its flywheel, and, robbed of their self-accelerating monetary repercussions, the variations in the rate of private investment should lose their violence.

On the other hand, we may expect that with the establishment of a regime of Full Employment the flow of business investments—unhampered by the damping effects of a reduced National Income—will undergo a marked increase. Western populations being practically stationary, the countries of the West might thus find their capital equipment rapidly approaching completion. After an initial spurt of constructional activities there would set in a rapid reduction of investment—and consequently the fluctuations in the tempo of capital expansion would greatly lose in strength.

Thus under a rational monetary regime the course of capital formation would be at first accelerated and presently slowed down again as it would be approaching completion. At the same time capital saturation, which is now our bane, would become—what it ought to have always been—a source of stability and contentment. It would represent the satisfactory completion of a mighty task, and the elimination from economic life of the turbulence which accompanied the process of its achievement.

CHAPTER II

FULL EMPLOYMENT IN SOVIET RUSSIA

Socialism as an Alternative. But what about Socialism? Does not public ownership and a socialist planned economy offer another, more straightforward, way of assuring Full Employment? Has not the Soviet Union successfully applied that method, and could its Government not declare as early as 1930 that unemployment had been eliminated in the Soviet Union?

In answer to these questions I shall briefly outline here the economic history of Soviet Russia and show that the elimination of unemployment was not achieved in that country along any more direct path, but by the very same method that I have described in the previous chapter. Full Employment was not established in Soviet Russia by the socialist method of centrally directing people into prescribed jobs, but simply by maintaining a Budget Deficit which kept the labour market under inflationary pressure. Compulsory labour regulations were adopted only, or mainly, in order to meet the difficulties of the excessive demand for labour created by the inflationary pressure. These measures, far from being responsible for the achievement of Full Employment, were, on the contrary, necessitated by an already established state of full and more than full employment which they had played no part in producing.

Socialist Planning. The economic development of the Soviets between 1917 and 1939 can be divided into four phases, the first of which—setting aside the early ineffective attempts at replacing capitalist managers by councils of workers—is represented by the measures usually described as ‘War Communism’. In the course of this period, extending from about 1919 to March 1921, practically all industries were nationalised and an attempt was made to direct their operations centrally by allocating productive tasks and resources to each enterprise according to a central plan. The system aimed at the elimination of accounting in money, thus attempting to exclude all commercial criteria from the conduct of industrial production. It embodied, in fact, the original programme of a centrally planned and directed Socialist economy, which would produce not for the market but for the good of the com-

munity—as assessed by the supreme economic authorities of the state.

The allocation of labour was to be effected—as that of all other productive resources—centrally, by directing everyone compulsorily into a suitable job. It is impossible to say how the latter measure worked, or would have worked, since the whole experiment failed from the start and was soon submerged under a tide of mounting disaster. These calamities were rapidly growing in weight throughout the last months of the year 1920 and the first months of 1921—after peace had been fully restored—and could therefore not have been due, as commonly asserted, to conditions either of civil or of foreign war. They must be regarded, on the contrary, as representing the collapse of the original purpose of Socialism—the achievement of which had been attempted not *because* of the war, but, as contemporary sources clearly prove, quite consciously *in spite* of the war. They were due to the fact that an attempt at a centrally planned and directed economy must end in administrative chaos and complete paralysis. They were certainly regarded in this light by the Soviets, who never again deliberately attempted the establishment of a centrally directed economy.

State Capitalism. The second phase in the development of the Soviet system brought forth as a violent reaction from Communism a system of State Capitalism, usually called the 'NEP'. The closest imitation of capitalism was its guiding precept. While all main industries remained under state ownership, they were granted full autonomy for the conduct of their operations and enjoined to pursue strictly commercial lines of profitability.

Among the various anomalies which such a system manifested, that which interests us here especially is the dilemma concerning the handling of financially insolvent enterprises. If the State Bank continued to pay up losses for insolvent enterprises, this would mean abandonment of effective control over their efficiency; if not, insolvency would lead to a discontinuation of operations by insolvent units—which might possibly cause mass unemployment. In its strict adherence to capitalist principles, the Soviet Government chose the latter course and—during the so-called 'scissors' crisis—did compel its own enterprises to sell out stocks at disastrously low prices and thus forced large numbers of them out of business. The event proved that State Capitalism, when conducted on orthodox lines of finance, may lead to phases of serious unemployment, exactly like private capitalism. The reasons for eventually abandoning the NEP were, however, political rather than economic. The

successes of the system strengthened the position of the great masses of independent peasants, while its temptations tended to demoralise the Communist Party at its core.

First Five-Year Plan Period. This brings us to the third phase of the Soviet experiment, known as the First Five-Year Plan period, which is of great importance to us as it led to the elimination of unemployment in Soviet Russia. We shall analyse this phase in some detail here.

The First Five-Year Plan (which went into operation on 1 October 1928) set out a number of considerable new investments and provided for a general increase of production throughout industry and agriculture. At the same time the operational autonomy of enterprises was abolished and a system of far-reaching centralisation inaugurated. Hundreds of plants were joined together in Industrial Combines which were commissioned to direct the production of these plants both technically and commercially, to buy and sell and provide labour for them.¹ The existing mutual financial obligations of enterprises were rigorously severed. The Credit Reform of 31 January 1930 prohibited the granting of credit by one enterprise to another and placed all transactions between them on a cash basis. Credits could henceforth be granted only by the State Bank (Gosbank), which was empowered to act as an agent for all payments falling due on deliveries. Suppliers, on presenting their bills to the bank, were credited with the price, and the sum was forthwith charged to the buyer's account.

Such a system was bound to collapse from over-centralisation. After a year and a half's trial Stalin was declaring: 'It is clear that the president of a Combine comprising 100 enterprises and more can have no proper knowledge of these plants and of their possibilities of production.'² Under such direction, or lack of direction, enterprises could not operate profitably, even without the additional handicap of a bank which debited them with the price of any delivery which another enterprise thought fit to post on to them. The only clear guidance the manager of an enterprise would receive was the declared—nay, loudly heralded—policy of the Government to expand production at all cost. What else could he do but throw all thoughts of solvency to the winds and enlist in

¹ L. E. Hubbard, *Soviet Money and Finance* (1936), pp. 28, 30. This measure restored a set of authorities of a status similar to that of the Control Boards (Glavki) of the period 1919–21. Cp. B. Brutzkus, *Economic Planning in Soviet Russia* (1935), p. 149.

² Speech of 23 June 1931, published 5 July.

the general scramble for raw materials and labour and the drive for higher output? And what else could the Government do but pay up all resultant deficits? Listen to Ordzhonikidze, president of the Workers and Peasants' Inspection, at a conference of industrial managers held at the beginning of 1931: 'With us the State Bank pays for everything, and the undertaking is materially responsible for nothing at all... Wages are paid without reference to you [the industrial managers]. Goods are paid for regardless of quality, people take your products away and distribute them.'¹ No wonder that Stalin finds by mid-1931 that 'Many enterprises and organisations have long ago ceased to keep accounts, make estimates, or draw up statements of income and expenditure...'² A situation of this kind naturally revived for its own justification the original ideas of a moneyless Socialist economy. 'What does all this mutual accounting matter'—people were saying, according to Reddaway—'when everything really belongs to us? Why hold up production, just because the credit of the enterprise is exhausted, which is only a sort of financial jugglery?'³

When a commercial deficit is paid up—be it by a bank, by a private individual or by the State—the operation amounts to a New Investment. It is a new loan given for use as business capital, and its effect on the monetary circulation will be exactly the same as that of any other payment made with respect to a New Investment; it is bound to increase circulation. The money which had gone into circulation when the original loss was incurred, will of course, turn up again (so far as it is not saved up), first in the form of additional purchasing power, and then swelling the profits of some enterprise—where the state may succeed in confiscating it, through which circulation would be reduced again. But the reductive process could be effected only after the additional money, having gone into circulation, had actually caused a general rise in prices. Such a rise would almost inevitably be followed by a stiffening of wages, which would set up a resistance to the reduction of circulation. If the flow of money expended for paying up deficits goes on streaming continuously, the only way open to the State to keep monetary circulation balanced would be to assess in advance the amount of subsidies to be disbursed for repayment of deficits and to impose concurrently an equally high annual tax on income. It does not appear, however, that the Soviet Government

¹ Quoted by B. Brutzkus, *Economic Planning in Soviet Russia* (1935), p. 163.

² Speech of 23 June 1931.

³ W. B. Reddaway, *The Russian Financial System* (1936), p. 79.

has ever attempted such drastic deflationary measures, for signs of monetary over-expansion have remained in evidence throughout the following years.

In any case, up to 1931 no obstacle was raised to the flood of expansion arising from the paying up of deficits by the Government. The ensuing inflation was characterised by an intense over-demand for labour, accompanied by a catastrophic rise of labour turnover. In 1930 the coal-mining industry's turnover was about three times the total labour employed, so that on the average each worker retained his job only for four months.¹ Such fluctuations of labour could not fail to cause serious symptoms of disorganisation.² The conditions were also reflected in the counter-measures taken by the authorities, comprising restrictions on the mobility of labour, such as compulsion to accept a job offered by the Employment Exchange, the introduction of labour passports, and the punishment of absenteeism.

It was in the midst of this economic catastrophe that the Soviet Government discovered that it had eliminated industrial unemployment. On 9 October 1930 this was officially announced in the form of the abolition of unemployment benefit in the Soviet Union.

This picture differs profoundly from that usually accepted in the West, according to which the Soviet Government abolished unemployment by establishing a rationally planned economic system in which every citizen would be given a useful part. The truth is that, precisely at a time when the Soviet economy was rapidly falling into an abyss of disorganisation, and largely in connection with this catastrophe, there occurred in Russia an explosive inflationary expansion which in the shortest time led to the absorption of all available labour in the country.

Stalin's move towards central planning was, of course, the origin of the whole sequence of events. It was the excessive centralisation resulting from this move that reduced all enterprises to a rudderless condition and simultaneously released them from their obligations of solvency. It was again the resolution of the planning authorities to keep all industries going—irrespective of their losses—which resulted in the paying up of all commercial losses: and in a flood of new money which swept away unemployment. But these effects of economic planning were produced unintentionally and could have been obtained simply by a suitable monetary policy.

New Investment. At this point a digression must be made in order

¹ L. E. Hubbard, *Soviet Labour and Industry* (1942), p. 57.

² Cp. e.g. E. Strauss, *Soviet Russia* (1941), pp. 232-3.

to meet a number of objections which are almost bound to arise in the reader's mind. The usual picture of the First Five-Year Plan is that of a deliberate throttling of output for consumption, and of the application of the resources thus made available to the achievement of an immense programme of construction. The very harshness of the privations incurred has been taken to demonstrate the magnitude of the effort which they served. The reader will ask therefore whether an investment campaign of the alleged unusual dimensions is not more than enough to account for the elimination of unemployment. Even though it were argued that such a process is in principle not different from that which operates under capitalism during a boom period, the whole picture would still be very different from that given above.

This point must be cleared up, even at the cost of a brief digression, particularly since otherwise the following period of the Soviet regime cannot be properly understood.

We may point out first that the First Five-Year Plan was not originally meant to involve any self-denial. The original plan as published by G. T. Grinko, *The Five Year Plan of the Soviet Union* (1930), forecasts in great detail large advances of consumption in every field and for every section of the population. '... With regard to the most important consumer goods' this official publication says on p. 304, 'the Five-Year Plan provides for the doubling or practically doubling of the per capita consumption.'

Moreover, the immediately following development in Russia itself shows that the intensity of privations imposed on the population gives no indication of the constructional effort shouldered by the country. Whatever the fraction invested in the First Five-Year period may have been—and we shall deal with that in a moment—there can be no doubt that this fraction was much greater under the Second Five-Year Plan; by which time the expansion of the coal and steel industry undertaken in the First Five-Year period had made greater investments possible. Yet the hardships were far more serious during the period of 1930–2 than during the years 1933–7. In fact, in 1936 Stalin could exclaim, not without some justification: 'Life has improved comrades, life has become joyous.'

Not only did provisions become ampler in this later period in spite of a mounting rate of investment, but the existing inflationary pressure was also much reduced. Throughout the 7 years of 1932–9—while the rate of investments was steadily higher than during 1930 and 1931—the prevailing inflationary symptoms never reached

the wild and uncontrollable degree which characterised the latter two years. It is clear, therefore, that the size of investments was not the effective cause either of the severe privations or of the heavy inflation which Soviet Russia underwent in the early planning period.

This conclusion is confirmed by reference to the actual figures of the rate of investment. They show no evidence that the fraction of the national income invested by the Soviets during either the First or the Second Five-Year Plan period was unusually high. The question seems not to have been examined before, and a calculation made on the basis of the best available figures—for which detailed evidence is given in Appendix III—suggests that about 8.5% of the annual national income was the fraction actually invested during the period 1928–32. The fraction invested, according to Colin Clark,¹ during the period 1934–7 was 14.2%. By comparison we may look at the following series which is the fullest available for any single period, namely, 1925–30. Fractions of National Income invested: Great Britain 7.6%, U.S.A. 10.9%, France 11.2%, Germany 7.7%, Switzerland 12.6%, Holland 19%, Spain 10.9%, Japan 19.8%, Australia (1928–30) 7.2%, New Zealand 11.5%, Austria 7.3%.¹ It is clear both by comparison with these countries' investments and with the investment figure of Russia itself in the subsequent period that the 8.5% rate of the First Five-Year Plan was comparatively modest and does not by itself account either for the privations or the wild inflationary excesses of the period.

The Period 1932–40. We can now turn to the fourth phase of the economic development in Soviet Russia and deal more fully with the general improvements—mentioned already in the foregoing discussion—which this period achieved. It was a period similar to the NEP in its vigorous tendency to reintroduce capitalist methods in the conduct of enterprises; but it fell short of producing the rigorous State Capitalism of the NEP, as enterprises were not granted complete financial independence but kept under the strict day-to-day control of the State Bank.

Under this system (still operating to-day) the State Bank fulfils the double role of a financier and of a controller of finance. Thus it is hoped to solve the dilemma arising in the case of enterprises becoming insolvent. A State Bank which would play the role of a mere creditor by forcing the insolvent enterprise out of business would revive the unsatisfactory conditions of the NEP. This is not

¹ Colin Clark, *Conditions of Economic Progress* (1940), p. 406.

allowed to happen; '... where the enterprise becomes insolvent the only thing to do is to start again with a fresh supply of capital and a new manager', writes Reddaway.¹ 'It may be assumed that in practice no debtor enterprise has ever actually been sold up and closed down on account of insolvency', says Hubbard.² But to prevent this practice from producing a torrent of subsidies, as it did in 1930-1, the Bank is given the responsibility for exercising a strict 'Treasury Control' over every item of expenditure incurred by its client enterprises. Thus it is hoped at least to reduce the inflationary pressure inevitably originating from a system of enterprises which are virtually insured by the Government against closing down on account of insolvency.

The inflationary pressure is reinforced by the fact that the responsibility of managers is not limited to the pursuit of profits. The enterprise must not only pay its way but also fulfil a plan imposed, to some extent, from above. In case of conflict between these two obligations, the latter overrides the former. The manager must carry on with the plan often irrespective of profitability; or, alternatively, in disregard of the prescribed price schedule. 'Failure to secure supplies of raw materials', writes Hubbard,³ 'is not accepted as a good excuse for failing to deliver the planned output, and payment of a premium to get the required material and goods may be practically forced on the manager of a factory. He will naturally try to cover the cost by charging higher prices for his finished goods.' Gourvitch observes that despite all regulations price advances, unplanned and illegal, were fairly common.⁴ Collusion between enterprises was widespread, as, for instance, lower grade goods were invoiced at the value of a higher category in order to cloak the actual bidding up of the price. The most recent description of this feature of Soviet life is to be found in the following passage of Hubbard's book:⁵

When plans fail to agree with reality, another set of defects arises. Because of faulty planning, the demand for certain raw materials or, still more probably, partly manufactured goods may exceed supply, and a factory manager may find his work in danger of interruption through lack of some essential. This is not accepted as a good excuse

¹ W. B. Reddaway, *The Russian Financial System* (1936), p. 25.

² L. E. Hubbard, *Soviet Money and Finance* (1936), p. 231.

³ *Ibid.* p. 52.

⁴ A. Gourvitch, *American Economic Review* (1936), p. 276 (see p. 76 below).

⁵ L. E. Hubbard, *Soviet Labour and Industry* (1942), p. 239. Collusion between managers also mentioned by W. B. Reddaway, *The Russian Financial System* (1936), p. 35.

for failure to complete his plan, so he will try to obtain what he wants by unconventional means. That is by a private deal with a supplying enterprise, which usually takes the form of offering the latter an addition to the fixed price, either in money or kind. For example, a watch and clock factory might offer a number of timepieces to a factory supplying brass stampings or spring steel or glasses. This is known as *blat*, and many factories retain the services of so-called commercial travellers whose chief occupation is to negotiate such transactions.

This picture may represent the effects both of administrative pressure towards plan fulfilment and of inflationary business conditions which have their origin in that very pressure. The pursuit of planned targets regardless of profitability inevitably causes losses, which, when paid up by the bank, are a source of monetary expansion, and the resultant inflationary demand for goods further reinforces the drive towards increased output. The description given above by Hubbard may in fact apply to almost every country in wartime when there is both an administrative and an inflationary pressure towards expansion. In such a state the zealous manager must not be too scrupulous with regard to legality; and this applies equally to any public official in charge of an institution requiring supplies. An official responsible for the output of a vital factory—or for the welfare of a hospital, or of a detachment of troops—cannot but throw himself into the general scramble for supplies—however shady its methods may become—once there is no other alternative by which he can discharge his trust. Strict adherence to unworkable rules may, in fact, sometimes amount to conscious sabotage.

We have it clearly demonstrated here how the elimination of mass unemployment took place in Russia. We have seen before that this was first achieved in 1930 as the result of an inordinate wave of monetary expansion. We may note now that the continued flow of subsidies compensating for commercial losses has in subsequent years maintained the inflationary bias of Soviet economy and that a permanent flood of monetary demand has kept unemployment at a minimum.

Signs of inflation were present—throughout the period 1932-40—also in the consumers' markets. The custom of indiscriminate buying for the purpose of taking advantage of any offer of merchandise, remained widespread. Striking cases of this are described in 1937, when a sudden offer was made to the public of large quantities of pillow feathers, and 'that day the odd spectacle was seen of people passing along the streets with sacks, bolsters and

pillows from which a steady trickle of feathers floated away in the breeze'. Similar processions are described filling the streets on another occasion, carrying galvanised iron wash-tubs.¹ An even more serious inflationary symptom was the widespread formation of queues, which various observers have reported as being customary at that time.²

The effect of monetary expansion on the labour market has been clearly analysed by Gourvitch.³ 'Least successful of all', he writes, 'has been the effort to secure industrial labour at low money cost through regulation both of prices of life necessities and of wages. Reluctantly, but very consistently, the authorities have been forced by financial requirements of the programme to enact successive and very heavy advances in retail prices, with the result that the cost of living has increased enormously, instead of decreasing as planned. Wage regulation has been unable to prevent this from being reflected in advances in wages, although it has been effective in securing a lag of wages behind retail prices and in the slowing down to an extent the cumulative rise of money costs.' As this process was maintained, so was the competitive scramble of enterprises for labour and the consequent wastage in terms of indiscriminate appointments and instability of labour.⁴ High labour turnover and abnormal inclination towards absenteeism—the well-known concomitants of excessive demand in the labour market—remained in evidence. The inevitable counter-measures, orders penalising changes of employment and punishing absenteeism, made their appearance again and again. The long series of new labour laws of extraordinary severity issued in the Soviet Union during the years 1939 and 1940 shows that excessive mobility of labour had become an increasingly serious danger to the process of production.⁵ Compulsory measures of this kind have often been considered as the means of enforcing Full Employment in the Soviet Union, but actually they represent attempts to protect labour discipline against the adverse effects of a state of full—or rather excessive—employment. The fierceness of the measures taken may be said to reflect the dictatorial temper of the regime, but the occasion for taking such measures will present itself under any kind

¹ L. E. Hubbard, *Soviet Labour and Industry* (1942), p. 183, refers to 1937.

² See, for example, L. E. Hubbard, *op. cit.* p. 242.

³ A. Gourvitch, *American Economic Review* (1936), p. 276.

⁴ W. B. Reddaway, *The Russian Financial System* (1936), p. 83.

⁵ See L. E. Hubbard, *Soviet Labour and Industry* (1942) (Recent Labour Legislation), pp. 95–103.

of regime whenever an inflationary pressure prevails, causing an excessive competitive demand for labour.

In the virtual absence of private investments in Soviet Russia the only source of monetary expansion consists in the budgetary deficit. In view of the small tendency on the part of the public to accumulate private savings (due probably to the rising tendency of prices), taxation is the only deflationary influence of any importance. The stimulus to investment from rising profits is probably not very marked, though reinvestment of funds by prosperous enterprises is bound to have a certain effect in this direction. With these modifications the connection between monetary circulation and the level of employment is the same under the Soviets as it is in a system of private enterprise.

Mr G. D. H. Cole has postulated a fundamental difference between Capitalism and Socialism in a state of Full Employment. '...in a Socialist economy [he writes] in which presumably both incomes and prices would be regulated in accordance with public conceptions of the general interest...it would not follow that an addition to the supply of money would raise prices or set afoot movements for higher wages, as long as the output of goods and services rose *pari passu* with the supply of money.'¹ Assuming, however, that output of goods and services rose *pari passu* with the supply of money, there will be no rise in prices and wages under either system.² While in neither system can Full Employment be reached without the appearance of a tendency for the supply of money (or rather of money incomes and of demand expressed in money) to outrun the rise in output of goods and services. The Russian example certainly shows an unbroken record of inflationary symptoms throughout the periods when Full Employment was maintained.

The almost complete absence of private investment in Russia and the comparative insignificance of the tendency towards cumulative investments in socialised enterprises might be thought to make inflationary tendencies more easy to control than under Capitalism. But actually the Soviet system has shown itself singularly impotent in the face of rising floods of monetary circulation. It seems reasonable to assume that a method of State Control which entails the granting of subsidies to cover practically all financial

¹ G. D. H. Cole, *The Means to Full Employment*, p. 43. On the next page Mr Cole refers to the example of Russia as a complete system of Socialism.

² The supply of money is presumably supposed to be varied while the rate of circulation remains constant, otherwise the relationship is meaningless.

losses of subordinate enterprises renders the Socialist State in fact more powerless with respect to changes in monetary circulation than a capitalist State, aided by the stringent legal sanctions enforcing the solvency of all enterprises.

Thanks to its inflationary bias the Russian economy has avoided—as Reddaway observed already in 1936¹—wastage through unemployment and has thus made good to a considerable extent the disadvantages of an over-centralised system. This inflationary bias was also the greatest source of the Soviet Government's propagandistic successes. The exhilarating atmosphere of a general rush for labour and goods, in which jobs and customers abounded, contributed greatly to the dazzling effects which Soviet Russia exercised on visitors from countries suffering under widespread unemployment. The total absence of any business failures and dismissals, exhibited in conjunction with a massive show of deliberate central planning, made it appear that a new method of conducting economic life had eliminated all the uncertainties and anxieties of the competitive struggle. In fact, seen against this background of happy liquidity, the aspect of a series of striking public investments irresistibly convinced the observer that a new comprehensive and beneficent economic power had been successfully established.

It is true that the suppression of all criticism of government policy in Soviet Russia has prevented the expression of popular resentment against the hardships and wastages involved in their economic system; but its genuine appeal to the active pioneer spirit of the Russian people yet remains undeniable. A similar appeal has invariably emanated from a state of monetary expansion. It could be felt in the opening years of the Hitler regime in Germany and even during the hard war years in Britain. An inflationary atmosphere seems to exercise a stimulating effect which in the popular view to-day largely offsets its material inconveniences, and even its shady moral aspects. This public bias is bound to form an important, and I think up to a point legitimate, factor in deciding on the desirable level of employment and national income.

¹ W. B. Reddaway, *The Russian Financial System* (1936), p. 84.

CHAPTER III

ECONOMIC EXPANSION FOR WAR

Next to the great Planning Periods of Soviet Russia it was the expansion of economic life in Germany under the Nazi regime which made the deepest impression on the Western democracies, plunged into the depression of the 1930's. There were six million registered unemployed in Germany when Hitler took power in 1933; so that when within two years that figure was reduced to one-third, the whole world was struck by this feat of economic policy, and Hitler gained at the same time one of his strongest claims to the allegiance of the German people.

Hitler, it appeared, had conquered unemployment by inaugurating large-scale public works, supplemented by expansionist pressure on private firms. Employment was being given to people in the first place on vast constructions—such as roads and public buildings—and by forcing employers to take on more labour; while various inducements to spending (such as marriage loans) were added by way of stimulating private expenditure. By the year 1936 this policy of giving work (*Arbeitsbeschaffungsprogramm*) merged into a vast campaign for rearmament and preparation for self-sufficiency in wartime (*Wehrwirtschaft*). By the beginning of 1937 Germany was approaching a state of Full Employment.¹

A similar expansion of employment occurred in Britain and later in the United States when these countries started effectively to prepare for war. Rearmament, starting in Britain in 1937, was by 1938 strongly stimulating employment in this country; where with the intensification of rearmament after the outbreak of the war in 1939 Full Employment was reached soon afterwards. British rearmament began to stimulate employment in the United States as early as 1939 and in the subsequent years of American rearmament employment rapidly expanded to a maximum.

By 1940-1 the world was thus faced with the aspect of vast resources that had been lying idle only a few years earlier in Germany, in Britain and in the United States, awakened to new life at the command of the State. Not only was the State the prime mover, calling forth action by its demands, but it also appeared to replace commercial management and private competition by a measure of governmental control; fixing prices here, rationing

¹ Compare p. 98 below.

supplies there, offering subsidies and premiums and intervening in a thousand other ways at every stage of production and distribution. The lesson of this seemed to be that if the Government only chose to act by ordering production to be resumed and sweeping aside capitalistic impediments, it could release all the dormant resources of a people and make everyone happily active again. It seemed clear that unemployment had been abolished by determined Economic Planning. The obvious task seemed to be now to plan production for peace on the same lines which had been so successful in planning rearmament for war.

In the light of the Keynesian analysis of unemployment we can admit none of these conclusions. As the root cause of economic expansion we regard in all these cases the budgetary deficit, by which both Hitler's 'Arbeitsbeschaffung' and armament campaigns and the war production of Britain and U.S. were mainly financed. Had these activities been financed from current taxation—and in so far as they were so financed—no considerable increase of total employment could have resulted; and, on the other hand, had the same unbalanced expenditure been incurred without any new demand being made for public purposes, the same (or a very similar) expansion of employment would have arisen. The Government's intervention in the form of price-fixing, rationing, etc., can be shown to be merely incidental, and in no way instrumental to the process of economic expansion. These measures were partly aimed at eliminating, at a stroke, private purchasing power which would otherwise compete with government demands, and at redistributing private incomes in accordance with wartime requirements—and partly also at restraining a state of boom in which there is more money going to market than goods offered on sale, so that prices and wages tend to rise indefinitely.

I shall briefly outline now the facts of wartime expansion in the light of these points of view.

Hitler's Abolition of Unemployment. Hitler's public works and rearmaments programme up to the end of 1937 was largely financed by 'special bills' which were in effect orders issued by the Government requesting the Reichsbank to pay the stated sums. No accounts were published of these transactions, but according to German estimates the total reached at the end of 1937 amounted to 16-17 milliards.¹ Adding to this about one milliard 'tax certi-

¹ K. A. Hermann, *Deutsche Wirtschaftszeitung*, 28 April 1938, quoted by C. W. Guillebaud, *The Economic Recovery of Germany from March 1933 to March 1938* (1939).

ificates' which had gone into circulation by that time, and valuing the £ at 12 Marks,¹ the total addition to the floating debt amounts to about £m. 1400. To this must be added approximately 10 milliards (£m. 840) of additional long-term loans.² The total unbalanced expenditure of £m. 2240, incurred in about 5 years, averages out to about £m. 450 p.a.; which agrees approximately with the estimate by T. Balogh³ that annual public loan expenditure in the period 1936-8 was approximately 6-7 milliards, i.e. £m. 500-600. This sum may be compared with the estimate of £m. 300 as the annual Budget Deficit required to keep up Full Employment in Britain (see p. 128 below). It certainly appears quite large enough to account in the main for the rise which occurred at the time in the level of employment in Germany. It is true that private firms were induced to finance part of the Government's programme from their own funds and that private savings were subjected to pressure through increased taxation. But these measures by themselves would not have produced Full Employment.

There is evidence that the German financial authorities were aware of the monetary process by which they were restoring employment and that they were keeping an intelligent watch on its limitations. *Die Wirtschaftskurve*, a publication of the *Frankfurter Zeitung*, analysed the situation in its issue of February 1936 in the appropriate terms.⁴ It pointed out that during the previous period monetary circulation had expanded in Germany in the form of notes and bank deposits, but that this additional purchasing power was fully utilised by the re-employment of idle labour. It mentions that recently difficulties had arisen with respect to foreign raw materials and that as the expansion of employment was thus temporarily checked, an inflationist tendency had begun to appear; it recommends that this trend should be countered by increasing taxation.

The idea that Hitler abolished unemployment merely by ordering idle workers to manufacture arms—using the sharp weapon of dictatorship to compel their obedience—is in fact doubly erroneous. The volume of German economy closely approached the level of full capacity by the beginning of 1937 without any effective transfer of managerial responsibility to the State. Management was hedged

¹ H. W. Singer, *German War Economy*, Manchester Statistical Society (1943).

² Calculated from Maxime Y. Sweezy, *The Structure of Nazi Economy* (Harvard University Press, 1941), p. 158.

³ 'The National Economy of Germany', *Econ. J.* (1938), p. 477.

⁴ Quoted by Haberler, *Prosperity and Depression* (1938), p. 259.

in by innumerable new rules and had to apply on a great many occasions to various new economic authorities for permission to proceed with its plans. But within these rules the management remained in full charge of the operations of its plant and continued to be responsible for conducting its transactions by the light of commercial principles towards the achievement of commercial success. Hardly any of the new rules and controls were directed at raising the level of employment. The true reason for them was rather: First, that German reluctance to permit the external devaluation of the Mark had caused a fall in German exports and a corresponding reduction of imports, and that hence foreign exchanges had to be rationed and all imported materials became scarce. Second, that in the interest of 'Wehrwirtschaft' these scarce materials (and their home-produced equivalents) were compulsorily diverted from civilian to military users. And third, that an (altogether unreasonable) attempt was made to prevent, by price fixing, any rise in the level of internal prices. We shall presently analyse some of these points in more detail as we come to wartime controls in the U.S. and Britain.

The view that Hitler merely gave work to the unemployed by using them to produce armaments is disproved also by the fact that a great many workers were re-employed to produce consumer goods. The turnover figures of the retail trade calculated over the cost of living index to represent stable values show the following changes between 1929 and 1937.

Turnover in 1929	36.0	milliards ¹
„ „ 1932	28.5	„
„ „ 1937	37.6	„

Even though (as Guillebaud remarks on these figures) articles not consumed by the working class had increased in price more than the cost of living would indicate, there can be no doubt that a very considerable increase of production for the consumer had occurred since 1932. The fact is borne out by detailed figures of the per capita consumption of foodstuffs.²

This is how a state closely approaching to Full Employment was achieved in Germany even before 1938 in which year she occupied Austria and part of Czechoslovakia. In 1939 she continued her conquests and with the attack on Poland entered on the present war. Henceforth the economic problems of Germany were similar to those of other war economies, to which I shall now turn.

¹ *Frankfurter Zeitung*, 1 April 1938, quoted by Guillebaud, *op. cit.* p. 207.

² Guillebaud, *op. cit.* p. 207.

Wartime Employment and Wartime Controls. The early phases of British rearmament and their effects on the level of employment have been analysed by Bretherton, Burchardt and Rutherford.¹ The views of these authors—being based on the same theoretical foundations which underlie the present book—naturally coincide with my own thesis. In their view additional employment was created by rearmament to the extent only to which the expenditure was not covered by current revenue. 'It is generally agreed'—they write (thinking rather of the opinion among modern economists than of that commonly held by the public)—'that revenue expenditure on works does not as such increase total income and employment but represents a transfer of income via the State from one income recipient's pocket to another recipient's pocket, and a similar diversion of labour from one activity to another.'²

The first marked effect of rearmament on the level of employment was observed in Britain during the year 1938 when there was a definite tendency towards a trade depression through the spreading to this country of a sharp recession which had occurred in the previous year in the U.S., but this was virtually cancelled by the increase of employment due to the financing of rearmaments by a loan of £75 million.³ It seems well worth quoting at full length the authors' comments on this point:

It is not uninteresting to consider what would have happened, *ceteris paribus*, if the Government had not resorted to borrowing and had either cut down defence expenditure or charged the increase to revenue. Take the year 1938, and assume the State had attempted to balance the budget and had not taken up £120 millions loans for defence works. That would have implied (say) 500,000 or 600,000 man years less primary employment and, assuming a multiplier of 1.5 to 2, a possible total decline in employment of 750,000 to 1,200,000 man years. Taking into account the effects of such a decline on the state of confidence on entrepreneurial decisions on investment, and similar psychological reactions, it appears very likely that unemployment would have touched the 3 million mark instead of the actual figure of 1.8 millions. The depression would thus have become more severe than that of 1932 and presumably would have increased in length too.⁴

The authors have estimated on the basis of the experience of 1938 and of 1939 (so far as the data were available to them), that

¹ *Public Investment and the Trade Cycle in Britain* (1941).

² *Ibid.* p. 88. Certain qualifications which ought to be attached to this statement were discussed before on pp. 55-8.

³ White Paper on National Income and Expenditure, Cmd. 6347.

⁴ *Public Investment and the Trade Cycle in Britain* (1941), p. 92. The actual figure for loans amounted only to £m.75 and not to £m.120, but this does not affect the line of argument and leaves its main conclusions unimpaired.

in these years it required an unbalanced expenditure of £m.200 to reduce the number of registered unemployed by one million.¹ These figures, though very uncertain, are significant, since they represent one of the earliest concrete estimates of the effect of governmental finance on the level of employment. A further analysis of the effect of unbalanced expenditure on the level of employment in Britain in the conditions prevailing in 1938 is given later in Chapter VI, p. 128.

The steps by which the United States approached Full Employment in the course of their recent rearmament campaigns has been discussed above already to some extent from the point of view of modern economic theory. Mr Stone's work, quoted at great length in an earlier chapter, gives the evidence on the subject. The rearmament of the United States started in the summer of 1940, but did not get under way till 1941. The deficit of public authorities was \$2.3 billion in 1940 and \$3.4 billion in 1941. It increased to \$13.2 and \$25.1 billion on the average of the first and second quarter of 1942. The corresponding unemployment figures were: 1939, 16.7 %; 1940, 15.0 %; 1941, 6.1 %; 1942, - 1.0 %.² This is in essence the information from which Mr Stone estimated the monetary Gap which would have had to be filled in order to establish Full Employment in the United States during the period 1929-42 (see p. 27 above).

It is significant that, as in Germany, the re-employment of the idle resources was limited neither in Britain nor in the United States to the process of the additional manufacture of arms; on the contrary, production for civilian purposes increased concurrently, until a state approaching Full Employment was reached. In the United States in particular the early phase of the rearmament campaign which took place in the years 1940 and 1942 was accompanied by a very marked rise in the level of popular consumption. The actual figures in billions \$ (standardised at the value of 1939) were 61.7 for 1939; 65.1 for 1940; 70.0 for 1941; 69.7 for 1942.³

It is also apparent again in both countries that the imposition of various economic controls in wartime was not the instrument for producing Full Employment. The first purpose of wartime controls was to draw away resources from civilian consumption without

¹ *Public Investment and the Trade Cycle in Britain* (1941), p. 96.

² *Monthly Bulletin of Statistics of the League of Nations* (1944). A negative figure indicates that the number employed exceeds the normal labour force.

³ *National Income and National Product* (1942), by Milton Gilbert and George Jaszi, *Survey of Current Business* (March 1943).

having to compete for them with civilian purchasing power. When, for example, most of the natural rubber production of the world fell into Japanese hands, the United States Government was forced to confiscate all available rubber supplies, since the only alternative course open to the Government would have been to buy rubber at a price sufficiently high to compel the sale of all existing supplies to itself—a policy by which enormous unearned incomes would have been created to owners of rubber stocks, and which would have proved morally untenable and most harmful in its inflationary effects. The wartime rationing of consumer goods is based on similar grounds. When, for example, the supplies of butter are reduced by loss of imports, poorer people must be secured a reasonable share by rationing. The alternative would be either to tax the rich into poverty or (what amounts to the same thing with respect to current consumption) to provide the poor with such additional incomes as would allow them effectively to compete with the rich for the allocation of butter supplies. While either of these methods would actually lead to a more economical distribution of butter than is achieved by rationing—just as the raising of the price of rubber to a sufficiently high level would lead to a better economy in rubber than does the direct control of supplies—the requisite changes in the flow of money and incomes are impracticable, and rationing must be preferred.

There is nothing in the nature of the manufacture of armaments as distinct from other productive enterprises which would cause the process to be more efficient when run or controlled by the Government. Supposing that countries like Britain and the United States had in future to maintain *permanently* the wartime rate of expenditure on armaments, the most economical way of achieving this would be by adjusting the price and income structure so that both the administrative control of materials and the rationing of consumer goods could be dispensed with. The Government would naturally continue to co-ordinate its purchases centrally in the endeavour to obtain, at a given cost, the strongest possible military equipment—selected in due consideration of the foreign situation. The centralisation involved in the task of buying to the best effect armaments of many highly differentiated types would probably still prove burdensome and accordingly decisions would be slow, bureaucratic, formalistic and uncertain; but the factories producing in response to these decisions would conduct their affairs freely by the usual principles of commercial management.

An important function of war controls is to curb the inflationary

tendencies which accompany the approach to Full Employment. An inflationary bias is as a rule inevitable in wartime because public expenditure must be increased rapidly before sufficient revenue can be collected to offset its inflationary effects. (Moreover, the unpopularity of any sufficiently high taxation would hamper any efforts to balance revenue.) An inflationary bias will require counteraction through rationing and price control. It goes without saying that no measures of this kind—nor any of the other control measures described above—can in any way be responsible for the elimination of unemployment, but represent on the contrary a barrier to certain dangers arising from Full Employment when achieved.

Generally speaking, however narrowly the rules of wartime control may have hemmed in the process of management, these rules were usually of a permissive, not of a prescriptive character. 'A basic feature of these methods has been to retain'—says the *14th Report of the Select Committee on National Expenditure*—'as far as possible in war conditions, the existing commercial structure, and for the Government to remain, essentially, buyers from private industry, rather than to become themselves the main producers.'¹ The initiative thus remained with the individual management of the enterprise. All the day-to-day decisions involved in planning, organising, staffing, directing, co-ordinating, which comprise all specific choices of persons, objectives, places, means and times, remained essentially in its hands.

¹ *Fourteenth Report from the Select Committee on National Expenditure*, Session 1942-3, H.M. Stationery Office, 4 November 1943, no. 126, p. 6.

CHAPTER IV

INTERNAL PROBLEMS OF FULL EMPLOYMENT

Fixing the Level of Circulation. The last two chapters have given various illustrations of the difficulties accompanying the establishment of Full Employment. We can see now how serious the problem is of choosing the correct level of monetary circulation. It seems clear that in future this will become the most responsible decision to be made annually in connection with the Budget.

There are two contending aims between which a compromise will have to be sought. Circulation—that is, the size of the National Income in terms of money—should be ample enough to cause the fullest possible utilisation of the country's resources. The production of goods should thus be raised to a maximum. But circulation must not be pushed to the point at which financial stability is endangered. In fact, in normal times we should maintain stability with a reasonably safe margin, and not precariously fenced in by a network of regulations restricting the use of purchasing power. Limitations on certain speculative opportunities and on the movements of 'hot money' may be imposed permanently. But the public will hardly approve of the permanent establishment of a broad battlefield between an army of officials and the private users of money. The less so, since it will desire better guarantees against the devaluation of its savings than are provided by police measures against black-marketing, gold hoarding and currency smuggling.

Expansion and Rising Prices. In the crude picture of economic expansion which we have illustrated by diagrams on p. 7, the rule for fixing the level of circulation seemed simple enough. The money belt must be widened, it would seem, until we reach 'Full Circulation', and there we must stop. It would appear from the diagram that up to this point the volume of production would increase proportionately to the volume of circulation, and that thus the process of expansion would be accompanied by no rise in the level of prices.

This, however, is only roughly true. When circulation expands or contracts this always affects the price level, even though the variation occurs well below the level of Full Circulation. The reason is quite simple. Consider the case where the flow of money contracts. It will leave high and dry some less profitable under-

takings, operating at a higher cost; while the firms which retain a share in the reduced flow of money and continue in business will be those operating at lower costs. The latter manage to carry on because they can afford to reduce their prices; but reduce them they must. Therefore, contraction lowers prices. Expansion reverses the process and causes prices to rise.

This is why the fluctuations of real National Income are less marked than those of nominal National Income; which is illustrated by the chart relating to the period 1929-41 in the United States, in Appendix I on p. 151.

Changes in circulation will not leave wage rates unaffected either. But their movement is of a secondary character; wage adjustments will follow on rising or falling prices, but will never quite catch up with these changes. Thus the real wage rate will inevitably move in a direction opposite to changes in circulation and the price level; expansion will cause wage rates to decline and contraction will cause them to rise.

These relationships are bound to cause serious social problems in the course of a monetary expansion, well before we approach the level of Full Employment. It is true that with the progressive elimination of unemployment total real earnings of the working classes are bound to increase; that real family incomes are also likely to rise, and even individual earnings supplemented by overtime may show a real rise. Yet the fall in real wage rates may cause justifiable dissatisfaction among some classes of wage earners and among salaried persons. Compensation would have to be sought in additional redistributive taxation for which the swelling profits of industry would offer the obvious source.

The danger of such a situation lies in the fact that it may provoke workers and employees to attempt to reverse by wage demands the change which has occurred to their disadvantage. Any serious attempt to raise the level of wage rates and salaries to compensate for rising prices would inevitably frustrate any policy of Full Employment. It would cause circulation to become unstable well before a satisfactory level of circulation could be reached. And if taken to the extreme—for example, by effectively fixing the level of real wage rates—it would cause any, however modest, rise in the level of employment to degenerate into unlimited inflation.¹

Since the power of workers to exercise pressure for an advance in wages increases rapidly with the approach of Full Employment, it will require a great sense of responsibility on their part to refrain

¹ J. M. Keynes, *General Theory of Employment, etc.* (1936), pp. 269-70.

from such action. The temptation can be avoided only by the clearest intellectual realisation of the whole position on the part of employees and the public in general, *coupled with the assurance that the Government can be trusted to compensate employees fairly by effective measures of redistributive taxation.* Such political preconditions of a successful policy of Full Employment are required at every stage, and we shall repeatedly emphasise them throughout the rest of this book.

The Government itself must clearly recognise the implications of an expansionist policy for the price level. It must refrain from clamping down anti-inflationary regulations to check a buoyancy of prices which is an almost invariable corollary of a rising level of circulation. The German Government caused serious trouble to itself and to the public when during the recovery of employment in Germany from 1936 to 1938 it tried to prevent a rise in prices. We may contrast this with the wise policy of allowing a moderate increase in prices during the first years of this war both in Britain and the United States. This has allowed an adjustment to an increased circulation and reduced the harshness of rationing and price control, when resort had to be made to them in the end.

Danger of Inflation. When economic expansion approaches to a point at which the employment of labour is becoming fairly comprehensive, even greater difficulties are bound to arise. In various trades and categories of skilled labour shortages will become apparent. At these points the expansion of productive activities is slowed down and tends to fall behind the still expanding demand. Thus existing demand in certain lines of goods will remain unsatisfied and there will occur a sharp rise in the prices of these goods, as well as a hardening in the prices of all the contributing factors of production, including the wage rates for the types of labour which formed the original bottle-neck.

Each new bottle-neck developing in the rising tide of monetary circulation becomes the focus of a local boom. The scene of multiplying booms will lead to the expectation of more booms elsewhere, and will start off a wave of advance buying in branches where no acute scarcity has yet developed and thus precipitate the development of new scarcities. The ensuing general high level of profits will cause businessmen to enter on a keen competition for labour and rapidly to bid up all wage rates. Through these and other similar self-accelerating processes, circulation will eventually lose its stability and monetary expansion will then irresistibly degenerate into a runaway inflation.

Residual Unemployment. This brings us up against the stern limitations of a policy of Full Employment. When choosing a level of circulation to aim at, the public will have to resign itself to the fact that a certain residue—perhaps an important residue—of unemployment will have to be tolerated in order to form a dam against a runaway inflation. The question of residual unemployment is likely to be the greatest challenge to clear thinking and responsible action in the future handling of economic affairs—and to become, in case of failure, the most dangerous stumbling-block to social peace. I shall therefore deal with this question in some detail.

It is customary to distinguish between two kinds of unemployment: one which is called 'cyclical', or 'general', or 'mass' unemployment—the other which is called 'structural' or 'transitory' unemployment. The former is then explained in the Keynesian theory by the level of monetary demand as shown in our first chapter; while the latter is represented as due to changes continually taking place in the economic apparatus, as certain branches of business become unprofitable and are being replaced by new enterprises. The term 'transitory' expresses the fact that this kind of unemployment is only due to a change from one job to another, while the term 'structural' points out that it arises from a structural disproportion of the productive apparatus which can be remedied by releasing these workers and employing them elsewhere.

This distinction, however, cannot be accepted in this form. Even in the most obvious state of 'mass unemployment' the unemployed part of the population will keep changing. Generally speaking if unemployment at one time is 15 % and at another 5 %, this only means that the average waiting period for finding a new job is three times shorter in the former than in the latter phase. Whether unemployment be light or heavy there will always be people who die before they ever get a new job, and their number will be approximately proportionate to the number of the unemployed. Unemployment is therefore always 'transitory' or 'structural' because workers will always be getting unemployed in plants which are losing business and being re-employed in others which are expanding. In these respects all levels of unemployment bear the same characteristics; the difference between them is only a matter of degree.

Remember that a rising tide of circulation will bring into operation less and less productive business units at each successive stage. There is no enterprise, however uneconomical, that will not be

made profitable by a sufficient increase of the general price level (when occurring in conjunction with stable or only slowly rising wage rates). Thus the structure of the economic apparatus cannot force any particular fraction of enterprises or working people to remain unemployed—provided that circulation is sufficiently expanded. It will merely make it more difficult to employ some enterprises than others, and cause the former to remain unemployed until a later stage of monetary expansion. Thus 'structure' does not determine in itself any particular level of unemployment, but determines only which part of the economic machine will be unemployed at any particular level of monetary circulation.

Moreover, the existence of a measure of structural disproportion will cause a measure of residual unemployment to persist at any level of monetary circulation, however high. If a fully balanced economy could exist in which each element was ideally adjusted with respect to all the others, such an economy would become fully employed at a definite level of monetary circulation; and should the flow of money be allowed to go somewhat beyond that of Full Circulation, there would occur only a gentle rise in all prices (and subsequently of wages) without any bottle-necks becoming apparent and local booms developing at these points. But such an ideal is not realisable nor could it persist, if realised, for any length of time in view of the incessant changes inevitably occurring in modern economic life. There is therefore always a degree of disproportion present in the economic system, and there remains accordingly always a certain residue of unemployment left over.

We must get this point quite clear because here our problems are touching on the very foundations of our civilisation.

Let us concentrate on a characteristic section of the modern economic scene. Remember a shop in 1914—remember a dozen shops of different trades, of grocers, drapers, electricians, book-sellers, shoemakers, etc., and suppose their contents were offered on sale to the public 25 years later, in 1939. More than half of the merchandise offered will have become unsaleable, and more than half of the merchandise demanded by the public will be missing, while the merchandise which can still be sold can be sold only in new proportions as reflected by a new scale of prices. The change has been achieved by a kaleidoscopic sequence of phases affecting every particle of the system—and affecting many of them by a rude shock—in the course of the foregoing 25 years. Millions have at one time or other been threatened with heavy losses or total bankruptcy, and many thousands have been actually forced out

of business and replaced by newcomers. Throughout the productive apparatus functions have shifted and proportions radically changed.

This is an essential feature of our civilisation. An economy based on widely divided labour in which a hundred thousand plants are engaged in turning out millions of different articles, while all these plants are sharing a vast variety of resources gathered for them in a single pool, or market—such an economy cannot remain stationary for long in any of its details. Even if technical progress could be stopped, as it certainly cannot be: even if the consumers' tastes could remain unchanged, as they certainly never will—the mere changes occurring in the size and constitution of the population and the gradual exhaustion of natural resources would force the system continuously to readapt itself, and each adaptation would involve repercussions throughout the myriads of interdependent processes of which it is constituted. In any case, the progress of science and of technical knowledge and skill will never be at rest so long as our civilisation endures—nor the constant desire for better conditions of health and comfort be cast out, nor the urge to improve our manner and circumstances of life be stopped, so long as we continue to carry on the distinctive tradition of the West.

A certain measure of insecurity is inherent in the economic positions offered by these conditions. It is true that as a rule every change that occurs in the system will confer benefits on those who initiated it: on the enterprising people who, catching sight of a new opening, have reached out to secure it for themselves; but in consequence of this a number of others, spread out throughout the economic system, will find their own opportunities curtailed. In this game of competition there may be as many winners as there are losers—in fact, in view of the steady trend of progress benefiting all there must definitely be more winners than losers—but the fact remains that there must be losers. There must be a certain amount of business failures: of capitalists going bankrupt and of workers and employees becoming unemployed. Our system was built up by enterprising people who were prepared to take risks and to expose themselves at all times to the danger of failure so long as this gave them a chance of getting on in life. Such a system offers no happy abode to a generation which values security above everything else. It cannot be run by businessmen who will not take risks or operated by workers who will not face the chance of losing their jobs.

Is there an alternative? There exist primitive economies of self-

sustaining farmers among whom business failures are unknown and unemployment cannot arise. In a medieval economy each person had his assured niche to which he belonged by birth for life. But no highly industrialised economy has ever been achieved on any other basis than that of commercial management; and in no commercially managed economy can business failures and the incidence of unemployment be entirely avoided. Nor can they even be reduced to a negligible factor, except by raising tides of monetary circulation to heights which render life intolerable. And in saying this we may definitely include—in view of the analysis made in the previous two chapters—both the system of state ownership as operating in the Soviet Union and the war economies as conducted during the war of 1939–45 by the various Western nations.

Unless we are prepared to live in a permanent state of inflation with its eternal scramble for goods and labour and its ceaseless wrestling with regulations which try to keep the scramble within bounds—our only alternative to incurring the risks of business failure and unemployment is to go back to primitive self-supporting agriculture. This would involve the reduction of our living conditions—if we may judge by contemporary examples—to about one-tenth of our present Western (British, American, Australian) standard of life. Needless to say any Western people accepting this choice would be eliminated in the shortest time; the soil on which they live could not support more than a fraction of their numbers—nor would their women be willing to increase the number of births to cope with the inevitably much increased infant mortality; or their men be able to defend the country against conquest by more highly industrialised neighbours.

We are committed. We must carry on with our commercial type of civilisation or perish from the earth. We must face this fact and resist the temptation of hoping for some kind of 'planning' which would magically set all things right. Once the fact is squarely faced that the nature of our civilisation requires that certain risks should be borne by people engaged in industrial undertakings, it should not be too difficult to adjust the measure of that risk and the circumstances under which it is to be borne in a way which makes its incidence appear bearable, and even reasonable, to those affected by it.

Factors affecting Residual Unemployment. There is not enough experience available to tell exactly how much residual unemployment must be tolerated in any particular set of circumstances in order to avoid a runaway inflation. But we can see that three main factors will enter into the problem.

All circumstances which tend to slow down technical and economic change are likely to reduce, to this extent, the level of residual unemployment. During the Great Depression of 1930-3 many voices were raised against the excessive rate of technical progress, and proposals for reducing its pace or at least regulating its course were widely canvassed. Though we cannot accept the assumption that an excessive rate of technical progress has in the past been the cause of mass unemployment—the real cause of which lay in an insufficiency of circulation—yet it may be reasonable to raise afresh the question of restraining the course of technical progress, with a view to a reduction of the level of residual unemployment.

Could we not make economic life at least slightly more secure by reducing technical progress? The idea seems hardly practicable. Take as a concrete example the probably impending utilisation of atomic energy. No single country could deliberately refuse to share in this, probably, forthcoming development, since in doing so it would leave to other countries the important advantage of establishing a pioneer position in the new technique. On the other hand, a world agreement of all countries to forego the use of atomic energy would certainly not be workable. The spirit of our civilisation is such that coercive measures against improvements, which could help to lift the burden of poverty, disease and squalor from millions of people, could never rely on sufficient general support. Perhaps if we were all Buddhists, or Erewhonians, we could enforce such an arrangement; but we, the people of the West, will never allow our economic order to be established on such foundations.

The second of the factors affecting the level of residual unemployment is really another aspect of the first. We have considered under our first heading the reduction of unemployment caused by the kind of trade restrictions which limit the rate of technical progress; we must now consider also that the same, and other, trade restrictions may often affect unemployment in the opposite direction by slowing down the process of economic adaptation. Any circumstance which retards the transfer of the factors of production from one occupation in which they have become redundant to another in which they are in demand, increases, so far, the time during which these factors will remain idle. Thus the level of residual unemployment is increased.

All limitations imposed on entry into a particular trade are bound, in this sense, to increase residual unemployment. Trade

organisations which protect their preserve against new entrants and their markets against foreign competitors throw an increased burden of adaptation on other people at home or abroad; and trade unions setting up professional barriers for the purpose of reducing entries to their crafts are likewise throwing an increased burden of unemployment on other classes of workers whom they rob of a certain range of possibilities for finding a new job. All such restrictions are likely to increase the total amount of residual unemployment which will have to be endured.

We may supplement this discussion of the factors reducing the mobility of labour by an analysis of those which increase it; and on which we shall principally rely to reduce the level of residual unemployment.

The most important factor for improving the mobility of labour is a good general education. Mental discipline, wide experience and a good stock of knowledge enable men and women rapidly to adapt themselves to new requirements. A good education forms eager learners: confident of acquiring a new craft even at a later age. Official advice, based on the study of current trends, could be further developed and could become increasingly useful to those seeking to make a rational choice of training. Widened statistical information, based on an increased publicity of business enterprises, should allow the formation of a reasonably sound and convincing judgment regarding the trend of prospective openings in industry.

Another powerful factor contributing to increased mobility is an efficient system of Employment Exchanges. They should be able to give fuller and more vivid accounts of plants situated in distant parts of the country. Workers in search of jobs should be given the opportunity to see photographs and to watch films showing possibilities of living and working in surroundings which lie outside their own experience.

An obvious condition for increasing the mobility of labour (and of other factors of production) is the cancellation of the trade restrictions which now hinder it. This may not be so difficult as it may appear from the experience of the inter-war period. In a chronically depressed state of business the risks of economic failure are excessively aggravated. A falling level of employment, a growing army of unemployed, means a dangerous lengthening of the period between a job lost and a new job found. Dismissal or loss of business becomes in these circumstances a serious misfortune and, particularly for older people whose chances of re-employment

are reduced, it may spell final disaster. The same is true for the loss of a customer or of a market; when trade is generally depressed, the chances of getting a new connection to replace such losses is remote. On such terms employers, as well as workers, resent the necessity of constant adaptation and will try to retain by every means a hold on such business opportunities and jobs as they may possess. But if the level of circulation rises and the general demand for goods and services improves again, the temper of workers and businessmen changes fundamentally. Millions lost their jobs in the early phases of this war through contraction of trades for civilian supplies, but they hardly resented it, because the intense general demand for labour assured them of a reasonable chance of bettering themselves. Even the most conservative classes of working people, such as the miners and the cotton operatives, appeared in these circumstances to be extremely mobile. Nor do businessmen feel in these conditions that they need insist on retaining any particular market; not even the heaviest imports, 'dumped' free of charge into the country, are resented by them in this mood.

How powerfully the approach of Full Employment acts as an emollient on all trade restrictions can be seen most clearly from the nature of the troubles associated with excessive employment. A too ample circulation of money causes a universal 'seller's market' both in labour and goods. Employees become excessively ready to abandon their jobs in order to better themselves, while businessmen become so uninterested in retaining customers that they can hardly be troubled to give them a minimum of service.

This brings us to the third factor determining the level of residual unemployment, which consists in the capacity of the Government to control the evils of over-employment. In order to prevent a runaway expansion of circulation the Government must restrict the spending of money. *At the point where these restrictions become intolerable, the practicable limit of circulation and of employment is attained.*

The tide of circulation can be hemmed in by rationing and price control for vital consumption goods and raw materials, coupled with the control of wages and the transfer of workers; while a system of licensing can be applied to all investments. However, in order to be effective in restraining a broad tide of monetary circulation, these controls must be rigorous and cannot fail to become painful. Sharp strains—which we know well from our own wartime experience and from the familiar picture of the Soviet economy—will become apparent everywhere. Each grocer, tobac-

conist and wine merchant becomes a potential dispenser of personal favours; a potentate, to be flattered and propitiated by customers. 'Black markets' and 'grey markets', discreet personal connections and mysterious abilities for getting round difficulties, become customary and often indispensable elements of economic life. The tensions in the labour market become most burdensome. A continuous 'paper war' is being fought for getting labour or for retaining labour, for getting rid of misfits and for countering indiscipline by which employees are trying to make themselves unbearable to their employers in order to force an approved transfer to another job.

Given a certain rate of economic and technical changes, and given a certain rate of adaptation to these changes in the rest of the economic system, the amount of employment which can be granted will depend on the way market controls are applied and tolerated. A skilful economic administration will be able to keep within bounds a broad circulation without causing much strain on economic relations. A government supported by a people prepared to tolerate great strains, or strong enough to impose such strains, can secure a higher level of employment than if such support or such power is lacking.

Here lies the true reason why a totalitarian government can reduce residual unemployment to an exceptionally small measure. Its powers are such, the restrictions which it can impose are so extreme, that it is able to keep within controllable bounds an exceptionally ample circulation of money. In other words: by forcing people to accept an inflationary state of an intensity which they would not freely tolerate, the totalitarian state can maintain a higher level of employment than is possible under the democratic system of the West.

In a democracy the level of circulation should ultimately be determined by informed public opinion. The annual parliamentary decision to fix the level of the national money income should express the popular balance between the desire for fuller employment and the reluctance to accept further restrictions on contractual freedom. This alternative must be so presented to the public that it should be in a position to judge intelligently and to make its influence effective in a reasonable fashion. It must be brought home to the voters what they may expect from a reduction and what from an expansion of circulation, so that they may acquire a sufficient appreciation of the issue and exercise wisely the kind of general control which constitutes their proper democratic function.

Can we give a figure for the probable level of unemployment which would have to be tolerated? The statistics quoted on p. 21 from the British Government White Paper suggest that during the period 1858–1919 the average level of unemployment was around 5 %; while in the boom periods the level on numerous occasions dropped to about 2 %. From this it would not seem too rash to suggest that unemployment may be permanently reduced to a residue of 3–4 %. The experience of Germany suggests similar estimates. By the end of 1936 the number of unemployed was reduced to 500,000, which corresponded to less than $2\frac{1}{2}$ %, and this state of employment was maintained for one year without resorting to restrictions on the movement of labour.¹

It is important to realise that even if residual unemployment could be permanently reduced to 3 %, this would mean that over 450,000 would always remain unemployed in Britain, and that, on the average, each workman would have to spend about $1\frac{1}{2}$ years of his life looking for a job. Unless it is clearly realised that a minimum of unemployment of this kind of magnitude is absolutely inevitable, there cannot be established the necessary consensus and mutual confidence among people, which is indispensable for even this to be achieved.

Depressed Areas. A particularly difficult situation arises when at Full Circulation a large amount of residual unemployment persists within a compact settlement. A region thus stricken has in Britain been called a 'depressed area'. The cure of such nests of massive unemployment may be possible by a transfer of population to more prosperous regions. But this may involve migration to unknown surroundings and a breaking of ties; leaving behind a town or village which, far from feeling relieved by the departure of its idle citizens, is afflicted in consequence by a growing sense of communal decay. The problem of the 'deserted village' has troubled Britain throughout the process of industrialisation. In our own times the picture on the screen of an abandoned farmstead is sure to evoke feelings of profound resentment in the average British cinema audience.

I cannot attempt to judge here how far such sentiments are justified. But I must point out that their cultivation is likely to involve great sacrifices in wealth and national safety and may, moreover, seriously prejudice the moral integrity of public life.

Britain has risen to her present position of prosperity and power

¹ K. Mandelbaum in *The Economics of Full Employment* (Oxford University Institute of Statistics, 1944), p. 200.

by a process of industrialisation which resolutely disregarded all attachment to traditional occupations. There is every reason to expect that the adoption of the reverse policy would hamper future adaptation and cause the country to fall behind in material development. The people of the United States owe their material strength largely to their proverbial mobility. They have always been ready to abandon farms, industrial sites, mines, railways, even rivers previously made navigable, if the pursuit of greater economic success demanded it. This habit has greatly helped them in the process of releasing their national wealth.

However, within limits, the desire to preserve the continued existence of certain areas of habitation even if they prove temporarily idle and economically unsuitable, cannot be denied, and methods to give it effect must be considered. We note first of all that there is always the possibility for adjustment by a local lowering of wages. Many districts (for example, wide regions in the south of the United States) would be 'depressed areas' but for the fact that the wage level is much lower than in other parts of the country. Alternatively, or additionally to the local lowering of wages, a nation may quite properly choose to succour a depressed area by improving its general conditions so as to increase its average productivity. If a local deficiency in health or education can be noted, national funds should, without question, be made available to remedy the weakness. But even beyond that a great deal may justifiably be done by building roads, railways, opening ports and rivers to navigation and establishing various other public facilities by which the area may be reopened to business.

The moral integrity of public life is jeopardised, however, if the succour to depressed areas or industries is not given openly but in the form of guaranteed prices or other economic facilities, thus maintaining the depressed branches and regions commercially profitable at the expense of the community. Such measures may be occasionally justified in order to overcome a brief critical period of an industry. But when granted permanently they are bound to be morally dangerous. They foster a sense of economic achievement where there is no right to it, and they undermine the fundamental honesty of peoples' lives. They tempt every industry to produce special pleas for government support which exempt them from the consequences of economic failure. They impose on the authorities of the state the responsibility—which can be discharged only by arbitrary action—of deciding between rival pleas of this kind. They penalise industries which prefer to prosper by work,

economy and enterprise—to the advantage of those who choose rather to profit by government favours.

The Problem of Compulsion. Our approach to the problem of unemployment has ignored so far the idea, widespread in contemporary literature, that Full Employment can be obtained only at the price of accepting a considerable amount of compulsion. The policy which I have suggested includes no compulsory direction of labour by the Government, and assumes that compulsion would be entirely of the usual economic kind. Workers and other employees would be laid off by employers when not wanted, and would then seek re-employment through the usual channels. The need for improving mobility along these channels has been emphasised, but no governmental compulsion has been suggested to replace or supplement the pressure exercised by reduced earnings. I have assumed implicitly that unemployment benefit would be so much less than the normal wage that the material gain of finding employment, together with the moral satisfaction of doing something useful, would constitute a sufficiently strong inducement for seeking and retaining a job.

If unemployment benefit is fixed at a high level, a certain amount of legal pressure to enforce the acceptance of employment would be unavoidable. Since, as I shall explain in a moment, I do not believe that such compulsion can be exercised rationally, it follows that unemployment pay should be fixed low enough to permit the lawful choice of idleness to those who prefer it. So long as the voluntarily unemployed remain a small minority, their presence constitutes no difficulty and may have useful cultural functions. Their pay may be justified as representing their share in the dividend from the commonly inherited national capital.

The tendency mentioned at the opening of this section, of regarding a large measure of compulsion as the price of Full Employment, forms part of the mood which hopes for the solutions of all major economic problems by the application of 'economic and social planning'. Its representatives believe that the main and ubiquitous problem of our time is to choose between freedom and efficiency. Let us examine this alleged conflict with respect to the problem of unemployment.

It seems to me that in the matter of regulating the transfer of labour compulsion has been readily accepted, even when as in wartime it was applied on a considerable scale, whenever there was a rational case for imposing compulsion. Compulsion, it would seem, is rational, first, if the authority giving orders is in a better

position than the person receiving orders to judge the personal interests of the latter. Anybody standing at a street crossing is readily invested with authority to wave on cars because it is recognised that he can see along two lanes crossing each other, while the drivers cannot see round the corner. The doctor is willingly given authority by the patient over himself because the doctor can judge the patient's interest better than he. Compulsion seems rational, secondly, when the social interest must be enforced against the personal interests of the individual. Roughly speaking, all forms of authority normally exercised by the State are based on the latter plea. In normal times there seems to be little occasion for applying either of these criteria for exercising compulsion in the sphere of re-employment. In wartime both may apply to some extent. The first because jobs cannot be freely publicised, and the second because the public interest requires a greater measure of employment than can be conveniently induced by economic pressure. Compulsion has accordingly been readily accepted in most countries in wartime, even though the experience of America indicates that a great deal could be achieved without it.

Thus within the commonly known range of practical decisions we can see no great issues arising with regard to the scope of compulsion for labour. The raising of such issues expresses in reality a desire for a fundamentally different system—for a system where labour would be permanently employed by the State and transferred from one job to another under the authority of the State. It assumes that if only industry were nationalised and workers were prepared to take orders for their own transfer, as government officials normally do, they could enjoy the same security of tenure as do the latter.

Let us consider for a moment this radical approach to the problem of Full Employment. The Soviet experience leaves no doubt about the fact that even though the whole industrial system were entirely operated by the State the affairs of each unit would still have to be conducted on a commercial basis. This being granted, we may assume further that each plant would be allocated by the Government—to start with—a certain number of workers. As the operation of plants would proceed, workers would presently become redundant in certain units, and openings for additional labour would become apparent elsewhere. Idle labour would have to be removed from plants where it is no more wanted and their presence reported to a central Personnel Department which would have to transfer them to vacant positions elsewhere.

These conditions for re-employment would not be materially different from those under capitalism. The central Personnel Department would have the same function as a central Employment Exchange. It could perform its task only through local branches similar to local exchanges, in the way these exchanges do; namely, by giving information to the unemployed and relying on their own judgment to assure that they get jobs which fit them. The central Personnel Department would have no more rational basis than have Employment Exchanges, for exercising compulsion in the placing of unemployed labour. Should they decide to exercise a notable measure of compulsion, they would inevitably produce a crop of hardships and misfits—together with a growth of red tape and favouritism, which are the constant companions of administrative excesses. Following established administrative custom, temporarily redundant personnel placed in reserve would of course be put on half-pay. The level of this pay would be determined by the same considerations by which the level of unemployment benefit is fixed under capitalism. In these conditions the mobility of labour would, at best, be no greater than under capitalism, so that the level of residual unemployment—as represented by the fraction of workers on half-pay—would be determined in both cases by the same factors and in the same way.

These conclusions are confirmed by the fact that—apart from the catastrophic Communist experiment of 1918–21 in Russia—the compulsory direction of laid-off labour to new jobs has never played a major part in any industrial system for the purpose of assuring Full Employment. In Britain compulsion of labour in war-time has been used mainly to prevent workers from leaving their jobs in the face of an excessive demand for labour. Where newly enrolled labour was specifically directed to take on particular jobs, this was done to prevent them from taking instead some other job, more to their liking. In the Soviet Union the allocation of labour to individual enterprises is made in the form of an approved wage fund, the manager being left to find the requisite workers in the labour market. The characteristic scramble for labour between rival enterprises, the struggle of the authorities against managers mutually bidding up wages and the legislation to restrain the excessive turnover of labour—all these clearly show that there is no occasion in Russia for using the compulsory direction of labour for assuring everyone of a job. In Germany again, we are told, low mobility never really caused difficulties in assuring Full Employment in industry. Compulsory shifting and tying of workers became

established on the contrary when the number of vacancies had become twice or three times as high as the number of unemployed.¹

New Responsibilities for Government Economists. The maintenance of the desired level of circulation by the policy advocated in this book will inevitably involve a considerable amount of responsibility for the expert economist in government employment. It will involve decisions which can be accounted for only in terms of professional judgment, and also decisions which essentially depend on personal skill and must be taken by the light of a specially trained intuitive discretion.

The functions of the Government Economists will become the wider, the more independent (and the more dangerous in their independence), the further the public decides to expand monetary circulation, in spite of the ensuing intensification of restrictive control. In fact, the desire to keep the executive functions of the Government Economists within reasonable constitutional limits may become an important consideration in deciding for a lesser level of employment.

To some extent these new executive functions of Government Economists will only replace certain functions performed to-day by the Central Banks and other larger financial institutions. In the important financial centres of the world, and particularly in the City of London, these institutions have as a rule been striving by means of their credit policy to maintain a state of reasonable stability and of all-round liquidity of business. Their business interests which were advanced by such conditions impelled them to act in this sense. The responsibility which they thus exercised was guided by specialised professional knowledge. The responsibility of the Government Economists who will take their place in future—and who, armed with a modern governmental monetary policy, will perform the City's traditional functions in a far more effective fashion—will be of a similar character. They will practise the art of economic government within the framework of the employment policy accepted by Parliament; while their performance will be controlled and guided by the judgment of the professional opinion of their fellow-economists.

¹ *The Economics of Full Employment*, Six Studies in Applied Economics prepared at the Oxford University Institute of Statistics (1944). Article by K. Mandelbaum, 'German Economy, 1933-38', p. 199.

CHAPTER V

FULL EMPLOYMENT AND INTERNATIONAL TRADE

Problems of Competition. Most nations subsist for the major part of their wants on the produce of their own soil, but all of them rely also to varying extents on exchanging their produce for foreign goods. The two methods of earning a livelihood—the internal and the external—will in general show the same degree of efficiency. If, on the average, the British workman has to spend 2 hours of labour to gain what the American workman gains in 1 hour, that will be true alike for home production and for production of exports. On the world market the British exporter will have to sell the produce of 2 hours' labour at the same price at which the American sells 1 hour's produce, and at such prices they will compete at par. The same holds between the British and Japanese exporters, who will compete at par when the former sells 1 hour's British labour at many times the price the Japanese exporter can obtain for 1 hour of Japanese labour.

It is the same for two parts of the same country possessing different levels of productivity. If the less productive region is satisfied with a correspondingly lower wage level, both regions can be fully employed and trading with each other, or mutually competing in trade, on equal terms.

Different Currencies. Yet the problems of foreign trade and foreign competition are clearly marked off from those of internal trade. While this may be partly due to the incursions of political sentiment into the field of economic competition, there are also solid points of difference between the two fields. They arise from the inevitable use of different currencies by different countries.

In the light of our analysis in Chapter I we may regard it as a primary function of the State to satisfy the communal needs of the nation by purchases for which it pays by issuing money; while in order to prevent a harmful swelling of monetary circulation it accompanies as a rule the issue of money by the collection of taxes. Under modern peacetime conditions, the taxation required for this purpose would usually be a good deal less than the volume of money issued; while in wartime, on the contrary, the collection of taxes usually cannot keep pace with new issues and a certain amount of excessive circulation is unavoidable in consequence.

Suppose now Britain and France had the same currency which could be issued both by the French and the British Governments. The British Treasury could then supply the needs of the public authorities in Britain by issuing money and purchasing goods for that money both in Britain and France. At the same time they might forego the imposition of adequate taxation and leave it to the French to collect within their own territory some, or even a major part, of the taxes required to keep circulation down at a reasonable level. Such Gilbertian situations cannot be avoided except by the use of two different kinds of money in Britain and France. The same holds for any other two territories the populations of which have distinct collective needs to satisfy which they cannot expect to be paid for by people outside their territory.

Rate of Exchange. When each country has its own currency the nationals of each earn their living mainly in the money of their own country. If they want to buy something abroad, they have first to exchange their money into that of another country. An Englishman wishing to buy wines in France will offer his pounds to a Frenchman who will accept them in view of the fact that there are always people in France who want to buy, say, coal in Britain—or, more generally, because there is a world market for pound notes in terms of all other currencies; there being people everywhere who desire to make purchases in Britain. At what rate will it be reasonable for the Frenchman, and for all the other buyers of pounds, to exchange their own currency for pounds—and for the Englishman to part with his pounds? Clearly all these transactions will be fair and acceptable to all participants if equal purchasing powers are exchanged every time. In other words, the rates of exchange will be fair and acceptable to all if the number of francs, pesos, dollars, lire, etc., obtained for a pound will buy approximately the same value of goods in France, Argentina, U.S.A., Italy, etc., respectively, and the same as a pound will buy in Britain. In fact, the only thing a 'Rate of Exchange' can rationally mean (in the kind of generally settled situation of trade which we are envisaging here) is to express the ratio at which different currencies possess the same purchasing power.

Balance of Payments. Unless Exchange Rates are so adjusted as to give to each currency the same buying power at home and abroad, some altogether absurd consequences are inevitable, similar to those discussed a moment ago for the case of French currency being issued in Britain. Suppose the franc were undervalued by one-half in comparison with the pound. Britons could

then double the purchasing power of their income by changing it into francs. Imports from France could be paid for by issuing pound notes for which the French could buy only one-half of the value which they had given up in the form of exports to Britain. So long as the British Government went on issuing the additional pound notes for these transactions Britons would enjoy a handsome revenue from this source. But the French would not go on accumulating pound notes indefinitely in exchange for useful goods. They would soon realise that no other Rate of Exchange is acceptable to them than that which will equate the purchasing powers of the currencies exchanged.

The rates thus adjusted will make each country normally receive on the average the same value in imports as it surrenders in exports. The advantage of trading is then limited to the fact that some goods are bought cheaper in certain countries, while others are cheaper in other countries; notwithstanding the fact that the average price of all goods is the same everywhere. Thus all countries would normally maintain an even balance of payments.

International Lending. A Government may borrow abroad for war, public works and occasionally for straight business purposes. Private businessmen in rapidly developing countries will often borrow heavily from more advanced centres of industrialisation. When Argentina, or Argentine businessmen, raise a million pounds on loan in London for long-term investment, there will follow a phase of imports into Argentina which are not balanced for the time being by Argentine exports. And later, when interest is being paid on the loan and its capital is being repaid, there is a reverse movement of goods *from* Argentina which directly or indirectly produces an equivalent excess of imports to Britain.

In order to facilitate these movements it will be desirable to let the Rates of Exchange deviate slightly from equal purchasing powers. In the first phase (when Argentina is buying abroad in excess of their exports) it is desirable to offer pound sterling for sale at a little less than its value in purchasing power; while in the return phase it is desirable to undervalue the Argentine peso somewhat in relation to all other currencies. The offer for sale of the sums of sterling currency raised by loan in the international money market may have the desired effect in the first instance, and an offer of pesos in excess of the balanced demand would call forth the second movement. But, for reasons to be discussed later in this chapter, it is questionable whether the free market could altogether be relied upon for all major operations of this kind. A World Bank set up

by the Governments of all countries for the purpose of supervising international exchanges in accordance with the above principles may greatly facilitate the smooth operation of international payments.

International Stability. If Rates of Exchange are steadily being adjusted so as to keep the purchasing power of money equal in all countries, then the rates must vary every time the price level changes in one country as compared with another. In other words, the Rate of Exchange between any two countries must be constantly readjusted so as to eliminate any changes in the ratio of their two price levels.

Such readjustments of Exchange Rates have certain disadvantages. If a Frenchman borrows a million pounds in London and finds that by the time he has to repay the money the sterling rate has gone up by, say, 10 %, he may find it very unfair to have to find £100,000 worth more in francs for repayment of the loan than he had received when he originally converted the million pounds into francs. It may be argued that he will have profited from investing the money in France where prices have risen precisely to the extent to which the sterling has been appreciated. But this is hardly true of a banker whose function is merely to act as a broker for loans. International banking, and particularly short-term lending, would be much hampered if Rates of Exchange kept undergoing considerable fluctuations.

This trouble will be minimised if the governments of different countries operate in accordance with similar policies for the maintenance of employment. Assuming that all countries set themselves similar targets of Full Circulation, price levels in these countries may be expected to move on approximately parallel lines and variations in relative prices may be greatly reduced.

But the importance of this problem must not be exaggerated. Considerable fluctuations of the internal price level have occurred commonly enough in the past and yet internal lenders have continued to bear the risk of a falling value of money, while borrowers risked having to repay their debts in money of higher value than that which they had received. The volume of international lending of the kind which would be adversely affected by varying Rates of Exchange is very small compared with the volume of internal lending. Inconvenience to this fractional part of existing credit operations must not weigh too heavily with us. The international financial machinery to be set up by all governments should overcome most of the difficulties and any that remain must be dis-

regarded, rather than allowed to deflect a rational policy of Full Employment. Such a policy cannot be pursued in conjunction with rigorously fixed Rates of Exchange, and any desire to maintain such fixed rates (on lines reminiscent of the old gold standard) would represent—as we shall see—a most serious obstacle to a rational readjustment of the economic affairs of the world.

Depressed Countries. Before entering on the discussion of the unnecessary difficulties arising from attempts to fix rigid international Rates of Exchange we must refer to certain serious and hardly avoidable troubles which may arise from a high degree of national specialisation.

A country which essentially depends for its livelihood on the export of a narrow range of commodities is always in danger of losing its subsistence by a change in the conditions of demand for its particular exports. The problem presented in such an event is quite similar to that of a 'depressed area' within the territory of one country. It admits of no easy remedy. If the citizens of the stricken country will not or cannot live on what they can earn in their present occupation at the existing state of demand (and these earnings may be zero or negative) they must as a rule find a new occupation, if necessary abroad, where their labours will produce results which can earn them a livelihood.

The same is true, in my view, with very little modification, of an industry which loses its internal market by the intervention of foreign competition. In that case it may in general be possible to exclude the new foreign competitors by tariffs or other protectionist measures. This would deprive their potential customers of the advantage of cheaper supplies and force them to pay in this form a subsidy to the endangered home industry, which would thus be kept in business. I can see no justification for asking potential consumers of foreign goods to make this sacrifice. Help to compatriots in need—and indeed to any people stricken by the consequences of economic change—may be rightly demanded. But it should not be given in a form in which it inevitably continues to encourage a wasteful, or relatively wasteful, line of production. At first sight the method of maintaining a market for the produce of a stricken industry may appear less injurious to the dignity of those in receipt of assistance, than the straight offer of a subsistence allowance. But this is true only so long as a belief can be maintained that the protected industries are somehow worthy of preservation for their own sake. The interest which the owners and workers of such industries have in upholding such a view may

succeed in keeping it current for a time. But this could only delay the final realisation of the fact that these people are exploiting propaganda and political pressure to supplement their livelihood. Tariffs which maintain a market for a stricken industry falsify economic truth and create a vested interest in the exploitation of pretences supporting this falsehood. Far from preserving the dignity of the stricken producer, they drive him into confusion and dishonesty.

Money as a Promise of Gold. There is a false conception of money which has its origin in earlier usage. Right up to the time preceding the first World War a great deal of coined gold was in everyday use among the general public. The metal value of these coins was fully equal to their nominal value as money. Naturally, paper money was considered as a mere substitute for gold coins and was thought to possess value only as a promise of gold. Thus the value of paper money was said to be 'based on gold'.

In the course of the past 30 years the Western people have achieved a new conception of money. They have established the custom, based on a sound social experience, of accepting money of a purely conventional value. Modern people will readily make use of paper money issued by the authorities, because they know that by doing so they will secure for themselves the immense advantages of a convenient monetary circulation. They will continue to use money thus issued so long as they can trust the authorities to keep its value reasonably stable *in terms of goods*. A general rapid rise in the price level may frighten the public out of the possession of money and cause it to flee 'into goods'; but a mere rise in the price of gold hardly impairs the modern public's confidence in its money.

Yet the conception of money which was originally established in the age of gold coins still persists in a whole system of traditional policies concerning the regulation of Exchange Rates. Many powerful business circles, particularly in America, are still attached to the ideas of an international gold standard. They remain convinced that money cannot circulate properly in international trade unless its steady relation to gold is restored, or at least a rigid relationship is maintained between all the different national currencies.

It is understandable that such views, having reigned for centuries, and until fairly recently, by unchallengeable right, should still maintain a hold on the minds of many people. In fact, the ideas which derive their origin from the conception of a paper

money representing a promise of gold are so widespread that we must describe the corresponding monetary system of the 'international gold standard' in some detail here. Thus only can we hope to recognise the traps into which the tradition of gold coins is constantly leading contemporary thinking about matters of money.

The Rules of the Gold Standard. The whole *modus operandi* of the Gold Standard can be derived by adding to the rule: 'Trade must balance', the second rule: 'Exchanges must retain gold parity'.

Any rational monetary system must uphold the first rule. Countries must be safeguarded from being deprived indefinitely of a share of their produce in exchange for nothing better than the money printed by neighbouring States. While the payment of goods by goods may be replaced for a time by a settlement in money, no country can be allowed to let the balance of its payments accumulate indefinitely in the books of its suppliers. The rule that trade must balance is safeguarded under the modern system (as outlined above) by adjusting the Rates of Exchange so as to make the purchasing power of every currency the same everywhere. When, on the other hand, currencies are based on gold, all Exchange Rates are permanently fixed, and then the only way to achieve universally equal purchasing power of currencies is to keep relative price levels fixed for all countries. That is what the international gold standard automatically does: it is a machinery which tends to keep relative price levels permanently fixed everywhere.

It works in the following way. Each country undertakes to keep a sufficient amount of gold in readiness to meet all demands for redeeming its own notes in gold. In other words, it undertakes to prevent circulation from exceeding the level at which the available monetary gold would be insufficient to meet such demands. The circulation of money is thereby limited to a certain sum which bears a more or less fixed relation to the quantity of gold in possession of the Central Bank. Consider now what follows if the price level falls in one country. Suppose, for example, that—in consequence perhaps of a general rapid technical progress—manufactured goods, which form the major part of marketable commodities in Britain, become cheaper in this country than anywhere else. Or suppose that the British public at the time finds less opportunities for (home) investments and hence there occurs a reduction of monetary circulation and a fall in the British price level. Whatever its reason may be, a fall in the level of British as

compared with world prices will stimulate exports from and throttle imports to Britain. The balance of foreign payments will go in favour of Britain; more pounds will be bought by foreign countries than are being sold by them. Foreign countries will have to settle the balance by transferring gold to Britain and, forced by the loss of gold, they will have to compress their monetary circulation, while Britain, with its broadened gold basis, will be in a position to expand circulation. These two changes, if successfully carried out, will correct the trend of the British price level; they will lower prices abroad and raise them in Britain, thus restoring the parity of purchasing powers and removing to that extent the reason which originated the unbalance of trade.

In order to reduce circulation in compliance with the requirements of the gold standard, the Central Banks used to raise the discount rate and generally raise the costs and reduce the facilities of credit. Such action, calculated to depress the investment activities of the business community, often proved effective; while the reverse, a cheap money policy applied as a stimulus to investment, was usually less successful. Moreover, while the duty to redeem notes in gold involves an obligation to reduce circulation if gold reserves are falling, it only permits, but does not prescribe, the expansion of currency when gold reserves are increasing. The operation described in the previous paragraph may have therefore often resulted in a greater reduction of circulation in the gold-losing country than was the simultaneous expansion on the gold-gaining side. In any case the process provided at the best for a general maintenance of the total volume of circulation while transferring part of its flow from one country to another.

As circulation is being diverted from one country to another so is the volume of employment. In fact, the gold standard may be looked upon as a method for spreading out and sharing business fluctuations between countries. Suppose a business depression starts in one country, e.g. here in Britain; there is a fall in British prices and a flow of gold to Britain, followed by a reduction of circulation abroad and an expansion of circulation at home; with the result that some of the unemployment arising from the depression in Britain is imposed on countries abroad. Conversely, a boom taking its origin in Britain will be damped by losses of gold to foreign countries, and hence some of the rise in the volume of employment will accrue to countries abroad. The spreading out of the great American trade depression of 1930-2 to Britain and various other parts of the world is still in vivid memory. It was

in defence against this process that Britain stopped payments in gold and altogether went off the gold standard in 1931.

A large and wealthy country, possessing a superfluity of gold, will of course have no fear of unemployment spreading to its territory from abroad. Such a country—as exemplified by the U.S. to-day—may well hope to meet gold losses arising from a depression in any foreign country without having to reduce its domestic monetary circulation. The more so, since a leading industrial country like the U.S. may always hope to catch up with lower price tendencies abroad by improving the effective purchasing power of its own money through a further increase in the efficiency of home production.

During the nineteenth century Britain held a position rather similar to that of the U.S. to-day, and she did not then fear to be seriously affected by the state of business in other countries. On the other hand, it seems that the banking interests of the City of London often considered the difficulties of economically weaker countries and (in order to keep international business going) developed a technique for averting from them the rigours of the gold standard by investing the balance due to British exporters in the form of long-term foreign investments. A similar policy is now frequently being urged on the United States: but this expedient seems altogether irrational. There is no purpose in selling goods under conditions which force you to leave a major part of your gains indefinitely at the disposal of your customers. Foreign lending may be highly desirable in certain conditions: but this does not justify a monetary system which can function only by letting the volume of loans to economically weaker countries mount up indefinitely.

International Life under the Gold Standard. We can see now the system operating as a whole. There is a certain amount of gold distributed over the various central banks of industrial nations—and the banks are allowed to issue a certain amount of money on the basis of that gold. This total circulation allows a certain total of employment to all industrial countries jointly and, roughly speaking, the share of gold and the share of total circulation that each country can secure will determine its share in the total of employment.

In good times, when the total volume of employment is ample (be it because monetary gold stocks have increased or—what is more common—because a comparatively large amount of employment can be based on a given amount of gold), the rules imposed by the system can be satisfied without too much difficulty. But if

at any time the total volume of employment becomes insufficient, the stage is set for a bitter conflict of interests between nations. Each can increase its home employment only by robbing the others of theirs; by preventing imports and facilitating exports; by doing to others what they do not want to be done to themselves.

No wonder that throughout the period of chronic inter-war depression barriers upon barriers were erected against imports: against the use of currency for foreign purchases: against the immigration of unemployed people from abroad. In earlier periods of history, before Governments were made responsible for the state of trade, they could perhaps have foregone such sharp economic measures; but modern Governments which are held responsible for the level of employment and may be facing a revolutionary upheaval if they fail to remedy unemployment, cannot possibly refrain from such action.

We may recall the cartoons of the early 1930's showing each nation busily erecting around itself a wall of tariffs, currency restrictions and immigration laws and entombing itself in a prison cell of its own making. Yet the position thus derided was an entirely logical result of applying the gold standard in a general state of depression. The system of tariff walls was unreasonable from the point of view of nations in the aggregate, as it was bound to impoverish all of them by impairing the international distribution of labour; yet each country had something to gain in the scramble for a larger slice in the total volume of existing employment. An increased share of employment diverted to one's own country would yield an increase of wealth to it even though the general productivity of labour were damaged by the struggle.

It is hard to see how in these conditions a system of free trade and of peaceful international trading relations could possibly be maintained. Suppose a number of nations should magnanimously resolve not to attempt to improve the state of employment within their territory by erecting obstructions to imports. They would be exposing themselves only to be preyed upon by the less magnanimous, or perhaps merely more hard-pressed nations. The situation is laden with conflicts of interest which are bound to be viewed differently by the different nations involved and which cannot be decided by any known rules or standards of equity. Any ambiguous move made by one Government may induce others to take retaliatory measures, which in their turn may unleash a chain of counter-measures and rapidly lead to the complete breakdown of any previous amicable arrangement.

Free Trade through Full Employment. The moment a rational control of circulation is adopted and fixed Rates of Exchange are replaced by adjustments in accordance with international purchasing power, the situation is radically changed. By abandoning gold as the standard of value for money and accepting a completely conventional, or customary, basis for its valuation, modern nations can release themselves from a situation in which the only way to a greater measure of employment lies in depriving their neighbours of their share of it. Once each country is provided by its Government with sufficient money to maintain Full Employment, there is no reason left for any to press for a surplus of money receipts from abroad. The most powerful reason for obstructing imports is then removed and Free Trade becomes again possible.

The machinery of international payments must of course continue to safeguard the levelling out of foreign balances, so that no country would be allowed to live by merely issuing money and importing goods in exchange for it. But foreign balances of payment vanish—at least in the long run—if the purchasing power of all currencies is adjusted at parity for all countries; which—in the long run again—can be achieved by allowing Rates of Exchange to find their level in a free market of currencies; and when the steady balance of foreign payments is assured, the payment for imports in terms of exports is assured at the same time.

Admittedly, there may be cases of single countries—‘depressed areas’—for which no balance will establish itself; or else only at such a low level of imports (and exports) that the country is condemned to starvation. Such countries must be given proper assistance; but even so, not by protecting them against the forces of free trade, but rather—as I have urged—by refloating them and causing them to be guided by these very forces towards a new start, at home or abroad.

Readjustments of the Level of Employment. So far, then, an economy based on a rational handling of money can make true the doctrine of Free Trade which regards foreign trade in exactly the same light as home trade. But this holds only with certain reservations which have now to be set out at some length.

We have to deal with the fact that the balance of payments of a country may suddenly deteriorate (or improve) without any change in the international buying power of its currency.

It is clear that even though all countries of the world were pursuing policies of Full Employment, each might find it necessary to adjust its level of employment separately from time to time. It

is not necessary that such changes should, nor perhaps likely that they would, be either sudden or large: but it will be useful to consider here the case where the change is in fact quite marked. Suppose, for example, that employment were increased by 1% and that the country in which this happened were Britain, as its structure was, say, in 1938; then the National Income would go up by about £m.40, and in addition imports would increase by about £m.10.¹ Assuming now to simplify matters (which is quite permissible) that the price level remained practically unchanged, then the expansion would have no stimulating effect on exports at all, and the whole of the increased imports would be added to the negative side of the balance of foreign payments.²

Clearly, the problem thus presenting itself could not be readily abandoned for readjustment to the forces of the free market. It does not seem rational in this case to let the expanding country's rate of exchange sag to the point at which the balance of payment would be wiped out. In the circumstances this would not establish parity of purchasing power at home and abroad, but rather vitiate the parity which had existed before. It would lead to an undervaluation of the home currency, and to a consequent undervaluation of exports and over-valuation of imports. The terms of trade would be falsified to the disadvantage of the inhabitants of the country which had expanded its circulation.

But why this difference between the domestic and the foreign parts of monetary circulation? How smoothly the process of 'squirting' worked out so long as we disregarded the external circuit! Why should additions made to external circulation meet with such difficulties?

The reason lies obviously in the fact that the Government of a country expanding its circulation cannot issue any foreign currency to its citizens. The citizens of the country have to purchase such currency abroad from foreigners who wish to buy their country's exports; and this process lies outside their own Government's direct jurisdiction. In other words, the external section of the squirting process, as represented by the passive foreign balance resulting from a process of internal expansion, must work its way through foreign countries until it has produced there a sufficient number

¹ The average import content of all goods and services consumed or invested in Britain in 1938 was about 20% (Beveridge, *Full Employment in a Free Society* (1944), footnote p. 214).

² Technically speaking: all the 'demand curves' of the country would be pushed bodily upwards by (roughly) 1%.

of people desirous to buy additional exports from the country which started the expansion: and this process may find itself obstructed by the monetary policies pursued—perhaps even quite rationally pursued—by foreign Governments.

As a matter of speculation we may note certain conditions in which the expansion of the foreign circuit could be brought about just as easily—or at least almost as easily—as that of the domestic circuit. Suppose there are plenty of unemployed capacities available abroad and (which is rather unrealistic) assume also that the level of employment thus established remains steady—except for the effect under consideration of increased purchases from the country expanding its circulation. The ‘squirting’ effect of these purchases will then take place on the usual lines, causing a re-employment of men and plants and an all-round increase of demand—including the requisite additional demand for the exports of the country which had originally expanded its circulation. Thus the external money circle will be closed and the negative balance of payment, caused by the original expansion, cancelled; the whole process taking only perhaps a little longer—on account of the wider extension of the circle—than it would take for a process of ‘squirting’ to take full effect (i.e. Savings to become equal to Investment) within the range of home circulation.

However, let us return to our original assumption that all countries abroad are pursuing rational policies of Full Employment. Such countries will offer no scope for additional employment imposed from abroad. They will counteract the expansionist effects of increased foreign purchases by increased taxation and reduced deficit spending; thus cancelling an amount of their previous internal ‘squirting’ equal to the additional payments received from abroad. (The money which would have been used for the cancelled portion of ‘squirting’ would be sold to the citizens of the country making these payments, who by their purchases would do the ‘squirting’ instead.)

In these circumstances no rapid addition could be made to the foreign part of the Money Belt. The additional external circulation could not be established by the rapid process of expansion, but would have to work its way through the foreign markets by breaking the existing circle of exchanges and replacing it by a new wider circle which would include the country expanding its circulation. The process amounts to a reorganisation of trade on the basis of an increased international distribution of labour; and would have to proceed through the usual competitive mechanism, which

breaks down bit by bit one form of production and distribution and replaces it by another. While the exact time required for such a process can hardly be assessed, it seems safe to assume that it may advance fairly slowly, particularly in a state of Full Employment when there is little unemployed capacity which can be utilised as an intermediary for switching over from one system of production and distribution to another.

In order to make clear the monetary aspect of this process, we may return to our example of Britain expanding employment by 1 %, and giving rise to a negative balance of £m.10 per annum. Throughout the phase of trade adjustment described in the previous paragraph, £m.10 of excess foreign payments would be flowing out annually from Britain, and the British public would be enjoying goods valued at £m.10 per year without any return to foreign countries. A return would be assured at some future date, however, by the fact that the foreign public would be acquiring sterling balances which they could, and would, eventually use for purchases in Britain. By which they would close the additional section of the external money circle which had taken its origin from the expansion of employment by 1 % in Britain.

On this showing it would almost appear that we might leave the whole process to the interplay of individuals in the market. But there are serious objections to such a policy. First, the public of the foreign countries which would have to acquire and eventually utilise the sterling balances in question could not possess the fullest available information about the forces which are likely to affect the situation. They would not be privy to the international conversations by which the various governments would be discussing their proposed future moves with respect to the expansion or contraction of employment. Moreover, even if they were, there is little reason to assume that speculative trading in sterling balances would adequately meet the requirements of the situation. A satisfactory solution would have to take into consideration the interests of the various countries involved. It should balance the immediate interests which the country expanding its currency has in increasing its external circulation against the point of view of the countries which are seriously inconvenienced thereby—with little or nothing to gain immediately from it—but which yet agree on general grounds to facilitate any reasonable adjustment of this kind. The legitimate interplay of these various group interests can find no expression in the operations of a market in foreign exchange, and hence the processes of free trade may

require to be supplemented by concerted international government action.

This may take a number of different forms. Financial support may be given to currencies which are in excessive supply, culminating eventually in the definitive cancellation of whole blocks of foreign balances that have accumulated in that currency. Alternatively, countries which are in the process of incurring passive balances in consequence of a deliberate expansion of their circulation, may be induced to slow down, by temporary restrictions of imports, the rate of readjustment in the sphere of foreign trade. Tariffs may be applied for this purpose—rather paradoxically perhaps—at the request of the exporting sides who would wish to protect themselves from depredation through unbalanced purchases from abroad.

The above section has dealt in detail with the situation arising from an expansion in the circulation of one country. The reverse case of a contraction would lead to a somewhat different, though closely related, set of problems. Imports would be reduced all round, and the countries from which they had been received would incur a negative balance of payments. These balances would have to be dealt with on the same lines as described above for the negative balances incurred by a country when expanding its circulation.

A World Bank. Thus we realise that the division of the world into national territories with separate currencies may necessitate considerable government intervention for the purpose of maintaining international circulation. We may try to visualise a kind of World Bank which would perform this function.

The task of the World Bank would be to collect information which would allow its managers to observe and possibly to foresee the occurrence of balances of payment between countries. The Bank would undertake a classification of these balances—in the terms introduced recently by Mr Balogh¹—into ‘spontaneous’ and ‘derived’ balances. ‘Derived balances’ would be those described in the previous section as resulting from readjustments in the level of employment of different countries; while ‘spontaneous balances’ would be those arising from gradual changes in the productive apparatus of various countries and the growth of trade relations

¹ Th. Balogh, ‘The International Aspects of Full Employment’, p. 128 (published in *The Economics of Full Employment*, by the Oxford University Institute of Statistics, 1944).

between them, including the movement of international investments. Spontaneous balances would as a rule be left to be readjusted by the forces of the market; the Rates of Exchange being allowed to find their level in a free market of all currencies. Derived balances would be handled by the World Bank.

The procedure for handling derived balances would be partly by intervention in the exchange market. The World Bank would have at its disposal funds of all existing currencies and would use these to buy up derived balances. It would assist the cancellation of these balances by their gradual sale to the public at a suitable rate.

In the process of marketing accumulated balances the World Bank would avoid so far as possible the depression of the currency in question below purchasing power parity. A certain amount of depression below that level may, however, be deliberately brought about and the resultant unequal terms of trade accepted in exchange for a cancellation of a part of the passive balance. The World Bank may also call upon a country, which has run up a passive balance, to choose between depreciation of its currency, curtailment of its imports—possibly by the imposition of a general tariff—or stimulation of its exports—possibly in the form of governmental exports financed by the Exchequer.

No great difficulties should be expected in these matters if the accumulated passive balances are really of a 'derived' character. The additional employment from which they are derived should make the requisite resources available; while a public sense of fairness would give effective support to measures taken for the repayment of imports which had been acquired—without any service rendered—merely by operating the international monetary machinery.

Serious difficulties are to be anticipated rather in the case of certain 'spontaneous balances'; particularly when technical progress suddenly deprives a country of its market for exports on the sale of which it largely depended for its subsistence. This is the case of regional depressions which we have already repeatedly discussed above. The World Bank authorities will constantly be on the lookout for the appearance of new 'depressed areas' and will call international attention to their difficulties. Loans and subsistence allowances allocated by way of assistance to needy populations of such areas and schemes for their rehabilitation or transference to other countries would be handled through the World Bank.

All countries participating in the World Bank would have the

same interest in the continued development of the international division of labour. While they may wish to impose military or cultural reservations on its progress, they would see ample scope for reaping continued advantages from it.

There are many uncertainties left open in this outline. But it is reasonable to assume that a sufficient degree of consensus could be assured between the countries represented in the World Bank to assure that these gaps would be filled without too much difficulty. This expectation seems warranted by the underlying assumption that all countries concerned would be maintaining a level of stable employment and thus demonstrating fundamental agreement on rational monetary principles; they would all be regarding money as a conventional token and public finance as responsible not for the balancing of the budget but for balancing the Gap by the issue of the requisite amount of new money. Being agreed on such common principles, they should also be able to agree in detail as to what is useful and fair in dealing with 'derived' international balances.

Intermediate Arrangements. At the time of writing there is no world-wide agreement yet concerning the foundations of a rational employment and exchange policy. Among the great trading nations Britain and the British Dominions may be approaching the acceptance of such a policy; but the United States show as yet comparatively little inclination in that direction. This disparity has led to much anxious speculation in Britain about a *modus vivendi* which would allow this country to pursue a policy of Full Employment even while America would go on conducting its affairs on the basis of balanced budgets and of fixed international exchanges.

Naturally, it is necessary to think about such eventualities; but we must not expect too much from it. When two great nations radically disagree on economic principles it is little use to make plans for them to co-operate in removing future difficulties which may arise from this disparity. The only real solution can be to eliminate the disparity and to arrive at an accord in fundamental outlook. In no case should the achievement of that accord be allowed to be overshadowed by a struggle over the details of temporary arrangements, the spirit of which stands in conflict with that of the final relationships aimed at.

The situation which we may anticipate can be briefly outlined as follows:

Suppose that after the war Britain and most of the rest of the world were to conduct rational policies of Full Employment, while

the United States would continue to manage their affairs on the basis of orthodox financial views. In these circumstances it would be inevitable that, as soon as the impulse from the mobilisation of war savings would have spent itself, the United States would go into a depression. This would curtail purchases by the U.S. in all world markets and cause most countries of the world to incur a passive balance of payments in respect to the U.S. The countries pursuing a policy of Full Employment, with their exports to the U.S. severely curtailed, would presently be unable to procure dollars for the continuation of their purchases in the U.S., and would have to face a critical situation.

Suppose now that a World Bank had been previously established with a view to dealing with this emergency. What could the World Bank do? Could it effectively finance the 'derived balances' arising from the slump in the U.S.? That seems hardly possible; for the following reasons.

It is inconceivable that the United States, who alone would be in a position to finance the balances in question, would be prepared to do so even though (by assumption) they would be unwilling to finance employment directly inside their own borders. We can hardly assume that the U.S. would give, and continue to give, huge loans to foreign countries to enable these to maintain the conduct of their finances according to principles which the U.S. would consider to be totally unsound. Which they, in fact, would abhor to such a degree that they would rather see their own economy sink into a slump than attempt to retrieve it by such methods. Moreover, it would be inevitable in these circumstances that the financing of the balances in question by the United States should be regarded as a loan granted by them to the countries incurring those balances, which would place the latter in a position of intolerable dependence. These countries would necessarily refuse to accept such loans.

It follows then that the World Bank would be unable to prevent a severe curtailment of purchases by all countries in the United States. And as these countries would naturally be anxious to maintain, so far as possible, their level of employment, they would necessarily try to divert the money which their people would want to spend in the U.S. into some other circles which would avoid passage through the U.S. This could be done by various methods with more or less similar effects. Thus the countries outside the U.S. may depreciate their currency in respect to the dollar; or they may put up tariffs against U.S. goods; or give loans to undeveloped

countries on condition that the proceeds must be spent outside the U.S. The effectiveness of all such measures would be necessarily limited, since it is hardly possible to divert a considerable part of the world's monetary circulation at short notice into new channels.

In any case no purpose could be served by discussing such possibilities in advance with the United States. If the latter continue to rely on orthodox economics (which they would testify by letting their economy go into a slump), they would also continue to believe that mass unemployment is due to trade restrictions; and they could not be expected to appreciate a policy based on an entirely different view. They could not help looking upon the measures taken to discriminate against their trade—and thus to aggravate their domestic depression—simply as selfish, perverse and hostile acts. No previous agreement could do much to mollify such a view, since this view would alone be logical.

On the other hand, if we regard the modern principles of monetary policy now gaining acceptance throughout the world as correct, we must expect them to spread and presently to become accepted also in the U.S. While this may occur too late to prevent the next slump in the U.S., it is almost bound to be induced by the occurrence of that slump itself. It seems scarcely reasonable to set up new institutions and to discuss their future policy at international conferences in detail, when their future application would be limited, in human foresight, to a single future event; an event which, besides, cannot be foreseen in detail and the reactions to which could scarcely be modified by previous undertakings.

It would seem more proper, both in order to keep our own minds clear and to induce an early break-through of the truth, to concentrate now on elaborating and spreading the principles by which economic expansion should ultimately be safeguarded everywhere.

CHAPTER VI

CRITIQUE OF CURRENT PROPOSALS

The Spreading of Keynesian Ideas. The acceptance of the Keynesian analysis of unemployment in academic circles has been remarkably rapid. To-day, eight years after the publication of the *General Theory of Employment*, there are few universities left in Britain where its doctrine is not approved and taught as part of the academic course. From the universities the theory has infiltrated widely into the minds of educated people both here and abroad. Some measure of response to the general trend of Keynesian ideas can be universally felt wherever unemployment is being discussed to-day.

We are witnessing here the gradual re-establishment on broader lines of Adam Smith's doctrine that a nation's wealth is determined by its skill and natural resources. People are ceasing to accept lack of money as a good reason for economy unless they can see that a satisfactory level of employment has been reached. The same public who in 1931 was prepared to join vigorously in an economy campaign launched as a cure for the prevailing heavy slump, would now violently reject such a policy and be inclined to accept in a similar situation a policy of vast government expenditure. There is a wide feeling that while unemployment prevails it is not far from the truth to call pounds, shillings and pence 'meaningless symbols'.

We have also seen the acceptance by the British Government, under almost universal approval, of the responsibility for the maintenance of Full Employment. It is becoming generally agreed, both here and in the United States, that the Government can cure unemployment—even though in the United States many businessmen still think they ought to do it themselves.

Most of the published plans for the cure of unemployment in Britain—and certainly all the more important and influential documents of the kind—are based on Keynesian ideas. Every one of them proposes that governmental expenditure should be incurred to supplement a deficiency in effective demand. They usually refer also to the possibility of unbalancing the budget in times of business depressions, and most of them agree that this may be necessary. Thus the ground is well prepared for the acceptance of a consistent Keynesian policy in 'all its consequences'; but I cannot see that anyone has yet actually proposed such a policy.

Current Proposals. Before turning to the survey of contemporary suggestions a word of acknowledgment is due here to the earlier advocates of a rational conception of money and unemployment. The great merits of writers like J. A. Hobson and Sylvio Gsell in pioneering in this direction long before Keynes are undisputed, and have been emphatically recognised by Keynes in Chapter XXIII of his *General Theory of Employment*. The less distinguished of the money reformers also deserve our gratitude; as Keynes has put it with respect to Major Douglas: he is 'entitled to the claim as against some of his orthodox adversaries, that he at least has not been wholly oblivious of the outstanding problem of our economic system'. And so are many others among the 'money cranks'.

The failure of these pioneers in gaining general recognition was due partly to the fact that in their time they were solitary voices, not yet supported, as was Keynes, by a widespread trend of speculation among economists. But we must admit also that their theoretical framework was, even at the best, too defective and too clumsy to penetrate the intellectual defences of the orthodox doctrine. It is hardly surprising that in these circumstances proposals for 'stamped money' which would gradually lose value with time (Sylvio Gsell) and for the gratuitous distribution of money among the people (Douglas, Townsend) were not accepted as a cure of unemployment. In the absence of a convincing theoretical basis such proposals were bound to appear extravagant; the more so since they were in fact sharply offending against the standards of social equity.

The first suggestion, based on the Keynesian theory, embodying the method advocated in the present book of curing mass unemployment by the issue of money, was made in 1938 by Mr James E. Meade in his little book *Consumers' Credits and Unemployment* (1938). He expounded this method here with unsurpassed clarity, but failed to round off the picture by adding to it the principle of neutrality. His suggestion to distribute money as a supplement to social services in amounts compensating for circulatory deficiencies is in sharp conflict with this principle. It grants to certain classes of people a dividend on economic depression which they have done nothing to deserve. A system which would have to distribute prizes in such an arbitrary fashion would be hardly less repulsive than the state of unemployment which it would replace.

Among the more recent publications in Britain on the cure of unemployment some of the most influential have been in the form of pamphlets. The following is a list of the most authoritative

statements of this kind: *Full Employment*, published by the *Economist*, January 1943. *The Problem of Unemployment*, published by Lever Brothers and Unilever Limited, January 1943. 'Full Employment'; ten articles from *The Times*, Summer 1943. *Full Employment*, by Barbara Wootton, September 1943. *Employment Policy and Organization of Industry After the War. A Statement*, Nuffield College publication (1943). *The Prevention of General Unemployment* (Evidence submitted to Sir William Beveridge in connection with his investigation into employment), by a Group of Fabians, February 1944. *The Price of Full Employment*, by B. Seebohm Rowntree (for the Liberal Party), London, 1944. *Employment Policy* (British Government's White Paper), May 1944. During the same period a number of books have also appeared, particularly: G. D. H. Cole, *The Means of Full Employment* (1943), and quite recently—after the manuscript of the present book was first completed—Sir William Beveridge's *Full Employment in a Free Society* (1944).

All these publications had their merit in developing Keynesian policies, but we shall limit ourselves here to the analysis of the two documents which have superseded the rest in their influence on public affairs: to the British White Paper and the book by Sir William Beveridge on Full Employment.

The British White Paper on Employment. The following is the principal reform on which the Employment Policy of the British Government rests:

Public investment, both in timing and in volume, must be carefully planned to offset unavoidable fluctuations in private investment. (48c)

The meaning of public investment is defined as 'capital expenditure on buildings, machinery, roads and other durable equipment by the central Government, local authorities or public utilities' in contrast to 'public expenditure on current services', which is expenditure by public authorities on education, medical services, national defence, etc.—exclusive of constructional expenditure (43 b).

Such a policy is in general inoperative (and always irrational) unless we assume that 'Public Investment' stands for 'Public Investment financed by Budget Deficit'. The document, however, makes it clear that this identity is not implied. Public investment which is not remunerative in the commercial sense (as e.g. on roads, schools, parks) is to be financed by loan only 'within certain limits', as defined by the principle: 'that the budget must be

balanced (at least) over a longer period.' It is thus laid down that the public investments which are to fill the gaps of private investment are to be financed either from current taxation or by loans repayable from future taxation. In the former case no or only a comparatively small increase of employment would result;¹ in the latter case a momentary increase would occur at the expense of the level of employment at a later date.

Suppose now that these facts were fully recognised and that the Government proposals were revised accordingly as follows:

Public investment *so far as financed by a Budget Deficit* must be carefully planned, both in timing and in volume, to offset unavoidable fluctuations in private investment.

It would be clear then that the Budget Deficit, being the effective factor of the proposed measure, would alone require to be planned to offset fluctuations in private investment. However, once this position is reached, the government proposals are revealed as being—at least in their present form—obviously irrational. If you require a Budget Deficit, why go to the trouble of creating new items of expenditure on which to spend it; and why spend only on 'constructional' and not on 'current' items? There is no answer to these questions. The paper refers to customs and tradition, but such references are pointless when our task is to scrutinise and reform financial custom in the light of a new economic theory.

Supposing this objection were again admitted and the government proposals were once more revised so as to read:

A Budget Deficit must be carefully planned, both in timing and in volume, to offset unavoidable fluctuations in private investment.

This final revision would make the proposals entirely rational, but would also bring them into sharp conflict with the principle: 'that the budget must be balanced (at least) over a longer period.' The charts attached to the government White Paper (reproduced on p. 21 above), illustrating the high average level of unemployment in the inter-war period, leave no reason to expect that a Budget Deficit planned on the above lines could ever be covered. A prescription for repayments of deficits incurred in this fashion from future revenue makes it impossible to 'plan them to offset fluctuations in private investment'. The latter method of planning is completely determinate; and though it may perhaps occasionally lead to balanced budgets, it is clearly incompatible with the general

¹ Cp. pp. 57-8 above.

observance of the rule that budgets must be balanced, whether over shorter or longer periods.

It may be argued perhaps that the Government is well advised in following a course of action which appears plausible to the public even though it may not represent an entirely rational policy.

Could the Government—we may ask—not achieve its aim while avoiding offence to traditional ideas of financial soundness, simply by keeping up an increased rate of public investments of the kind which are normally financed by loan? It is true that this would inevitably involve a continuous increase of the national debt, but there would always be a solid constructional achievement to point at as its equivalent. Each additional bloc of Government bonds issued would be balanced by the presence of an additional electricity plant, or of a new section of rail or road, or a new hospital or school building. Could the irrational nature of the distinction thus drawn between constructional and 'current' public expenditure not be disregarded for the time—and escape notice by the public? And would the actual accumulation of Budget Deficits (if remaining within moderate limits) not be accepted by the public in its present mood without offence to its sense of custom and tradition: provided only that the funds are borrowed in the usual form of government loans and each transaction leaves behind it a solid monument in brick and mortar? Would that not represent a line of lesser resistance—admittedly perhaps not a perfectly rational method, but one more acceptable to the public, and therefore actually more useful than a more logical policy which would frighten and confuse people by its financial radicalism? It is not impossible that this is what the authors of the White Paper actually had in mind and we shall consider it therefore carefully.

The fundamental obstacle to such a programme lies in the firm connection which exists between human needs lying in the two spheres of individual and collective consumption. It is a matter of common experience, strikingly borne out by the figures of Richard Stone for the period 1929-40 in the U.S., during which a particularly violent oscillation of incomes was taking place, that public expenditure is regularly increased when general business conditions improve and is decreased when business is depressed. And this seems entirely rational. Public utilities and other semi-commercial enterprises naturally expand production when demand for their services expands. When more electricity is demanded, more is supplied; when applications for new telephones increase, more

lines are laid and more instruments are installed. A state of prosperity also increases the demand for education and for all kinds of health services. It makes increasing demands on the roads and heightens the urgency of town planning. It greatly intensifies popular impatience with public evils, such as the backward condition of education and health and the continued existence of slums. A policy which would propose to break this connection and make the peaks of public expenditure, at least on the constructional side, coincide with periods of lowest general prosperity, would fly in the face of all rational sense of economy.

In this connection it is once more to be remembered that we have every reason to suppose that in the Western countries the state of employment would in peacetime be unsatisfactory even at its peaks. The correct reading of the government proposals is therefore that additions to public investments shall be made at all times: but while these additions would be less massive in times of relatively good business conditions, they would be increased by additional amounts (equalling sometimes the total of private investment at their highest level) when there was a general slump.

Suppose we start the proposed new policy at a condition of comparative prosperity as it prevailed, for example, in 1938 when unemployment figures in Britain stood at 13 % of the insured population of 15 millions. In order to reduce this to, say, 4 %, i.e. from approximately 1.9 millions to 0.65 million, it would be necessary to increase public investment (financed from loan) by about £m.250 per year.¹ If a severe slump of the kind experienced in 1932 followed, the sum would have to rise to, say, £m.480 per year, while on the average of a period like that of 1929-39 (with an estimated average of 2.0 million unemployed which were to be reduced to 0.5 million) it would stand at about £m.300 per year.¹

We have to compare this result with the normal average annual expenditure of all public authorities and railways, etc., on additional capital goods, which is given, for example, for the period

¹ Calculated on the basis of a decrease in registered unemployment of 300,000-350,000 for a Budget Deficit of £m.70. See Bretherton, Burchardt and Rutherford, *Public Investment and the Trade Cycle in Britain* (1941), p. 91; cp. p. 83 above. For a more detailed analysis of hypothetical loan expenditure on the level of employment, see N. Kaldor in Appendix C of Beveridge, *Full Employment in a Free Society* (1944), p. 363. Our estimate of £m.300 p.a. for the average Budget Deficit required for the period 1929-39 coincides with that of E. F. Schumacher for post-war Britain. *The Economics of Full Employment*, Oxford University Institute of Statistics (1944), p. 102.

1926-38 by Bretherton, Burchardt and Rutherford¹ at £m.258 per year. Thus public construction would be about doubled in relatively good times, as in 1938, and increased further at the onset of a slump to nearly three times its usual value, so that on the average it would be kept at *well over double its present average amount*.

The effects of this policy on the currently consumable National Income would consist in an increase of rather less than £m.300 per year,² i.e. about 8 % of what was previously available. Thus the proposed policy would aim at satisfying in the course of the next generation or so all our needs with respect to habitations, roads, communications; hospitals and schools; electrical installations and gasworks, at, say, twice the present customary standard—while the satisfaction of our other requirements (such as food, clothes, fuel, recreation, education, medical attendance, etc.) would remain practically at its present level. The change of proportion as between the provisions undertaken in these two different directions would be quite noticeable, even in times of general prosperity, but it would become most striking and shocking when business tended to decline. The standards of wealth in terms of bricks, mortar, rails and road surface at which we should be aiming in a phase of depression would be about three times higher than we should have otherwise adopted in proportion to current consumption.

Such a programme would set us labouring to achieve disproportions which may be envisaged here in a few particular instances. Take this University where I am employed. My laboratory, which now has 10 rooms, would be extended to 20 rooms; while there would be no appreciable increase in students or staff, or research grants in prospect. The hospital next door, built in 5 floors, would be extended to 10-12 floors for the same number of patients and doctors, the same mobile equipment, and no addition being proposed to the service and clerical staff or to the consumption of fuel, gas and electricity. School buildings would be extended in a similar fashion, classrooms would be doubled and corridors lengthened and widened, staircases considerably broadened, even though there were no additional pupils to be taught and no addition could be made to the teaching staff and other urgently needed items of current expenditure.

Any similar constructional campaign applied to public utilities

¹ Bretherton, Burchardt and Rutherford, *Public Investment and the Trade Cycle in Britain* (1941), pp. 407, 419.

² Calculated for a 'multiplier' 2; see passage quoted from Bretherton, Burchardt and Rutherford on p. 83 above.

would immediately appear manifestly absurd. No one would be prepared to double the size of power stations, gasworks, waterworks, post offices and telephone exchanges, including their machinery and their network of distributive cables and pipelines, for the service of an unchanged number of customers and an unchanged level of consumption. Nor do railways and roads offer more acceptable opportunities for a large expansion of permanent installations irrespective of the fact that demand has remained practically unchanged.

The extension of housing is sometimes considered as a field of public investment where a great deal can be spent without any danger of reaching saturation. But there are few people who would be prepared to live in, say, twice the number of rooms they occupy now without any addition to their income from which they could buy more furniture, more coal and electricity, more crockery, and more paid help for the housekeeper. There exist, of course, slum dwellers who must be forced to accept more hygienic dwelling conditions, even if their own tastes do not demand them. But the mass of the population would be fully justified in regarding it as a scandalous waste of their resources if these were used to extend considerably their dwelling houses, even while their income, available for other purposes, remained practically unchanged.

We must realise how delicate the adjustment is in the apportionment of our resources, be it to the satisfaction of our different human needs or in the matter of supplying the various requisites for running a productive enterprise. A marked increase in the supply of one group of resources—selected merely for the fact that they embody bricks, mortar and constructional work—would inevitably be felt as an outrage to commonsense. Nor would it be a matter which could be readily overcome and soon forgotten. The accumulation of new buildings and machinery, of roads and railways would inevitably necessitate a considerable increase in costs for repairs and renewals. The public would presently find itself saddled with an additional annual burden of £m.100 or so for keeping in good condition its great array of white elephants, which had cost so much useless labour to acquire.

Such are the conditions to which the British Government's plan would rapidly lead if circumstances should in the future prove in any way comparable to those which prevailed in the period of 1919-39. Actually, my forecast of the difficulties arising from the proposed policy falls somewhat short of the probable result. My implied assumption that public investment would be entirely financed by

loan would involve a definite departure from current financial practice. On the lines of customary finance, a larger amount of additional public investment—perhaps 25 % larger—would be required than that which I have estimated. Moreover, I have left out of account the powerful contracting forces which would presently assert themselves as the annual amortisation of the invested capital would keep mounting up. Taking an average amortisation quota of 2 %¹ on an additional public investment of £m.300 p.a., the annual rate of amortisation after 25 years would amount to £m.150 p.a. In order to recirculate this contracting flow on the lines of the Government's policy a further quota of additional public investment would be required of the order of at least, and, if financed on orthodox lines, more than, £m.150 per year.

We may add that it would prove extremely difficult, if not impossible, to enforce any reasonable standards of economy for the conduct of enterprises which would be undertaken for the express purpose of spending public money. A policy of enormous public constructions, undertaken regardless of any appreciable need, would in fact inevitably stimulate a reckless and arbitrary mood of administration, bringing lawlessness and corruption in its wake.

No: far from offering a line of least resistance, and curing unemployment without giving offence to public opinion, the British Government's policy would rapidly lead to the most crying anomalies. Exasperation would be intense against a system which would so blatantly waste the nation's labours and resources merely for the purpose of bringing money into circulation. We may recall how a comparatively small increase of public investment beyond normal requirements was undertaken for the purpose of stimulating circulation by the Roosevelt Government in its W.P.A. scheme and by Germany in the first years of the Hitler regime, and how even these comparatively small undertakings roused complaints about 'synthetic jobs' and 'boon-doggling' in the United States and caused grumbling about 'pyramid building' even in totalitarian Germany.

It is clear from para. 62-65 of the British White Paper that the various difficulties in using the timing and dosage of public investment as a cure of unemployment have not passed unnoticed. But since the other main remedies recommended in the Paper are either notoriously ineffective (as are the stimulation of exports and of private investment), or could lead only to the equalising, not

¹ Estimate based on the periods of redemption for sums borrowed from the Public Works Loan Board as tabulated for 1920-34 by Ursula K. Hicks, *The Finance of the British Government, 1920-1936* (1938), p. 131.

to the raising, of the level of employment (as would the anticyclical variation of social insurance contributions), we must assume that the Government did rely in fact on curing unemployment by a policy of public investment, of which we have analysed the implications above.

To this analysis we may add that the most dangerous feature of a scheme of the proposed kind lies in the fact that it sets a striking example of deflecting economic life for the sole purpose of putting money into circulation. There is no limit to the irrational and arbitrary measures that can be justified by such precedent. The White Paper itself gives a foretaste of it by suggesting that hire-purchase transactions should be regulated according to the state of trade. This can only mean that hire purchasing should be encouraged in times of trade depression by relaxing the rules which now restrict these transactions. It would seem that poor and inexperienced people are to be allowed to incur greater risks than would otherwise be admissible, for the sole purpose of putting more money into circulation. Another example was set by the Chancellor of the Exchequer's announcement in his Budget speech of 1944 of granting tax relief to reinvested profits as against accumulated reserves. Thus businessmen were to be induced to reduce their margin of safety below what they would otherwise consider justifiable, for the sole purpose of putting money into circulation.

By such precedent every single interest in the State is given a claim to government aid. There is no class or occupational group which cannot claim that it can spend money as effectively as others, and prove that a subsidy or a guarantee would assist it in this function. None that could not demand the relaxation of some rule or other on such a plea. A Government which had accepted the principle that the processes and rules of economic life shall be materially altered in order to stimulate more spending would have no grounds on which to resist such claims. Nor could it have sufficient grounds to arbitrate between the claims of rival interests. A lawless and corrupt tussle of pressure groups would ensue, each outbidding the others in their proposals to distort economic life in its own way with a view to putting more money into circulation.

Sir William Beveridge on Full Employment. The present book was first completed before the appearance of Sir William Beveridge's book *Full Employment in a Free Society*. It may be interesting to confront here my own argument briefly with the statements of this important document.

I would like first of all to welcome the clear rebuttal by its author

of the customary opposition to an indefinitely increasing national debt. Though he unfortunately accepts the obligation to consolidate the national debt by the sale of interest-bearing government bonds—which inevitably raises apprehensions about the future level of ensuing interest payments—he resolutely sets such difficulties aside as minor considerations.

The book gives three alternative routes to Full Employment (p. 142):

- Route I.* Increase of public outlay, leaving rates of taxation unchanged.
- Route II.* Increase of public outlay, with all-round increase of taxation sufficient to balance public income and expenditure.
- Route III.* All-round reduction of rates of taxation, leaving public outlay unchanged.

Beveridge rejects (p. 144) Route II, which he considers to be 'a theoretical rather than a practical possibility'. (I have explained before (p. 57 above) that I cannot recognise Route II, in general, even as a theoretical possibility for the establishment of Full Employment and that it would be altogether useless if applied in a state of depression.)

Route III is rejected by Beveridge after some discussion: principally because it 'would leave giant social evils entrenched' (p. 151).

Route I is then accepted in principle and made into the vehicle of a vast programme of social reform. Action is proposed (p. 157) with respect to all possible channels of outlay: private consumption outlay; joint consumption outlay; business investment—private sector; business investment—public sector; and communal outlay. The programme which involves all these items is set out under the heads: Social Security; National Health Service; Nutrition; Fuel and other Necessaries; Education; Town and Country Planning, Housing and Transport. The setting up of a National Investment Board which shall 'plan investment, both public and private, as a whole' forms part of the plan; and so does a system of subsidies for essential consumer goods.

Beveridge's proposals coincide with those of the White Paper in so far as they both rely on increased public expenditure for the purpose of providing employment. The main difference in principle is that Beveridge dismisses the White Paper's misgivings about a mounting deficit, and that he rejects the timing of public works to fit into the slack phases of private investment, suggesting instead that private investment should be maintained on an even level by the action of an Investment Board. Beveridge's demands for

increased public expenditure and public intervention to overcome 'the evils of Want, Disease, Squalor and Ignorance' are emphatic and insistent, and the temper of his programme is far more radical than that of the White Paper; but this does not, in itself, constitute a difference in principle.

My own position in relation to Beveridge's argument and proposals is as follows. I agree that Route III is to be rejected; but not essentially because it leaves many social evils unremedied, but because it attempts to fix the level of public expenditure: which is not, in my opinion, a matter to be included in a programme of Full Employment. The fact that the particular level at which public expenditure would be fixed in this case is almost certainly too low, lies, in this view, outside the correct argument. I object therefore, also on quite similar grounds, to Route I which almost certainly sets public expenditure much higher than the public would desire to do on its merits, i.e. apart from any consideration of the question of employment.

Beveridge's book is dominated by the belief that the State 'if it undertakes the responsibility for ensuring sufficient total outlay for full employment, must concern itself also with the direction of outlay' (p. 186). That 'The State cannot undertake the responsibility for full employment without full powers. It must be free to adjust policy according to circumstances, over the whole range of possible subjects of spending' (p. 187). This means, as I understand it, that the State, in providing its citizens with the money required to maintain the exchange of goods and keep the wheels of industry going, is supposed to become invested with new functions and rights to direct the activities thus restored. It means that unemployed men should not be allowed to enter idle factories, and businessmen to restart their activities, unless the public are prepared to agree first to certain enlargements of the public sphere of responsibilities, which Sir William Beveridge (or anybody else responsible for assuring Full Employment) happens to desire, but which the public would otherwise not wish to adopt.

This is precisely the connection against which the present book is protesting. I have argued against policies of this kind earlier, by pointing out that they would shift the direction of outlay merely for the sake of maintaining circulation, and that any such shift would be a reprehensible waste of communal wealth which cannot fail to arouse public feeling—maybe even to the extent of the measure of unemployment which it would serve to eliminate. I have argued that a polity and an economy in which a prospective

stimulus given to monetary circulation is admitted as a justification for either collective or individual demands on the public purse—or for the relaxation of rules of business life—cannot fail to become involved in corruption and confusion.

I may now add that the brief experience of the few weeks since this argument of mine was written, and during which Sir William Beveridge's book on Full Employment has taken effect on the British public, has fully demonstrated the confusion which is created by combining a policy of Full Employment with a particular programme of social reform. It is no exaggeration to say that it has become almost universally accepted by the British public to-day that the increased public expenditure, the greater equalisation of incomes and the more effective supervision of private investment and private consumption, etc., advocated by Beveridge form part of the conditions required to establish Full Employment. Few people realise that these merely represent measures which Beveridge (and others) have taken an opportunity to urge, even though they have essentially nothing to do with the establishment of Full Employment. That Full Employment could in fact be attained also, for example, in conjunction with a reduced quota of public expenditure, an increased inequality of incomes and a relaxation of public responsibility for consumption.

This confusion may give a powerful fillip to the particular social programme which is linked by it to the prospects of Full Employment. But even though this programme were wholly good, it would be wrong to promote it at the cost of spreading confusion about the nature and cure of unemployment. The problems raised by unemployment are so varied, difficult and unforeseeable, that no public opinion can hope to deal with them—or can effectively support, criticise and guide a Government dealing with them—if nurtured on a false or biased conception of the matter.

I insist that the management of a complex society must be divided into definite sections and each subjected to definite rules. If each organ of society were allowed to regard the public interest always as a whole, unrestrained by any specific references or rules, there would be no criterion by which any matter could be traced to any particular agent and any agent be called upon to give an account of his specific functions. Only under a clear division of competences and by subjection to definite rules, therefore, can the management of society be conducted responsibly; and only in these conditions can public opinion scrutinise and guide the functions of Government. I maintain that a policy of Full Employment can

be conducted separately, on its own merits: and must therefore be so conducted. The principle of neutrality which I have advocated in this connection is but a variant of the principle of separation of economics from politics. The latter maxim has recently fallen into discredit; partly on account of its abuse by those who upheld it to bar the State from fulfilling its humanitarian obligations; and partly through the influence of Marxist Socialism which has weakened the sense for the ordered division of powers which alone can preserve society from arbitrariness, corruption and oppression. We must restore respect for this maxim once more. Keynes has discovered and defined a disharmony in the capitalist mechanism (long suspected by its various critics) which prevents it from automatically achieving Full Employment. It falls upon the State to modify henceforth its functions, as guardian of the monetary system, so as to supplement the defect defined by Keynes. The task is novel and delicate; the problems involved are inflamed by the illusions of our time and by the false cures applied in bygone years. In these circumstances it is imperative that the new ground for which the State shall be responsible should be strictly delimited. There is an obvious, clear and simple way of doing so: a policy for Full Employment should be primarily concerned with Full Employment—and with nothing else. It should leave to other sections of governmental machinery, which are competent to deal with them, the issues of social security, equality, efficiency, and all the rest of them. Co-ordination between the various departments of society is necessary—but that is a different matter from having no separate departments at all.

There remains, however, yet another aspect of this question to be dealt with. It has been argued—particularly by Sir William Beveridge—that a purely monetary solution of Full Employment is insufficient since the additional demand may fail to exert itself in the direction in which unemployment is to be found.¹ Even though Beveridge concedes that workers must be expected, at least in the long run, to change their occupation in accordance with changing demand, he suggests that in the meantime they should be relieved from unemployment by engaging them in suitable public works. He demands that the Government should plan special public works and control private investment with a view to the reduction of such residues of unemployment.

I wonder whether such suggestions have ever been considered in concrete terms by those who advocate them. I suppose it would be

¹ Sir William Beveridge, *Full Employment in a Free Society* (1944), p. 185.

generally admitted to-day that the state of chronic depression, which has been our bane, can be conquered, and conditions of boom—of a buoyancy similar to that of the peaks of business activity in earlier phases of capitalism—can be permanently maintained, without recourse to any but general monetary measures. It is clear also that the limits to which monetary circulation would be expanded in order to maintain Full Employment would be mainly limited by the danger to monetary stability from the rising demands for labour which threaten to set in motion an inflationary spiral of rising prices and wages. Given therefore a certain mobility of labour and given also the measure of wage control which is both practicable and acceptable to the public, the amount of labour which will have to remain unemployed in order to satisfy the current demand for labour without giving rise to a progressive advance in wages, will be approximately fixed. In these circumstances any public guarantee of employment given to a group of workers who, but for that guarantee, would become unemployed, would necessitate a compensatory reduction in monetary circulation, reducing employment again to its former level.

We would be faced then with the following situation. First, in view of the high level of general business activity there would be less justification than ever within recent memory for public support for individual industries. Secondly, unemployment would be narrowed down to a point which may well render any support of such kind ineffective in raising the general level of employment. And thirdly—we may add here—there would be no trace left of the usual cyclical fluctuations which make it possible to assign support, with some degree of rationality, to certain industries, on the basis that they are only temporarily depressed. Any insolvent enterprise would have as good a claim as another to demand public support, and no government authority could equitably withhold aid from one such enterprise if it had previously given it to another. Support for individual branches of industry has, even in conditions crying urgently for relief and incomparably more suitable for the judicious application of this particular remedy, never been put into effect without causing justifiable resentment for sheltering inefficiency, bolstering monopolies and inviting wire-pulling by interested groups. We must protest therefore against an attempt to lay down a system of such interventions for a future state of maximum monetary circulation when there would be hardly, if any, justification for such interventions left and rational criteria for their application would be completely lacking.

Such schemes moreover becloud the fact that unemployment can be eliminated on any massive scale only by unbalanced public expenditure. In fact when Beveridge's Report on Full Employment, which is essentially based on the technique of unbalanced expenditure, proceeds to adopt and give prominence to a programme under which the State would guarantee the continued operation of particular stricken industries, it abandons its rational grounds. And in view of the weighty principles which it thus affects and the political emotions which it thus rouses it can hardly fail to originate some dangerous popular illusions.

CHAPTER VII

SUMMARY AND WIDER HORIZONS

Usefulness of Theory. When early in the nineteenth century the battle for Free Trade was victoriously brought to an end and leadership towards further progress was taken over by the humanitarian movement aiming at social reform, this movement was not supported but often opposed by the adherents of classical economic doctrine. The main advances of social progress had to be achieved during the last 100 years or so in deliberate disregard of economic orthodoxy.

To-day this has changed. It is the privilege of our generation to bring to a close a difficult period of conflict between the teachings of theory and the necessities of progress and to embark on great reforms supported by a revised understanding of economic, and particularly monetary, matters. Modern economics has reached a point from which clear perspectives for action become visible. A great era of bold yet realistically balanced reform may follow.

I would like to formulate once more in this closing chapter the main guiding lines for the new departure. But before I can do that there is a difficulty to meet. There is a tendency, particularly in Britain, to deprecate theoretical guidance in public affairs and to distrust simple formulae. Now I fully appreciate that the foundations of society, of nationhood and good government, must remain inarticulate; and I can see elements of the inarticulate, purely traditional, foundations of government properly entering into all branches of public affairs, down to their ultimate details. I am aware of the great achievements of English civilisation, gained in avoidance both of French Rationalism and German Profundity. I recognise the dangers of intellectual excesses and shall refer in a moment to the exaggerations which have brought so much discredit on the theory of Free Trade. I recall with gratitude how the Humanitarians, led by Shaftesbury, did much of their great work by flouting the doctrines of the economic science of their time; and how it was later left to 'money cranks' to keep alive by most inadequate arguments an, alas, only too justified revolt against the ruling orthodoxy. Yet I would maintain that such experiences can properly serve only as warnings against doctrinaire cocksureness, and that they must not prejudice us against systematic thinking and its application in public affairs.

In any case the opinion that British public life has never been guided, and successfully guided, by sharply formulated theoretical thought is quite erroneous. There can be few parallels in any country's history to the continued and profound influence of economic theory on public life during the first two-thirds of the nineteenth century in Britain. Adam Smith and his successors were then the prime masters of British economic policy. The Hammonds describe how 'Adam Smith and Malthus were becoming as familiar in parliamentary debates as Cicero and Virgil'. And while no doubt some of Adam Smith's influence was excessive and harmful, its bulk has formed the very foundations of modern industrial prosperity in Britain. For another example take Jeremy Bentham. There can be no more typical 'intellectual' than Bentham; yet his doctrine influenced the reform of law and administration in Britain to an extent for which it is hard to find a parallel in the history of any country. Nor can it be denied that this influence was highly salutary. Sir Henry Maine wrote of it 30 years after Bentham's death:

It is impossible to overrate the importance to a nation or profession of having a distinct object to aim at in the pursuit of improvement. The secret of Bentham's immense influence in England during the past thirty years is his success in placing such an object before the country. He gave us a clear rule of reform.

It is safe to conclude that a deliberate refusal to consider novel theories and to accept logical conclusions from such theories in matters concerning public policy is both intellectually reprehensible and contrary to the best precedents of British political life. Intuitive wisdom must be vindicated without obscurantism. Doctrinaire extravagance must be avoided: but not at the cost of pampering intellectual flabbiness and timidity.

Yet even so there is a difficulty—at least so far as the application of modern financial theory is concerned. Some economists and men of affairs, while prepared to entrust their policy to the guidance of modern financial theory, would prefer not to emphasise this openly. They wish to avoid causing unnecessary shocks to the public by putting forward a straightforward policy of monetary expansion. They think it may be better for the authorities to introduce such policies in a veiled form, while pretending to remain faithful to financial orthodoxy. They believe that in view of the prevailing errors about the nature of money this is the only practicable method to pursue; and that no Government could hold power on other grounds and still less retain among businessmen the measure

of confidence necessary to make its policy workable. They seem to believe that so long as the Government is prepared eventually to do roughly the right thing, it does not much matter if it pretends all the time to adhere to wrong principles.

I can see no advantage in following such a course. A Government which would be preparing (more or less deliberately) to stave off unemployment by unbalancing the budget even while condemning such a course as unsound, would in the end do much more harm than good. It would have to postpone action until conditions had become very bad, and such action as it could eventually take would inevitably be 'too little and too late'. Moreover, any benefits from this kind of action would lie under a shadow of fundamental unsoundness. It would all happen as in 1931 when Britain, breaking at long last with former professions, took the right financial course by going off the gold standard—only to cause a severe setback of business confidence and a general feeling of national failure.

Few great social problems are likely to be solved in the dark by methods which leave the public uninformed and unconsulted and deprive the Government of guidance by public criticism and support by public co-operation. The problem of unemployment will certainly not be solved in this fashion. A misdirected public opinion will not understand, for example, why it has to put up with a considerable amount of residual unemployment; nor why the squeezing of this residue should involve rapidly mounting sacrifices in the form of restrictions on the use of money. It will ask for the impossible, while forcing the Government at the same time to go round in circles, and to heap pretence upon pretence in order to maintain the appearance of adhering to its avowed principles.

The mental health of nations is to-day even more important, because more delicate, than their physical condition. People will go through a heavy ordeal uncomplainingly, if they feel that they are doing something sensible, while they will revolt in comparatively comfortable conditions if they feel lost and aimless. There would be little use therefore in carrying out a rational policy of employment which people would not be allowed to understand. In a great question of this kind they must be offered the opportunity to participate rationally, deliberately and responsibly.

The Position To-day. What is it then that modern economic theory can offer to the world? Nothing—unless the world is prepared to accept much less than demagogues will freely promise it. Plans for eating our cake and having it too are always plentiful, and economic theory will always remain the Dismal Science

engaged in unmasking such fallacies. Only by fully recognising our limitations can we concentrate our efforts on effective reform.

We are standing to-day at the close of a hundred years of ceaseless rebellion against the theory and practice of capitalism. That rebellion has at last borne fruit in the discovery by Keynes of a fundamental deficiency in the adjustment of monetary circulation under capitalism. It is our privilege to build on these new foundations; but we cannot build properly unless we first resolutely dissociate ourselves from all the false starts, from all the vain illusions which a century of fruitless rebellion has bequeathed to us.

I see these illusions embodied to-day in the idea of a Socialism promising to cure all economic evils by nationalisation of capital, and I believe that we must totally remove the temptations of this promise if we are to make rational use of the Keynesian renewal of economic thought. From the middle of the nineteenth century onwards Marxist Socialism came to represent the great fundamental alternative to existing capitalistic conditions. By the turn of the century its teachings had become accepted by the majority of progressive people on the Continent of Europe and by a large part of them in Britain. And as the century advanced the socialist movement came near to absorbing all that was progressive, humane and intelligent in the mind of the age. The promises which it held out were comprehensive. 'Socialism to its votaries', writes the historian and former Marxist Franz Borkenau, 'is not primarily an affair of economics. Or, rather, economics in Socialism are really only regarded as means to an end. The socialist hopes that Socialism will bring about a society without inequality, oppression, war and violence. He expects the advent of Socialism to mark a fundamental change in human relations. He regards it as a moral and religious affair as much as an economic one. He cherishes hopes that mankind will be fundamentally changed through its introduction.'¹ These Marxist expectations were the driving force of the Russian Revolution in 1917 which carried it to victory and to power over an immense empire. These expectations are still alive or at least lie dormant in thousands of breasts to-day wherever a fundamental alternative to capitalism is desired and hoped for. It is our task finally to eradicate these expectations.

This is the lesson to be drawn from the course of the Russian Revolution. The disastrous collapse of the Russian experiment of 1920-21 for the establishment of a centrally planned and

¹ Franz Borkenau, *Socialism, National or International*, p. 34.

directed economy and the insight which has since forced itself with inexorable necessity on a desperately reluctant Government, that a modern industrial system can be conducted only on the lines of commercial profitability, is one of those hard-won lessons of humanity which must form the basis of all future civilisations. It teaches us that there exists and can exist no fundamental alternative to capitalism. It crushes all aspirations of conducting production otherwise than for the market. It explodes forever the illusion that a complex modern industrial system can be directed by a joint consideration of all its elements in the councils of a central authority. It demonstrates that administratively such a problem is utterly insoluble. It shows that whatever powers a central authority may assume over a modern economic system it is unable to direct the operations of its units; and that, lest they cease to function altogether, it must set them free and let them seek guidance from the pursuit of profit in the market. It reveals that for the last hundred years those who attacked capitalism in principle were wrong and those who defended it were right.

The continued maintenance of the state ownership of industry in Russia does in no way impair these conclusions. It is true that the Soviet State still acts as a holding company for all capital assets, and excludes thereby certain institutions which are essential for the management of such assets under private capitalism. It eliminates individual risk-bearing and accordingly admits of no investment market by which private investors are in the habit of revaluing industrial enterprises and of redistributing the available capital between them. But the absence of private risk-bearing for investments and of markets for investments is quite illogical—and only explicable on political grounds—in a system which bases the management of enterprises on the principles of profitability. There can be no economic reason why the resources incorporated, say, in a steam engine should be managed by different principles than resources which happen to be used up more rapidly: like coal, labour and oil. Why, in other words, durable productive resources should be excluded from the market which (even though hemmed in by fixed prices) is being used in effect for valuing and distributing those of a less durable kind. The reason can only be that the Government is reluctant to relinquish—in spite of all its disadvantages—a system on which its political power is embedded.

The disadvantages of State ownership even in the commercial forms practised in the Soviet Union are patent enough. In the absence of individual risk-bearing and of a market in capital

investment, enterprises cannot be granted commercial independence without falling into the irresponsibilities of the NEP. They have to be kept under a system of 'Treasury Control' which is both cumbersome and irrational; hampering enterprises, while virtually relieving them from the threat of insolvency.

These residues of Socialism persisting in the Soviet Union cannot be considered as fundamental features. The striking advantages of Soviet economy as compared with capitalism are due to its inflationary bias; and this difference would vanish once circulation under capitalism was rationally controlled and maintained by the State.

But the inexorably enforced retreat from Socialism in Soviet Russia teaches us yet further, wider lessons. It shows quite generally that legal power over enterprises does not confer effective control over them. That independence may be essential to the functioning of a subordinate unit: in which case it must be released from central direction, lest it stops functioning altogether. This principle effectively limits the possibilities of central direction—even assuming ideal efficiency, integrity, etc., of administration—and removes a wide field of tasks far beyond its scope. We must rigorously eliminate in its light certain habits of thought which are derived from Socialism. It is common even among distinguished writers to-day to speak disparagingly of 'the erratic course of private enterprise', of the 'disorderly scramble of competition', etc.; or for economists of repute to point out by careful analysis the imperfections through which the capitalist system fails to produce the harmonies postulated by Adam Smith, and to use such observations as an argument for central control. This reasoning must now be altogether rejected. Having recognised that the effectiveness of central direction is strictly limited, we have no longer any reason to presume that it can always provide a remedy when individual management fails. To suggest, for example, the establishment of an Investment Board 'in order to stabilise private investment', or the nationalisation of enterprises 'in order to assure a proper accounting of social costs'—without previously demonstrating by an administrative analysis of these tasks that they could, in fact, be centrally performed—now appears as indulgence in quite unfounded assumptions, left over from socialist habits of thought. We must strictly guard against such lapses in future.

The ground on which we must take our stand is capitalism—capitalism, however imperfect, however needful of urgent reform, but not replaceable by any fundamentally different system.

Another and very different kind of lesson which we have also to derive from the past hundred years of rebellion against the teachings of classical economics is the following. We must admit the grave, and in many ways fateful, error of the followers—particularly the popular followers—of economic orthodoxy in adopting a negative attitude with respect to social reform. This attitude was to no small extent a consequence of a wrong conception of the origins of unemployment. Political economy assumed that unemployment was due to the attempt to force wages above their natural economic level. There was no iniquity in the distribution of incomes, no arbitrariness of the employers' rule over the workers, no irresponsibility regarding the social repercussions of the factory system, that could not find a defence—appealing to political economy—on the grounds that any attempt to intervene against such evils would drive capital out of business and render labour unemployed.

Now that we are in possession of a correct theory of employment, this whole fateful complex of fallacies must be energetically repudiated. It is true that the economic system cannot work efficiently unless each of the participants is normally rewarded better for doing a more useful rather than a less useful job. But it does not matter in this respect *how much more* he gets in following the more useful line—provided he is offered a sufficient incentive to make him prefer it. The incentive will be sufficient, on the whole, if he thinks the reward to be fair. There is only one case—admittedly an important one—in which it may appear that a lower limit is set by objective criteria to the level of a fair reward. We cannot expect any person to bear risks unless we offer him chances of rewards which, on the average, will balance the risks. But the measure of risks involved in any particular case, and the actual chances offered by taking those risks, are so difficult to assess, that the balancing of chances and risks cannot in fact be carried out by objective methods. We are thrown back again therefore, even in this respect, on feeling our way in the light of experience, guided by our sense of fairness.

Thus the economic machinery determines the necessary *sequence* in the gradation of rewards, but the sense of fairness determines the necessary *steepness* of their gradation. Wages must admittedly remain limited by the productivity of labour; but redistributive taxation can modify income distribution in favour of the poorer classes, including wage earners, to any degree generally accepted as fair, without any harm to the efficiency of the economic machinery.

In order that any particular standard of social justice may be smoothly applicable, it is of course necessary that it should be widely if not universally accepted by all those concerned: gainers as well as losers. Greed and envy must be sufficiently restrained to allow the same, or similar, principles of equity to be accepted by rich and poor. Our task is to clarify our sense of economic justice and to establish sufficient agreement with regard to its demands. Equality or even approximate equality of earnings is certainly not popularly considered as equitable in our time, and hence equalitarian systems, unless restricted to very small like-minded groups, invariably fail. The obstacle, however, is not in the economic machinery which can be operated in conformity to any standards of economic justice, provided that these are widely enough accepted by society as a whole.

Besides, the main inequalities of wealth under capitalism and much the greater part of *undeserved* advantages of wealth (assessed by whatever reasonable standards), are not due to disproportionate earnings but to the present institution of inheritance. This institution forms no part of the economic machinery of private enterprise. In fact, the modern form of industrial property owned in shares of small denomination would make a quick rotation and dispersal of ownership at the death of each owner quite easy. Far from being repulsive to a system of competitive private enterprise, a rapid redistribution of property would represent the most perfect embodiment of its principles: by equalising opportunities completely it would provide an ideal field of free competition for all talents.

The abolition of inheritance might, and probably would, cause economic disturbance to-day: but only because it is not in fact acceptable to the generally prevailing sense of equity. There is a widespread sentiment that people must be allowed to make some special provisions for their dependents and also that the handing on of certain property, particularly of land from father to son, preserves valuable family skills and traditions. However, both the equalisation of incomes and the equalisation of opportunities by curtailing inheritance might have gone much further but for the fact that progressive thought was misdirected for some time past towards the idea of nationalisation and took little interest in reforms under capitalism—many socialists looking upon such measures as bribes, offered in order to appease fundamental opposition.

A further great error of classical economics—with which this book has been principally concerned—was its assumption that the supply of money required to run the economic system satisfactorily

is capable of adjusting itself automatically. We must accept the fact discovered by Keynes that the supply of money is determined by a mechanism which may very well keep it at an insufficient level; and that in the modern Western world the tendency is definitely towards a chronic lack of circulation and a correspondingly depressed level of employment. We must affirm the responsibility of the public authorities to supplement monetary circulation by infusing into it the requisite additional streams of new money.

In a way this approach amounts to a new and wider re-formulation of the great discovery of classical economy that wealth lies in production and trade and that money is but a 'veil' covering the real exchange of goods. This discovery had unfortunately misled economists to accept the famous 'Say's law' with its denial of the possibility of a general over-production. With this fallacious conclusion now abandoned and the necessity of regulating the flow of money to meet the requirements of trade recognised, a number of new conclusions follow.

First, it follows that just as the acquisition of money does not in itself increase the wealth of a nation, so the expenditure of money by the Government is in itself no burden to the national economy. If the Government's operations for supplementing the circulation of money lead to a mounting score of monetary issues, such issues should be considered as entirely irrelevant to the well being of the nation. This being recognised, the 'principle of neutrality' also follows: namely, that Governments must use existing channels of public expenditure for issuing new money and not undertake new public enterprises or deviate in any other way from the otherwise desirable course of economic policies, merely for the purpose of bringing money into circulation.

A second conclusion is: that since the supply of money has to be adjusted so as to secure the requisite level of employment, money cannot remain linked to gold. If monetary circulation is to fulfil the requirements of employment policy, it cannot at the same time fulfil the requirements of a fixed relation to existing gold reserves.

Thirdly, we may conclude that, for the reasons just mentioned, the money of one nation cannot remain linked in fixed relation to that of another: the rational Rate of Exchange between any pair of currencies being that which gives them equal buying power in both countries. This is the rate which tends to establish itself by trade and which once internationally established maintains the universal balance of international payments.

The nature of tariff wars and modern monopolistic tendencies

now appears in a new light. A money supply linked to gold limits the amount of employment that can be granted. In the nineteenth century this limitation was not so severe as it has become now (at least in the West) owing to Capital Saturation and, more even perhaps, to increasing Rates of Saving. When the total volume of employment is unsatisfactory the scene is set for a greatly intensified struggle to gain a foothold within the flow of trade. In a state of general depression the gold standard sets nation against nation and impels them to fight each other by tariffs for an increased slice of employment. Similarly, within the several countries the various industries will in these conditions find the public favourable to their plans of making secure their share of employment by price agreements and restricted production.

The Keynesian theory reveals that tariffs and price agreements do not create mass unemployment, and that their abolition would not restore Full Employment. But neither can the opposite claim, that employment can be stabilised by trade restrictions, be upheld in this light. Restrictions on entry, etc., can only secure to one section of the people the privilege of retaining their position in a particularly secure branch of the economic system. It does nothing to stabilise a satisfactory level of employment. Yet we must count with an irresistible tendency to set up trade restrictions particularly between nations, so long as the general level of employment continues to be chronically and severely depressed. Free Trade, both external and internal, can only flourish in a medium of reasonably Full Employment; and in fact we may hope that a protracted phase of general economic expansion would rapidly reverse the mood favouring trade restrictions, and open the way to the achievement of a new era of Free Trade.

Free Trade through Full Employment must be the aim. The purpose of Free Trade remains, as Adam Smith saw it, to secure the best division of labour between nations, regions and individual producers. The ideal of Free Trade cannot be fully realised in practice; but even so, individual commercial competition in the market remains the only mechanism by which any acceptable division of labour can be adjusted. Price agreements and restrictions on entry to industry are in general clumsy and lawless methods of governing industry. They can be operated only by arbitrary decisions which open the door to intimidation and corruption. Such lawless methods are particularly pernicious when practised between nations as partners to them. They embitter and poison international life more than any other issue.

Unfortunately, the inevitable existence of different national currencies necessitates a series of adjustments which cannot be left to the free play of international markets. Whenever a country readjusts the level of its domestic employment it induces a change in the volume of its foreign purchases which may well require to be curbed or canalised by governmental action. However, it may be hoped that once nations are all agreed on the principles of Full Employment, they will jointly accept a set of rules by which common decisions can be smoothly reached for dealing with such situations.

The new era of Free Trade must rest on the willing acceptance of the risks of continuous economic adaptation and progress to which we are irrevocably committed. There is no way of assuring 100 % employment in an economy based on a far-reaching complex division of labour. As I write to-day in Britain there prevails an intolerable state of over-employment, yet there are over 40,000 registered workers seeking employment at the labour exchanges. Normally there must be a good deal more; and there is no conceivable way of eliminating this residue while maintaining the complex economy on which our existence depends. Workmen must accept this; nor can businessmen and investors be permitted to shirk their function of risk-bearing. A considerable amount of commercial risk remains involved and must be borne in the pursuit of enterprise even under conditions of reasonably Full Employment.

We must even face the risk of being caught in a 'distressed area'. The economic decline of a region within a country, and even that of a whole country, which has lost its outside customers on which its livelihood depended, must be accepted as a normal risk of economic progress. Society can and must give relief to the stricken populations, but this must not involve the offer to buy goods the production of which has become uneconomical.

In the controversy between *Laissez Faire* and Planning my outlook leans distinctly towards the former. I wholeheartedly accept the guidance of the 'invisible hand' for the mutual adjustments of productive units. I repudiate the mood of millenist planning, which I regard as a symptom of decline emanating from the moral crisis of our Western civilisation. Yet I have proposed some measures which many people may call 'planning'. If we understand by 'planning' the setting aside—in whatever instance—of an alleged automatism, which economic science used to consider as inescapable, and its replacement by government action, then I certainly have suggested definite measures of 'planning'. The distribution

of incomes and property has been recognised as a proper subject of legislation, and the State charged with the maintenance of a satisfactory level of monetary circulation. Though I have considered private property as fundamental to the operation of our economy, I have accepted property rights only on the grounds of their usefulness—and to the extent of their usefulness—to the community. I have also realised that future prosperity will very much depend on the understanding and skill of economic administration and I have envisaged a degree of responsibility borne by the future politician for the functioning of economic life which far exceeds that of earlier days. Instead of merely voting public expenditure and distributing its burdens, Parliament should come to regard the entire distribution of the National Income as subject to its annual decisions. It should, moreover, have the momentous choice to make every year, of a desirable level of monetary circulation and decide to accept a corresponding quota of residual unemployment. The co-ordination of such decisions with the policies of foreign Governments, required in order to minimise the fluctuations of exchanges, should add further to the new tasks of public economic policy.

Such institutions cannot function unless the people feel a new confidence in their Government and show a new measure of restraint and responsibility in making demands on the Government. Confidence and restraint closely depend on one another. When people can trust their Government they will refrain from wrecking its policies by excessive sectional demands. If, on the other hand, they feel that they are not getting a fair deal, they naturally strike out for any advantage they can grasp at whatever cost to the general interest. The pre-condition of confidence is a clear, truthful, generally understood policy, fundamentally acceptable to all. It is high time therefore that modern economic theory and policy should be presented unhesitatingly to the public in all their striking and at first somewhat bewildering simplicity.

APPENDIX I

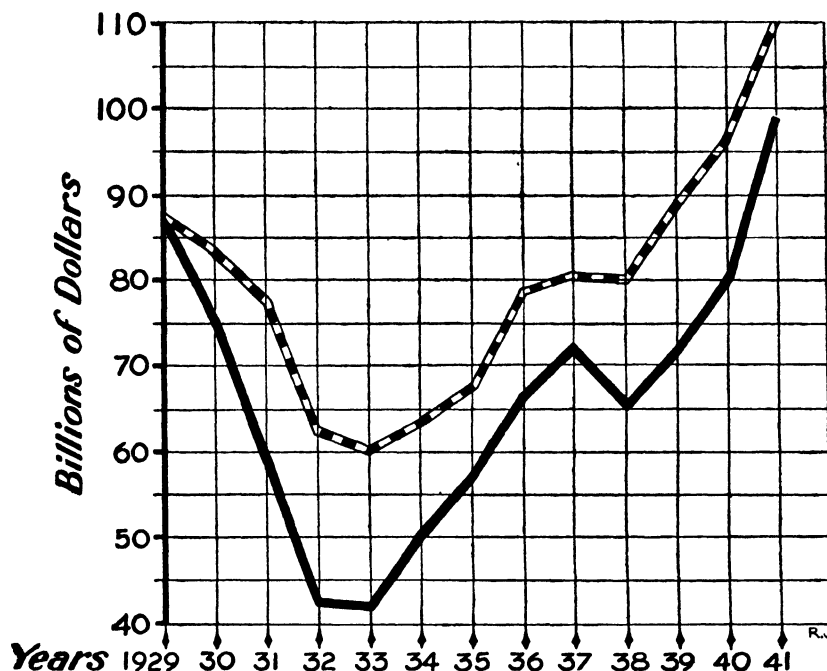


Fig. 5. National Income in United States 1929-1941. Full curve: Nominal Income (as in Fig. 3, p. 15 above). Dotted curve (*From League of Nations Year Book 1935/6 and 1941/2.*): Real Income calculated over wholesale index; 1929=100.

APPENDIX II*

Approximate Percentage Distribution of Tax Revenue between Types and Sources (1938)

	U.S.A.		U.K.	
	Federal	State and local	Central	Local
Alcohol, tobacco	7	2	17	—
Customs	4	—	8	—
Sales taxes	—	7	—	—
Motoring	2	8	7	—
Income, profits taxes	21	—	35	—
Inheritance taxes	—	5	8	—
Local rates	—	33	—	20
Wage taxes†	5	5	4	—
	abt. 40	60	abt. 80	20

* I am greatly indebted to Mrs U. K. Hicks for letting me use the above table of figures compiled by her for a forthcoming publication of her own.

† Social insurance contributions in U.K., payroll taxes in U.S.

In 1938 tax revenue per head of population was £26 in U.K. and \$114 in U.S.

APPENDIX III

The total value of fixed capital in Soviet Russia was estimated according to *U.S.S.R. Handbook* (1936) quoted by Colin Clark¹ for 1928 and for 1934 at 49.4 milliard (p. 18) and 112 milliard roubles (p. 39)—at 1933 prices—respectively. The purchasing power of the rouble in case of investment goods is found (p. 38) at 36 roubles to the £; hence the values of fixed capital for 1928 and 1934 become £m.1380 and £m.3100 respectively. The difference of £m.1820 divided over six years gives an average rate of £m.303 net investment per annum. The total national income is valued by Colin Clark (p. 40) at £m.2923 for 1927-8 and at £m.3546 for 1934; which gives an average of 9.4 % net investment per annum.

No country can invest suddenly from one year to another a large part of its income. Even the most comprehensive rearmament campaign fails to effect this before it has run for about two years, because the redirection of national effort can only be small until new plant has been constructed for the purpose. This is true to a much greater extent in an agricultural than an industrial country. The standard of nutrition in the agricultural countries like Hungary, Rumania and Russia suffered little during the war years of 1914-17 (see livestock chart for Russia). The main sources of new investment are: (1) the production of existing heavy industries, and (2) imports. The heavy industrial production of Soviet Russia at the opening of the period in question, that is, the year 1927-8, is valued by Colin Clark at £m.305 per annum (p. 38), of which £m.83 were needed to cover current depreciation and repairs (p. 19). By 1934 heavy industrial output had risen to £m.738 (p. 38), of which (not less than) £m.247 were required for depreciation, etc. (p. 41). Imported machinery has been valued for the whole First Five-Year Plan period at £m.100.² Thus it is difficult to see how the average investment could have reached any average value exceeding £300 p.a. between 1928 and 1934. Moreover, the rate of investment for the first part of the period was lower than for the latter part. The sum for 1933 and 1934 is estimated by Colin Clark (p. 40) at 26.8 milliards = £m.740, leaving an average investment of £m.270—or 8.5 % of the estimated average national income—per annum for the period 1928-32, in which general suffering was greatest.

The figures of 9.4 % for 1928-1934 and of 8.5 % for 1928-1932 fit in excellently into the series of percentage investment calculated for Russia more recently by Colin Clark.³ He gives for the average net investment in per cent per annum for the period 1925-30 7.8%, and for the period 1934-7 14.2%.

¹ *Critique of Russian Statistics* (1939). The pages in brackets refer to this publication. All £ sums are valued on the British market at 1934 prices.

² M. Polanyi, *The Contempt of Freedom* (1940), p. 80.

³ Colin Clark, *The Conditions of Economic Progress* (1940), p. 406.

APPENDIX IV

Countering inflation: Problems of a Labour Government

(Reprinted from *The Manchester Guardian*, 3 March 1947)

It is only ten years since Lord Keynes made it clear to us that modern capitalism automatically tends towards deflation and unemployment. He was right in the circumstances, but the social and economic changes of the intervening period have brought about an altogether opposite tendency. The modern activist State, based on the power of labour and intent on asserting its responsibility for the economic life of the nation, tends to flood the channels of trade with an excess of purchasing power. Its programme of industrial re-equipment and expansion of social institutions brings into circulation an increased flow of money, while its policy of equalising incomes reduces the propensity to save.

An activist Government, confident of its ability to act as chief economic regulator, readily embarks on the task of readjusting the economic choices unbalanced by an excessive flow of purchasing power. Thus, while it goes on pumping into the markets more money than there are resources to be bought at the prevailing prices, it also keeps in operation an elaborate system of licensing for the purpose of pressing the excess of money back again into savings. By far the greater part of the limitations imposed to-day on economic life in Britain form no part of any overall economic plan, but are mere emergency measures for keeping an inflationary demand within reasonable bounds. This is typical of a modern socialist economy and can be observed also in Russia, though inflation there is due partly to different reasons.

Unfortunately it is impossible to replace rationally by central direction the individual decisions of many thousands of economic agents. That remains true even under an authoritarian system, as the Russians had already discovered in 1921. It must be the pivot of any policy dealing with the dislocation of British industry to-day.

Causes of unbalance. The White Paper¹ shows that for 1947 net investment will be 13 % of the national income and the deficit in the balance of payments will be 4 % of the national income. This means an infusion into circulation of a sum equal to 9 % of the national income, which will have to be balanced by an equal amount of saving. In 1938 voluntary savings were just about 9 %. But there are powerful factors tending to reduce voluntary savings for 1947 well below this figure. They are: (1) Reduction of income available to consumers (about in proportion to the reduction in the quota of consumption from 78 to

¹ *Economic Survey for 1947*, published by H.M. Stationery Office, Cmd. 7046, February 1947.

66½ %). (2) Equalisation of incomes. (3) Accumulated war savings. (4) Depletion of consumers' personal possessions.

While it is impossible to assess accurately the total effect of these factors, I suppose no one will quarrel with a guess that they will reduce voluntary savings in 1947 by at least one-third as compared with 1938. That would leave a minimum of 3 % of an estimated national income of £8,500,000,000—that is, about £250,000,000—pouring into circulation in excess of voluntary savings.

In a state of full employment the steady infusion of money into circulation in excess of saving must, in the absence of Government intervention, cause a runaway inflation. To-day the Government intervenes by price control and rationing. It forces people to stand in queues and to wait for permits. While they wait, the money for their purchases is also kept waiting in their pockets or bank accounts and forms there a pool of savings. It is unreasonable, therefore, to blame the Government for its tardiness in granting licenses for the purchase of raw materials, etc. So long as aggregate demand (in money) continues to exceed the total value of industrial resources offered for sale, the only alternative to runaway inflation is to keep every prospective buyer of resources waiting and force him thereby to save his funds for the time being. Provided the Government currently disposes of all resources under its control, it is not causing any delays that would be avoidable under the prevailing system of controlled inflation.

This method of forced saving is, of course, ruinous to industry—particularly when there are, as to-day, expanded productive capacities left over from the war. Each factory has enough orders booked to carry on its business, but each is short of labour, of raw materials, of machinery, etc. Managers must buy what they can, and when they can. Careful matching and synchronisation must be abandoned for the hand-to-mouth methods so strikingly described in the *Manchester Guardian's* recent survey of British industry.

Budget surplus. As an alternative to price control and rationing, the Government may try to cut down by taxation the amount of money available for consumers to spend. The proceeds of such taxation should form a budgetary surplus, to be definitively cancelled after collection. The tax surplus would have to be larger than the amount by which monetary infusion exceeds voluntary saving. It would not be enough to tax away £250,000,000 (or whatever the exact figure resulting from such a calculation as outlined above would be), for this would release an appreciable amount of savings from the income left over from taxation. The cut would have to go far enough to offset these reductions in saving. A surplus of £400,000,000 to £500,000,000 might be required.

Much more study is needed to settle the best form of taxation by which to collect the necessary budgetary surplus. My own preference would be to start with an increase of income tax and a reduction of all

salaries. Labour will not accept a return to freer markets to-day unless its recent achievements in economic equality, social opportunity, and material security are upheld in the process. Yet some increase of indirect taxation will hardly be avoidable; the remarkably high general turnover tax of Soviet Russia illustrates the necessity of such taxation in circumstances of this kind.

There is one big obstacle to any deflationist policy which should be stated clearly. In the present sellers' market for labour, unemployment is reduced to about $2\frac{1}{2}\%$. In a normal state of circulation it would be higher—perhaps $3\frac{1}{2}\%$. Though this figure may eventually decline again when improved housing conditions make labour more mobile, there is no doubt that a reduced monetary circulation would have a serious effect on labour's security of tenure. When employers can once more pick and choose among applicants for jobs, their personal power over their employees is bound to increase. Labour opinion may not agree to this unless the disciplinary powers of management can be rooted more effectively in the consent of the workers in each factory. Here lies a crucial task for a programme of balanced circulation.

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