Wage Rates, Credit Expansion and Employment

by

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A large part of modern economic doctrine proceeds in terms of aggregates. Aggregate demand, national income, aggregate investment, aggregate consumption, have become the conceptual tools of a growing number of economists; and the relationships between the prices of different commodities, and between prices and wages, are now largely neglected. Characteristic of this development is the Report on Full Employment by a committee of the United Nations, published late in 1949. The small attention which this report pays to the relationship between prices and wages contrasts with the crucial rôle attributed to that relationship not only by the classical writers but also by Lord Keynes.

For economists who think exclusively in terms of aggregates it is an easy step to the conclusion that all that is necessary to overcome unemployment is to raise aggregate money demand. This conclusion, combined with the assumption that the monetary and fiscal authorities always have control over the volume of aggregate demand in an economy, has produced a tendency to ascribe to these authorities a much greater power over the degree of employment than they actually possess.

The purpose of this article is two-fold. First, it aims at dispelling a widespread misconception, the notion, propagated by popularisers of the views of Keynes, that *all* cases of unemployment can be successfully remedied by a monetary and fiscal policy aimed at raising the volume of aggregate demand. Secondly, it attempts to restate the conditions that are necessary if such a policy is to succeed in bringing about full employment.

I. *Keynes and the Classics.*

It had generally been assumed, on the basis of the classical doctrine, that if money wage rates were flexible, *i. e.* if there were, in the words of Pigou, « thorough-going competition among wage-earners », full employment could always be achieved. The general reasoning behind this conclusion was that in each firm output proceeds to the point where price (under perfect competition) or marginal revenue (under imperfect competition) equals marginal cost, and since a reduction in money wages — brought about by the bidding for work of the unemployed — will lower the firms' marginal cost curves, it will also increase their optimum output and the amount of labour they employ. The Classics assumed that, with given technique and capital resources, marginal real costs would rise as more output was produced by combining more labour with those resources; or, in other words, that the marginal physical product of labour would fall as more labour was employed, and so therefore would the real wage or the remuneration of labour in terms of the product. The level of employment and the level of real wages (or the ratio of output prices to wage rates) were thus mutually dependent; and if, through collective bargaining contracts or minimum wage laws, the general level of money wages and therefore of real wages was set too high, part of the labour force would be unemployed.

Keynes challenged the classical argument that a reduction in money wages will always increase employment. The classical writers neglected to observe, he said, that in certain circumstances a general fall in money wage rates may cause prices to fall in the same proportion, as the result of the reduction in aggregate money demand. In that event there will be no fall in real wages and no increase in the volume of employment and output. There may thus be no way open to labour as a whole, says Keynes, by means of which it « can reduce its *real* wage to a given figure by

making revised *money* bargains with the entrepreneurs » (1).

Keynes proceeded to give his own account of the mechanism through which aggregate money demand would, given certain conditions, be prevented from falling in proportion to the reduction in money wage rates. His explanation ran in the following terms: the reduction in money wage rates would, in the first instance, lower the total wages paid to and received by those already employed; hence it would reduce the amount of cash required in the system for the « transactions » purpose; the cash thus set free would be available for satisfying the « speculative » motive and in consequence, given what he considered to be normal conditions, the interest rate would fall, and investment, and with it employment, would rise. The conditions that had to be satisfied in order for this mechanism to work were first, that the interest rate should not already be so low that it could not be lowered any further, and secondly, that investment should be responsive to changes in the interest rate.

Although Keynes thus conceded that a reduction in money wage rates would, given the appropriate conditions, lead to an increase in employment, he did not advocate a policy of reducing money wage rates as a cure for unemployment. He agreed with the Classics in one essential point, however. He believed that an increase in employment was necessarily associated with a change in the wage-price relationship or, in other words, with a fall in real wage rates. « In a given state of organisation, equipment and technique », he says, « the real wage earned by a unit of labour has a unique (inverse) correlation with the volume of employment » (2).

In Keynes' system this fall in real wage rates is brought about not by lowering money wages but by raising aggregate money demand. The increase in aggregate demand leads to an expansion of output; at the same time, since the cost curves are upward sloping, prices rise and, assuming constant money wage rates, real wages fall. Keynes favoured a policy of raising aggregate demand in preference to one of reducing money wage rates mainly for three reasons:

The first is that money wage rates are « sticky » downwards; under modern conditions they either cannot be lowered at all or cannot be lowered fast enough.

The second reason is that money wage rates are also, so he assumed, « sticky » upwards; wage-earners, although unwilling to work for lower money wages, are willing to accept lower *real* wages brought about by a rise in the prices of wage-goods. He considered this situation to be the *normal case*. He says: « reductions of real wages » arising from changes in the purchasing power of money « are not, as a rule, resisted unless they proceed to an extreme degree » (3). He thus regards the raising of prices through an increase in aggregate money demand, while hourly money wage rates remain constant, as a more practical method of achieving the same result as might in principle be achieved by lowering money wage rates.

The third reason given by Keynes for preferring one policy to the other is that falling money wage rates and prices, by leading to the expectation of further falls in the future, are likely to exert a depressing effect on the incentive to invest in the present. Continually falling wage rates, he says, will have an unfavourable effect on investment. The best thing would be an immediate large reduction to what is considered a bottom level; but this, he adds, is scarcely practical politics « under a system of free bargaining » (4).

The raising of aggregate demand can be achieved by the « orthodox » methods of monetary policy (*i. e.* by lowering the interest rate) provided the interest rate has not yet reached bottom level, and provided investment is elastic with respect to the interest rate. These two conditions are, we should notice, identical with those that would be required in order for a policy of lowering money wage rates to be successful in increasing employment. If they are not satisfied, only direct government expenditures, *e. g.* on public works, can secure the increase in aggregate demand.

As regards the first condition, flexibility of the interest rate downwards, Keynes thought it conceivable that if the rate had already fallen to a level so low that people regarded it as an absolute minimum above which it was bound to rise again in the future, it could not be reduced further, since at that level every one would prefer to hold cash rather than a debt which yielded so low a rate of return. In that case the monetary authorities would lose control over the interest rate. « But », says Keynes, « whilst this limiting case might become practically important in future, I know no example of it hitherto » (5). As regards the second condition, the responsiveness of investment to the interest rate, Keynes believed that investment was elastic with respect to the interest rate, so that a fall in the latter would always increase investment.

There has been a tendency subsequently among economists, particularly in countries with low interest rates, to place more emphasis on the practical importance of the « limiting » case where interest rates could not be reduced any further, and also to minimise the influence of the interest rate on investment. Still more recently, however, there have been indications of a movement away from this latter view that the level of the interest rate has an insignificant influence on investment decisions.

II. *Developments after Keynes.*

Since Keynes' « General Theory » appeared the discussion has developed in a number of directions.

First, a more rigorous analysis has been made of the relationship between money wage rates and the level of aggregate money demand on the one hand, and the volume of employment on the other. We refer in particular to Pigou's « Employment and Equilibrium » (1941, second edition 1949), and Lange's « Price Flexibility and Employment » (1944). This literature is highly technical and we cannot here review it in detail. We need only point out that the most significant difference, as regards the problem we have been discussing, between this literature and the « General Theory » concerns the *mechanism* through which a reduction in money wage rates leads to an increase in employment. The broad conclusions are essentially the same: *i. e.* it is only under certain special conditions, mainly concerning the expectations of the entrepreneurs, that an appropriately large reduction in the level of money wages will fail to produce full employment. The emphasis remains on the impracticability of money wage reductions or on the difficulty of securing them rapidly enough.

Secondly, some economists have sought to show that it is not essential for real wages to fall as aggregate demand and output increases. Keynes himself acknowledged this as a possibility in an article (6) in which he answers attempts to show statistically that real wages have actually risen in periods of increasing activity rather than the other way round. He thought, however, that the statistical evidence was inconclusive, especially as other investigations had produced the opposite result. And although he agreed that *a priori* argument could show *possible* cases where real wages might rise as output increased, he thought that the *probability* of these cases arising in practice was small. We shall examine this point in some detail below.

A third line of thought has led to what we shall call the « degenerated » version of Keynes' theory. In its most popular form it is reduced to saying that all that is required to eliminate unemployment is an increase in aggregate money demand even if this is brought about by raising money wage rates. This version ascribes no importance at all to the *relative* levels of prices and wage rates on which Keynes himself laid so much emphasis. For what Keynes proposed was not that aggregate demand should be increased by raising money wage rates, but that aggregate demand should be increased without raising money wage rates, or without raising them proportionally. If they were raised proportionally, the attempt to achieve full employment would, he pointed out, be frustrated (7). The argument that an increase in purchasing power *per se* is the cure for unemployment is now, however, widely used by trade union leaders, particularly

(1) J. M. Keynes: *The General Theory of Employment, Interest and Money* (1936), p. 13.
(2) Ibid., p. 17.
(3) Ibid., p. 14.
(4) Ibid., p. 265.
(5) Ibid., p. 207.
(6) J. M. Keynes: *Relative Movements of Real Wages and Output*, Economic Journal, March 1939.
(7) *General Theory*, Chapters 20 and 21.

in the United States, in support of claims for wage increases.

The fourth development has been the increasing concentration, especially in the United States, on what is now called the «secular stagnation thesis» and on the policy recommendations associated with it. Keynes himself discussed the possibility of secular stagnation in the « General Theory », but did not think that it would arise in the very near future. American economists, in particular Professor Hansen, have elaborated the thesis; and the fear that secular stagnation is a real danger for the American economy has haunted academic as well as government economists. The essence of the thesis is that a highly industrialised economy, of which the population is not increasing rapidly, will reach a point where it is so well provided with capital equipment of all kinds that the remaining private investment opportunities are no longer sufficient fully to absorb, at positive rates of interest, the large volume of savings associated with the high national income of the economy. There will then exist a persistent tendency for the rate of saving to run ahead of the rate of investment thus reducing aggregate demand. As a result the national income (and with it employment) will fall, until it has reached a level low enough to reduce the volume of savings to an amount just sufficient to match the existing limited private investment opportunities. At this level of the national income the economy will be in equilibrium, but it will be an equilibrium characterised by permanent unemployment.

To deal with this situation it has been proposed that the government should close the gap between savings and private investments by public investments, and that it should use the taxing instrument to redistribute income in favour of the lower income groups whose propensity to save is low.

It may be doubted whether the danger of secular stagnation is a real one even for the United States. No practical signs of it have yet appeared. The greater danger appears to be that the policy recommendations for dealing with secular stagnation, which have been persistently urged upon the authorities over a number of years, and have already done much to contribute to the discouragement of economy in government spending and to the maintenance of artificially low interest rates, will be applied in a situation where no secular stagnation exists, and where their effect will be to create inflationary tendencies, or to aggravate those which already exist for other reasons. On theoretical grounds also the validity of the secular stagnation thesis is open to doubt (8). It is in any case clearly irrelevant to present day conditions in most countries, including those of Western Europe. In Italy, for instance, it is only too apparent that there is a scarcity of capital goods rather than a superabundance, that rates of interest are high, that the population is still increasing substantially, that the income per capita is low and the propensity to consume correspondingly high.

III. *Credit Expansion and Employment in the Short Run.*

Let us now return to the argument mentioned earlier that it is possible to absorb the unemployed, by increasing aggregate money demand, without a fall in real wages. Those who have held that real wages need not fall have based their argument on two principal possibilities: first that output can be expanded at constant (or falling) marginal prime cost, and secondly, that monopoly (or imperfect competition) is a prevalent condition in the economy, and that the degree of monopoly decreases as output increases.

In discussing the first possibility, we should remind the reader that we are at present arguing for the « short run », *i. e.* we assume a given state of organisation, technique and equipment. We are not now concerned with what may happen over the longer period as the capital equipment of the economy gradually expands, and as new and improved techniques are discovered. Our problem is to consider what will happen if we want to achieve an increase in output in the immediate future during which changes in the amount of equipment and in the state of technique can be of only insignificant magnitude. We may then distinguish two cases.

(8) Cf., for example, A. C. Pigou, *Employment and Equilibrium*, Chapter IX and Note to Chapter IX.

The first is one of *generalised* surplus capacity. This implies the existence not only of unused labour but also of unused equipment and surplus inventories, or, in Keynes' words, « perfect balance in the quantities of various unused resources » (9). Marginal prime costs may then be constant at least over a considerable range as output is expanded, and in some firms they may even be falling over some part of that range. Even here, however, we should notice that actual output is likely to approach capacity output in some lines faster than in others; this means that, as aggregate demand increases, rising costs and bottlenecks will sooner or later be encountered in some lines at least, and that (apart from possible exceptions for monopolistic conditions which we shall discuss below) prices in those lines will begin to rise.

The second case is that where, from the beginning, surplus capacity is either non-existent or « spotty » (*i. e.* confined to certain sectors of the economy). Here it is no longer true that increases in output can take place in all or almost all lines at constant (or falling) costs. In most lines it will be possible to achieve such increases only by drawing into use older and less efficient units of equipment, or by bringing into use units normally held in reserve for meeting breakdowns, or by working the units already in use for extra shifts. In any case costs will rise for one reason or another — the lower efficiency of the extra units, the increased stoppages for making repairs, the extra wear and tear on the equipment, leading to higher repair costs, or the higher wage rates which have to be paid for shift work. The ease with which output can be expanded will, of course, vary in different industries: in some costs will rise faster than in others. While, for example, in some industries it may be possible to introduce extra shifts, in others, which are for technical reasons already working continously twenty-four hours a day, this will be impossible. Thus, while at one extreme there may be industries in which output can be expanded, to some extent at least, at constant or almost constant costs, at the other extreme there may be industries in which it is not possible to increase production at all.

There remains the argument that even if costs rise as output increases, prices will not necessarily follow because, when imperfect competition or monopoly prevails over most of the economy, the degree of monopoly or of imperfection of competition (or the degree to which producers take advantage of it) may decrease as output increases. Here again we need to distinguish two sub-cases: the first is monopoly or monopolistic competition and the second is oligopoly.

Under monopoly, or more generally monopolistic competition, each firm regards itself as being faced by a downward sloping demand curve for its product, and it takes the shape and position of this curve as being approximately independent of its own price and output policy, and of the reactions of other firms to that policy. Now, if it is true that as aggregate demand increases the elasticity of the demand curves confronting the firms for their products also increases (so that a fall in the price asked by one firm enables it to capture demand from other firms more easily than before), the price which each firm will charge — in order to equate marginal revenue and marginal cost and thus maximize its profits — may fall instead of rising as output expands, despite the fact that the firm is on the rising part of its marginal cost curve. Those who contend that the elasticity of the demand curves will in fact increase (and that hence the degree of monopoly will decrease) as aggregate demand expands rely on the proposition that increasing wealth leads to a larger proportion of income being spent on luxury goods, for which the demand is more elastic than it is for necessities. On the other hand, it may be argued (10) that as people become better off they also become less sensitive to price differences, and are therefore less likely to shift their purchases from one firm to another on account of such differences; and this factor will work in the direction of increasing rather than decreasing the degree of monopoly as output expands.

In the second sub-case, that where oligopoly prevails, each firm cannot regard the demand

(9) *General Theory*, p. 300.

(10) Cf. R. F. Harrod: *The Trade Cycle* (1936), p. 86-7.

curve for its product as being even approximately independent of its own price policy: it has to take account of the possible reactions of other firms to a change in the price it charges for its product. Here prices are determined not by the rule that marginal revenue should equal marginal cost, but by the rule that price should equal the average « full cost » including a « mark-up » or profit margin. It has been contended that under oligopoly, because each firm fears that if it raises its price other firms will follow, prices are « sticky », and will not immediately rise in response to an increase in demand (and/or costs). It may equally well be argued, however, that the size of the mark-up or profit margin depends on the «discipline» of the group, and that an increase in demand is likely to strengthen the discipline and therefore to increase the degree of monopoly or the size of the mark-up (11); consequently prices may rise even faster than demand and costs.

Thus it would seem that, failing empirical evidence to the contrary, we are not justified in supposing that any general tendency exists for the degree of monopoly to decrease as demand and output increases, rather than the reverse, and that we cannot rely on this factor to prevent a fall in real wages.

On the basis of the preceding analysis we may distinguish three principal variants of the situation with which the authorities trying to increase employment may be faced.

The first is one where generalised surplus capacity exists, so that a considerable expansion in production can take place in almost all lines without increases in costs, and where such bottlenecks as may appear in the early stages of the expansion can be eliminated, for some time at least, by drawing in increased supplies of goods from abroad. This latter condition presupposes, of course, that the country under consideration has ample foreign exchange reserves, or can draw on foreign credits (12). So long as these « ideal » conditions, of generalised surplus capacity coupled with the possibility of drawing on foreign resources, exist, credit expansion is beneficial. The price level will not rise perceptibly, and output and employment can be increased without any perceptible lowering of real wage rates. It should be noticed, however, that even under these favourable circumstances a policy of credit expansion will not always succeed in increasing employment. For if, and so long as, the outlook of the entrepreneurs and the general public is pessimistic, the additional money may simply be hoarded, *i. e.* used to satisfy their liquidity preference, instead of increasing aggregate demand.

The second situation is one where surplus capacity is either non-existent or confined to certain sectors, and where bottlenecks cannot be eliminated through additional supplies from abroad. Under these conditions an increase in aggregate demand, through credit expansion, will lead from the beginning to a rise in the price level. Employment will increase provided money wage rates do not keep pace with the increase in prices, *i. e.* provided real wages are allowed to fall. In following an expansionist policy under these conditions account must, of course, also be taken of the repercussions of the price rise on the country's balance of payments position.

The third situation which we may distinguish is one where, as in the second, output cannot be increased at constant prices, nor can the price level be kept constant by drawing increased supplies of goods from abroad, and where *in addition* money wage rates are, in one way or another, tied to the cost of living index. In this situation credit expansion can, as Keynes himself pointed out (13), only lead to inflation without exerting any effect on the level of output and employment.

Which one of these three situations prevails in any country at any time is, of course, a question of fact. And in any particular instance some of the relevant facts may be difficult to ascertain. Thus, for example, it may be difficult to determine over how wide an area of the economy output can be expanded at constant prices. About one point, however, there seems to be little doubt. Whereas Keynes assumed it to be a fact — which indeed he made one of the cornerstones of his analytical structure — that wage-earners do not insist that money wage rates should keep pace with increases in the cost of living, it is becoming increasingly apparent that this assumption is invalid for modern conditions. In most countries where free collective bargaining still prevails to-day, it is true that even if the tie-up between money wages and the cost of living does not formally apply over the whole of industry, it applies in certain key industries, and wage increases in these industries tend to set the pace for increases in the others. This fact inevitably has the effect of severely restricting the number of practical cases in which credit expansion will be an effective remedy for unemployment.

(11) Cf. Oscar Lange: *Price Flexibility and Employment*, p. 41.

(12) Precise reasoning leads, however, to the conclusion that some price rises will usually be necessary in order to induce imports of those goods in which shortages have begun to develop at home.

(13) *General Theory*, p. 284.

IV. *Illustrations*.

Empirical observation shows that credit expansion has been successful in achieving or maintaining full employment in some cases and unsuccessful in others.

A state of full, or even over-full employment has existed during and since the war in the so-called « controlled » economies, *e. g.* those of Great Britain, Holland, Norway, Sweden and Denmark. We shall here single out the British case for a short discussion.

In the years 1940 to 1946 the money supply in the British economy expanded rapidly. From 1947 on the annual rate of expansion was small (see Table 1). Nevertheless, government representatives, economists and journalists, in the years 1947 to 1949, rightly warned the public that strong inflationary pressures continued to exist in the British economy. These pressures emanated less from the slight increase in the money supply which took place in those years than from the overabundance of money that had been created in the preceding years. Part of this money had been held in idle cash balances, which the holders could be expected to spend as soon as the relaxation of physical controls permitted. A rough calculation of the income velocity of money indicates both the existence of large idle balances at the end of war, and the tendency for these balances to be spent during the past three or four years. The income velocity (calculated as the national income at factor cost (14) divided by the total volume of money), which was 2.83 on the average in 1938, had fallen to 1.66 in 1946, but had climbed back to 1.97 in 1949.

The British economy, in these postwar years, has often been described as one in which « too much money was chasing too few goods ». Indeed, ever since the beginning of the war aggregate demand has increased more rapidly than the physical volume of production, with the result that prices have risen continuously. The wholesale price index, which stood at 95 on the average in 1939, had risen to 212 in 1949. Thus rationing and price controls did not succeed entirely in suppressing the inflationary effects of the excessive creation of money during the war and immediate postwar years.

Table I

TOTAL MONEY SUPPLY IN THE UNITED KINGDOM DURING AND AFTER THE WAR
(*milliards of pounds sterling*)

Year	Money Supply (yearly average)
1938	1.64
1939	1.79
1940	2.21
1941	2.72
1942	3.14
1943	3.56
1944	4.07
1945	4.42
1946	4.96
1947	5.04
1948	5.12
1949	5.19

Source: International Monetary Fund, International Financial Statistics, June 1950, p. 126.

(14) The figures for national income at factor cost are: 1938 Lst. 4,638 million; 1946 Lst. 8,249 million; 1949 Lst. 10,226 million. If, alternatively, we base the calculation on the figures for gross national expenditure at market value (1938 Lst. 5,728 million; 1946 Lst. 10,197 million; 1949 Lst. 12,834 million) we obtain as our velocity figures: 1938 3.50; 1946 2.06; 1949 2.47. If we base the calculation on the figures for gross national expenditure at market value *plus* the deficit in the balance of payments on ordinary current account or, that is, *plus* the net amount received from abroad from gifts, loans and sales of assets (of which the totals are: 1938 Lst. 5,798 million; 1946 Lst. 10,567 million; 1949 Lst. 12,904 million), we obtain as our velocity figures: 1938 3.53; 1946 2.13; 1949 2.49. The movement is thus the same whichever method of calculation we use. (The income and expenditure figures are taken from *National Income and Expenditure of the United Kingdom 1946 to 1949*, April 1950, Cmd. 7933).

The overabundance of purchasing power in the hands of the public was undoubtedly one of the principal reasons why a state of full employment could be maintained during those years. In order to complete the explanation of the success of Britain's full employment policy we need, however, to consider a number of other factors. Let us look first at the movement of wage rates.

The British government abstained even during the war from fixing wage rates. It advocated a policy of voluntary restraint on the part of the individual trade unions. After the devaluation of the pound in September, 1949, the Trades Union Congress (acting in support of the policy advocated by the government) tried to obtain a more formal undertaking from its affiliated unions to suspend sliding scale arrangements, and to refrain from asking for wage increases for one year unless the cost of living index rose beyond a certain figure (allowing an increase of between 4 and 5 per-cent over the initial figure).

Table 2

INDICES OF WAGE RATES AND COST OF LIVING IN GREAT BRITAIN

Date	Index of Wage Rates	Index of Cost of Living
(Sept. 1939 = 100)		
July 1940	113	121
» 1945	150	134
» 1946	163	132
» 1947	167	131
(June 1947 = 100)		
January 1948	104	104
July 1948	106	108
January 1949	108	109
» 1950	110	113

Source: S. R. Dennison: *Wages in Full Employment*, Lloyds Bank Review, April 1950, pp. 20 and 22.

The figures in Table 2 seem to indicate that up to, and including, the year 1947 the policy of voluntary restraint was not successful: wage rates rose more rapidly than the cost of living index, *i. e.* it appears that real wages increased. Only from January, 1948 on is a small fall in real wages noticeable. There are, however, several reasons why these figures cannot be taken at their face value.

First of all, the old cost of living index (used in Table 2 up to 1947) was based on working class expenditures before 1914. The « basket of goods » which a typical worker bought in the 'forties was, naturally, very different from the basket he bought in 1914. « A recalculation, taking account of the changed pattern of consumption, shows that by 1945 the cost of living of working-class families had risen not by the 30 per cent. of the official index but by about 50 per cent » (15). If this is true, real wage rates actually declined, on this account alone, during the war years, and remained roughly stable in 1946 and 1947.

Secondly, the cost of living index does not reflect the quality deterioration of the goods which took place after 1939.

Thirdly (and most important), the index does not and cannot register the effects of the rationing system and of changes in it. The rationing of many consumers' goods in Great Britain reduced the individual's freedom of choice in the spending of his income, and restricted the satisfaction which he could obtain from a given money wage. This has made it impossible (for trade union leaders as well as others) to measure changes in real wages with any accuracy. The rationing system has also enabled the government to control more or less rigidly (according as it tightened or relaxed the rationing controls) the real living standards of the wage-earners. Money wage increases do not necessarily mean increased living standards (even if the cost of living index remains stable) provided the physical controls over consumption are tightened simultaneously; and stable money wages are quite compatible with rising living standards if the controls are relaxed.

Summarising, we may say that the inflationary conditions prevailing in the British economy, the restraint exercised by the trade unions in their demands for wage increases (particularly after the devaluation of the pound), and the government's control over living standards through rationing, have all been instrumental

(15) S. R. Dennison: Loc. cit., p. 21.

in helping to preserve a state of full employment in Great Britain.

It is doubtful, however, whether all of these conditions will continue to prevail in the future. The policy of stabilising money wages, followed more or less successfully since the devaluation, is in process of breaking down. The Trades Union Congress General Council acknowledged in June, 1950 that its policy of « rigorous restraint » on the basis of an accepted formula had become unworkable (16), and that all that it could now do was to urge the individual unions to exercise voluntary restraint. A large number of wage claims was already outstanding at that time. If all of these and more are pressed in the future, the result may be both to imperil the level of employment and to create inflation, unless the government either imposes a « national wages policy » to take the place of collective bargaining, or again tightens the rationing controls which it has been progressively relaxing since the spring of 1949.

It is not difficult to point to practical instances where credit expansion, in the absence of other necessary conditions, has failed to secure the absorption of the unemployed. There is first the case of Italy prior to September, 1947. In spite of a rapid credit expansion between June, 1946 and September, 1947 unemployment remained at a high level. If our thesis is correct, the fact that money wage rates were tied to the cost of living index was largely responsible for this lack of responsiveness of the level of employment to the credit expansion.

The history of credit policy in the United States offers further examples. The period 1933 to 1936 is a case in point. Unfortunately the unemployment figures for this period are unreliable; but it is generally recognised that the deficit financing by the government during the period failed to make any great dent in the volume of unemployment. The explanation usually given is that the entrepreneurs, because they continued to take a pessimistic view of future business prospects, preferred to improve their liquidity rather than to increase output.

(16) At its annual conference in September, 1950, the Trades Union Congress voted against all restrictions on demands for wage increases.

More recently, in the period from July, 1949 to March, 1950, credit expansion again failed to bring about the absorption of the unemployed. The first half of 1949 was characterised by a slight recession which raised the unemployment figure from a low of 1.6 million in October, 1948 to 4.1 million in July, 1949. By March, 1950 the unemployment figure was even slightly higher than it had been in July, 1949. Yet credit expansion had proceeded at a rapid pace during the intervening nine months. Total loans and investments of the weekly reporting member banks of the Federal Reserve System rose from 62.5 milliard dollars at the beginning of July, 1949 to 66.6 milliard at the end of March, 1950. This latter figure was the same as that reached by loans and investments in October, 1948, *i. e.* at the time when the level of unemployment was at its minimum.

It is not quite clear what the reason is for the failure of the policy of credit expansion to absorb the unemployed in this instance. There have probably been two main contributory factors, however:

First, the credit expansion coincided with another round of wage increases in the form of contributions by the firms to pension funds for their employees, contributions which raised production costs in just the same way as outright wage increases would have done.

Secondly, employers are reluctant to hire additional workers if they think that they may need to dismiss them again after a relatively short interval. The reason is partly that the employers are anxious to keep good relations with their trade unions, and partly that they have to pay a dismissal compensation of one month's pay.

Whatever the explanation, the fact remains that the credit expansion in the nine months from July, 1949 to March, 1950 was not effective in reducing the number of unemployed.

V. *Long Run Possibilities.*

Throughout the preceding sections, it will be remembered, we were concerned — apart from the secular stagnation case — with the conditions for increasing employment with a « given state of organisation, equipment and

technique ». We concluded that, under this assumption, except in the case of generalised surplus capacity, employment can be raised by increasing aggregate money demand only if prices rise and real wages fall; and that, if real wages are sticky, an increase in aggregate demand will only lead to inflation. We may then have to wait for the working of the much slower process of improvements in organisation, technical progress, and expansion of the stock of capital equipment. This process, by increasing the real productivity of labour, enables the economy to support more workers than before at any given level of real remuneration.

Proponents of a policy of credit expansion argue that such a policy is in itself an easy and effective method of forcing the pace of the growth of the stock of equipment above what can be achieved on the basis of voluntary domestic savings and foreign loans. Two sources of this « forced » increase in the stock of equipment are usually distinguished: the primary investments directly financed by the credit expansion, and the secondary investments financed out of the increased profits of firms created by the additional spending of those who are newly employed as a result of the primary investment projects. We must notice, however, that in order for the credit expansion to produce any significant increase in the stock of equipment, the same conditions are required as for it to produce a significant increase in employment; *i. e.* it is necessary that prices and wages should not rise in proportion to the increase in the volume of aggregate money demand. If these conditions are not satisfied, the attempt to maintain any given rate of increase in the stock of equipment through « primary » investments will require injections of doses of credit of constantly increasing magnitude, and will produce a galloping inflation. Similarly, the working of the secondary investment effect requires that, if prices rise, wages should lag behind. If wages are tied to the cost of liwing, the lag will be too short to allow of any significant additions to profits, and therefore to the stock of equipment, from this source.

One final warning note needs to be added. An increase in productivity brought about by additions to the stock of capital equipment (and by technical progress) will lead to an improvement in the employment situation only provided the trade unions do not press for general wage increases immediately the employment situation begins to improve. What is required is that temporarily — *i. e.* until the bulk of the unemployed have been absorbed — the general level of real wage rates should lag behind the rise in productivity. This does not, of course, imply that no upward adjustments of wages at all should take place: indeed some adjustments may be essential in order to encourage that mobility between trades and localities without which the maximum productivity cannot be achieved.

In fact there is a serious danger in all parts of the western world that the unions may continually exert pressure towards raising real wages even faster than the general level of productivity rises, and that this may push governments into a policy of continual inflation in a desperate effort to keep up the level of employment. Since mere inflation cannot, under the conditions assumed, secure full employment, governments may then be faced with the following dilemma. They will have the choice either:

1) of trying to maintain the free market economy, but of extending the principle of public regulation of monopoly power not only to corporations (to which it is already applied in some countries), but also to trade unions, *e. g.* by imposing compulsory arbitration in wage disputes, or

2) of resorting to a fully planned economy with its implication of full control over real wage levels.

The second course may be politically easier than the first, but it is not clear that it is in the best interests of the wage-earning classes. Apart from its encroachment on the freedom of choice of the individual, it has, as British experience shows, certain effects on the economy — the weakening of incentives and, partly bound up with this, the increasing rigidity of the production structure — which tend to slow down the rate of increase in productivity on which future improvements in real wage levels must depend.