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 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 twofold. 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.

1. 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 technical 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 «sporadic» 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’s 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 rate. He says: «Reductions of real wages arising from changes in the purchasing power of money are not, as a rule, resisted until they proceed to an extreme degree» (3). He thus regards the raising of prices through an increase in aggregate money demand, while hourly money wages 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 key thing would be an immediate large reduction to what is considered a bottom level; but this, he adds, is scarcely practical policy «in a system of free bargaining» (4).

The raising of aggregate demand can be achieved by raising wages, prices and output. «The orthodox» method of monetary policy (i.e., by lowering the interest rate) provided the interest rate has not yet reached the 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’s 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 conclusions remain 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 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 at 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 proportionately. If they were raised proportionately, the attempt to raise money wages would be defeated, he was, frustrated (7). The argument that an increase in purchasing power per se is the surest cure for unemployment is, however, widely used by trade union leaders, particularly...
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 governmental 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 prosperity 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 (b). 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 low.

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 price 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 amounts of equipment and in the state of technique can be of only insignificant magnitude. We may then distinguish two cases.

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

(b) General Theory, p. 300.

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 «spoony» (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 new and less well equipped 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, and the increased stoppages for making repairs, the extra wear and tear on the equipment, leading to higher repair costs, or the added wage rates which have to be paid for shift work. The case with which output can be expanded will, of course, vary in different industries; in some industries 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 continuously 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, 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 maximise 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 the basis 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
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 today, it is true that even if the tie-up between money wages and the cost of living does formally apply over the whole of industry, it applies in certain key industries, and wage increases in these industries act to raise the cost of living in 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.

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 1938, national income (at factor cost) 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, and the opposite has been the case with prices.

The wholesale price index, which stood at 96 on the average in 1939, had risen to 212 in 1949. This rising and falling of prices did not succeed entirely in offsetting the inflationary effects of the excessive creation of money during the war and immediate postwar years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Money Supply (millions of pounds sterling)</th>
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</thead>
<tbody>
<tr>
<td>1938</td>
<td>1.70</td>
</tr>
<tr>
<td>1939</td>
<td>1.71</td>
</tr>
<tr>
<td>1940</td>
<td>1.72</td>
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<tr>
<td>1941</td>
<td>1.73</td>
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<td>1942</td>
<td>1.74</td>
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<td>1943</td>
<td>1.75</td>
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<td>1944</td>
<td>1.76</td>
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<td>1945</td>
<td>1.77</td>
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<td>1946</td>
<td>1.78</td>
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<td>1947</td>
<td>1.79</td>
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<tr>
<td>1948</td>
<td>1.80</td>
</tr>
<tr>
<td>1949</td>
<td>1.81</td>
</tr>
</tbody>
</table>

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).

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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Index of Wage Rates</th>
<th>Index of Cost of Living</th>
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</thead>
<tbody>
<tr>
<td>July 1946</td>
<td>130</td>
<td>134</td>
</tr>
<tr>
<td>July 1947</td>
<td>135</td>
<td>136</td>
</tr>
<tr>
<td>January 1948</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>July 1948</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>January 1949</td>
<td>106</td>
<td>106</td>
</tr>
<tr>
<td>July 1950</td>
<td>110</td>
<td>110</td>
</tr>
</tbody>
</table>

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 (15) and that all that it could do now 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 were pressed in the future, the result may be both to imperil the level of employment and to create inflation, unless the government imposes a "national wages policy" to take the pace 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 secrete the absorption of the unemployed. There is 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.

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
Italian Agriculture in the Framework of the New Customs Tariff

by PAOLO ALBERTARIO

We are by now (1) in possession of sufficient data to enable us to form an objective judgment on the most important probable economic-technical effects on Italian agriculture of the special customs regime which will shortly regulate our foreign trade.

An examination of the new customs tariff proves that the Italian Government, in drawing up the duties and fixing the rates for agricultural products, has followed those principles of liberal trend which are contained in the international agreements on this matter already accepted by Italy. Obviously, this judgment has to be considered in the light of some inevitable realities of our agricultural structure and of transitional contingencies, calling for a limitation of a free trade approach and therefore deserving to be emphasized at the outset.

Limiting Conditions for a Free Trade Policy.

1. — Firstly, attention should be drawn to the structural peculiarities of fundamental Italian agricultural branches as for labour and capital and the limited transferability of both of them. In a country like Italy, lacking in raw materials, with a very scarce natural productivity and a population ever on the increase, these limitations are effective factors of organic weakness especially in agriculture, which is the foundation of the life of the country.

I shall never forget the impression which I received, some years ago, on visiting some agricultural farms in Kansas, one of the most important cereal growing regions in the United States. My eyes met vast extensions of highly productive flat land for which the advisability of artificial fertilization did not yet need to be considered, although the yield was from 18 to 24 qrs. of wheat per hectare. There farm organization is of the greatest simplicity: there is no need for any particular levelling or draining of the land, and there is a considerable lack of fixed investments and even of internal communications; tree plantations are almost unknown and the buildings reduced to the farmer's house and, at most, some sheds. The arable surface is destined as to 2/3 to the cultivation of wheat and 1/3 to lucerne meadows, utilized by dairy cows of high yield. Well, in that territory, where the farmers have an extension of 200/250 hectares — the typical size of a farm in our Po Valley — the same person who administers the farm also provides the manual labour, since the extensive use made of mechanical equipment and operating machines requires little manpower. Wheat cultivation, on the whole, calls for two operations, at the start and at the finish of the cultivation cycle. The farmer, with his mechanical equipment, only goes over his field twice a year: in the late autumn, for the sowing (the tractors draw, at the same time, the three-ploughed ploughs, the disc harrow and the cornseeder machines); at the beginning of summer, for harvest (the combine leaves behind it the sack of wheat already tied up).

One instinctively compares that system with the series of operations which the cultivation of wheat calls for in our regions, rendered fertile by centuries of work on reclamation and soil improvement, but above all by assiduous...