THE relation of Keynesian economics to the problems of underdeveloped countries is a subject which has received wide attention from our economists recently. In a series of articles in the Indian Economic Review (Vol I, Nos 1, 2 and 3), Dr V K R V Rao called attention to the special features of underdeveloped economies and enquired to what extent the Keynesian propositions apply to these economies. It was a subject of discussion in the 1953 session of the Indian Economic Association, and a good many papers were devoted in the Conference to a consideration of this problem. In general, the authors, despite differences in emphasis on specific points, seem to come to the conclusion that Keynesian economics, in so far as it is formulated in the General Theory of Employment, Interest and Money, has little validity in the context of underdeveloped economies, that Keynesian involuntary unemployment is not the kind of unemployment from which these economies suffer, and that the problem in these economies is one of long-term economic development rather than the attainment of 'full employment' in the Keynesian sense. Broadly speaking, I find myself in sympathy with this general attitude. I have always felt that, whatever the generality of the General Theory, it may be in the limited sense in which the term 'general' was used by Keynes, the applicability of the propositions of the General Theory to conditions of an underdeveloped economy, such as India, is at best limited.

As early as 1942, commenting on certain aspects of an important book on 'India's Fiscal Policy' in which an appeal was made to the Keynesian theory of involuntary unemployment in support of a general policy of protection for India, I said:

"Has the argument any particular relevance to the case of India? Is there anything like involuntary unemployment in this country? Is it not pertinent if one asks for a demonstration of its existence before one accepts any judgment of policy which begs so delicate an assumption? Mr Keynes, I think, had the case of his own country in view when he enunciated his theory of involuntary unemployment. A country which is in an advanced state of economic development, where population is fast coming to a stationary level, and where, further, there exists a strong trade union organisation to resist any reduction of money wages, provides a peculiarly suitable ground for the application of Keynes' theory.... Indian economy, on the other hand, is characterised by an entirely different set of conditions. It is not capital saturation, and surely not a refusal of the people to multiply that accounts for a low marginal efficiency of capital. The trade unions are just in their infancy and are not sufficiently organised, so that there is still scope for 'plasticity' of wage rates. General considerations suggest that mass unemployment, in this country, is mostly seasonal, although partly also it is due to inertia and lack of mobility of capital." (The Indian Fiscal Policy, Indian Journal of Economics, October, 1942.)

I developed this thesis at some length in a course of extension lectures that I delivered under the auspices of the University of Lucknow in the autumn of 1950, publication of which has been held up on account of my pre-occupations outside the University for the last three years. The following notes are intended to offer a summary of the attitude that I hold on the matter, for whatever it may be worth.

2. The propositions of the General Theory are by no well-known. I would, however, restate them in a slightly different order, placing emphasis on certain ingredients and bringing out one or two implied assumptions which are relevant to the present enquiry.

Let me start with the definition of 'full employment', from which is derived the core of Keynesian economics—the concept of involuntary unemployment. Full employment signifies a state in which any person willing to work at a wage rate that corresponds to his economic contribution to social product finds a job at that wage. To put it in more precise terms, in a state of full employment, the marginal unit of labour gets a wage in real terms, the utility derived from which is equal to the disutility that the work involves. From this it follows that in a state of involuntary unemployment, the utility of wage exceeds the marginal disutility of labour. Keynes does not offer an independent theory of wages. He accepts the ordinary theory that the real wage rate is equated-in equilibrium to the marginal productivity of labour. But—and this is important—he emphasises that real wage is a derived concept and does not represent the actual operation of the market. The wage bargain in the market runs in money terms, and the real wage rate is derived from the money wage rate relative to the prices of wage-goods.

The period of reference is a short period over which, among other things, capital equipment and technique are given and constant, these being the result of past investment. Labour is employed upon a given capital equipment, and is pushed up to the margin of profitableness. A short period equilibrium is thus envisaged for the economy as a whole. However, although Keynes' analysis runs in terms of a short period, it does not preclude longer-run inferences. For, a long period is a succession of short periods, each endowed with a different capital equipment and carrying the legacy of the past.

Propositions supporting the Keynesian theory of involuntary unemployment can now be set forth.

(i) Money wage rate is fixed more

*It is important not to miss this. For it provides the basis of the familiar stagnation theory. If—to anticipate our story—the 'marginal efficiency of capital' depends at all upon the stock of capital existing currently, then, in the absence of favourable exogenous factors, such as innovation, growth of markets, etc, every act of new investment over a given period creates difficulties for the next period by enlarging capital equipment and lowering its prospective yield. However, I shall have occasion in a later section to refer to this matter, for, as I feel, so far as this longer-run aspect of Keynes' theory is concerned, the conditions of underdeveloped economics are in sharp contrast with those of mature economics.
or less conventionally between employers and trade unions. This given money wage rate provides the measure of the magnitudes involved in the analysis. Consumption, investment, prices, etc., are measured in terms of 'wage-units', i.e., the money wage received by representative unit of labour.*

(ii) Prices of wage-goods, along with the general price levels, are determined by the expenditure on consumption and investment.

(iii) Expenditure on consumption goods is limited, with reference to a given prospective income, by the extent to which income-earners are inclined to spend rather than to save (marginal propensity to consume).

(iv) Expenditure on investment is limited, given the market rate of interest, by the prospective marginal net yield of investment (marginal efficiency of capital).

(v) A decision not to spend on consumption does not necessarily mean a decision to invest; the rate of interest which is ordinarily supposed to be the connecting link between the two, is determined not just by the propensity to save but by the preference of the public to hold cash (liquidity preference).

(vi) The expenditure on consumption and expenditure on investment, between them, make up the aggregate demand price of output as a whole, and short period equilibrium is struck at a point where the aggregate demand price is equated to aggregate supply price.

(vii) Under conditions of equilibrium, therefore, the price level may be too low relatively to the given money wage rate, or, in other words, the economy may be too badly set up for full employment to be secured. More than full employment can be ruled out, for the workers have the option not to work if the real wage rate fails to compensate for the disutility of labour. But less than full employment is a probability; indeed it tends to be a normal feature of utility of labour. But less than full rate fails to compensate for the disutility of employment, the mechanism by which this could be effected is absent, unless special measures are taken.

(ix) These special measures include (a) transfer of income from the relatively rich to the relatively poor—thus causing a tendency to an increase in the propensity to consume- (b) maintenance of a low rate of interest as an inducement for larger investment. However, the potency of these measures is limited. A tax on higher incomes, in so far as it touches fixed costs, would prejudice investment. On the other hand, the effectiveness of interest policy is dubious, if only because the liquidity preference of the people being what it is, there is a limit below which the rate of interest cannot be brought down. Hence what is indicated is a more direct measure, namely, public investment through deficit finance, unprofitable as it may seem at first sight. A dose of public investment, in so far as it is not at the expense of private investment, would release forces making for increased consumption, whereby the increment of aggregate output will be a multiple of the initial investment, the value of the multiplier depending upon the marginal propensity to consume.

[Students of Pigou's Economics of Welfare will notice that, in the context of involuntary unemployment, the multiplier formula provides another conspicuous example of a discrepancy between marginal private net product and marginal social net product. Equilibrium implies that an additional dose of investment by itself is unprofitable and would not be undertaken in the private sector. But when the secondary repercussions touching the various consumption goods industries are taken into account, the investment turns out to be socially profitable and hence it should be undertaken by the State. Indeed the so-called theory of employment as a whole seems to me to be capable of being subsumed under the general theory of allocation of resources from which it is so often so sharply differentiated. A deviation from full employment can be shown to be just an indication of wrong allocation, less than full employment being interpreted as a forced surrender to leisure at the expense of a more preferred object—real income. If this unemployment is caused by a low expectation of profit relative to the rate of interest, that again is amenable to treatment in terms of the time structure of production and consumption—the temporal excellence, of allocation. And so on, one could proceed. Personally I am inclined to believe that not only would some kind of integration between the theory of employment and the theory of allocation give formal elegance to our analytical structure, it would also provide a check to certain misdirections of public today. A theory of employment conceived outside the framework of the theory of allocation is apt to neglect long run consequences. An employment policy, unless checked up by an allocational norm, is apt to contain seeds of ultimate disruption. Neglect of these considerations seems to me to inform much of that part of Keynes' General Theory which relates to capital and interest, and I doubt very much if his prescriptions regarding interest would at all be compatible with a long survival of classicism which was so near to his heart. But that is a different story.]

3. This is Keynes' General Theory in its pristine form. I have tried to bring out the essentials of the theory and to put it in a form which makes it inevitable that any pushing up of employment should be accompanied by a reduction in the real rate of wages. And of course this is what Keynes had in mind; the hypothesis is one of diminishing returns at or near full employment.

Now one who is acquainted with the conditions of an underdeveloped economy in which 'money' serves as the instrument of economic operations, in which these operations include borrowing and lending, and in which, further, the ownership of the means of production is divorced from the use of these means, which is to say that labour is divorced from capital,
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Wherever these conditions prevail, Keynesian technique of analysis applies. And these conditions are the conditions of capitalism in that special sense in which socialists would use the term. It is under capitalism that savers are distinct from investors, that net profit is the motive force behind production and employment, and that the rate of profit is determined in money as a result of a bargain between two parties—the employers and the employed.

To what extent are these characteristics present in the so-called underdeveloped economies? Even in India which, in respect of the stage of economic development though not in respect of per capita income, happens to be the most advanced among the underdeveloped South Asian countries, it is only over a small field that these conditions hold good. The organised sector of the economy, with its large scale industries and a fairly well-developed banking system, does not doubt come under the scope of Keynesian economics, for it presents features no less capitalist than those associated with the so-called advanced economies. But the place that this sector occupies in the national economy from the point of view of its contribution to employment is surely insignificant. The waste due to 'involuntary unemployment', if there is any, in this sector is surely of the second order of smalls when considered in relation to the total working population of the country. (Please see note at the end.)

A considerable part of the economy does not fall under money economy at all, and even where it does, in so far as the organisation of the industry is such that the worker works with his own tools (e.g. cottage industries), the level of activity is determined by considerations of gross income and not of net profit. All this explains why in this country the depression of the 'thirties did not affect employment so much as it did prices, and why, on the other hand, the stimulus to investment during the last war was almost immediately followed by inflation and a rise in money wages. If I am not mistaken, it is this aspect of the matter that Dr Rao brings out in the first article in the series. Dr M A Khusro seems to me to have, misjudged the relative significance of the constituents of Keynesian theory when, in an otherwise excellent paper, (Keynesian Theory of Investment in an Underdeveloped Economy, Indian Economic Association Papers, December, 1953), he shifts the emphasis from the multiplier to interest and marginal efficiency of capital. After all, even in the context of an advanced economy, marginal efficiency is an uncertain factor and the rate of interest is pf limited significance. May be interest policy would do some little trick here or there. Yet, in spite of Keynes,* concentration on this factor would lead us away from the more vital elements of the policy prescriptions which are associated with the General Theory. It is much more important to concentrate, as Or Rao does, on the marginal propensity to consume and income and not of net profit. All ties are limited, yet, when account is taken of the fact that most of these economies are characterised by a rapidly growing population, they should not normally lag behind the rate at which workers are inclined to save. If, in spite of glowing population, the marginal efficiency of capital in these economies is found to be low, the cause is to be sought not in Keynesian direction but rather in the direction of J B Say. If the curve of marginal efficiency of capital to be raised, what is needed is, as Nurkse has so beautifully shown (of K Nurkse, Problems of Capital Formation in Underdeveloped Countries, aply quoted by Dr Khusro, op cit, pp 37-38), a simultaneous development of a number of industries, the supply of goods in one creating demand for goods produced in others. And this involves an expansion in the stock of capital resources. The limiting factor in the growth of employment in any way with a full time is not so much a shortage of money as a shortage of real capital. With the existing capital equipment, even if we have full employment in the Keynesian sense, a large volume of unemployment will still remain in the physical sense. When capital equipment is low and population large, marginal productivity comes down to the level of marginal disutility of labour at a stage where unemployment still persists in the physical sense, though not in the Keynesian sense. But there is no, in the context of such economies, to enquire whether saving creates wealth, as it did in the nineteenth century England, or it destroys wealth.

4. The possibilities of involuntary unemployment is not denied, in so far as even an underdeveloped economy may contain an organised sector wherein the Keynesian propositions hold good. But its magnitude is not likely to be appreciable, if only because the marginal propensity to consume in a low level economy, despite huge inequalities of income, tends to be relatively high; and, although investment opportunities are limited, yet, when account is taken of the fact that most of these economies are characterised by a rapidly growing population, they should not normally lag behind the rate at which workers are inclined to save. If, in spite of glowing population, the marginal efficiency of capital in these economies is found to be low, the cause is to be sought not in Keynesian direction but rather in the direction of J B Say. If the curve of marginal efficiency of capital to be raised, what is needed is, as Nurkse has so beautifully shown (of K Nurkse, Problems of Capital Formation in Underdeveloped Countries, aply quoted by Dr Khusro, op cit, pp 37-38), a simultaneous development of a number of industries, the supply of goods in one creating demand for goods produced in others. And this involves an expansion in the stock of capital resources. The limiting factor in the growth of employment in any way with a full time is not so much a shortage of money as a shortage of real capital. With the existing capital equipment, even if we have full employment in the Keynesian sense, a large volume of unemployment will still remain in the physical sense. When capital equipment is low and population large, marginal productivity comes down to the level of marginal disutility of labour at a stage where unemployment still persists in the physical sense, though not in the Keynesian sense. But there is no, in the context of such economies, to enquire whether saving creates wealth, as it did in the nineteenth century England, or it destroys wealth.

5. The only reference to the problem of an underdeveloped economy in Keynes’ General Theory is in the following passage, which I quote as it reads: "The history of India at all times has provided an example of a country impoverished by a preference for liquidity amounting to so strong a passion that even an enormous and chronic influx of the precious metals has been insufficient to bring down the rate of interest to a level which was compatible with the growth of real wealth." (p 337.)
ration is marked by a stage where absence of involuntary unemployment ensures absence of unemployment in the physical sense, too, barring frictions due to lack of mobility of labour.

What happens in this background about the much talked of stagnation theory? Will each expansion in the stock of capital lower the marginal efficiency of capital while it raises the marginal productivity of labour? Does expansion itself contain seeds of stagnation? The answer is again to be sought in Nurkse's hypothesis. Capital saturation is a long way off for an underdeveloped economy with a strong pressure of population and a depressed standard of living. For such an economy, an increase of capital resources, if it could be brought about, will make possible a simultaneous development of industries and will have rather the effect of raising the marginal efficiency of capital. Indeed this points to a peculiar feature of an underdeveloped economy which distinguishes it fundamentally from a so-called mature economy.

Note to § 3
Assuming, for example, persons involuntarily unemployed constitute 10 per cent of the number actually employed in organised industry, and assuming further that organised industry absorbs 5 per cent of the total working population (these are hypothetical figures), we find that involuntary unemployment turns out to be just 0.5 per cent of the total working population. We do not have reliable unemployment figures for India. However, the following table showing the waste due to unemployment in certain other countries is revealing.

<table>
<thead>
<tr>
<th>Country</th>
<th>Employment and Unemployment Taken Together</th>
<th>Marginal Efficiency of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1368</td>
<td>1550</td>
</tr>
<tr>
<td>Canada</td>
<td>1337</td>
<td>1440</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1202</td>
<td>1280</td>
</tr>
<tr>
<td>Australia</td>
<td>980</td>
<td>1090</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1089</td>
<td>1210</td>
</tr>
<tr>
<td>Sweden</td>
<td>653</td>
<td>700</td>
</tr>
<tr>
<td>France</td>
<td>604</td>
<td>720</td>
</tr>
<tr>
<td>Germany</td>
<td>646</td>
<td>750</td>
</tr>
<tr>
<td>Norway</td>
<td>599</td>
<td>599</td>
</tr>
<tr>
<td>Austria</td>
<td>511</td>
<td>570</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>455</td>
<td>480</td>
</tr>
<tr>
<td>Italy</td>
<td>343</td>
<td>393</td>
</tr>
</tbody>
</table>

The figures have been taken from Colin Clark's *Conditions of Economic Progress* (1st Edition, p 77). They are based on the most generous assumption, namely, that the average productivity of the unemployed would have been about the same as those who were actually in work if the unemployed had been absorbed in industry. Yet, barring USA, Canada, Great Britain and Germany—countries which are definitely the more capitalistic in our sense,—the waste due to unemployment during a period which includes years of one of the severest depressions known in history, is surprisingly small.
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