1. This study has been a real voyage of discovery for the writer. When he started work on 'The Employment Problem in India', his understanding of it was faulty on two vital points. He believed that the employment problem in India was in essence the same as in the advanced capitalist countries*, and that its various aspects, viz. the problem of involuntary unemployment, of voluntary employment, of frictional unemployment, of inefficient employment, and of 'unproductive' employment, were in fact so many independent problems. It had therefore appeared that an examination of the employment problem in the advanced capitalist countries would be of considerable help in an analysis of the problem as it existed in India. Such an examination was, therefore made the starting-point of his study.

2. Stable full employment was accepted as the most appropriate goal of economic policy in the advanced capitalist countries. This, it was felt, would ensure them a level of output sufficient to maintain simultaneously a reasonable standard of living and a satisfactory rate of progress. Full employment in the literal sense, i.e. the state when every able-bodied adult annually works the number of hours considered at the time normal for a fully employed person, appeared to be unattainable in a capitalist society. An advanced capitalist society necessarily implies the concentration of the bulk of the means of production in the hands of a minority. This brings to many in this class unearned incomes that are large enough to enable them to live in comfort, or even luxury, without work. Accordingly, in such

* Throughout this study the term 'capitalist country' means a country where the predominant mode of production is private enterprise with hired labour (power). The capitalist mode of production is, however, found associated with both low-level and high-level technique. The plantations in colonial and semi-colonial countries are instances of the first, and manufacturing, especially heavy, industry in the Western countries, that of the latter. The term 'advanced capitalist country' refers to a country where not only the predominant mode of production is private enterprise with hired labour, but also where such enterprise is associated with high-level technique. It thus covers the countries of Western Europe (excluding Spain), Canada, the United States, and O mania.
a society there are bound to be quite a few able-bodied persons who prefer to live in this well-paid idleness. That appeared to explain why full employment had been defined, for instance, by Pigou, not as a state when every able-bodied adult worked the normal number of hours, but as one when 'everybody who at the ruling rates of wages wishes to be employed is in fact employed'. Joan Robinson, too, has given 'full employment' the same meaning as Pigou. According to her, 'conditions of full employment obtain when no one employer can increase his staff without reducing the staff of some other employer'. This would be so only when all those who want employment at the current wage-level do in fact have it.

3. Full employment even in the sense of Pigou, however, appeared to be unattainable. Normally a certain proportion of the workers are always unemployed because, on the one hand, structural shifts in demand and production, seasonal character of some of the available employment, and waxing and waning fortunes of different firms, necessitate the redistribution of the available labour force as between different firms and occupations, industries and localities; and, on the other hand, imperfect spatial and occupational mobility of labour hinders such redistribution. There is, in other words, always some frictional or seasonal unemployment. This fact has led Keynes, and many after him, to define full employment as the level of employment which falls short of full employment in the Pigouian sense by no more than the volume of permissible frictional and seasonal unemployment.

The UN Experts' Report on National and International Measures for Full Employment (1949) also accepted the Keynesian definition of full employment. The Economic and Social Council of the United Nations, too, seems to have done the same. In 1950, it recommended that each government publish

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* Lapses from Full Employment, London (Macmillan), 1945, p. 1
'as soon and as precisely as is practicable the standard by which it defines the meaning of full employment as a continuing objective of policy'. The purpose of such a standard, according to a UN Report, was 'to provide a definition of full employment which is consistent with the smallest amount of unemployment that a country can reasonably be expected to have after a minimum allowance which must be made for seasonal and frictional unemployment'. The UK, however, was the only country that defined the full employment standard; it expressed it as a level of unemployment, at the seasonal peak, of 3 per cent of the total number of employees. The Soviet Union and the People's Democracies of Eastern Europe replied that they had no unemployment and that in their case full employment of the population was assured by the very character of their economies.

4. By definition full employment in the Keynesian sense is the maximum level of employment that capitalist countries can attain without experiencing strong inflationary pressures. This was, therefore, laid down as the objective of economic policy for such countries. The existence of the gap between the literal and the Keynesian full employment was recognized, but it was felt that this was of only limited significance. For this gap, in the case of an advanced capitalist country, is not likely to be excessive. Firstly, the volume of voluntary unemployment is quite limited, partly because those with sufficiently large unearned incomes form a very small proportion of the total population, and partly because the employment open to this class in private business and in administration, being mainly of the administrative type, is so highly remunerative and so very pleasant, that many prefer it to idleness. Attractive employment opportunities for this class are especially plentiful if the advanced capitalist country concerned bears the 'burden' of administering a vast

* Resolution 290 (XI).
** Problems of Unemployment and Inflation, 1950 and 1951, p. 5
*** Ibid., p. 80.
colonial empire. Secondly, on account of the very high level of labour mobility and the greatly reduced importance of seasonally influenced lines of activity, the frictionally or seasonally unemployed are bound to be but a very small proportion of the available labour force. A UN study has put their number in most of these countries at just 2-4 per cent of the total wage-earners. Thirdly, it is commonly considered that some amount of frictional unemployment is a necessary price that a capitalist country has to pay for dynamism in the economy. Such unemployment, it is claimed, serves to maintain a proper fluidity in the labour market and thus avoid inflationary pressures arising from this source. Finally, there is the consideration that the frictionally unemployed may be considered no more unemployed than are government servants during the joining-time allowed them in case of transfer from one post or place of posting to another.

5. Note was taken of the possibility of narrowing the gap between the literal and the Keynesian full employment by reducing the practicable minimum of frictional unemployment, and measures to that end were suggested. Frictional unemployment is caused by the simultaneous operation of factors which necessitate redistribution of the labour force as between different firms, occupations, industries and localities, and those which hinder such readjustment and redistribution. Consequently the measures to reduce frictional unemployment fall into two groups: (a) those which seek to increase the mobility of labour and (b) those which seek to reduce the need for it. The first category includes the following: maintenance of an adequate level of demand, an efficiently organized employment market (i.e. efficient employment, vocational guidance and training services), public financing of movement of labour, appropriate housing

policy, arrange ents for temporary transfers of workers, appropriate differentials in real wages and working conditions, relaxation or removal of trade-union restrictions on the entry of workers into new trades, removal of legal restrictions (if any) on free movement of labour, pressure on employers to make them shed their prejudices against special categories of workers, education and propaganda and direction of labour. The second category mentioned above includes the following: controlled economic development, stable demand, efficient vocational guidance and planned recruitment and re-planning of industrial location (to bring jobs to the unemployed).

6. The problem of raising the level of full employment (Keynesian sense) in these countries was, however, considered much less important than the problem of attaining and maintaining this level of employment. For in these countries lapses from literal full employment due to frictional factors are in practice far less important than the lapses from Keynesian full employment due to insufficient demand. Throughout the inter-war period, especially in the 'thirties, 'deflationary unemployment' far over-shadowed frictional unemployment. And it is the fear of the former that has continually haunted private business, workers and employees, and academic world and governments in the advanced capitalist countries since 1949, when the post-war boom seemed to approach its end. The attainment of stable full employment (in the Keynesian sense) was, therefore, identified as the basic problem confronting these countries.

7. Stable full employment requires that effective demand should be sufficient, but just sufficient, to buy at the current price level the full employment output. If aggregate demand falls short of this level, there is deflationary unemployment; if it exceeds this, there is inflation. It also requires that the desired level of demand should be ensured within the framework of a basically peace economy.

* Lerner's term for unemployment due to insufficient demand.
An economy of war preparation or of war prosecution is by its very nature unstable, for war preparation or war prosecution cannot go on for ever. To be able to enjoy stable full employment, an economy, without abandoning its peaceful character, must ensure adequate demand. Full employment based on war preparation or war prosecution is not only unstable, but of inferior content, relatively to that obtained in a normal peace economy, for it means either lower current standard of living or slower economic progress, or both.

8. The problem of optimum demand was, therefore, discussed in the context of a normal peace economy. The condition of full employment equilibrium in a capitalist economy is that net private domestic investment plus net foreign investment plus budget deficit must balance desired net private saving corresponding to full employment*. Effective demand will be excessive or insufficient according as the first aggregate exceeds or falls short of the second. Historical experience,

* The aggregate of net private domestic investment, net foreign investment and the budget deficit is by definition always equal to net private saving. Let aggregate Consumption, Investment, Effective Demand, Income and Saving be denoted by C, I, E, Y and S, respectively. We have:

\[
C + I = E = Y = C + S
\]
\[
C + I = C + S
\]
\[
I = S
\]

Since aggregate Investment is composed of net private Domestic Investment and Net Foreign Investment, and aggregate Saving is composed of Net Private Saving and Public Saving, we have:

Net Private Domestic Investment = Net Private Saving + Net Foreign Investment

\[
\text{Net Private Domestic Investment} + \text{Net Foreign Investment} + \text{Public Saving} = \text{Net Private Saving + Budget Deficit (i.e. Dis-Saving)}
\]

While the aggregate of Net Private Domestic Investment, Net Foreign Investment and the Budget Deficit is always equal to Net Private Saving, full employment requires that this aggregate should be equal to desired Net Private Saving corresponding to this level of employment.
especially that since World War I, indicates that advanced capitalist economies, when organized on a normal peace footing, are confronted with the problem not of excessive but deficient demand. Inflationary pressures are witnessed only when these economies are engaged either in the preparation or prosecution of war, or in conversion from war to peace footing, or have to service very large unilateral transfers, especially war indemnities. In the absence of these abnormal conditions, inflationary pressures are hardly ever felt. The view that the upward pressure on money-wages resulting from the immensely strengthened bargaining-power of labour under full employment may initiate a wage-price spiral even as an advanced capitalist economy was on a peace footing was noted, but the present writer was unable to trace an actual instance of this. Theoretical considerations suggest that tendency to deficiency in demand is inherent in an advanced capitalist economy. Demand, we saw, would be deficient if desired net private saving out of full employment income exceeds the aggregate of net private domestic investment, net foreign investment and the budget deficit. High propensity to save, therefore, tends to make demand deficient. And in an advanced capitalist economy, propensity to save tends, for the following reasons, to be high:—(a) Capitalism implies unearned incomes. And the magnitude of a person’s unearned income depends upon the volume of income-earning assets owned by him. This provides everybody with a most powerful incentive to save, in order to accumulate income-earning assets. The existence of what may be called the ‘exploitation’ motive to saving brings about the result that when high per capita income makes it possible for people to save a high proportion of their income, they do in fact try to save this proportion. (b) The prevalence of great inequalities of income, themselves a consequence of great inequalities of wealth, also depresses the consumption function. The more unequal the distribution of income, the higher is the propensity to save.

* Here we use ‘exploitation’ in the Marxian sense viz. to denote the appropriation by the non-workers of a part of the net income produced through employment. The desire to increase one’s unearned income through accumulating income-yielding assets may, therefore, be described as the ‘exploitation motive’ to saving.
(a) The greatly increased instability of the system provides another powerful motive to saving, viz. the precautionary motive*. Even in good times uncertainty about the future makes the people save a higher proportion of their income than they would do if they could count on stable full employment. The existence of a system of unemployment insurance does weaken this motive, but only to an extent. Nobody would like, if he can help it, to be caught in something like the great depression of the thirties without a reserve to supplement any unemployment benefits that may be available. (d) The centralization of capital represented by the predominance of the corporate form of enterprise also depresses the consumption function. By amortizing assets at a rate higher than their actual rate of depreciation and obsolescence and by diverting into reserves a large proportion of the net profits earned, the big bourgeoisie who control capital, force the smaller owners to save a higher proportion of their net income than they would if the true net profits were wholly distributed among them. In view of the above facts, the main threat to continued full employment in a normal peaceful advanced capitalist economy seemed to lie in the tendency to insufficient demand because of the high propensity to save.

9. An advanced capitalist economy can deal with the threat in two ways: (a) by reducing desired net private saving corresponding to full employment and (b) by strengthening the offsets to net private saving, i.e. by promoting private domestic investment, by creating a budget deficit or enlarging its size, and by bringing about a large net export of capital. The scope, methods and limitations of each of these lines of approach to the problem of a deflationary threat were studied in detail. The discussion is summarized below.

10. The three main components of net private saving are: (a) excess of provision for depreciation over the actual rate of depreciation and obsolescence of assets, (b) undistributed corporate profits, and (c) personal saving. To reduce the magnitude of net private saving corresponding to

* The motives to saving listed here should not be confused with the motives for liquidity preference identified
full employment, one or more of these magnitudes should be reduced through measures which do not at the same time weaken any of the three offsets mentioned in the previous paragraph.

As regards the possibility of reducing the volume of the first two components of net private saving, the emergence of corporations as the predominant form of business organization, and the growing monopolization of economies that have characterized capitalist development, have made the task much more difficult than it was in the days when capitalism was mainly competitive and unincorporated enterprises occupied an important position in the economy*. To achieve some success in this direction, the governments concerned will have to adopt such extraordinary measures as statutory limitation of the permissible provision for depreciation to the actual rate of depreciation and obsolescence, and a very much higher rate of taxation on undistributed than on distributed corporate profits. The extraordinary character of these measures casts doubts on their practicability. A fall in the gross profits-wages** ratio will no doubt tend to discourage corporate saving, but the effect of this will be offset, or may even be more than offset, by the reduced incentive to invest, resulting from the fall in the rate of profit. Rising capital-labour ratio is an indispensable condition of economic progress, of rising labour-productivity. This requires that, if a fall in the rate of profit is to be avoided, the gross profits-wages ratio should actually rise. In the short period, the rate of profit may be kept stable in the face of rising capital-labour ratio even without a rise in the gross profits-wages ratio through increasing the proportion of net profits in gross profits at the expense of interest. But there is a minimum limit to the fall in the rate of interest and any such fall is once for all. Accordingly, in the long period, stability in the rate of profit, in the face of rising (Contd) by Keynes. While we seek to explain why in respect of a portion of their income people prefer saving to consumption, Keynes explained why for holding a portion of their savings they preferred the most liquid asset (money) to other assets.

* See paragraph 37 below.

** Wages, as used here, refer to all payments for work, i.e. all earned income, and the gross profits include net profit, interest and rent, i.e. the excess of aggregate net income over wages.
capital-labour ratio, necessarily involves rising gross profits-wages ratio. The actual trend of development is thus in the direction just opposite to that required to discourage corporate saving.

11. The size of the third component of net private saving, viz. personal saving, may be reduced by causing the distribution of personal income to be less unequal, by weakening what we have termed the 'exploitation motive' to saving, and by stepping up taxation that impinges mainly on saving*. The scope and limitations of the various methods of achieving these objectives appear to be as follows.

12. Reduced inequality of incomes would be an important step towards a higher consumption function. But a high, and probably a growing, inequality of incomes seems to be inherent in the capitalist system. Incomes are unequally divided, firstly because different workers earn different amounts depending upon the quality and quantity of work performed by each, and secondly because the ownership of income-yielding property is very unequally distributed. Inequality of incomes from work is not peculiar to capitalism; it persists even in a socialist society. But inequality of incomes on this account alone is unlikely to be on anything like that currently witnessed in the advanced capitalist countries. The extreme inequalities of gross income (i.e. income gross of tax) found in these countries are mainly accounted for by the very uneven distribution of income from property. Inheritance tends to perpetuate this inequality. And what

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* A fall in the rate of interest is of little value for a permanent downward pressure on the rate of personal saving. The main effect of cheaper and easier credit is not to induce a permanent increase in consumption but merely to cause a given consumption demand to occur earlier than it would have done otherwise. The rise in the consumption function is thus not permanent but temporary. But continuing full employment in an advanced capitalist country requires the former.
is worst, the inequality most probably tends to grow with the passage of time. The high-income groups normally save a higher proportion of their income. The absolute amount saved per capita by the rich is, therefore, very much larger than by the low-income groups. This naturally tends to increase inequality of wealth, and hence of income.

13. Inequality in the ownership and control of capital contributes to inequalities of income, not only directly but also indirectly. Since business profits tax is charged on profits net of costs, any item of expenditure that can be put into the cost account is in fact subsidized at the rate of the tax. Businessmen naturally charge the maximum possible of personal expenditure to the cost account of the businesses they control. Their real income is thus larger than indicated by the income-tax statistics. Since no such opportunity is available to wage-workers, the inequality of incomes is appreciably higher than the published statistics indicate. Again, many of the large incomes which are classified as earned incomes, e.g. fat salaries drawn by business executives, high directors' fees, etc. contain a substantial element of unearned income. It is doubtful if these jobs would be remunerated at the current scale if the executives, directors, etc. were mere employees and did not own or control capital. Yet again, many of the

* The writer has used the words 'most probably' instead of 'definitely' because in the absence of sufficient empirical evidence regarding the distribution of gross income from property, it would not be proper to make an unqualified categorical assertion.

** The sample surveys of consumer finances carried out in 1949 by the Federal Reserve System and the Institute of Social Research of the University of Michigan revealed the following picture regarding the distribution of savings in the USA in 1948. The top 10% of all spending units, who received annual income ranging upwards from $6,000 did 80% of all net saving. The top 30%, who received annual incomes of $3,750 or more, did well over 100% of all net saving. The remaining 70% showed on balance negative saving. (O.Rosen, 'A Note on the Distribution of Incomes and Savings in 1948,' American Economic Review Vol. XL, No 5, (Dec 1950), pp 896-98.

*** The Oxford University Institute of Statistics has remarked the following regarding the view that inequalities of income tend to grow: 'The experience of Britain during the inter-war period does not conform with this pattern.
well-paid jobs and professions require expensive education and training, which only the owning classes and a small top-layer of the working classes can afford to provide to their children. For the rest of the population, these are 'barri­ced by high cost of entry'. Restricted labour supply in these jobs and professions keeps earnings high, while in others, where there is little or no cost of entry, relatively unfavourable supply position depresses earnings. Consequently, a much higher degree of disparity in income from work prevails than would be the case if the way to 'professions' and other skilled jobs were not largely barred to non-owning classes. This, together with the fact that many of the larger incomes from work also go to those who receive the bulk of the unearned incomes, so that vast numbers have the worst of both the worlds, accentuates inequalities of income.

14. Inequalities in the ownership of capital are thus the basic cause of the great inequalities of gross income in present-day advanced capitalist countries. The growing monopolization of capitalist economies, by its tendency to raise the gross profits-wages ratio, further accentuates these inequalities. Private ownership of capital inevitably leads to great inequalities in the distribution of income-yielding wealth, and hence of income. Abolition of private property in means of production would, therefore, be a very effective way to reduce inequalities of income and thus raise the consumption function. Furthermore, by destroying what we have termed the 'exploitation motive' to saving, it will further weaken the propensity to save. But to abolish

(Contd) as far as personal incomes are concerned. It does conform fairly well when undistributed profits are included in the incomes of 'the owners of industrial equities'. The figures on Consumers' expenditure and saving in USA, made available by the National Resources Planning Board for 1936, afford an excellent confirmation of this generalization. (The Economics of Full Employment, Oxford, 1948, p. )


** Unfavourable to the workers.
private ownership of capital is to abolish capitalism. The preservation of capitalism, therefore, necessarily implies great inequalities of gross income and the operation of the powerful exploitation motive to saving, both of which depress the consumption function.

15. The tendency for inequalities of wealth and income to grow through inheritance can no doubt be considerably modified through a progressive estate or succession duty. But there is a limit to the egalitarian possibilities of this measure too. Evasion of inheritance taxes is easy and hence very widespread. Again, the higher the rate of the tax, the greater will be the resistance of the propertied classes to further enhancement of it. Finally, beyond a limit, sharper progression in the inheritance tax may discourage investment. The gain in lower rate of saving may to a certain extent be thus offset through reduced incentive to invest.

16. Taxation, the incidence of which is mainly on the richer classes, heavily impinges on savings. One method of depressing the rate of private saving would then be to step up such taxation. The income, wealth and the consumption of the rich may be taxed more heavily and the proceeds used to reduce taxes which impinge on lower incomes, to raise the disposable incomes of the mass of the people by paying to them family allowances, old-age pensions and unemployment and other social security benefits, to step up government expenditure on current goods and services, to provide publicly supplied goods and services at prices below cost, and to grant subsidies to private business to reduce prices of articles of mass consumption or raise wages. Private and public consumption may thus be stepped up at the expense of private saving. But there are limits to the efficacy and scope of progressive, savings-impinging, taxation. High direct taxation provides a powerful incentive to legal and illegal tax evasion, encourages socially wasteful expenditure* by subsidizing it at the rate of the tax, reduces the incentive to efficiency, and, worst of all, reduces the incentive to invest. The stimulus to the economy through increased propensity to consume may thus be offset by the weakened inducement

* (Next page)
to invest. And there is a limit to which adoption of the modified income-tax system suggested by Kalecki* can be made to offset the deterrent effect on investment of a high rate of the income-tax. For, by exempting all gross savings** from taxation, this system would tend to accentuate inequalities of income. The gain in investment may consequently be offset by reduced propensity to consume. Finally, excessive direct taxation arouses the wrath of the predominant property classes. The experience of the last half-century shows that no large capitalist country has ever succeeded in solving the problem of deficiency of demand through redistributive taxation. The only solution that has been acceptable to the capitalist class, and hence the one to which capitalist countries have sooner or later turned, has been that which sought to remedy the problem through public works, colonial expansion, rearmament and war. redistributive taxation is seldom carried even to the practicable limit.

17. Another method of discouraging net private saving would be to stimulate (conspicuous) consumption on the part of the rich. But in a society where material welfare, social esteem and political power are associated with ownership of capital, the limits to which the rich can be induced to prefer luxury consumption to saving are quite narrowly set. Moreover, a high level of employment achieved in this manner conflicts with the need of bringing the structure of demand into conformity with the requirements of maximum social welfare.

18. The economic development of present-day advanced capitalist countries has been marked by the operation of

* (Last page) e.g. that on tax experts and lawyers to help find loop-holes in the tax laws, and that on excessive advertisement, high pressure salesmanship and various 'prestige items'.

* The Oxford University Institute of Statistics, op.cit., p. 48. The common practice is to levy tax on profits net of depreciation. Kalecki has suggested that the tax should be levied on profit gross of depreciation, but all investment in fixed capital, whether for replacement or expansion, should be deducted from this taxable amount. The advantage of this form of the tax is that the rate of profit expected on new investment remains the same as it would be in the absence of the tax.

** For the country as a whole gross investment is equal to gross saving.
conflicting tendencies, some favourable and others adverse to private saving. The former include: the decline in the relative share of income accruing to the landlords and the Church (the two relatively very important consumers of national income in the early period of capitalist development); a change in the consumption habits of the aristocracy in the direction of greater frugality; the increasing concentration of ownership of land and capital in the same persons or groups of persons, very often through the agency of business corporations, and the consequential progressive disappearance of a separate class of landlords whose consumption habits may differ markedly from those of the capitalists; the rise in per capita income (which provides greater scope for the fulfilment of the exploitation motive to saving); and, most important of all, the rise in the capital-labour ratio and an accentuation of the inequalities of income. Among the tendencies adverse to private saving we may mention: the rise in the habitual standards of living; the greater expansion of the distributive relatively to the production sector; the fact that "the capitalists, thanks to their greater wealth and more important social position, have become more aristocratic and are obliged to display their wealth somewhat more lavishly than was necessary for the 'middle class' of the

* The growth of monopoly obliges capitalists to place ever-growing emphasis on selling at the expense of production. The monopolization of capitalist economies has, therefore, been marked by greater expansion of the distributive relatively to the production sector. This is adverse to the propensity to save in two ways. Firstly, the volume of production (including transportation, storage and delivery) will be less, and hence its excess at full employment over consumption smaller, if more productive resources are diverted to commerce proper (i.e. buying and selling activities as distinguished from transportation, storage and delivery). Secondly, the bulk of the profits earned in distribution are likely to be shared more widely than are the bulk of the profits earned in industrial production. Consequently, if a higher proportion of aggregate private income is earned in distribution instead of production, inequality of incomes, and hence the propensity to save, is relatively smaller. However, a distributive system larger than socially necessary represents wasteful use of productive resources. A higher level of employment achieved in this manner is not a very satisfactory
nineteenth century; the willingness of the propertied classes to accept a larger measure of redistributive taxation; and the fact that a rising proportion of state transfer payments goes, by way of social security benefits, into the hands of the classes with a high propensity to consume. On balance the factors favourable to a high rate of private saving seem to outweigh those adverse to it. And economic policy can modify this tendency only within quite narrow limits.

19. The recognition that in an advanced capitalist society the scope for raising the propensity to consume is severely limited, led the writer to consider possible measures to strengthen the various offsets to saving. Private domestic investment being at once the most significant and the most capricious constituent of aggregate community investment, measures to stimulate it were taken up for consideration first. Such investment takes two forms: investment in fixed capital and investment in inventories. Of the two, the first is of strategic importance. For in the process of expansion of demand, inventory building normally acts not as an initiating but as a magnifying factor. Moreover, quantitatively, investment in fixed capital is much larger than investment in inventories. Investment in fixed capital depends upon the marginal efficiency of investment (i.e. the highest rate of return expected from an additional, or marginal, unit of the most profitable of all types of capital assets) and the rate of interest. The rate of investment for the economy as a whole will be pushed to the point where the marginal efficiency of capital in general is equal to the current rate of interest. Since the marginal efficiency of investment is a decreasing function of the rate of investment, and since in equilibrium the marginal efficiency of investment equals the current rate of interest, the schedule of the marginal

(Contd) solution of the problem. Socially unnecessary employment is at least as wasteful as unemployment.

* Paul M. Sweezy, The Theory of Capitalist Development
efficiency of investment (i.e. the schedule relating rate of interest to the rate of investment) has a negative slope. It follows that investment can increase only if there is either a fall in the rate of interest, or an upward shift of the marginal efficiency schedule.

20. Cheaper and easier credit is accordingly one possible means to larger private domestic investment. Credit could be made cheaper and its availability increased by the banking system, especially the Central Bank, following an expansionist monetary policy, by the government itself granting loans to private firms and individuals for replacement, renovation and expansion, or guaranteeing such loans to them by private agencies, and by the government promoting, through low-interest loans, subsidies and other special facilities, the creation and expansion of such credit institutions as supply investment loans to small producers, who generally do not have access to commercial banks. The value of cheaper and easier credit as a device to initiate and sustain an expansion is, however, severely limited, because of the following considerations:—

(a) It is much more difficult, and takes longer, to beat down the long-term rate of interest. And it is this which is relevant to investment in fixed capital. Moreover, if the long-term rate of interest sags slowly, it may actually discourage investment in fixed capital; and if it falls quickly, one of its very undesirable consequences will be a rapid rise in capital values with large windfall gains to the property classes. The latter may reinforce expansion by stimulating consumption by the rich. But since it is not only the volume but also the 'content' of employment that has a bearing on social welfare, increased employment created through inducing the rich to indulge in orgies of luxury consumption is of very doubtful desirability.

(b) The lower the rate of interest, the more difficult it is to push it down still further through monetary expansion. And eventually the point is reached when the rate of interest, though still positive, becomes inelastic
to further changes in the quantity of money*. If the actual rates of interest are already very near this limit, as in fact they were up to 1950, there is little scope for stimulating investment through interest-rate reduction.

(o) Even for short-period purposes, i.e. those of lifting an economy from a particular depression, interest-rate reduction is of very limited efficacy. If the marginal efficiency of investment has fallen below the minimum possible rate of interest, as very often happens in a depression, monetary policy by itself will be powerless to stimulate investment. The practicable interest-rate reduction cannot then initiate recovery, though it may aid it when it has otherwise begun**. Furthermore, since interest, though an important element of cost, is not of overwhelming significance relatively to other factors, the marginal efficiency schedule tends to be inelastic rather than elastic. In other words, the response of investment to fall in the rate of interest is never very vigorous. For long-term purposes, i.e. of maintaining stable full employment, the value of interest-rate reduction is even less than for short-period purposes. Stable full employment requires continuing high and rising level of investment. Interest-rate reduction is a one-for-all movement down the marginal efficiency schedule. Its capacity to stimulate investment is exhausted when actual interest-rate touches the minimum practicable limit. For continuing high and rising rate of investment the marginal efficiency schedule must be continuously shifted upwards. This would happen if the factors of growth and progress create new investment opportunities faster than the process of investment exhausts the available investment opportunities. Interest-rate reduction has little value as a measure for continuing high and rising rate of investment required by stable full employment.

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* Keynes (op.cit., p.202) set the lower limit at about 2.4. Pigou (op.cit., p.22), too, accepts the existence of a positive lower limit to the fall in the rate of interest.

21. The recognition of the limited efficacy of interest-rate reduction led to the study of measures to achieve a continuing high and rising rate of investment through raising the marginal efficiency of investment. Such measures include:
(a) increase in the labour-force available to the capitalist sector, (b) technological progress, (c) extension of capitalist frontiers within the country*, (d) cheaper capital goods, (e) tax reduction, (f) capital-deepening, (g) public consumption, and (h) export expansion. The scope and limitations of each of these methods were discussed in some detail. The conclusions reached are summarised below.

22. In the final analysis the natural-technical role of investment is to multiply capacity for the production of consumer goods and services. But under capitalism it also performs an additional role, viz. that of a plug to fill the savings gap. Investment cannot be maintained for long at the level at which it will expand production capacity faster than the expansion of consumption demand. For the growing excess capacity will depress the marginal efficiency of investment and thus choke off investment. Only that rate of investment is feasible over the long period which expands production capacity pari passu with the expansion of consumption demand. But if this rate of investment falls short of the level required to fill the savings gap corresponding to full employment, the economy will be faced with the problem of insufficient demand. In such a situation only such measures will be helpful as either increase the feasible rate of investment without enlarging the savings gap corresponding to full employment, or narrow this gap without discouraging investment. Measures to increase to increase the rate of investment if they at the same time tend to enlarge the savings gap (i.e. discourage consumption) are self-defeating. And so also the measures to narrow the savings gap (i.e. to encourage consumption) if they tend to discourage investment.

* Opening up of territories in foreign lands is discussed under measures to promote net investment abroad.
23. It has often been debated whether economic crisis (which represents collapse of demand) is brought about by the falling rate of profit or by the tendency of production capacity to outstrip consumption. The writer's studies have led him to the conclusion that what makes economic crisis inherent in the capitalist system is the increasing difficulty, in the face of growing capital-labour ratio and a high degree of inequality in the ownership of capital, of having a gross profit-wages ratio that will at once be high enough to ensure adequate return on capital and low enough to ensure adequate consumption. Economic advancement consists in rising labour-productivity. (labour-output ratio). And the latter necessarily involves rising capital intensity (capital-labour ratio), though the increase in the two ratios need not be proportionate, because, on the one hand, capital-saving inventions tend to make the increase in capital-labour ratio less than proportionate to the increase in labour-output ratio; and, on the other, the need to apply labour and capital to inferior natural resources tends to make this increase more than proportionate*. If capital-labour ratio is rising, the indispensable condition of a stable rate of profit is that the gross profits-wage ratio must rise.** But a rising profit-wage ratio tends to raise the rate of saving. For a higher proportion of income is saved if it accrues as profits than if it accrues as wages, because, firstly, under conditions of full employment, a high percentage of profits—indeed a much higher percentage than the rate of saving out of personal incomes—will be directly saved by the corporations through being credited to reserves; and, secondly, the distribution of the balance of profits is, on account of great inequalities in the ownership of capital, far more unequal than if the same amount were also distributed by way of wages. The basic contradiction in the system is thus this: if the gross profit-wage ratio does not adequately rise in the face of rising capital-labour ratio, the rate of profit falls, and this tends to make the

* For the disadvantage of inferior natural resources has to be offset by applying more capital per worker.

** See paragraph 10 above.
actual rate of investment fall below that required to fill the savings gap corresponding to full employment; and if the gross profits-ware ratio does adequately rise, the depressive effect on consumption tends, because of the derived character of investment-demand, to make the feasible rate of investment fall below the rate required for full employment. This explains why in a capitalist economy, in the absence of offsetting factors, actual investment eventually tends to fall below the rate required to fill the savings gap corresponding to full employment. And when this happens, demand is deficient and there is economic crisis.

24. The truly offsetting factors in this context are those that increase the feasible rate of investment without enlarging the savings gap corresponding to full employment, or narrow this gap without discharging investment. The conclusions drawn in respect of the more important of these factors are given in the following paragraphs.

25. Increase in the labour force available to the capitalist sector is highly conducive to domestic investment. In the absence of an increase in the labour force available to the capitalist sector of the economy, once full employment has been reached, further investment can continue only through capital-deepening. This means that all further investment goes to raise the capital-labour ratio. The above-mentioned contradiction thus operates with full force so that the economy rapidly tends to reach the point where actual investment falls below the rate required to offset savings corresponding to full employment. The significance of growing labour force is that investment can continue at a rate equal to the product of the annual increase in the labour force and the capital currently employed per worker without any rise in the capital-labour ratio. Capital intensity then increases only to the extent investment proceeds in excess of the above rate. Under continued full employment, the faster the increase in the available labour force, the greater is the proportion of new investment absorbed in capital-widening and the less the proportion absorbed in capital-deepening. And the lower the rate of capital-deepening, the milder the force of the system's
basic contradiction. Of course, the relief provided to the system is at the cost of keeping the standard of living lower than it would be if investment which goes to equip the additional labour force went to raise capital-intensity, provided, of course, the system's contradiction in this case did not prevent full employment. That is a major reason why the capitalist crises in the nineteenth century were mere mild tremors relatively to the great 'quake that shook the system in the thirties of this century. In the early stages of industrialization when the rise in the standard of living is high enough for a rapid decline in the death-rate, but not yet high enough for a rapid decline in the birth-rate, the rate of growth of population rises sharply. This explains the rapid increase in population, and hence in the available labour-force in the nineteenth century, in the advanced capitalist countries. And this factor held in check the above contradiction.

26. The natural increase in population is not the only source of increase in the supply of labour force available to the capitalist sector. This supply also increases when the decline of pre-capitalist forms of production releases men (and women) for employment in the capitalist sector. This factor also operated powerfully in Western Europe in the nineteenth century. In North America, where this factor did not operate, the increase in the available labour-force through natural increase in population was powerfully reinforced by the flow of immigrants.

27. The relief provided by increase in the available labour force has greatly weakened. The rapid decline in the birth-rate in the advanced capitalist countries has greatly reduced the rate of population growth. Some countries entertain fears even of a decline in population. The spurt in the birth-rate in many advanced capitalist countries in the post-World War II period seems to be a temporary phenomenon, mainly an aftermath of the war. In fact there are already signs of a reversal of this trend, so that before long the birth-rate may be expected to fall to the pre-war level. The scope for increase in the labour supply available to the capitalist sector seems to have been almost exhausted with the virtual extinction of the pre-
capitalist sector within these countries. Increase in the available labour force as a factor to weaken the system's basic contradiction has become very much less effective than it was in the nineteenth century.

28. Technological progress promotes investment by creating new outlets for it. The strength of the stimulus provided by the discovery of new products depends upon the degree of their novelty, the capital intensity of the production processes involved, the "time-dimension" of the investment promoted, and the intrinsic importance of the want served. Similarly, the investment-generating capacity of new processes depends upon their novelty, their capital-intensity, the time-dimension of the investment involved, and the intrinsic importance of the want to which they relate. In the second half of the eighteenth and the whole of the nineteenth century, technological progress provided a powerful stimulus to investment. Inventions in the fields of manufacture, transport and mining, created products and processes which were very new indeed, very different from anything known till that time. The pace of new inventions was also very fast. The scale of investment involved by the new products and processes was large relatively to the then rate of saving corresponding to full employment. The time-dimension of a substantial proportion of new investment, especially in transportation, heavy industry and mining, was relatively large. And the wants catered to - transport facilities, cloth, footwear, metal products, etc. - were of great intrinsic importance. In the present-day world, however, when efficient methods of satisfying man's basic wants - food, clothing, foot-wear, means of transport and communication, facilities for recreation and cultural pursuits, - have been discovered, when monopolies, which rule the roost in the economic sphere, often

* Pobb's term for the time required for the fruition of the new investment.
** For instance, the discovery of a new 'molecule to cure a rare disease cannot induce anything like the investment which the invention of railways did in the nineteenth century.
*** We leave out of account possibilities for 'technological progress' in the field of 'means of war, for we are considering the problem of adequate demand in the context of a basically peace economy.
discourage and suppress new inventions for fear of obsolescence of their existing investment, when new inventions are often of capital-saving type, and when the savings gap corresponding to full employment is so large, it is highly unlikely that in the foreseeable future technological progress will create new investment opportunities that would, as powerful an offset to the present rate of saving corresponding to full employment as were the investment opportunities created by new products and processes in the last two centuries to the then rate of saving corresponding to full employment. The potency of another major demand-stimulating factor thus seems to have, relatively speaking, very considerably diminished.

29. Extension of capitalist frontiers within the country also stimulates investment. The capitalist sector of a country's economy can expand through the discovery and exploitation of new resources (e.g., mineral deposits) and the opening up of new territories. The existence of the scope for such expansion provides a stimulus to investment. Throughout the nineteenth century this factor operated powerfully in the USA: the westward movement of the internal frontier provided large investment opportunities. In the present-day world, however, this stimulus is no longer available to most advanced capitalist countries. For the old countries the scope for internal extension of the frontier was never very large. In the new countries, too, such scope is becoming increasingly narrow. In the United States it has virtually exhausted. But for capitalism the frontiers can expand internally also at the expense of the pre-capitalist forms of production. Capitalist production, being more efficient compared to pre-capitalist modes of production, progressively destroys the latter. This factor, however, operates only in old countries in the early stages of industrialization. The scope for the expansion of the capitalist sector, and hence for investment, provided by such internal expansion of capitalism has become practically exhausted in all the advanced capitalist countries where the pre-capitalist sector has more or less disappeared. Still another factor favourable to investment has ceased to operate.

30. Reduction in the price of capital goods is another method
advocated to stimulate investment. When the fall in the prices of capital goods is part of the general fall in the price-level, in consequence of either a general deflationary movement or of the failure of effective demand to increase pari passu with the increase in productivity, it lends no stimulus to investment. But a fall in the prices of particular capital goods has the same significance as of a capital-saving invention; though for the time being it stimulates investment in the sector of the economy concerned, eventually it increases the difficulties of the system by lowering in terms of value the capital-output ratio.

31. Tax reduction as a measure to promote investment may take several forms: the business profits tax or the corporation tax may be lowered; for purposes of computing the tax liability, the deduction of losses from business profits may be allowed not only for the year in which they occur, but over a period of several years; liberal allowances for depreciation and obsolescence may be allowed; net investments exempted from taxes for a specified period; the rate of duty on machinery reduced; employers' contribution to social insurance funds reduced; and so forth. Grant of subsidies may also be considered a case of tax reduction, i.e. a case where the rate of the tax becomes negative. Tax reduction can play a valuable part in lifting the economy out of a particular depression, i.e. of correcting deficiency of demand at a particular moment. Its value for ensuring continuing adequate and expanding demand is very dubious. Reduction in direct taxation accentuates inequalities of income and wealth, and thus depresses the consumption function. An investment-stimulating factor that depresses the consumption function is eventually self-defeating. For investment-demand is ultimately derived from consumption demand. Reduction in the duty on imported machinery has the same significance as a fall in the prices of capital goods, and consequently as a measure to ensure continuing high and expanding level of demand, it is subject to the same limitation.

32. Capital-deepening is also mentioned as an outlet for additional investment. The natural-technical role of capital-deepening is to raise labour-productivity. For this purpose,
the possible upper limit is set by the level of technological advance attained. With technological progress the natural-technical limit to capital-deepening is continually pushed upwards. But capital-deepening as a device to rectify insufficiency demand, i.e. as a measure to maintain full employment through applying to investment resources which under the given conditions cannot be used for consumption, may not only be undesirable, but will eventually be self-defeating.

If a rise in current living standards accords better with the accepted scale of social priorities than further rapid rise in labour-productivity, then the appropriate policy would be one that steps up current consumption rather than the pace of capital-deepening. An underdeveloped country may justifiably devote a high, and, up to a limit, even a growing proportion of its resources to investment. For in such a country, higher productivity through capital-intensification may well occupy in the accepted scale of social priorities as high a place as or even a higher place than an increase in the current living standards. But in an advanced country whose difficulties arise from consumption not keeping pace with production capacity, (with the consequences that growing relative abundance of capital equipment lowers the marginal efficiency of investment, depresses investment to a rate below that of desired saving at full employment, and precipitates a decline in activity), it is queer logic to suggest the remedy of still further stepping up the rate of investment. For such a country the problem is not so much capital accumulation as capital utilization**, not so much building up production as consumption. The solution should, therefore, be sought in higher propensity to consume. If this can be achieved, the consequential narrowing of the gap between full-employment income and consumption will reduce the need for investment, while at the same time rising consumption

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* When production capacity exceeds consumption demand (as distinguished from need), we have relative abundance of capital.

** A system that irrespective of the stage of development of the country makes the utilization of existing capacity conditional on the creation of new capacity at a still faster rate is surely irrational and instable.
will increase the scope for it. In this way investment could be brought into correspondence with desired saving at full employment, and thus the condition of full employment met. If, however, it is found that the required increase in the propensity to consume requires a fall in the profits-wages ratio to the level which will choke investment by making the rate of profit inadequate, this is a proof that the preservation of capitalist relations of production has become incompatible with the realization of full employment. In such a situation, the community can no longer afford to postpone a choice between the two (unless, of course, it decides to seek a solution of the problem of effective demand in militarization. But such a 'solution' leads straight to war which, as in the case of Nazi Germany, may lead to the destruction of the country which attempts it).

33. Capital-deepening is a proper solution for low productivity. As a solution for insufficient demand, it is self-defeating. It does not solve but merely postpones the problem of adequate consumption expenditure. A rising rate of capital-deepening means that production capacity is being increasingly devoted to its own multiplication. Clearly, this will result in the production capacity, and hence the need for consumption demand, in the future being higher than would be the case if it were possible at present to devote a higher proportion of current production capacity to consumption and a smaller proportion to its own multiplication. The problem of adequate consumption demand, therefore, recurs in the future in a greater magnitude. For advanced capitalist countries harried by insufficient demand, capital-deepening provides neither a satisfactory nor a feasible solution. There is no escaping the fact that private investment cannot go on for long without becoming purposeless and finally checked unless accompanied by a corresponding expansion of consumer demand. Thus the same difficulty, that of sufficiently increasing the consumption demand, which necessitates a high and a rising rate of investment makes it difficult of attainment.
34. Public consumption is perhaps the most powerful instrument available to the government to promote private investment. Public or government disbursements may be divided into two parts: transfer payments and purchases. The former add to demand not directly, but by promoting personal consumption expenditure. Expanding transfer payments increase private consumption and hence promote investment. The net increase in private consumption from a given expansion of transfer payments depends on the one hand upon what proportion of the extra payment goes into consumption, and, on the other, upon what proportion of the amount that has gone to finance these payments would have been spent on consumption had it not passed into the hands of the State. The stimulus to personal consumption, and hence to investment, provided by a given expansion of transfer payments is maximum when it is financed by created money, and when the beneficiaries are classes with the highest propensity to consume. The stimulating effect is less when such expansion is financed through borrowing genuine private savings, and least when financed through regressive taxes which impinge heavily on consumption.

35. Public purchases, in turn, fall into two categories: public investment of the 'private' or profit-making type, and public consumption (including expenditure on national defence, civil administration and beneficent departments - Education, Health, etc. -, and investment of the 'purely public' or non-profit-making type - e.g. that on roads, libraries, museums, parks, etc.). All increases in public purchases directly add to aggregate demand, but, in an advanced capitalist country where we can expect private enterprise to avail of every opportunity for investment of the profit-making

* We have not mentioned in public consumption the purchase and deliberate destruction of commodities such as that practised by the US Agricultural Adjustment Administration in the thirties. For we are considering not all possible methods of creating sufficient demand, but only such as seek to do this within the framework of a peace economy, and without causing the structure of demand to be different from that required for maximum social welfare.
type, only increase in public consumption stimulates private investment. Public investment in the profit-making fields competes with and discourages private investment.* Increase in the rest of the public outlay encourages private investment. Larger public consumption adds to aggregate national consumption, to the extent that the additional amount required to finance it is raised in ways which do not impinge on private consumption. The net addition is, therefore, greatest when increase in public consumption is financed through monetary expansion, less when financed through borrowing genuine savings, and least when financed through regressive taxation. Public consumption, especially that represented by defence expenditure, has shown a markedly rising trend in the capitalist countries for many decades. This has had a favorable effect on private investment. But there is a limit to which public consumption can expand without infringing one or the other desideratum of economic policy, viz. that the problem of effective demand should be solved in the framework of a basically peace economy, and that the structure of aggregate demand should meet the requirements of maximum social welfare. Excessive defence expenditure violates the first condition and excessive outlay on civil administration, beneficent departments and investment of the 'purely public' type conflicts with the fulfilment of the second objective. Historical experience shows that whenever a capitalist country tries to solve the problem of demand, mainly through the expansion of public consumption, it tends to gravitate to a wehrwirtschaft (an economy of war preparation), and finally to war itself.

36. Expanding exports stimulate investment in the export industries. But whether or not this makes so much net addition to the aggregate opportunities for domestic investment open to

* Stock-piling on public account may prevent a threatened decline in activity at any particular time. As a measure to ensure continuing high and expanding level of demand, it is of little significance.
the system, depends upon the character of imports obtained in return. If the latter consists of commodities which the country must in any case import (because either it simply cannot produce them or it is not worthwhile for it to produce them because in their case her comparative cost advantage is the least or the disadvantage greatest, so that their factor cost is less when they are obtained in return for exports than when produced at home), expanding exports open out new opportunities for domestic investment without being offset by the disappearance of potential investment opportunities in other sectors of the economy. For instance, in the period from the Indian Mutiny (1857) to the First World War, the expansion of British exports of textiles and other manufactured products to India stimulated investment in the export industries concerned, but the expanding imports of foodgrains, raw-cotton, raw jute, oil-seeds, hides and skins, tea, spices, manganese, mica, etc., obtained in return from India, did not kill any potential investment opportunities in Britain. The stimulating effect of expanding exports on capitalist development is reinforced if the consequential expansion in imports causes a decline of the non-capitalist sector, so that the capitalist sector enabled to tap both the labour-power and the demands currently in the non-capitalist sector; it is further reinforced if expanding exports also involve a growing export surplus.

On the other hand, if the imports consist of commodities which discourage the growth of industries that could in due course

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* The belief (cf. Dobb’s Review of Rosa Luxemburg’s "The Accumulation of Capital", in The Modern Quarterly, Vol 7, No 2 (Spring, 1952), pp. 98-99) that it is export surplus (i.e. capital export) and not just expansion of exports that is needed to assuage a crisis of over-production (over-production is another name for insufficient demand) ignores the fact that while expanding exports, accompanied by an export surplus, promote demand, both by adding to it directly (export surplus itself being a constituent of aggregate demand) and by promoting domestic investment (which is another component of aggregate demand), expanding exports, even when balanced by equal imports, may raise aggregate demand by stimulating investment in the export industries; it also ignores the stimulating effect on capitalist development of the decline of the non-capitalist sector, that may be hastened by the larger flow of imports.
be expected to become as efficient as the present export industries, the additional investment opportunities provided in the export industries are largely offset by the suppression of potential investment opportunities in other fields. The stimulus to capitalist development from expanding exports is thus the strongest when they increase at a fast pace and are accompanied by a growing export surplus, and when the consequential expansion of imports not only does not kill potential investment opportunities but also brings about a rapid decline in the as-yet-quite-large pre-capitalist sector. The position in respect of capital exports from advanced capitalist countries is further discussed below. In all other respects, conditions are less favourable than a century ago. Then there was a great scope for expansion of the foreign trade of the few capitalist countries within the pattern-structure most conducive to the development of their respective capitalist sectors, viz. export of manufactured products in return for food, raw materials, minerals and very simple manufactures. For vast areas were then available for 'colonization', which term signifies reduction of a country into a buyer of industrial goods and a supplier of primary products. Furthermore, there were in these areas till that time large possibilities of colonial type development, i.e. development which, being confined to agriculture, mining, transport and communications and public utilities, increased their importance as sources of supply of primary products and markets for manufactured goods. Export of capital to these areas for this type of development stimulated the exports of the advanced capitalist countries not only at the time when such export occurred but also in subsequent years, for the expansion of exports of primary products from the relatively backward countries increased their capacity to absorb larger imports of industrial products. It is common to attribute the backward countries' increased absorption of foreign manufactured goods to the decline in them of artisan production and the failure of modern industries to grow. But it is apt to be forgotten that this merely makes them need foreign products, and need is transformed into effective demand only through their increased capacity to pay for such imports by exports of primary products. The scope for increased output in and export of food, raw
materials and minerals from the relatively backward countries is as relevant to their capacity to swap primary products for industrial goods as is the decline of handicrafts and the failure of modern industries to grow. The stimulus to capitalist development in the advanced countries provided by expanding exports from them is now very much weaker than it was a century ago, due to the fact that, relatively to their aggregate output, the scope for expanding exports within the appropriate pattern-structure of foreign trade, viz. exchange of industrial for primary products, is very much smaller; because, firstly, in consequence of the revolution in the Soviet Union, Eastern Europe and China, the relevant backward areas of the world have greatly shrunk in size, secondly, a limited amount of industrial development has occurred in some of these backward countries, thirdly, the possibilities of development within the colonial-feudal framework have been largely exhausted — indeed, several of these countries due to growing population and relatively stagnant primary production have actually become importers of food — and, lastly, by far the most important capitalist country of today, the United States, is a very large producer and exporter also of primary products. This stimulus has also weakened because on account of the virtual extinction of the pre-capitalist sector in the advanced countries, the imports from backward countries no longer create scope for the internal expansion of the capitalist sector by speeding up the decline of the pre-capitalist sector. Finally, the stimulus to private investment, and hence to capitalist development, in the advanced capitalist countries has greatly weakened, because it is no longer possible for these countries to raise capital exports to backward countries to the level at which they will stimulate a volume of exports from the former sufficient to absorb a significant proportion of their output.

37. An important characteristic of advanced capitalism is increasing monopolization of the economies concerned, i.e. the centralization of the growing proportion of total private capital in the hands of a few giant monopolistic corporations. This development has a bearing on the problem of adequate demand through its influence, on the one hand, on the propensity to
save, and on the other, on outlets for new investment. Monopolisation of the economy tends to raise the propensity to save. Those in control of the giant corporations, with a view to increasing the aggregate capital at their command, provide for replacement and renewals at rates higher than the actual rate of depreciation and obsolescence and credit a considerable proportion of the profits to reserves. Compulsory saving on the part of owners of corporate stock other than those who control the corporation involved in this procedure raises the propensity to save. So also does the fact that, by raising the gross profits-wages ratio, by placing the highest paid jobs in private business generally in the hands of those who also own large blocks of capital, and by concentrating the ownership of a growing proportion of the entire private capital in the hands of a microscopic minority, monopolisation accentuates inequalities of income. Monopoly thus influences the saving function in a direction that aggravates the problem of demand. Its influence on outlets for new investment also most probably tends in the same direction. Two of the effects of monopolisation seem to be conducive to new investment. The vast resources at the command of the giant corporations make it possible for them to maintain elaborate research facilities. This should stimulate technological progress, and hence new investment. Again, the immense amounts of capital centralized in each monopolistic corporation make it possible for such bodies fully to exploit the possibilities of large-scale production and capital-deepening. The favourable effect of these factors on new investment is, however, more than offset by several other consequences of monopolisation. Firstly, 'the very maintenance of monopoly necessitates the blocking off of investment from the monopolized, and hence most profitable, fields of industry.' Under monopoly marginal revenue is less than average revenue. Accordingly, beyond a point, marginal return on capital falls.

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* The limitations of capital-deepening as a demand-creating device have been discussed earlier.

** Paul M. Sweezy, op. cit., p. 275.

*** i.e. when the depressive effect on profits of a fall in marginal revenue ceases to be sufficiently offset by a fall in marginal cost.
The monopolist naturally stops investing in his own field when the marginal return on capital falls short of the rate of profit that can be earned in other fields, even if the average return in the monopolized field may yet be very much higher than in other fields. It is true that this may induce outsiders to enter this field. But the very existence of monopoly involves that, for some reason or the other, outside capital does not have access to this field. Investment in the monopolized field thus ceases long before the average profit earned there has fallen to the level of the return obtained in the non-monopolized fields. When the marginal return on capital in the monopolized field has fallen to equality with the return obtainable elsewhere, the monopolist invests his savings in other fields and seeks to monopolize them also. The tentacles of monopoly thus spread ever wider, and the restrictive effect on new investment outlets is correspondingly strengthened.

Again, monopolization militates against the introduction of technological innovations because the monopolist, while deciding or not to adopt them, must take account of the consequential obsolescence of existing capital. Under competitive capitalism, the gain from an invention accrued to the innovator while the loss (through obsolescence of capital) was largely borne by his competitors. Under monopoly, the fact that the loss also falls on the innovator, deterrs him. The monopolist seeks to minimize the destruction of existing capital through obsolescence by delaying the introduction of new equipment to the time when the existing equipment wears out, and has in any case to be replaced. In other words, technological progress tends to be financed 'from depreciation accruals instead of from net savings'. The fact that technological progress thus ceases to be associated with net investment reduces its value as an investment-demand expanding factor. Finally, when the output of the monopolized product has been expanded to the point where the monopoly profits are maximized, there must be no further increase in output. From now on new investment in the monopolized field takes the form of introduction of labour-saving equipment. For this makes possible an increase in the capital employed without a proportionate increase in output, the effect of higher capital intensity, and hence of higher labour
productivity, being offset by reduction in the labour force engaged. But increased labour productivity, when the scope for increase in production is restricted by monopoly, can mean only growing unemployment. The labour-saving bias of technological progress under conditions of monopoly is thus another factor which tends to bring about less than full employment.

It follows from the above that the growing monopolization of economies is another development that has rendered the problem of adequate demand more difficult of solution than was the case a century ago when capitalism was mainly competitive.

38. Public dis-saving or budget deficits offset net private saving and so help to create adequate demand. A budget deficit of a given magnitude may be created through either an increase in public expenditure or a reduction in revenue receipts. For purposes of demand creation, the increase in public expenditure may appropriately be achieved by stepping up public consumption, public transfer payments and subsidies. The revenue receipts may be reduced through lower direct and indirect taxation, smaller employee and employer contributions to social insurance funds, and reduced current surplus of government enterprises. Each of the two methods of creating a budget deficit has its pros and cons. The need to maximize social welfare requires that there should be a judicious combination of the two. Accordingly, which of the above steps, or a combination of them, is to be adopted at any particular time for creating a budget deficit should depend upon what would maximise social welfare. If this requires larger personal consumption, and appropriate policy would be to reduce or abolish taxes which heavily impinge on consumption, reduce employees' contributions to social insurance funds, cut down the prices of publicly produced goods and services, increase the scale and extend the coverage of social security benefits, subsidize the production or sale of articles of mass consumption, and grant subsidies to producers to pay higher wages. On the other hand, if larger public consumption

* i.e. by lowering prices of publicly produced goods and services.
is more conducive to social welfare, the budget deficit may be created more appropriately by enlarging and improving civil administration, defence and foreign services, social services, and so forth.

39. The budget deficit may be met either by borrowing the genuine savings of the public or through monetary expansion (i.e. by borrowing created money). The requirements of continuing full employment, which in a dynamic society involve expanding national income, necessitate that an appropriate part of the budget deficit should be met in the latter way. For 'the national income cannot be raised effectively and in the most advantageous manner without some increase in the monetary supply'.

40. An important limitation of this method of stimulating demand is the growth in the public debt involved. Public debt incurred for the purpose of stimulating demand, being internal debt**, will not directly make the community any poorer. The interest and amortization payments in respect of internal debt involve transfer of wealth within the community: almost the entire community contributes through taxes or otherwise to the amount required to service the public debt, and a section of it, the bond-holders receive the interest and amortization payments. The burden of such a debt, therefore, is not that it involves any draft on the community's resources but that, since public securities are held mainly by the wealthier classes either directly or indirectly (i.e. through holding deposits with

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** It is, of course, quite possible or even probable, that increased domestic activity induced by deficit-budgeting in a particular country will tend to increase its imports and discourage its exports, i.e. its export surplus will tend to decline. To the extent this happens there will be an adverse effect on aggregate demand, for export surplus is one of the constituents of aggregate demand. Should the export surplus actually become negative, either the country's foreign assets will decline or its foreign liabilities increase. Such increase in foreign indebtedness (or decline in foreign assets) will be an indirect consequence of the budget deficit. 'Directly deficit-budgeting for demand-stimulation involves an increase only in the internal debt.'
banks, or owning stocks and shares of companies, which hold public securities as one of their assets), it accentuates inequalities of income which tend to raise the rate of private saving. The offset to private saving currently provided by deficit-budgeting is thus at the cost of raising the propensity to save in the future. Again, accumulating public debt, when held unequally, creates a growing rentier class, many members of which may choose to live a life of well-paid idleness. There may thus be an expanding gap between literal and Pigouian full employment. Moreover, to maintain and enrich idlers at the expense of the active elements in the community is to discourage and penalize work and enterprise. Still again, since public bonds are likely to be held by the older generation in the community, public debt involves a transfer of wealth from the young to the old, from those who have the maximum capacity for enjoyment to those who have the least. The two most significant demographic trends in advanced capitalist countries, viz. a marked fall in the rate of population growth — in some countries the threat of an actual decline — and increasing longevity of the population, by their tendency to reduce the percentage of active in the total population, aggravate the real burden of public debt. Finally, the growing public debt, and the prospect of larger amounts required to service it, may give rise to fears of higher taxation in the future. These fears may be baseless: but as long as they are there, they act as a deterrent to private investment. And to this extent deficit financing for demand-stimulation is self-offsetting.

41. The fear is sometimes expressed that expanding public debt, since it involves a growing volume of liquid assets in the hands of the community, increases the susceptibility of the economy to sudden outbursts of inflation. If there is a sudden and a large drop in the rate of interest, the consequent appreciation

* Sharply progressive taxation can offset, but not completely, the receipt by the owning classes of interest payments on the public debt.

** Against this, however, it may be pointed out that the family and other liabilities of the older generation are likely to be larger. To this extent there is some justification for the transfer of wealth from the younger to the older generation.
in capital values may markedly raise the propensity to consume. There will be a large increase in the luxury consumption of the rich, which may unleash powerful inflationary pressures. Inflation is always unwelcome, more so when caused by a large rise in the 'conspicuous' consumption of the rich. The larger the volume of public debt, the stronger will be this effect of the fall in the rate of interest. But the argument is largely of academic interest. Such sudden drops in the long-term rate of interest are unlikely, more so when it stands as low as it did in recent years up to 1950 (when an upward trend set in). Should, however, the possibility of such a drop arise, it will be necessary to prevent it, or at least to smooth it out, also for reasons other than the need to prevent inflation.

42. Some of the problems that arise from the adoption of deficit budgeting as an instrument for demand-creation do so in greater magnitude and in more malign form when the same object is sought to be achieved through stepping up private investment. The distribution of gross income (i.e. income before tax), for instance, is likely to be more uneven. Private bonds and equities will now take the place of public securities. Interest rates on private debt are, because of the greater risk involved, higher than on public debt, and under continued full employment the average yield on equities is likely to be higher still. Since ownership of private bonds and equities will also be very unequally distributed, and since they will carry a higher yield than public bonds, gross income distribution is likely to be even more unequal. As before, a rentier class will tend to grow, and higher incomes will tend to accrue to the old rather than the young. Again, the volume of negotiable instruments, and hence the latent inflationary potential, will be at least as large. Several of the objections commonly raised against deficit-budgeting as a demand-creating device thus apply with greater force to the attainment of the same object through stimulating private investment.

43. The writer sees a more important limitation of deficit budgeting in the extreme unlikelihood of the ruling classes countenancing it for the expansion of personal consumption or
social services. For, they find the lure of some of the alter­
native methods of dealing with demand deficiency, viz. colonial
expansion, rearmament and war, irresistible. Deficit budgeting
on a significant scale is, therefore, likely to be practised
to finance only war preparation and war-prosecution. This
reduces its value as a measure to achieve continuing full employ­
ment within the frame work of a peace economy.

44. Net private saving may be offset, finally, by net invest­
ment abroad. In the pre-World War I period, capital export
was a significant outlet for net private savings in those
advanced capitalist countries in which the volume of such saving
had begun to press against investment opportunities available
at home. For instance, from 1874 to 1914, the foreign long-term
investments of the United Kingdom, France and Germany increased
from $6,000 to $33,000 million i.e. by 27,000 million. If
losses due to defaults and bankruptcies, and the probable
increase in short-term credits, are allowed for, actual capital
exports from these countries seem to have been larger than this
figure. By 1914 the foreign long-term investments of the United
States had grown to $3,500 (against foreign investments in
the United States of $6,800 million), of Belgium, the Nether­
lands, and Switzerland to $5,500 million, and of other countries
(Japan, Russia, Portugal and Sweden) to $2,200, making a total
of $44,000 for all countries*

45. Today and in the future the annual flow of international
long-term investment will have to be very much larger in
absolute size than it was during 1874–1914 in order to constitute
a significant offset to net private saving in the advanced
capitalist countries. For the number of advanced capitalist
countries in need of capital exports has increased and, at the
same time, the flow of net private saving in these countries
has very greatly increased in absolute size. The most significant
change is the transformation of the USA from a borrower to a

* UN, International Capital Movements during the Inter-War
Period, 1949, pp.1-2
lender on international account. Up to 1914, except for a brief interregnum (1898-1901), she was a net importer of capital. Today, she needs capital exports more than any other country. It is not possible to make a precise guess as to the scale of capital exports that, in conditions of a normal peace economy, will constitute a significant offset to net private saving in that country. For the assumed conditions are very different from those that actually prevail, and the rate of net private saving can be materially influenced by public policy. A rough calculation may, however, be made. In the post-war period, the US economy in 1948, though still far from normal peace-time conditions, came nearest to these. In this year, the country also approached a state of full employment (in the Keynesian sense), the volume of unemployment being 2.065 million, i.e. 3.4% of the available labour force*. In this year net private saving was $23.5 billion as against a national income of $223.4 billion, giving a percentage of 10.5**. If net foreign investment at a rate equal to one-fifth of the rate of net private saving may be considered a significant offset to the latter, capital export from the USA must be at the rate of at least 2% of her national income. With her national income approaching $300 billion***, the USA must, for the present purpose, export capital at the rate of $6 billion a year. And this amount must steadily grow as her national income grows.

The USA, though the most important, is not the only advanced capitalist country that needs capital exports to offset a high rate of net private saving. Given normal peace economies, the UK, France, West Germany, Switzerland, Belgium, the Netherlands, Portugal, Norway, Sweden, Denmark, Italy, Austria, Canada and Japan, can be expected to feel the same need.

** Calculated from the data provided in the US Department of Commerce: Survey of Current Business (National Income Number), July 1952.
*** In 1951, at current prices, it was $277,554 million.
That most of these countries have figured as net importers of capital in the post-war period was, in the first few years, due to their need to replenish public and business capital following wartime depletion and destruction, to the backlog of consumer demand, and is now due to the draft on their productive resources made by Armament. Given normal peace economies, all these countries are bound before long to need capital exports to offset the high rate of net private saving. Capital exports from these countries at the rate of 2% of their (1949) income will mean additional international investment of about $2.6 billion a year. This gives a total of $8.6 billion. But as two of the most important potential capital-exporting countries viz., West Germany and Japan, had not by 1949 fully recovered from the effects of the War, and as over a part of this year several of these countries suffered from a mild recession in activity, the present (1952) level of their income corresponding to full employment would be substantially higher than the actual 1949 level. The present (1952) aggregate full employment income of the potential capital-exporting countries may be put at $500 billion. This will give $10 billion as a rough estimate of the required scale of net capital exports from the advanced capitalist countries. And this amount will need to grow with the passage of time, both on account of the increase in the national income of these countries and the likely addition in due course of other capitalist countries to this category.

46. Next we examine the scope for the absorption of international funds. The Soviet Union, the People's Democracies of Eastern Europe and China have rapidly expanding economies. Foreign capital should be welcome to them if it carried no political strings, if it were available in the form of loans on reasonable terms, and if the amount thus provided could be freely spent to finance the import of goods of their choice. Import of capital in this form and on these terms should expedite their development and ease their present burdens. But the possibility of capital exports to these countries is ruled out by the advanced capitalist countries, especially the United States', preferences for a cold war rather than for fruitful economic co-operation with
such countries. Accordingly the scope for the flow of international investment must be examined with reference to the capacity of other countries (hereafter called the "eligible countries") to absorb it.

47. A part of the capital exports may, for some years more, be absorbed by Australia and New Zealand, which, though advanced capitalist countries themselves, continue to be net importers of capital. How large foreign funds they can absorb, and for how long, will depend mainly on their capacity to achieve a rapid increase in population through attracting white immigrants in large numbers. However, by and large, the scope for large-scale continuing international investment depends upon the capacity of the underdeveloped countries of Asia, Africa, the Middle East and Latin America to absorb it. An annual capital import of $10 billion far exceeds their present absorptive-capacity. $10 billion a year is no small flow: it is twice as big as the flow of net domestic saving in 1949 in all these countries taken together**, and about 10 times the flow of net domestic saving in 1959-51 in India alone***. The eligible underdeveloped countries can usefully employ foreign funds on this scale if they launch upon high-speed, thorough-going, industrialization. Industrialization of an underdeveloped country signifies a process of all-round technological progress. It involves, first and foremost, the creation of modern large-scale industries, especially metal, engineering and chemical industries, and their development to the level where they acquire a predominant position in the economy. Secondly, it involves the expansion and development of mining, construction, power-capacity, transport and communications, financial and banking institutions, wholesale and retail trade, and education, health, social security, social welfare, employment and repair services. Finally, it involves the modernization and development

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* Neither country admits coloured immigrants.

** Aggregate net domestic saving in 1949 in Latin America, Africa, the Middle East, South Central Asia and the Far East (including China, Korea and the Mongolian People's Republic, but excluding Japan) has been estimated at $5,240 million (UN, Measures for the Economic Development of Underdeveloped Countries, 1951, p. 76). If China, North Korea and Mongolia are excluded, the figure must stand below $5,000 million.

*** Net domestic saving in India in 1950-51 has been estimated
of agriculture. Development in all these fields is complementary, in the sense that progress in any one direction cannot go very far without corresponding progress in others; in other words, it goes to form a single consistent process of economic advance. Industrialization is thus synonymous with general, balanced, allround economic development, though the essence of this process is the creation and expansion of heavy, especially engineering, industries. It involves structural reconstruction of economy in the direction of increasing the importance of industry as against cottage and small-scale industry, of heavy industry as against light large-scale industries, and of investment goods industries as against heavy industries producing durable consumer goods. Only the requirements of this type of structural reconstitution of economies can usefully employ the vast amounts under discussion. Economic development within the existing structural pattern will soon come up against the point where further investment will add more to national income if directed to industry than if directed to agriculture and mining and associated facilities. It is most unrealistic to assume that an annual investment of some $10 billion of foreign funds and perhaps an equal amount of domestic savings can be made in the eligible underdeveloped countries even for a few years without reaching the above-mentioned point. When this point is reached, the countries concerned must either embark upon industrialization or, assuming that foreign funds still continue to be made available by way of, say, foreign government grants**, make an increasingly wasteful use of these and the domestically saved funds.

48. In order to usefully employ foreign as well as domestic funds made available at the rate under discussion, the underdeveloped countries must undertake high-speed industrialization.

* It would be rather odd for the underdeveloped countries concerned not to achieve a rate of domestic saving at least equal to the rate of capital import.

** For the inflow of foreign funds in all other forms is likely to cease when the expected return on fresh investment falls to an unattractive level due to the exhaustion of profitable investment opportunities within the existing structural pattern.
If they do this, they can make use of foreign funds on the required scale only if the bulk of these funds are made available in the form not of loans and direct investments but of grants. For if the former, the amount of foreign exchange required to service them will multiply rapidly. For some time, old debts may be serviced by taking out fresh loans (provided these are available) as did Germany in the 'twenties; but ultimately the underdeveloped world must find the amount by achieving a large enough favourable balance of trade (i.e. excess of visible and invisible exports over imports) with the capital-exporting countries. To a certain extent, this may be done by economizing imports from the latter, by directing the flow of foreign as well as domestic funds into branches of production whose output may be substituted for some of the imports. But keeping in view the present volume and character of these imports, the rate at which service charges on foreign capital will multiply if such capital flows at the rate under discussion in the form of loans or direct investments, especially the latter, and the extreme unlikeliness of the advanced countries countenancing, more so of aiding, economic development that will injure their own industries by destroying their present markets in the underdeveloped countries, the only way to achieve the required scale of favourable balance of trade would be to direct the flow of investment into lines of production whose output may be exported to the foreign capital-providing countries. Since advanced countries are likely to import from the underdeveloped countries only primary products - food, raw materials and metals and ores - or very low-skill manufactures (e.g. jute bags) and not high-skill manufactures, least of all products of heavy industry, the need to expand exports to the capital-exporting countries requires that development must in the main remain confined to agriculture, mining and quarrying, low-skill manufactures and associated irrigation, power, transport and communications, banking and insurance, etc. facilities; in other words, development should.

* In the USA there is no market even for foreign some of the basic food (e.g. wheat) and raw materials (e.g. cotton).
prove within the existing structural pattern of the underdeveloped economies and not seek to transform it. The requirements of servicing the foreign investment thus conflict with those of a large flow, and useful employment, of such investment. It is this contradiction which currently inhibits the international flow of creditor or equity capital on an adequate scale. Conditions for such flow were highly favourable a century ago, when the then underdeveloped countries provided large opportunities for the investment of foreign capital in fields that promoted export of primary products and low-skill manufactures to the capital-providing countries. Now that, in the remaining underdeveloped countries, such opportunities have greatly narrowed, the requirements of further high-speed development, and hence of useful large-scale foreign capital-absorption, have come into sharp conflict with the requirements of servicing of such capital. This conflict is resolved if foreign funds are provided as government grants. But then they cease to fall in the category of capital export. In the USA, grants by the Federal Government to foreign countries are very appropriately classed as 'government purchases from abroad', i.e. as public consumption and not as capital export.

49. It follows from the above that there is little likelihood of capital exports proper ever hitting up a rate even remotely approaching that under discussion. International flow of funds for peaceful, development purposes, at that rate, is only possible if the advanced capitalist countries agree to provide the bulk of this amount in the form of government grants for financing the industrialization of underdeveloped countries. To expect that they will do this is to turn one's back completely on the character of capitalism, especially of monopoly capitalism. Hitherto the grants provided by the advanced capitalist countries to the underdeveloped countries have been entirely either for military purposes or for purposes of colonial type development. The writer knows of no advanced capitalist country whose government

* These funds may then be classed public consumption by the countries providing them. For the time being their stimulating effect on aggregate demand in these countries will be the same as of other increases in public consumption.
whether Conservative or Labour, Republican or Democrat, Christian Socialist or Social Democrat, has proposed, coun-
tenanced, or even vaguely hinted at government grants for financing the industrialization of the underdeveloped countries, not even of those that, falling in the so-called 'free world', should be especially nearer to the former's heart.

50. The foregoing discussion made the writer sceptical of the possibility, and even more so of the probability, of the advanced capitalist countries being able to solve the problem of effective demand within the framework of a basically peace economy. Theoretical considerations and actual current developments seemed to suggest that the solution was likely to be sought in a system of währwirtschaft. In the 'thirties, Germany tried this solution. The foremost capitalist country of today, the United States, seemed to be set on the same course and trying to induce all other countries under her influence to follow her into this blind alley. In their development, the advanced capitalist countries seem to have reached the stage when the chances of their being able to solve the problem of demand within the framework of a peace economy, and hence of enjoying stable full employment and uninterrupted economic and social progress seem rather slender. The attainment of these objectives calls for a social change in these countries.

51. The view that in a capitalist economy money-wage and price flexibility would automatically ensure adequate demand was discussed next, partly because it represents the essence of the 'classical' theory and the moot point between the Classicals and the Keynesians*, and partly in the belief that the discussion may prove of some value for an analysis of the employment problem in India where money-wages (especially the money earnings of the self-employed persons who form the bulk of the population) and prices are as yet quite flexible. The logical soundness, the practicability and desirability of wage and

* For instance, Prof. Pigou, the greatest among the living upholders of the classical tradition, has observed: 'The architects of that discipline [classical political economy] never had any doubt that, provided only thorough-going competition [Pigou's phrase for money-wage flexibility] exists among wage-earners, there must be tendency towards full employment, and apart
price-flexibility as an automatic device to ensure full employment, were the three basic issues discussed. Since demand deficiency was identified as the basic problem that would confront the present-day advanced capitalist economies if they were organized on a peace footing, the relevant question was whether unemployment-induced fall in money-wages could automatically create full employment. It was noted that a money-wage cut could possibly expand employment through one or more of the following effects: the substitution effect (i.e. the substitution of labour for capital), the lower interest-rate effect (i.e. the stimulating effect on demand of the decline in the rate of interest induced by a fall in money-wages and prices, and hence in the transactions-demand for money), and the Pigou effect (i.e. the stimulating effect on demand of a rise in the propensity to consume, induced by an increase in the real value of cash balances due to a fall in the absolute price level). An analysis of the working of the three effects revealed that the conclusion that they must restore full employment was unwarranted, even when the problem was studied in its static aspect. The study of the problem in its dynamic aspect suggested that there was a strong possibility that wage-flexibility may lead the system into a state of permanent less-than-full employment disequilibrium. As regards its practicability and desirability, wage-flexibility as an automatic cure of demand deficiency was found to be even more unsatisfactory than in its logical soundness. Even Pigou has conceded that the problem of demand should be attacked by manipulating demand rather than wages.

(Contd) from changes and frictions, there must actually be full employment*. (Lapses from Full Employment, op.cit. p.20). On the other hand, Keynes concluded: 'There is, therefore, no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment any more than for the belief that an open market monetary policy is capable, unaided, of achieving this result. The economic system cannot be made self-adjusting along these lines' (General Theory, p. 276).

* The discovery of this effect being associated with Pigou's name, Don Patinkin (Price Flexibility and Full Employment American Economic Review, Vol XXXVII, No 4, Sep 1947) has very appropriately termed it 'the Pigou Effect'.

** Preface to 'Lapses from Full Employment', op.cit.
52. When the writer attempted to apply the foregoing analysis of the employment problem in the advanced capitalist countries to the employment problem of his own country, he was struck by the fact that in India the problem was basically different from that in the advanced countries, in the following respects:

(i) The actual level of employment in India always closely approaches full employment in the Keynesian sense. This is indicated by the fact that even quite modest increases in aggregate demand generate inflationary pressures.*

(ii) Unemployment occurs mostly, not as outright unemployment of the wage-earning population, but as severe under-employment of the vast mass of the self-employed small producers.

(iii) Lapses from Keynesian "full employment" are insignificant. Moreover, if need be, effective demand can be easily stepped up without abandoning the peaceful character of the economy or causing the structure of demand to be different from that conducive to maximum social welfare.

(iv) The gap between Keynesian "full employment" and literal full employment is very wide, so that the attainment of no more than the former level of employment involves continued colossal waste of man-power through idleness. While the basic problem in the advanced countries is to raise actual employment to the level of Keynesian full employment, a major problem in India is also to raise the more or less ever-present Keynesian "full employment" to a reasonable proximity to the literal full employment.

* Since full employment output is the maximum output attainable by a country at a given time, the failure of output to respond to increases in demand, in other words, the generation of inflationary pressures, is indicative of the fact that full employment in the Keynesian sense has been reached.
(v) Since, relatively to the advanced countries, a much higher percentage of the population is under 15 years, and since the proportions of the able-bodied in the age-group 15-59 is, because of poorer health standards, considerably lower, literal full employment in India would mean full employment of a substantially smaller proportion of the total population.

(vi) In India, because of very low labour productivity, even literal full employment at the current level of output per man-hour will mean a relatively very low standard of living. The problem is, therefore, not only fuller but also more efficient employment.

What appeared to this writer as an important discovery was the understanding that all the above peculiarities of the employment problem in India emanate from a single foundation, viz., the underdeveloped state of the country's economy, that the various aspects of the employment problem were not independent problems but merely so many facets of the same basic problem, that in essence the problem was not one of demand-deficiency but of capital-poverty, and that, consequently, the basic solution lay not merely in creating adequate demand but in economic development. The employment problem of India thus became co-extensive with the basic problem of India. The realization that the problem under study was not just one, but the basic, problem of this country greatly enthused the writer. For what can be more inspiring to the citizen of an underdeveloped country than to be engaged in devising means and methods of her advancement?

53. When his work on the problem was drawing to a close, the writer was greatly reassured to find confirmation from several sources of the correctness of his central thesis that the employment problem in India is in essence the problem of under-development, and that economic development provides the basic solution to it. A body of experts appointed by the

* Among others, they included Dr. D.R. Gadgil, Director, Gokhale Institute of Politics and Economics, Poona.
Secretary-General of the United Nations, in pursuance of a Resolution of the Economic and Social Council, 'to prepare, in the light of the current world economic situations and of the requirements of economic development, a report on unemployment and under-employment in underdeveloped countries and the national and international measures required to reduce such unemployment and under-employment', actually came out with one on 'Measures for the Economic Development of Under-Developed Countries'. And in justification of this they wrote: 'In our opinion, the principal way to reduce unemployment and under-employment in the underdeveloped countries is through economic development. Hence our report concentrates on the measures for the economic development of under-developed countries'***. The main thesis advanced by Dr. Rao in his two very important articles, 'Investment, Income and the Multiplier in an Under-Developed Economy'*** and 'Full Employment and Economic Development' is that the Indian economy practically always has full employment in the Keynesian sense and that economic development provides the way to fuller and more productive employment. Prof. B. Dutta in his 'The Economics of Industrialization (1952)' concerns himself mostly with the analysis of the employment problem in India and builds up the case for industrialization on the ground that it alone provides a satisfactory solution of this problem. But, perhaps the most reassuring was the confirmation of the basic thesis of this study by the First Five Year Plan (1953), which observes: 'The problem in India is more one of under-employment rather than of unemployment as such. Under-employment is another facet of low productivity, which in turn is due to shortage of capital equipment and technical skill. The problem of removing unemployment and of opening up employment opportunities for all

** ibid., p. 4.
<<< A Doctorate Thesis approved by the London School of Economics.
at rising levels of real income is, therefore, in a sense, synonymous with the problem of development itself."

54. The employment problem in the advanced capitalist countries having been found to be basically different in character from that in India, it was considered unnecessary to incorporate in the present study the detailed analysis of the former undertaken by the writer. It was, therefore, decided to mention only the main conclusion of this analysis in the Introduction to this study; the full analysis, it is the writer's hope, will be published as a separate study. The main body of the present study accordingly deals only with an analysis and solution of the employment problem in India. The basic conclusions of this study are applicable to all densely populated underdeveloped countries.