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FISCAL POLICIES AND EMPLOYMENT PROMOTION

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I. A General Diagnosis

1. It seems appropriate, particularly for an author who has been out of close touch with the Indian scene for some ten years, to begin this presentation with a brief summary of current thinking about the problem at hand in more general terms, and only then to turn to specific issues related to the Indian economy as such. This is especially so since the problem of employment promotion, or at least of assuring the adequate employment of a growing labour force, has drawn increasing attention in many developing countries over the past two or three years, often taking the center of the stage away from such issues as that of import substitution (which in a considerable number of cases dominated the policy considerations of the 1950's) and those of the trade liberalization and export promotion (to which many development programmes of the 1960's were principally geared).

2. The diagnosis of the problem has already become almost standard. For all developing countries capital is a relatively scarce factor of production, and even with considerable efforts to expand the amounts of private saving and of publicly mobilized funds, the investible surpluses of these economies will continue to be severely limited. At the same time, the growth of output in the last two decades has in most cases been relatively fastest in activities whose capital-labour ratios are relatively high, and the amount

of additional labour that has been absorbed in the modern industrial sector has been disappointingly low when compared with the overall growth of the labour force. The almost-ubiquitous concern, then, is that a continuation of development strategies biased towards capital-intensive investments is not adequate to cope with prospective labour-force increases, and will tend to exacerbate or at least not significantly alleviate the twin problems of unemployment and underemployment.

3. At the most general level, the proposed "solutions" to the problem are a matter of simple arithmetic. The same amount of net investment, done in activities with lower capital-intensity, will absorb more of the increased labour force than if the same funds are applied to activities of higher capital intensity. Similarly, if ways could be found of using the existing capital stock more intensively, additional labour could be absorbed with little or no extra investment. (This latter solution receives greatest prominence in the many countries where recent data point to a substantial under-utilization of the existing capital stock.)

4. But these very general solutions are patently facile, and in themselves do not help much in the choice of appropriate policies. It makes no economic sense, for example, to decree that existing capacity should be more fully utilized, when the owners and/or managers of that capacity would be more than delighted to expand their output (and correspondingly their use of labour) if only there were demand for such expansion at remunerative prices. Likewise, it would in general be economically unsound to require by law that the labour intensity of specific activities be increased by certain arbitrary degrees--this would in most cases amount to requiring the enterprises in question to take on labour that would be economically redundant, given the overall pattern of demand existing at the time, with the degree and economic

cost of such redundancy varying widely from enterprise to enterprise. In a similar vein, it is folly to think that denying or severely limiting the access to investible funds by capital-intensive activities would solve the problem. Many of these activities--electric power production comes immediately to mind--are critical for the overall performance of the economy, and others, though less than critical, clearly qualify as highly beneficial in spite of their capital intensity.

5. Thus, while no one can deny the arithmetical validity of what I have called the most general proposed "solutions" to the problem, they are far from being sound guides for policy decisions--a fact which has been widely recognized. In their search for more valid and more concrete prescriptions for public action, many students of the problem have turned to an examination of the role that past and present policies have played in determining the evolution of the existing economic structure and its configuration of capital-labour intensities. As a result of such examinations in a number of developing countries, I believe it is fair to say that something closely approaching a common pattern has emerged, though naturally there are significant individual departures from one or more parts of this pattern in particular countries.

6. The pattern is best described in terms of the role which the relative prices paid by enterprises for labour and for capital plays in influencing the choice of techniques for enterprises in each line of activity. Broadly speaking, in virtually all of the countries examined, the modern industrial sector of the economy was favoured by preferential access to capital funds at low interest rates, and overvalued exchange rates together with low (or zero) rates of duty on imported capital equipment. Both of these items made the importation of such equipment artificially cheap. Often

these measures were accompanied by full or partial exemption from tax of the income generated as a consequence of the capital investments concerned (a device that, paradoxically, was used to the greatest degree in programmes aimed at reorienting investment towards the most backward and labour-abundant regions of the country in question). All these measures operated to make the capital factor artificially cheap for enterprises in the modern industrial sector. At the same time, labour legislation was typically such as to make the labour factor more expensive for these same enterprises. The specific policies operating in this direction were typically minimum wage legislation and social security taxes, both of which were generally restricted in coverage to larger firms (mainly the modern industrial sector) and also by other 'social laws' regarding the provision to workers of housing and similar fringe benefits by the larger employing enterprises. In addition to these policies directly affecting labour costs there was the fact that trade unions--particularly those that were strong enough to have a significant effect upon wages--were largely also concentrated in the modern industrial sector, this fact being in some cases a consequence of government policies favouring such development, and in other cases quite independent of the government's position.

7. Quite obviously the policy pattern just described operated to tilt the balance--and it should be emphasized to tilt it artificially--in favour of capital-intensive methods of production for the typical modern industrial enterprise. As a consequence, more capital was absorbed in the modern industrial sector than would otherwise be the case, leaving less of this scarce factor available for use in the rest of the economy. At the same time, the modern sector absorbed less labour than it would have done in the absence of

these special policies, leaving more of it to be absorbed by the remainder of the economy. The task thus thrust upon the rest of the economy--of absorbing a larger share of the incremental labour force, while at the same time having a smaller fraction of the available investment funds to do it with--is one that poses serious problems of adjustment. It can easily result either in open unemployment (a likely outcome when real wages are rigid in the downward direction) or in an increased amount of underemployment (about which more will be said later) or in both, and the available information strongly suggests that this was indeed the result in a considerable number of countries.

8. In addition, in several cases, the allocation of licenses to import raw materials was linked to the amount of each enterprise's installed capacity. This simply operated to strengthen the incentive to install additional equipment. Even if such equipment was not expected to be utilized in actual production for many years, its presence operated as a sort of guarantee that even in periods of foreign exchange stringency the authorities would permit the importation of enough raw materials to allow normal production to continue unabated. For example, if a firm had installed capacity equal to twice its normal production, it could continue normal operations even if the government cut its foreign exchange allotment for raw materials to 60 or even 50 percent of that corresponding to its full capacity. Of course the extra capacity cost the firm money, but many cases indicate that from the firm's own point of view the extra capital expense for increased capacity was a worthwhile 'insurance policy' against the risk of severe materials cutbacks. From the social point of view, however, the extra investment was largely a waste of scarce capital resources, since a more enlightened import allocation policy could have permitted the achievement

of the same levels of production without the extra investment.¹

II. Suggested Policy Adjustments

9. The above diagnosis carries with it some obvious implicit suggestions as to how to improve the situation: to the extent that public policies themselves have contributed to the problem, their reversal will obviously contribute to its solution. I shall treat below the main policies mentioned earlier, and discuss the possible effects in addition to improving the employment situation, that its reversal might entail.

a) Preferential Credit Allocation and Low Interest Rates for the Modern Industrial Sector

10. These, like most of the other measures to be discussed, had, in addition to biasing the choice of technique in favour of capital intensive processes, the effect of reducing costs as seen by the enterprises in question and consequently stimulating their output. This by itself would appear to be a good thing, but it must be realized that the extra capital resources taken as a consequence of the preferences had many and valuable alternative uses in other sectors of the economy--uses to which the capital was denied because of the existence of the preferences. In other words, the measures in question made capital available to the preferred sector at less than its true social opportunity cost, and it is a commonplace of economic theory that in such cases a loss, not a gain, of national output and welfare is entailed. Moreover, given the fact that the rest of the

¹Probably the two best sources giving supporting evidence for the above diagnosis are Fiscal Measures for Employment Promotion in Developing Countries (Geneva, International Labour Office, 1972), and a report on the employment problems in Latin America submitted by the Department of Economic Affairs of the Organization of American States to the September, 1971 meeting of the Inter-American Committee of the Alliance for Progress.

economy was much less capital-intensive than the preferred sector, the demand for labour would also be increased by the reduction or annulment of the preferences. It must also be recognized that the adjustment process would entail shifts in relative prices, with those of the commodities produced in the previously preferred sector tending to rise and those of the commodities produced in the rest of the economy tending to fall as the latter sector's output expanded at the expense of that of the former.

b) Overvalued Exchange Rates and Preferential Treatment
of Imported Capital Equipment

11. The direct effect of reducing or eliminating the overvaluation of exchange rates and the preferential treatment of capital goods imports is to release some foreign exchange for other uses. To the extent that the opportunity cost of foreign exchange is higher than the effective rate that the modern industrial sector has to pay for its capital goods imports (and this is implied by the idea of preferential import treatment at overvalued exchange rates), the foreign exchange thus released can be put to more valuable use in other areas, thus adding to the contribution to national income and welfare that can be derived from existing foreign exchange availabilities. This is directly analogous to the effect, discussed under (a) above, of releasing capital resources from the preferred sector in cases where the social opportunity cost of capital is higher than its yield at the margin in the preferred sector.

12. It is usually the case that both things are true at the same time, i.e., not only is the social opportunity cost of capital higher than its likely marginal yield in the preferred sector, but also the social opportunity cost of foreign exchange is higher than what the modern industrial sector is required to pay in order to acquire its imported capital equipment.

When this is true, the reversal of either type of preferential treatment will have beneficial side-effects. That is, the reduction of preferred access to capital funds will not only release some funds to other uses where their yield will likely be higher, but also, through its side-effect of reducing imports of capital goods by the modern sector, tend to release some foreign exchange to other uses where its economic productivity will likely be higher. In an exactly similar way, reducing the preferred access to foreign exchange for capital inputs not only directly releases foreign exchange but also would tend as a side-effect to release some capital funds which then could be applied more productively in the rest of the economy.

Obviously there are limits beyond which the reduction in capital and/or foreign exchange allocations to the modern industrial sector should not be carried. These limits are implied by our use of the terms preferential treatment, low interest rates and overvalued exchange rates in the preceding discussion. The signal as to when a reduction in allocations of capital funds to the industrial sector has been carried too far is when the expected marginal yield of capital in this sector is no longer higher than the alternative yield of that capital in other sectors. Likewise for foreign exchange: preferential access ceases to exist when the cost paid by a given sector for its foreign exchange is no longer lower than the true economic value which that foreign exchange has, at the margin, in other uses. We need not detail ourselves here, however, on the niceties of calculating precisely when this critical margin is reached, for in the countries to which the policy pattern described in Section I applies, it is characteristically true that the degrees of preference given to the modern industrial sector both with respect to access to investible funds and with respect to the amounts of foreign exchange made available to it for capital

goods imports have been very large. The directions in which policies should move to correct these preferences are obvious, and they would have to move very substantially in these directions before giving rise to any plausible worries about their having moved too far.

c) Tax Exemptions for Particular Capital Investments

13. It is nothing less than astounding how frequently the developing countries have resorted to the use of tax exemptions as a device for stimulating investment in particular lines of activity, particularly so in the light of the chronic problems these same countries have in raising fiscal revenues that are adequate to meet their needs. The closest I can come to an explanation of this widespread tendency is the conjecture that the typical lawmaker has the feeling that the incomes generated from the investments thus stimulated are truly net additions to the nation's total income stream. If this were indeed the case, even the total exemption from tax of these new incomes would not entail a loss in government revenue, as compared with what it would be without the exemptions. However, this is rarely if ever the case. Normally, the capital invested in the exempted activities would otherwise have been investment elsewhere in the economy, where it would have generated income streams subject to tax; these revenues are simply lost when the capital in question is diverted to an exempted use.

14. Revenue considerations aside, however, there is a sound economic rationale which can justify tax exemption in certain cases. The basic principle involved is that where private market forces would themselves bring about a situation in which the social benefit from additional production would exceed the social opportunity cost of that production, a subsidy (or what amounts to the same thing, a reduction of the tax that would otherwise

apply to the activity in question) is economically justified. Put in a technically somewhat more sophisticated way, when the sum total of incremental social benefits associated with all the changes in the levels of the various economic activities that are induced by a subsidy or tax reduction exceeds the sum total of incremental social costs associated with these same changes, then granting the subsidy or tax reduction is preferable on economic grounds to the status quo.

15. The case in which the above principle applies most directly and simply to the subject matter of the present paper is one in which the wages that have to be paid by enterprises in a given sector, activity, or region lie above the social opportunity cost of the labour employed. As an example, if the wage that had to be paid were Rs 5 per day, while the social opportunity cost of the labour employed were Rs 3 per day, a subsidy of Rs 2 per man day would be required to make the cost perceived by the employing enterprises equal to the true social cost of the labour involved.

16. What is surprising in this connection is that so few schemes of tax exemption are related to the amount of labour employed,¹ even when the clear intent of the exemption legislation was to promote employment. The common and traditional approach is to make tax exempt, totally or partially, for a specified period or indefinitely, the corporate profits earned on the affected investments. Although such tax incentives do tend to increase employment in the activities in question, this comes as a side-effect rather than as a direct effect of the incentive measure. The direct effect in this case is to increase the amount of capital employed, and it is strongest for

¹I know personally of only one--a Panamanian Law of 1971 which reduces the corporation income tax paid on incomes generated in backward areas of the country by an amount equal to 10 percent of the wages and salaries paid in those activities.

the most capital intensive activities. For the same cost in terms of fiscal revenue foregone, a significantly greater employment effect could be obtained by gearing tax incentives directly to the employment of labour rather than to the use of capital, as was done in the Panamanian case. Some of the technical details associated with an employment-oriented tax incentive scheme have been dealt with in ILO, op. cit., pp. 342-44.

d) Artificially High Wages in the Modern Sector

17. Like many other economic policies with dubious or even detrimental effects on economic efficiency and welfare, those leading to artificially high wages (including fringe benefits, social security taxes, and other employment-related labour costs) are motivated by the best of intentions. The aim almost invariably is to improve or protect the welfare of the workers, and there can be no doubt that this is the result for the workers who end up being employed in the affected activities (unless the laws are openly flouted, as is often the case with minimum-wage legislation). What is not so clear is whether labour as a whole gains as a consequence of the type of legislation in question. To answer this question we must inquire into its effects not only on labour in the affected sectors but also on the rest of the labour force.

18. This point has been well treated in standard economic analysis. In general it can be expected that an artificially high wage will reduce the amount of labour employed by the affected activities.¹ This in turn means that more people will be looking for work in the rest of the economy.

¹There is a theoretical exception to this rule which applies when a single employing enterprise is so large as to itself be capable of significantly influencing the overall level of wages prevailing in its labour market area, but the practical importance of this case is extremely limited and would in no sense provide a justification for general wage legislation applicable to broad sectors of the economy.

The result is that wages will have to be lower there than they would otherwise be in order to absorb the extra labour, or else the degree of open unemployment will increase, or both. In each of these outcomes, labour in the rest of the economy is worse off than it would be without the artificial wage props affecting the modern sector--about this there can be no dispute.

19. We have, then, the phenomenon that workers in the 'protected' sector of the economy are clearly better off as a result of legislation and possibly other forces generating artificially-high wages there, while workers in the "unprotected" sector are clearly worse off. One question that naturally arises in this context is whether labour as a whole gains or loses as a consequence of the "protective" legislation. This question, too, has been examined in the economic literature, and the answer for an economy with given endowments of labour and capital is quite clear--the gain of labour in the protected sector more than offsets labour's loss in the unprotected sector when the substitutibility between labour and capital (as measured by the elasticity of substitution between these two factors) is lower in the former sector than in the latter. On the other hand, when the elasticity of substitution between labour and capital in the protected sector is higher than that in the unprotected sector, the losses sustained by workers in the latter sector exceed the gains by those in the former. Finally, when the elasticities of substitution between labour and capital are the same in both sectors, the gains to workers in the protected sector are exactly compensated by the losses to workers in the unprotected sector.¹

19. Some readers may react to the above analysis by asking why one

¹These results stem from a two-factor, two-sector model in which each of the two sectors is characterized by a production function that is homogeneous of the first degree, with given endowments of each of the factors available to the economy as a whole.

should not extend the "protection" of artificially high wages to all sectors of the economy. Plausible though it may seem at first glance, this policy would end up simply by creating additional open unemployment, for now all enterprises would be required to pay higher wages and all would seek means of economizing on their use of labour.

20. Even when the protected sector does not cover the whole economy, and even when the labour market conditions in the unprotected sector (particularly its wage flexibility) enable that sector to absorb all workers who are willing to work in it on the prevailing terms, the creation of a protected sector by means of artificial wage props can result in open unemployment of a rather special kind, which I would call quasi-voluntary. Where wages and other conditions in the protected sector are substantially superior to those applying in the unprotected sector, there are likely to be some people who are eager to obtain work in the former sector but unwilling to accept employment in the latter. They are involuntarily unemployed vis-a-vis the wages and conditions of the protected sector but voluntarily unemployed vis-a-vis the conditions prevailing in the unprotected sector's labour market. Yet by the standard procedures applied in the censuses and surveys which record unemployment, they would almost certainly be classified as unemployed.¹ This appears to be characteristic of the so-called "educated unemployed" in many countries. There seems to be little doubt that there are many employments in which most of these people could find work but in

¹These procedures usually ask people a) whether they are employed and b) if not, what efforts they have made in recent weeks to obtain employment. If no serious efforts have been made, the respondent is generally classified as being out of labour force, while if such efforts have been made, he or she is classified both as being in the labour force and as unemployed. A respondent (whom I would classify as quasi-voluntarily unemployed) who is actively seeking work in the protected sector but not in the unprotected one would normally give a positive answer to question b) and thus be classified in the sample or the census as an unemployed member of the labour force.

many cases--either because of the nature of the employment, the status associated with the job, or its amenities or location--they prefer to continue searching for preferred-sector jobs, usually white-collar jobs with high pay, status, and amenities, located in a major city, rather than accept what they regard as an inferior employment. It should be noted, too, that the phenomenon of quasi-voluntary unemployment tends to be chronic as long as the conditions that give rise to it--wages and working conditions in the protected sector that are notably superior to those prevailing in the unprotected sector for workers of similar qualifications--continue to prevail. For under these circumstances there is always likely to be some group of applicants to whom working in the protected sector is attractive while working in the unprotected sector is not.

21. For the reasons stated above, it should be clear that a policy promoting artificially-high wages in a protected sector (usually as previously indicated, the modern industrial sector) of the economy is by no means an unmixed blessing. It distorts the allocation of resources in the economy, introduces an arbitrary differential between the rewards accruing to similarly-qualified workers depending on whether or not they are lucky enough to get protected-sector jobs, and tends to induce the appearance of what I have called quasi-voluntary unemployment. In addition, there is no presumption that the working classes as a whole are better off as a consequence of such a policy, though there is a virtual certainty that those who work in the unprotected sector will be worse off.

22. The issues surrounding policies that foster artificially-high wages in particular sectors are so fraught with political overtones, and the conditions in various countries are so different, that it would be presumptuous to propose a "solution" that pretended to be generally applicable

without qualification. However, it appears safe to suggest that where, as in most places, a gap already exists between the wages and working conditions of the two sectors, pressures to enlarge this gap by granting even more preferences to the protected sector should probably be resisted, and where the gap is already large, a strategy should probably be sought which would lead to its (probably gradual) reduction over time.

e) Summary and Comment

23. In a sense the key words in this section are artificial, preferred, protected. When the modern industrial sector has preferred access to credit and artificially low interest rates, efforts should be made to reduce or eliminate the preference, and to raise the rates they are required to pay for credit. When it has preferred access to foreign exchange for capital-equipment acquisitions, at an artificially low price, analogous conclusions follow. Tax incentives that give preference to investment in capital intensive activities should be avoided or, if present already, reduced, and if such incentives are given at all they should preferably be tied or geared to the amount of labour absorbed by the affected enterprises. Similarly, policies which make labour costs in the industrial sector artificially high, creating a protected segment of the labour force at the expense of the rest of workers should be viewed with extreme caution, as they, like the policies listed earlier, reduce artificially the absorption of labour by the affected sector.

24. Readers of this section will perhaps have noted that the analysis is implicitly based on the notion that the enterprises in a sector will in fact respond in some significant way to changes in the relative costs to it of labour and capital, using more labour and less capital when their relative

prices are not distorted in form of capital intensity than in the more common situation when such a distortion or bias exists. Whether or not such responsiveness exists is of course a question of fact. In principle, one can imagine a situation in which the nature of the technology is such that no serious alteration in factor proportions is feasible. Needless to say, I would not have devoted so much space to the preceding discussion if I did not believe that factor proportions were typically susceptible to ample variation in response to relative price changes. In the remainder of this section I shall briefly review the reasons for this belief.

25. Much has been made in the economic literature of the alleged inability of the developing countries to find "technologies" that are appropriate for their resource endowments. The existing technologies, it is said, were invented and developed in the more advanced countries and are designed with their conditions in mind. As a result they are much too capital-intensive to be suited to the conditions prevailing in the developing nations. This presumably leads to a situation in which essentially the same productive methods are used in the modern industrial sectors of poor countries as are employed in much richer nations, with correspondingly little labour-absorption taking place as these industrial sectors are developed.

26. There is an element of truth in the above position, but, in my view, it is a very small element. It is true that the basic equipment used in industrial processes in the poorer countries tends either to be imported from abroad or if domestically produced to follow designs which are similar to those adopted by equipment manufacturers in the more advanced parts of the world. It is also true that, by and large, the design of a piece of equipment determines the amount and type of labour that is required to run it. It takes one worker to run a given lathe or loom, for example, and this

is true regardless of whether it is installed in a poor or rich country. However, the inference that the same industry will have the same capital intensity in all parts of the world, when similar machinery is used, is not warranted.

27. The evidence on this assertion is, I believe, decisive. We know that the levels of wage rates are far lower in the developing countries than in the developed. We also know that the rates of return generated by capital are comparable or if anything higher in the poor as compared to the rich countries. Consider, then, a hypothetical example of an industry which in, say, the United States follows a particular technology, and uses a combination of productive factors such that half of its value added accrues to labour and the other half to capital (a quite typical rough relationship). Such, for example, would occur with 150,000 man-days of labour being used at a wage of \$20 per day (for a total wage bill of \$3 million per year), and with \$20 million of capital being employed at a gross-of-tax yield of 15 per cent per annum (for a total gross-of-tax turn to capital of \$3 million per year). Now assume that the identical processes are used in a similar enterprise in a poor country where the corresponding wage rate is only \$2 per day. If the rate of return to capital were the same (15 per cent per year) the overall return to capital would again be \$3 million, but the wages bill would only be \$0.3 million per year. The share of capital in value added would be 10/11, and that of labour only 1/11. These are the kinds of grossly unequal shares of capital and labour in value added that would be implied by identical factor proportions in the two countries. Yet as we look at the actual shares of labour and capital in value added in the developing countries we rarely encounter such an extreme relationship. The inference is inescapable that much more labour must in fact be used in the industries in question than a

strict replication of U.S. factor proportions would imply.

28. Where and how is this additional labour occupied? It certainly is not true that two or three secretaries sit at the same typewriter at the same time, or two or three operations work on a one-man loom or lathe simultaneously. In these particular operations it is probably true that the same factor proportions apply in the two countries being compared. But in many other operations--packing, loading, storage, shipping, materials handling, etc. etc.--the less developed country typically uses much more labour than the developed one. And when all the operations comprising an industry are taken together, the factor proportions of the poor country turn out to be vastly different from those of the rich one.

29. The above already implies a substantial responsiveness of the labour intensity of production to changes in the relative prices of factors, but it should be recalled in addition that there are usually at any one time a variety of processes or machine-types available to do particular tasks. Relative factor prices more favourable to labour-intensive production will in general induce the adoption, within this range of choice, of machine types that make greater relative use of labour. The function of the policies discussed in this section is to attempt to ensure that advantage is taken of whichever of these possibilities are economically viable in the economic setting of a given developing country at a given time.

III. Some Additional Fiscal Measures for Employment Promotion

30. The preceding section presented suggested policy adjustments which would help to rectify the biases toward excessive capital intensity which tend already to be built into the policy structures of many developing countries. In the present section we shall discuss a number of additional measures

that have been proposed toward this same end.

a) Changing the Rate of Growth of Output

31. I introduce this topic in the fullest awareness of a lesson that serious observers of the development process have increasingly come to recognize--there is no simple touchstone to economic growth, and in particular no key instrument of fiscal policy, or combination of such instruments, whose use will enable a nation to achieve a given growth target. Yet all too often the employment problem has been approached as if it were inevitably tied to the rate of economic growth--a linkage which in my opinion has tended to obscure the issue and to divert attention from more realistic ways of approaching and solving the problem at hand.

32. The characteristic output-linked approach to the employment problem can be summarized as follows. A target rate of growth of output per work (say 3 percent per annum) is established, in a circumstance where the natural increase of the labour force, is, say, 2 percent per annum. At the same time a specified rate of absorption of labour from the ranks of the unemployed, in the amount of, say, 1 percent of the labour force per annum, is also established as a target. The remainder is a matter of arithmetic. If the employed labour force is to grow at 3 percent per year (2 percent from natural increase and 1 percent from unemployment absorption) and output per worker is to grow at 3 percent per year as well, then output must grow at 6 percent per annum.

33. If only this were as easily done as said! Unfortunately, there are real economic barriers and constraints which must be overcome in order to increase the growth rate--scarcities of investible capital, of foreign exchange, of skilled labour of various kinds, of professional, entrepreneurial and technical talents, etc. Moreover there are also cultural and institutional

constraints, including many involving the traditional pattern and structure of governmental policies and processes themselves--that must be overcome in order to accelerate the economic growth rate. Surmounting these barriers is difficult, and entails both time and often substantial resource commitments. As a consequence, the future growth rate of an economy can be predicted only with a substantial margin of error, and in any case cannot be casually expected to reach the levels implied by ex-ante targets of labour force and productivity growth.

34. Obviously, efforts to expand the overall rate of economic growth are amply justified in their own right and should be vigorously pursued in any event. In short, such increases in employment as can be achieved via more rapid economic growth clearly should be, but it must also be recognized that this facile solution may not provide the total answer to the employment problem. The sheer size and obduracy of the task of stimulating the growth rate may and often will make it necessary to turn to other policies, more specifically oriented to the employment question, in order to attain an acceptable performance on that front. Some possible policies working in this direction have already been discussed, and we now turn to others.

b) Policies Directly Affecting the Composition
of Output

35. It was indicated earlier that it was not enough to shift the production of the economy toward the more labour-intensive sectors; to be effective such a shift would have to be accompanied by a corresponding shift in demand. Two types of fiscal-policy measures have from time to time been suggested as devices for accomplishing this end: policies designed to increase the demand for the products of labour-intensive sectors i) through changing the relative prices of the products of those sectors as compared to

those of more capital intensive industries, and ii) through changing the distribution of income towards those groups whose demand is more concentrated on labour-intensive products.

36. Neither of these sets of policies is likely to contribute substantially to the solution of the problem. They are by their nature blunt instruments in respect to their impact on employment; moreover, there are severe limits on the extent to which they can plausibly be exercised.

37. Consider the case of a policy designed to reorient demand between two broad sectors, both initially of equal size, and one twice as labour-intensive as the other. Clearly a shift from a 50:50 distribution of total demand between sectors to a 60:40 distribution must be regarded as massive, yet the impact of this enormous shift upon total demand for labour would be less than 7 percent, as is illustrated in Table 1.

TABLE 1
ILLUSTRATIVE EFFECTS OF A CHANGE IN SECTORAL DEMAND
UPON EMPLOYMENT^a

	Before Shift	After Shift
Sector I		
Output	100	80
Employment	100	80
Sector II		
Output	100	120
Employment	200	240
Total		
Output	200	200
Employment	300	320

^aTotal output is held constant because in this section we are discussing the sectoral redistribution of output, changes in the total amount having been treated under subheading IIIa above. Within each sector the ratio of employment to output is assumed to remain the same as before, since once again the motive of the example is to trace the consequences of policies designed to induce sectoral demand shifts, and not of policies aimed at changing

TABLE 1.--Continued

factor proportions within sectors. Finally, one must note that there are circumstances in which changes in demand for labour, either sectorally or globally, will work themselves out by changing real wages rather than actual employment. In a rigorous interpretation, then, the rows in Table 1 labeled "Employment" should be taken to stand for "Demand for Labour at Given Real Wages."

38. Now consider the kind of policy changes that would be necessary to bring about such a radical shift in demand. If the elasticity of substitution between the products of the two sectors were unity--a not implausible assumption where broad sectors are concerned--the relative prices of the products of the two sectors would have to change from 1:1 to 1.5:1--a huge change in the light of the relatively modest employment-effect involved. To bring about such a shift in relative prices, truly massive measures of fiscal policy would be required. If the job were to be done by taxes on the product of sector I or by subsidies on the product of sector II, such taxes or subsidies would have to amount to some 20 percent of the national income!

39. Alternatively, consider attempting to accomplish the shift in sectoral demand by way of a change in income distribution. Suppose that group A spends $\frac{2}{3}$ of its income on the products of sector I, and $\frac{1}{3}$ on those of sector II, while group B's expenditure on the products of the two sectors is divided in just the opposite way. Suppose also that the two groups initially share equally in the national income. Then in order, by income redistribution alone, to bring about a pattern of demand in which sector II accounts for 60 percent and sector I for 40 percent of national output, the distribution of income would have to be shifted so that group A got only 20 percent, while group B received 80 percent of the national

income--clearly an absurdly impossible task in any realistic political setting.

40. The simple exercises presented above demonstrate clearly that there are severe limits to the amount of increased employment that one can expect via redistribution of output between broad sectors of the economy: the policy instruments required, whether they operate through changing relative prices or through altering the distribution of income, would have to be wielded with a force far out of line with their expected impact on the amount of employment. Perhaps the most prudent conclusion to draw is that one could reasonably consider policies to change relative prices significantly or to alter substantially the distribution of income as parts of a general employment-promotion programme if those policies were regarded as substantially justified in their own right, without regard to their prospective employment benefits. Otherwise it is virtually certain that different strategies can be found which, with less drastic policy moves, will more profoundly affect the employment situation.

41. Two such strategies can in a sense be directly inferred from the foregoing analysis. The first is that of stimulating the more intensive use of labour within given lines of activity, as distinct from trying to accomplish this end by shifting demand from sector to sector. This is essentially the aim of the set of policy adjustments discussed in Section II of this paper, which would attempt to rectify existing biases toward capital-intensity in the modern sector of the economy. Such a strategy would undoubtedly also induce some sectoral shift in demand, but it would increase the demand for labour not only through induced sectoral shifts, but also, and probably mainly, through increasing the labour intensity of production within each affected sector. Moreover, within each such sector, this type

of strategy would induce changes in the relative prices of products, the labour-intensive ones becoming relatively cheaper. And there is a strong presumption that the elasticity of substitution among the final products involved would in this case be substantially higher than that which applies between broad sectors, thus producing a greater gain in employment for any given shift in relative prices between the products concerned.

c) Policies Affecting the Structure of International Trade

42. Although there was a significant movement in a number of countries in the 1960's in the direction of rationalizing their policies affecting foreign trade, there are still many whose current situation is characterized by a heavy emphasis on import substitution with comparatively little attention being paid to the promotion of exports. Import substitution policies, whether implemented through tariffs or quotas or licensing schemes, have often led to a situation in which the internal (e.g., rupee) value of a unit of an imported good or its domestically-produced counterpart was equal to two, three, or even more times the external (e.g., dollar) value of the same good converted at the official exchange rate. In other words, for the particular products in question, domestic resource costs equal to two, three, and more times the official rate of exchange have, as a consequence of the countries' foreign trade policies, been incurred in order to save a dollar of foreign currency. At the same time, exporters either receive just the official exchange rate in converting to local currency the foreign exchange that they earn, or, if through export incentive schemes they do manage to get a bit more, receive a premium of perhaps ten or twenty percent over the official rate.

43. The result is a situation in which much more is paid in terms of

domestic resources (measured in rupees) to enterprises for saving a dollar of foreign exchange via import substitution than is paid to them for generating a dollar of additional foreign exchange via export expansion. A number of countries (notably Brazil, Taiwan, and South Korea) have compiled astounding records of export performance as a result of policies which made serious efforts at redressing this imbalance in the incentive structures affecting import-substitution activities on the one hand and export activities on the other. But in many other countries progress in this direction has been meager and export performance sluggish.

44. The rectification of the imbalance in incentives can take a number of different forms, including changes in import-licensing regulations, alterations of the tariff structure, the granting of subsidies (or increasing existing ones) to exports, total or selective devaluation of the currency, etc. This is not the place to enter into a detailed analysis of these many options. Suffice it to point out that, in addition to easing the strains on a country's balance of payments, there is an overwhelming presumption that they will also have the effect of increasing the demand for labour. The relevant comparison here is not between the labour-intensity of possible additional export goods and that of an "average" activity of the economy; the comparison must rather be made with the additional import-substituting activities that would be required in the absence of export expansion. The new exports that would be stimulated by a well-designed policy of trade liberalization and export promotion would surely be items in whose production the country concerned had a genuine comparative advantage; the same cannot be said for the products that would enter on the import-substitution margin, given the extent to which that process has already been carried in most developing countries. It is clear that the comparative

advantage of the developing countries must lie with labour-intensive as distinct from capital-intensive products, and one can accordingly anticipate that positive employment effects will take place as a consequence of the changing pattern of demand, between and within sectors, produced by international trade policies (trade liberalization and export promotion) that are also beneficial in their own right.

d) Policies Promoting the Migration of Labour

45. Labour markets in all countries are characterized by some degree of regional imbalance, in the sense that the wages paid for similar work exhibit significant variation among areas. Some of these differentials are what are called "equalizing" in the sense that they simply compensate for differences in living costs and/or in the amenities of life afforded by the different regions. Others, however, reflect a situation in which workers could truly improve their lot by moving from one area to another. In these cases there is a natural tendency for migration flows to be generated, which in turn conduces toward the reduction in the differentials of real wages across regions.

46. However, migratory flows are often sluggish, especially when channels of information are poor and when (for example in the absence of official programmes or of the informal security given by the presence of friends and family members at the destination) migrants face relatively severe problems and risks in adjusting to their new or prospective environment. In these circumstances there may well be scope for public programmes, both those aimed at improving the flow of labour-market information and those directly stimulating the movement of workers from depressed or backward areas to more prosperous and growing ones. Both these types of programmes have been successfully applied in Spain, where not only travel but

also relocation subsidies (temporary living allowances at the point of destination) as well as help in obtaining new employment have long been given to migrants moving from the backward southwest region of the country to the relatively much more prosperous and dynamic northeast.

e) Policies of Direct Public-Sector Employment
of Labour

47. No solution to the employment problem would appear to be more direct and unequivocal than one in which the public sector directly adds to the demand for labour by creating new jobs. Yet even this solution is subject to important caveats. In the first place there is the fact that the public funds that are spent in direct-employment schemes are themselves a scarce resource. Unless the newly-employed labour generates enough additional social product to justify via production the use of public funds in this way, direct-employment schemes take on the aspect of a total or partial dole. And while there are undoubtedly circumstances in which such a dole is a more socially-acceptable solution to the problem than doing nothing at all, it is certainly true that a high premium should be placed on employment schemes whose benefit, in terms of the value to society of the product that they generate (even if not in terms of their direct financial contribution to the public treasury), is adequate to compensate the public-sector outlay involved.

48. A second and related caveat is also warranted with respect to direct-employment programmes. This concerns mainly the question of how the government's added demand for labour is reflected on the one hand in increased total employment, and on the other in increased levels of market wages, including those of people who would in any event have been employed in the absence of the programme. The answer depends more than anything else

on the aims that the programmes are expected to serve, and on the objective circumstances characterizing the labour-markets of the areas where they are implemented. With respect to aims, the main issue is whether the purpose of the programme is increasing employment as such on the one hand or alleviating poverty (improving the distribution of income) on the other. With respect to objective circumstances, the issue turns largely on the elasticity of supply of the affected classes of labour in the labour-market areas in question.

49. If the labour involved is highly elastic in supply, increased demand will be largely reflected in increased total employment while if the supply of the relevant classes of labour is relatively inelastic the effect of direct-employment programmes will be mainly to raise wage levels. This distinction points up the importance of the purposes of the programmes, for the aim of increasing employment can be frustrated by relatively inelastic labour supplies, while that of improving the distribution of income (especially with respect to those already employed) can at least in some senses be frustrated by highly elastic labour supplies.

50. One example of the importance of the interaction between programme aims and objective circumstances is provided by the medical programmes (Medicare and Medicaid) instituted by the United States government in the middle and late 1960's. These programmes led to a substantial increase in the demand for medical services, but given the inelasticity of supply, both of medical personnel (doctors, nurses, etc.) and of physical plant (mainly hospitals etc.), the end result has mainly been, at least to date, a sharp rise in medical costs without a marked increase in the total amount of medical services provided. In this case the objective, an increase in medical services, was frustrated by inelasticity of supply.

51. An opposite case would be a programme of direct employment whose aim was to improve the lot of agricultural labourers through bidding up the market wage level. Here the appearance of additional workers, say through diverting them out of employment on family farms or by inducing the entry into the labour force of people who were close to the margin of indifference between being active members of the labour force or not, could make the achievement of a desired rise in the market wage level very costly in terms of the amount of public funds diverted to incremental direct employment that it would require.

52. Of course, the above discussion with respect to direct employment also applies to the other techniques, discussed previously, of increasing the demand for labour. Perhaps most of all it serves to illustrate the need for a clear understanding of the objective characteristics of the labour markets in which programmes for stimulating the demand for labour might be applied, and for a correspondingly clear definition of the goals that those programmes are expected to achieve.

V. Possible Policy Directions for India

In this section I attempt to treat some of the policy issues that have been suggested in previous parts of this paper, with particular reference to the Indian economy, though not without once again adverting the reader to the fact that the picture that I have managed to assemble of the current Indian economic scene is, as it were, painted in broad brush strokes on the basis of information of a quite general nature (and therefore undoubtedly incomplete, especially with regard to details).

a) Relative Factor Prices in the Modern Sector

The policy pattern described in the last half of Section I as typical among the developing countries appears to fit the Indian case without significant modification. Preferences for the modern sector, with respect to access both to capital funds and to imported capital equipment have not only existed but have been quite strong, and this applies both to quantitative preferences (licenses, approvals, etc.) and to price preferences (low interest rates, low duties on capital goods). Tax incentives in the form of development rebates and the rapid depreciation of favoured investments for tax purposes, have as in most countries been tied to the amount of capital employed (development rebates are a fixed percent of investment outlays, and accelerated depreciation allowances are ipso facto proportional to the capital sums being written down). At the same time, legislation regarding minimum wages and other conditions of work, as well as the governments' own hiring policies, have enhanced the protected position of the organized-sector labour force as distinct from that of most other workers. Finally, the linkage observed in many economies connecting import licenses for raw materials, etc., to installed capacity appears to

describe the Indian situation as accurately as it does those of a number of other countries.

The indicated directions for policy adjustment suggested in Section II accordingly seem to be appropriate in the Indian case. Although brusque reversals of existing policies could be disruptive of economic activity and of employment, because of the heavy requirements of adjustment that they would impose on the economy, a gradual shift of the emphasis of policies affecting the costs and availability of credit and foreign exchange, and of those affecting labour costs would minimize such difficulties and would accordingly appear to be appropriate. The main direction of change here should be toward costs and availabilities of capital funds and of foreign exchange for the modern sector that more adequately reflect the scarcity value of these resources in the Indian economy. With respect to legislation and regulations governing labour costs, policy makers should probably resist pressures to enhance the already substantial gaps between the wages and conditions enjoyed by workers in the organized sector and those applying to the rest of the labour force. The focus on poverty emphasized in Section IVc suggests instead that priorities should be given to policies which would improve the lot of the poorer and as yet neglected strata of the labour force.

b) Policies Affecting the Composition of Output

In Section IIIb it was suggested that one could hope to accomplish very little by way of increasing the demand for labour through policies designed to affect the composition of output as among broad sectors, regardless of whether the policy instruments employed worked through changing the relative prices of the products of the different sectors or

through changing the distribution of income. The judgment was there reached that such policies should be pursued when justified in their own right, but that their influence on the demand for labour was not likely to be sufficiently strong to warrant its being the prime reason for their adoption. It was also stated that the reationalization of the structure of relative factor prices would itself tend to stimulate the greater use of labour through its influences i) on the choice of technique within given activities, ii) on the composition of demand for the products of the different activities that comprise each sector, and iii) though also in a limited way, on the structure of demand among broad sectors. It was concluded that the rationalization of the factor-price structure was, other things equal, to be preferred to product-demand-oriented policies as an instrument for augmenting the demand for labour. There would appear to be no reason why this judgment would not apply in the Indian case as well as in those of other developing countries. This leads to the judgment that policies attempting to influence the demand for labour indirectly through product demand should probably be avoided.

In what might appear to be a deviation from the above judgment Section IIIc suggested that the demand for labour would almost certainly be augmented by a rationalization of the policies pursued by most developing countries in the foreign trade area, and in particular by the reduction or elimination of the bias against exports that tends to be built into such policies. The contradiction is more apparent rather than real, however, for the emphasis in Section IIIc was on the complementarity existing between foreign trade rationalization on the one hand and increasing the demand for labour on the other. There can be little doubt that this is true in the case of India, hence there is every reason for considering the rationalization

of trade policy as a matter of high priority in its own right, and one which in addition will contribute to the improvement of the employment picture.

c) Policies to Promote Migration

In considering policies that would promote or facilitate internal migration, India faces larger problems than most other countries. On the one hand there is the question of sheer numbers--the vast size of the out-migration that would be required to have a significant impact on levels of living in the poorest regions of the country, and the heavy burden of absorption that this would place on the receiving areas. On the other hand, India's regional diversities with regard to language, culture, customs, etc., only add to the problems as seen both by the migrants and by the populace of their destination areas. To many, the problem of handling the migration flows that come about naturally undoubtedly seems serious enough already, without compounding it by special migration-promoting efforts. Yet regional inequalities are so great in India, and the natural-resource endowments of the backward regions so meagre, that it is hard to imagine any significant movement towards greater regional equality in the absence of special policy efforts favouring migration.

Needless to say, the movement of capital must also be a key element in any viable strategy for coping with the poverty issue. Indeed, it alone may be sufficient to raise levels of living in some presently-backward areas to the point where they cease to arouse special concern. But it is most unlikely that this will be true for the bulk of India's backward areas. In most of them, as in the case of the South of Italy, the Northeast of Brazil, and the Maritime Provinces of Canada (plus also the historical experience of the Southeast United States) outmigration of major proportions is undoubtedly

a necessary component of a successful attack on regional poverty. The choices facing policy-makers here are admittedly difficult ones, but once the poverty problem is recognized, as it was argued in Section IV, to be the major and fundamental challenge, there would appear to be no escape from the necessity of such choices. Policies promoting and facilitating migration are obviously only part of the answer to the poverty issue, but they are an important part. In the end, solving the problem of regional poverty entails shifting the demands for and supplies of labour among the different regions, and migration policies are the key element on the supply side.

d) Direct Public-Sector Employment

The impressionistic view of the Indian labour market structure that was presented in Section IV has strong implications regarding the role of direct public-sector employment. In the first place, the focus on poverty urged in Section IVc points toward programs of direct employment affecting the lower strata of the labour force, and aimed at raising the levels of their wages throughout each relevant labour market area. The purpose should not be the creation of additional protected enclaves of workers being paid greater-than-market wages, but rather the use of direct demand to bid up the overall level of market wages for the least skilled, thus improving the lot of the great mass of the disadvantaged in the area in question. In the second place, it is clear that direct-employment schemes oriented toward the poverty problem should in principle be biased toward the poorer regions, and toward the poorer areas within each region. The even-handed spreading of the extra demand across all districts, regardless of their wealth, such as is entailed in the recently-instituted crash

programme for rural employment, is likely seriously to dilute the degree of amelioration of poverty that can be accomplished with a given allocation of funds.¹ In the third place, the relative inelasticity of labour supply within labour market areas, for which the low rates of measured open unemployment and the substantial differentials in wages among regions can be taken as evidence, augurs well for the potential success of direct-employment programmes. (If labour supply were highly elastic, as some writers have assumed, the impact of the programmes on wages, and possibly also on serious poverty as such² would be small.)

If my analysis is correct, the mounting of direct-employment programmes thus has considerable potential as part of the attack on poverty. However, some qualifications are in order. First, the easiest projects in which to engage in such a programme are probably in the field of public works. Here there are likely to be a limited number of viable projects (i.e., projects where social benefits are adequate to justify their costs) in any given area. This means that, unless other sources of labour demand are found over time, the programme would either gradually wither away (as the viable projects ran out) or would take on the aspect of a quasi-dole (if the

¹The ceiling of Rs 100 per month on the wages paid to the labour hired under the Crash Programme may tend to make it inoperative in some very prosperous districts where the market wage is already higher, but this is the only sense in which the Programme incorporates any bias toward poor areas.

²In technical terms, so long as we are speaking of a movement along a labour-supply schedule, the newly-employed would tend to be people who were out of the labour force under the terms and conditions of work that prevailed before the programme, and only willing to enter it as a consequence of the improvement in those terms and conditions as a result of the programme. These are likely to be members of less-poor families, who were able to "afford" not to work in the pre-programme situation, rather than the most serious victims of poverty for whom such a choice would not exist.

labour used in the direct-employment programme came to be applied to projects with costs substantially in excess of benefits). To accommodate this problem, more permanent solutions must be sought, which either give rise to continuing production (as distinct from once-and-for-all operations like public works) or bring about a reduction in labour supply (presumably through regional outmigration). Policies to accomplish these aims have already been treated above. The time-factor operating against major and continuing reliance on public works programmes for the long run simply underlines the need for a coordinated and multi-faceted attack on the poverty problem, rather than any single-pronged effort.