The Limitations of Using Fiscal Incentives for Employment Promotion[1]

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I. INTRODUCTION

The role of fiscal incentives for employment promotion is only one aspect of the broader role of fiscal policy in this area. Fiscal policy can affect employment through three distinct mechanisms. The first is through its effect upon macroeconomic aggregates. Fiscal policy can stimulate aggregate demand, and therefore employment, in the short run provided there is some utilisable excess capacity. It can also promote higher rates of investment thus raising the level of capacity in the economy, and therefore employment, in the longer run. The second mechanism relates to Government expenditure decisions which can directly influence employment generation either by altering the composition of expenditure in favour of categories which are inherently more labour-using, or by choosing more labour-intensive techniques within given types of expenditure where such choices exist. Finally, fiscal policy can affect the level of employment either by altering relative output prices to induce consumers to switch to more labour-intensive products or by altering relative factor prices to induce producers to shift to more labour-using techniques. This is the mechanism of fiscal incentives with which this paper is concerned. The first two mechanisms are extremely important in terms of their quantitative impact on the employment situation. They may often be more important than fiscal incentives. However, they are outside the scope of this paper and are not dealt with further.

In examining the scope for using fiscal incentives to promote employment, it is important to avoid the simplistic approach of identifying tax or subsidy mechanisms which appear to have a favourable effect upon employment in one or more sectors and recommending a series of such measures. This approach needs to be qualified in three ways:

(1) It is essential to examine the impact of any set of incentives in a general equilibrium framework. Intervention in one sector has indirect impacts on other sectors and the total effect on employment can be effectively assessed only if a general equilibrium, or economy-wide, look is taken.

(2) Fiscal incentives typically have to operate in a system which is otherwise constrained in various ways and our expectation of the system's response should take these constraints fully into account. When this is done, the response of the system to a given fiscal incentive may be different from what would be predicted on textbook assumptions of smoothly operating competitive markets.

(3) Finally, having allowed for (1) and (2) above, the entire exercise must be undertaken in an optimising framework. Employment is not the only objective of government policy and other objectives such as growth are also important, not only in itself as it determines real income levels over time but also because employment itself over time is determined to a large extent by growth. Fiscal incentives to promote employment must respect trade-offs between different elements in the objective function.

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[1] [Editorial Note. For reasons connected with his official duties. Dr Ahluwalia was unable to provide a written paper to the Pune Conference, but gave an oral presentation of his thinking. He has subsequently been able to develop his ideas more fully in the chapter here printed. The Pune discussion was necessarily related to the oral presentation. Eds.]

[2] The author is at present serving as Economic Adviser in the Ministry of Finance. The views expressed are those of the author. This paper draws heavily upon many discussions with Amaresh Bagehi, with whom the author is engaged in an ongoing collaboration on this subject.

These considerations cannot be readily quantified and incorporated into precise formulae for determining optimal rates of taxation and subsidy. Yet unless the design of the incentive system takes these considerations into account, if not fully then at least to a significant extent, it cannot be defended on rational grounds. In what follows I propose to provide some illustrative examples, showing how many familiar proposals for fiscal intervention on employment grounds fail to take account of these considerations, we will also consider whether practical methods can be derived which could be used to identify desirable degrees of fiscal intervention.

II. GENERAL EQUILIBRIUM CONSIDERATIONS

The first problem identified above relates to the difference between a partial and a general equilibrium framework for analysing the effects of any particular intervention. Incentives which appear to promote employment when taking a partial view may not actually promote total employment in the system when an economy-wide view is taken. The problem can be illustrated in terms of a simple theoretical model, outlined elsewhere,[3] which is characterised by a two-factor, two-sector economy in which one sector is more capital-intensive than another and there is a pool of surplus labour available at a fixed real wage to expand employment in either sector. It is easy to show that a fiscal incentive directed at promoting greater labour-intensity in the capital-intensive sector may actually reduce total employment. For example, a wage subsidy m the capital-intensive sector would alter relative factor prices in favour of labour and thus promote a more labour-intensive choice in the sector. However, it also increases profitability in the sector. This will induce a shift in scarce capital from the more labour-intensive sector to the more capital-intensive sector until profits are equalised. This intersectoral shift operates against the interest of total employment generation and it is possible that this adverse indirect effect may be stronger than the favourable direct effect, so that total employment may actually decline.

This is obviously not to say that fiscal intervention has no role to play, but only that its impact must be viewed in an economy-wide perspective. There are important practical implications which follow from this. As far as factor price intervention is concerned, a tax on capital in the organised sector (or alternatively, a higher interest rate which makes capital more expensive) might be a preferred method of achieving employment objectives than offering wage subsidies or employment- related tax concessions. If the object is to alter relative factor prices in favour of labour within the organised sector this can be done as equivalently by making capital more expensive as making labour cheaper. The advantage of a tax on capital is that it discourages any shift of capital resources from the unorganised, or more labour-intensive sectors, to the organised and more capital-intensive sectors Indeed, from this viewpoint, the existence of a profit lax in the organised sector, with no comparable tax in the unorganised sector, can be argued to be an instance of deployment of a fiscal incentive favouring the allocation of capital towards the unorganised sector. A proportional profit tax does not affect the choice of technique within a sector, since the technique which maximises profits before tax also maximises it after tax However, it docs affect the inter-sectoral allocation of capital between sectors, since it lowers net of tax profitability in sectors where it is applied (or if it is passed on in the form of higher prices, it discourages production in the sector to that extent).

These considerations suggest a general rule of thumb for fiscal intervention aimed at altering relative factor prices. Factor price changes in favour of using labour should be achieved by raising the cost of capital in the organised sector rather than by trying to subsidise wages, or by introducing wage-bill-related tax concessions such as are frequently proposed. Unlike wage subsidies, raising the cost of capital through appropriate interest rate policies in the organised sector does not involve direct revenue costs. It may be argued against this approach that profitability may be unduly squeezed by raising interest rates. However, this

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[3] See Ahluwalia, M. S, Taxes Subsidies and Employment,' Quarterly Journal of Economics, LXXXVIII (August) 1973.

argument can be met by making appropriate adjustments in rates of tax on profits. In principle it should be possible to use these two instruments jointly, so as to achieve a sharp tilt in relative factor prices in favour of labour, while at the same time ensuring a reasonable net of tax profit for efficient enterprises in the organised sector. An interesting feature of this type of joint action is that as between enterprises which are in the same position in terms of labour-capital ratios, the enterprise with a higher profitability is given greater encouragement. This is because the rise in cost is related to capital use whereas the offsetting benefit is related to profit earned.

III. IMPACTS OF OTHER CONSTRAI NTS

The second problem in designing fiscal incentives to promote employment arises from the fact that fiscal incentives have to operate in the presence of a number of other constraints. Since fiscal incentives only create market signals, their impact may be reduced if the system cannot respond to these signals because of other constraints. Fiscal incentives aimed at redirecting the flow of resources towards labour-intensive sectors may be ineffective if there are industrial licensing restrictions which limit expansion of capacity in such industries.

For example, India's policy towards the textile sector limits the expansion of capacity in the organised mill sector in order to favour production of textiles in the handloom sector. These restrictions are clearly designed to expand handloom production, which is the more labour-intensive subsector within textiles. But it could be argued that they also have the effect of discouraging a potential flow of resources from other more capital-intensive industries in the organised sector towards this more labour-intensive sector. Thus even if fiscal incentives, succeed in raising the price of capital relative to labour, the expected redirection of resources within the organised sector towards the labour- intensive sector may not take place because of other constraints.

Most developing countries are characterised by fairly extensive government direction and regulation in the allocation of investment resources between sectors. These interventions include direct allocation of resources into particular sectors through public sector investment decisions, and also restrictions on the expansion of capacity in some industries through industrial licensing. In the presence of these constraints, fiscal intervention designed to favour labour-intensive production may have only a limited effect upon resource allocation between sectors and it is reallocation between sectors and subsectors, rather than pure choice of technique in producing the same product, which is typically regarded as providing the largest potential for achieving higher employments. The scope for choosing a more labour-intensive technique to produce the same product is often quite limited.

In addition to constraints on the flow of investment resources, moil developing countries have a wide range of trade interventions ranging from tariffs to quantitative restrictions on imports These interventions generate a powerful set of incentives affecting the allocation of resources between sectors. A consequence of any regime of import restrictions is the differential incentive given to import-substitution activity in comparison with export-oriented activity. It is a common criticism in the literature on trade distortions that, since export activities are typically more labour-intensive than most import-substituting activities, the trade regime in many developing countries is biased against employment generation. The scope for fiscal intervention to counter this bias is necessarily limited. Import control provides a mechanism for giving what are often very high rates of effective subsidy or protection to particular types of activity. It must be recognised that this generates strong incentives for resource allocation which are not easily countered by fiscal intervention.

IV. OPTIMALITY CONSIDERATIONS

Thus far the limitation of fiscal intervention have been discussed solely in terms of the factors and circumstances which determine the extent of total employment that would actually be created by such interventions. But even when these issues are satisfactorily resolved, and incentives identified which are likely to generate a larger volume of total employment in the economy, there remains the normative question of whether such incentives are indeed desirable.

This question can only be answered in an optimising framework which lakes account of two considerations. The first, which has been extensively discussed in the literature, is the question of the possible trade-off between employment creation and other objectives of policy, such as economic growth. The second relevant consideration for determining the limitations of fiscal intervention, and this is not much discussed, arises from the fact that fiscal incentives are not the only instruments available to the government. An optimum overall policy design is one which utilises all available instruments to achieve a position in which some objective function is maximised. Ideally the role of fiscal intervention should be derived as part of this optimum deployment of all available instruments. The availability of other instruments to promote employment may make it unnecessary to use fiscal intervention for a particular purpose as much as is sometimes supposed. For example, fiscal intervention designed to alter relative factor prices in favour of labour may not be necessary if interest rates (a monetary instrument) can be raised, since this makes capital more expensive across the board. Optimising for different objectives through different instruments is obviously an extremely complex exercise and it is certainly not practical to arrive at this simultaneous balance through some giant optimising exercise for the economy as a whole. However, it is important to be aware of the dimensions of the problem and if possible to derive practical methods or rules of thumb which can help to achieve economic rationality.

A workable technique of determining the desirability of a particular incentive as opposed to a method of identifying the optimum set of incentives-is the technique of project analysis. Consider for example the simple case of a fiscal intervention in the form of either a subsidy or lax exemption designed to increase production in a labour-intensive sector or subsector of the economy. The fiscal incentive increases employment by shifting labour, capital and other resources into the favoured sector and increasing its output, while reducing capital and other resources available to other sectors. The reduction in resource availability to other sectors leads to a loss in employment which is presumably smaller than the gain in the expanding sector which is more labour-intensive. Is this shift socially desirable? We can evaluate the effect of fiscal intervention by using the shadow-pricing rules of project analysis which are now well developed and which incorporate considerations of welfare gains arising from higher employment generation. This is usually done not by ascribing a value to employment as such but to the additional consumption of the poor created by the increase in employment

The social benefit can be calculated as the value of additional output minus the cost of additional resources used plus the social benefit of additional consumption accruing to the poor as a result of higher employment created minus the cost of budgetary resources arising from the subsidy or revenue loss. In evaluating each of these elements of social benefit, shadow prices would have to be used. For example, outputs generated and resource inputs used would have to be valued at appropriate shadow prices as in project analysis. The inclusion of additional consumption accruing to the poorer sections as a benefit reflects the welfare concern which underlies the so-called employment objective. It is obviously important to ensure that this calculation is based on additional consumption Since the shift of non-labour resources induced by the tax change leads to some curtailment of employment elsewhere, the increase in employment in the expanding sector overstates the total employment effect. It is therefore necessary to determine the employment loss in other sectors associated with an incentive in favour of one sector. A simplistic approach would be to assume that resources are withdrawn evenly from all sectors, and base employment loss on some average calculation for the economy as a whole. But in fact they would be drawn disproportionally from sectors which are close substitutes (have a high cross-price elasticity) with the sector being favoured by tax treatment. Where possible, the extent of employment loss should be estimated on the basis of identification of likely sources from which resources would come. The valualation of budgetary resources used must reflect an appropriate shadow price on public resources which is a familiar feature of most project-analysis methods.

An important aspect of this procedure is that there is no way in which the evaluation of employment benefits can be separated from the evaluation of the other economic aspects of resource reallocation. This is because the fiscal intervention cannot be viewed solely as affecting employment. It also affects the pattern of input use and of output generated, and it

has an effect upon budgetary resources. All these effects must be quantified and evaluated simultaneously.

As stated earlier, this approach docs not enable us to identify the optimum set of fiscal incentives in the system, but it does provide a way of evaluating the social benefit of a particular subsidy or tax exemption given to a labour-intensive product or sector on employment grounds. The case of a tax on a capital-intensive product or sector designed to discourage it is symmetrical, the only difference being that instead of having to estimate the employment loss in the sectors from which resources are drawn, it is necessary to estimate the employment gain in the sectors to which resources would flow The information requirements of doing an exercise of this sort are considerable thought to impossible. The project-analysis parameters the various shadow prices, border price conversion factors and the like, which are the stock in trade of practitioners of t his subject - are either already available with the organisation responsible for project evaluation or else they are readily computable. However, the information regarding the actual magnitudes of resource flows resulting from a fiscal intervention, including especially the source from which the resources will be diverted or the use to which they will flow, is more difficult to obtain. It is unfortunate that such careful quantification and systematic evaluation has not been done even by the many proponents for this or that fiscal intervention. Nor have most of the existing fiscal incentives, many of which were introduced for employment reasons, been subjected to systematic ex-post evaluation on these lines by researchers. Pursuit of these lines of enquiry would yield valuable insights into the role of fiscal incentives in promoting social welfare through employment creation.

V BALANCE BETWEEN FISCAL AND OTHER INSTRUMENTS

The second aspect of optimality identified earlier is the optimal balance between fiscal and other instruments of intervention. As stated above, ideally there should be a simultaneous determination of the optimal deployment of all instruments, but this is not practical. A point already noted is that the availability of some instruments, such as interest rates, may make it unnecessary to deploy fiscal instruments to change relative factor prices in favour of labour. The reverse situation is also possible where fiscal instruments are preferable to others. For example, quantitative restrictions may exist on production of particular sectors or subsectors which are imposed for employment reasons. These restrictions are designed to promote the expansion of competing sectors which may be more labour-intensive and which therefore promote employment. It is often possible to substitute a fiscal intervention (for instance, an excise duty) for a quantitative restriction achieving the same overall effect so far as employment in the sectors is concerned, but with some additional advantages. For example, substitution of quantitative restrictions by excise duties transfers rents which otherwise accrue to established producers in the capital-intensive sectors to the exchequer. The resulting gain in public savings is an advantage since public savings are at a premium.

It also has the advantage that the extent of the cost differential between the two alternatives is more directly evident (at least as measured in market price terms). Where many such interventions exist in different sectors, it is interesting to compare the variation in differential rates of excise tolerated in different sectors for employment- promotion reasons. In this connection it is worth noting that the Dandekar Committee, which examined the scope for using fiscal incentives to promote employment, had compared the cost of creating an additional job in different sectors in terms of the cost differentials between capital- and labour intensive techniques in different areas. The Committee found very wide variations in these costs. Resort to differential excise duty rates rather than quantitative restrictions serves to limit this type of variation by determining in advance the range of variation which is permissible.

VI. SOME CONCLUSIONS

To summarise, this paper has raised more questions than it has answered. There is certainly scope for using fiscal intervention to push employment objectives; but the design of fiscal incentives needs to be carefully determined. It must be on the basis of a general rather than partial equilibrium identification of effects, and the effects must be calculated to take account

of the fact that many established constraints on the system will affect the extent and even direction of response.

Having quantified the response, it must be evaluated in some explicit optimising framework. Unfortunately, in spite of the very extensive literature on this subject, there is very little by way of systematic quantitative research on the role of fiscal interventions along these lines. Such research would help to improve practical policy-making.

Discussion of Papers by Shri N.J. Jhaveri, Shri D.R. Pendse and Dr. Anand P. Gupta

The papers by J haven, Pendse and Gupta had three similarities, in the view of Dr Hiemenz, who introduced them. All concerned themselves only with the impact of tax incentives on the organized sector of the economy: all held that factor substitution as between capital and labour could lead to an increased demand for labour; and all abstracted from problems of cyclical economic fluctuation. Their detailed arguments were, however, distinctive in thrust. Dr Gupta's paper suggested that the rise of capital-intensity in Indian industry since 1961 was attributable, to an important degree, to the existence of capital-biased fiscal incentives However, this proposition was not backed by an analysis of changes of capital-intensity by sector over time and an attempt to estimate the impact of changes in fiscal incentives. The tabular matter only showed that many firms did take advantage of the incentives to reduce their tax liability and that, in the textile industry, they did so by buying machinery which appeared to be potentially labour-displacing.

Shri Jhaveri's paper rejected the policy of general capital-biased incentives, but also rejected a policy (often advocated as an alternative) of a general fiscal incentive for the employment of labour. He saw the need for a selective system of incentives, where tax relief was given or withheld according to the precise economic conditions of any industry, which would determine the response to the incentive as regards the employment of extra labour. He did not accept that existing tax incentives alone caused the observed rise in capital-intensity of production: a technology which lacked substitution possibilities, the availability of economies of scale, and a desire to avoid the dangers of labour unionisation would have been likely to play a part. The basic need was to identify the labour-intensive sectors of industry and to find ways of reallocating towards them.

Shri Pendse's paper was a brief commentary on the proposal for a marginal employment subsidy, or a payment in respect of each 'new'job created. The implementation problems involved with the administrative identification of 'new' jobs had been admitted in the paper and were clearly severe. But, on top of that, Shri Pendse seemed to be advocating a subsidy to labour as well as to capital. The net effect of this would be nil in terms of resource allocation: in terms of government finance, however, the effect would be rapid depletion.

Dr Hiemenz argued that incentives should be visualized in broader perspective than that of the three papers. He thought that observed rises in capital-intensity were attributable mostly to influences such as administered interest rates, the underpricing of energy, the operation of complex price controls and, coming back to the earlier discussion of the Indian trade regime, a persistence with an import-substitution strategy. If one asked what impact these incentives had had on the growth of output, the obvious answer was that capital was directed to relatively unproductive uses, which in turn induced rigidities in the economy and encouraged the emergence of underutilised capacity. The objective of policy on all incentives, not merely tax incentives, should be to rearrange incentives so as to direct capital to those uses in which it was most productive at the margin. A cut in capital-biased tax incentives would induce greater employment and would not hamper growth. But, in addition, non-tax measures would also be needed. Interest rates should be allowed to adjust to their equilibrium levels; energy pricing should be set by optimal pricing rules; and the rates of effective protection should be equalised across products.

Dr Ahluwalia who had been scheduled in the original programme of the conference to contribute a paper to this section, instead presented his views orally as follows[1]. He analysed fiscal policy as consisting of three different sets of questions:

(i) broad macroeconomic questions about the contribution of fiscal policy to long-run economic growth;

(ii) more detailed questions about the impact of government expenditure on income distribution and welfare;

(iii) questions about the way in which fiscal policy alters price incentives and affects resource allocation.

Questions of type (i) and (ii) were in his view the most important, but for the purposes of the present discussion they were being put on one side. In order to come to grips with type (iii) questions, some criterion or other of optimality was required. Where were such criteria to be found? From a theoretical point of view, we were concerned with the second- or nth- best. The underlying problem was conceptualised as one of generating extra employment when employment creation was inhibited by a 'distorted' set of factor prices. In addition, it was assumed that the fiscal instruments (such as direct taxation) which directly influenced individuals consumption were weak or unusable: it was therefore necessary to influence consumption indirectly by intervening fiscally in the choice of technique, and deliberately to 'distort' this choice in order to achieve a desired indirect subsidy to consumption. (Putting the question in this way conveniently omitted, however, the crucial question of how the government could finance the interventions in the choice of technique: very large sums would be required before such interventions would produce much in the way of additional employment.)

Because of the second-best assumptions of the problem, as well as because of the lack of relevant information in the hands of policy- makers, no formal optimizing exercise could be used to produce 'the correct solution' to type (iii) questions. One could neither draw up a concrete programming model, nor arrive at a set of specific shadow prices which could be used for the formation of policy on the price effects of fiscal interventions. The best that could be done in practice was to keep the economics of programming and shadow pricing at the back of one's mind when framing a practical set of suboptimising rules.

Dr Ahluwalia went on to suggest what these rules might be. Four general considerations should be adhered to, in his opinion.

(1) The government should try to equalise at the margin the resources used in each sector to create an additional job. Since every tax proposal must have some limit, it was important to ensure that the limits were not different in different sectors -otherwise more jobs could be created at the same resource cost merely by restructuring lax incentives that affected each sector.

(2) However, since fiscal instrument had only a limited coverage sectorally, some sectors, specifically the unorganised sectors, would always remain beyond the government's policy reach. Tax incentives could only assist the most deserving of help within one group of sectors; but they never could hope to assist the group of sectors most deserving of help, which was the unorganised group.

(3) The government should aim at optimal intervention with respect to the full range of policy instruments at its disposal. Accountants thought that they understood capital because they saw it, but not labour, as homogeneous: economists did not share this view, seeing labour rather than capital as homogenous. The accountant's vision might account for the tendency to narrow down the discussion of incentives to problems of capital depreciation, as in Dr Gupta's paper. But were there more potent policy instruments?

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[1] But see editorial note on page 341.

Would not changes in the rates of interest, for example, be a much more effective method of changing the relative prices of capital and labour?

(4) The government should not think itself into a position where it saw employment generation as its sole objective. The unthinking pursuit of employment could damage other government objectives. For example, quotas or heavy excises on the mill sector was an appropriate method of increasing labour absorption in the entire textile industry, as consumers were given an incentive to switch demand to the labour-intensive handloom sector. But it was appropriate only for a closed economy. If the government also wanted trade to flourish it was a costly policy because it would damage the export prospects of that sector. It was true that capital-intensive technology reduced the costs of quality control for export, and this aspect should also be taken into account when striking the balance of policy choice.

In the following general discussion of the papers Dr Lal agreed with Dr Ahluwalia that the discussion had to be set in the theoretical context of second-best optimisation. The important variable for policy purposes was the difference between the market wage rate and the shadow wage rate. This would differ by sector, and pace Ahluwalia labour subsidies could be given to one sector and not another without any damaging repercussions. It was wrong to look for a measure of the scope for substitution between capital and labour in observed historical data. That data embodied a whole tangle of price distortions, and the degree of capital/labour substitutability might well be much greater m their absence. Thus the small observable substitutability could not be cited against the proposals to use price incentives more. At the same time it was the case that, in the past, the possible effects of a labour subsidy had been exaggerated: often the subsidy had simply been passed through to swell the wages of the existing workforce. The more extensive use of price incentives should be done via the interest rate, as Ahluwalia had suggested. The chief virtue of this approach was that it would overcome the present administrative rationing of funds to the labour-intensive, small-scale sector.

Professor Bardhan suggested some further suboptimising considerations, as follows:

(1) If the incentive was to be in the form of a labour subsidy, attention must be paid to the manner in which it was financed. If it was financed by raising extra tax revenue, how did the extra revenue affect the demand for labour elsewhere in the economy? To justify the use of a particular policy instrument, one had to look not just at its direct incidence, but at its direct and indirect incidence throughout the economy. One must look at the distribution of income before the instrument was used and compare it with the situation afterwards, after all adjustments had worked themselves out.

(2) One element in assessment of labour subsidies which had so far been overlooked, but which in practice was often quite substantial, was the cost of disbursing such subsidies. Obviously the higher the administrative costs of using a particular instrument,the greater the extra tax revenue which needed to be raised to finance its use and the greater the likelihood of unintended and undesired indirect effects on income distribution.

(3) The proposition that capital-biased fiscal incentives should be abolished seemed to him wrong. One must distinguish between their effects II the effect was to move the factor-mix along the existing production function towards greater capital-intensity, it was not desirable. But if the effect was an outward shift in the production function itself, this was surely desirable.

Professor Wellisz urged the need for simplicity in policy design. He agreed with Dr Ahluwalia that it was vital to stop rationing credit and all other policies which discriminated against labour. These negative requirements should be met before a government embarked on a policy of subsidising the employment of labour. But they should be met in a piecemeal fashion, not dramatically, at a stroke.

Dr Toye made the point that it was by no means clear that capital- biased tax incentives really did have the effect of discriminating against the employment of labour Having

carefully surveyed many of the attempts so far made to measure the impact of these incentives in developing countries, he remained unconvinced that they did really have large direct repercussions on the choice of technique, except possibly in switching investment from one location to another. Their main direct effect was to swell the incomes of the beneficiaries. This produced a more unequal income distribution, distorted the composition of demand and increased the output of goods for capitalists' consumption. Their effect on the demand for labour was thus an indirect one.

Stressing the need to appraise fiscal and monetary policy in a general, rather than a partial equilibrium setting. Professor Bennathan also argued that the main instrument for directing the allocation of capital ought to be the interest rate, not tax incentives. Professor Robinson was sceptical of the government's ability to set the real rate of interest over the required range when inflation was endemic and capital markets highly imperfect. If one imagined that inflation happened to be 25 percent, could any government set the interest rate at 35 per cent? Dr Lal acknowledged the difficulty of a central bank trying both to control the supply of credit and being the government's banker. But if higher interest rates could be achieved. Professor Brahmananda thought, they would reduce stock-holding, moderate prices rise expectations and, according to his empirical results - though surprisingly, increase the capital-intensity of production. To reduce capital-intensity required a proportional capital tax, which would be acceptable provided that the rate of profit was equalised over all branches of industry.

Dr Ahluwalia returned to his point that shadow prices were not useful for policy-making, except heuristically. Setting shadow prices required knowledge of all constraints in the economy and power to enforce them on the private no less than the public sector If a better income distribution was the goal of policy, one did not need to eliminate all the distortions in an economy. The shadow-pricing approach either endorsed the present distribution or claimed lump-sum taxes as a deus ex machine. Focusing on income distribution might be consistent with accepting fifth-best, which was very hard to specify. Hence his suggestion of rules to aid suboptimisation.

'What type of economy were we trying to organise?' was what Professor Mathur wanted to know. It was plainly a mixed economy, but one with objectives set by planners whose overall aim was to channel resources towards their most socially relevant uses. The aim was a high rate of economic growth combined with the achievement of social justice. The private sector was tolerable if it performed socially relevant tasks: high incomes were tolerable if consumption could be re- distributed. The state could redeem these two 'ifs' provided that it changed its fiscal system away from its present preoccupation with gathering tax revenue. The Disparity Tax which he proposed was aimed at resource allocation, not revenue-gathering. Its base was, following Kaldor, income minus saving, its rate structure was progressively progressive, allowing 100 per cent taxation to be exceeded, and differentiated according to the degree of 'mis-expenditure', that is departure from the priorities of the planners.

Professor Lakdawala argued that, if the aim of policy was to secure more output from a given stock of capital, several instruments could be usefully employed. Differential excise duties and outright prohibition of certain forms of production could save capital by altering the structure of output in favour of labour-intensive goods. Some direct controls which had no fiscal equivalent would need to be retained: controls were not inherently self-defeating, only if maladministered. He did not favour a wage subsidy. That would simply be absorbed by the workers presently employed, under union pressure. Pro-capital tax incentives were not necessarily to be avoided, however. They might be useful in shifting capital into backward areas, and there were capital-intensive operations, for example the Amul dairy scheme in Gujarat, which had also had considerable impact in generating employment. Dr Gupta concurred, urging incentives with immediate rather than gradual impact for regional policy.

Dr Hampton raised the question of the organisation of industry between large-scale and small-scale units as a means of creating jobs. Could differential policies for the two sectors control the scale-wise composition of industrial output, and regulate the demand for labour?

That depended on having a definitive answer to the question of whether scale of operation was correlated with degree of labour-intensity. The exercises in the Indian Sixth Plan which addressed this question were, in his view, defective.

Returning to the contrasting approaches of Ahluwalia and Mathur. Dr Lal placed them on either side of a big philosophical divide, between economists who believed that optimal techniques of production could not be specified in full ex ante, and those who believed that they could. He placed himself in the first group: the market did not rely on there being an adequate supply of altruistic, well-motivated planners to make it work. This was just as well, because such planners could never possess adequate information to operate comprehensive controls successfully.

Dr Toye agreed that a Mathurian Disparity Tax presupposed an entirely unrealistic degree of economic insight in the planners. That proposal, though elegant, achieved its plausibility by combining an assumed abundance of planners' wisdom with a drastically reduced list of policy objectives for tax policy-makers Resources allocation alone was enthroned, while revenue, equity and administrative ease were, on various grounds, banished More generally, however, he had no objection to well-administered controls, but, except in wartime, they should be short-term measures imposed with a full understanding of their economic consequences. The problem with controls in India had been that they were piled one on top of another, in a way that succeeded in completely obscuring their true overall effect. The use of differential excises to promote employment, as proposed by Professor Lakdawala, would be objectionable precisely on the ground that their other effects, for example on exports, would be too complicated to be calculable. Sensible and effective policies to help the poor. Professor Wellisz agreed, would be easier to make without the piling of controls on controls: at present no-one could tell what was happening, except one could he certain that efficiency was being reduced. More particularly, he was sceptical of the use of tax incentives for regional policy. He cited the Italian case, where the selective removal of taxes on capital goods and subsidised railway tariff had produced in the Mezzogiorno a highly capital-intensive industry, little employment and the out-migration of labour. The Pakistan case, in which heavy tax incentives had been abandoned as ineffective was added by Professor Rafiq Ahmad.

The paper writers replied to some of the points raised in the discussion. Dr Jhaveri accepted the Ahluwalia argument that it would be very difficult to identify a fifth-best, but where did that leave policy? Surely it forced one back to the kind of partial equilibrium analysis which he had used? There had to be criticism of overcomplication in the use of policy instruments. But lax incentive had to be either general, and very crude in their impact, or selective, in which case they were necessarily highly complicated Much emphasis had been placed on adjusting the relative price of capital and labour. But since capital was so much more expensive a factor of production than labour, choice of capital-intensity would be influenced by much more than relative prices. On the whole he still thought that tax incentives were a useful instrument to achieve plan targets and that the main area for further policy research was into ways of improving the economic viability of small-scale enterprises.

Dr Pendse thought that the proposal in his paper had been somewhat misunderstood He had not intended that pro-capital incentives and pro-labour incentives should be received by the same entrepreneur. These were intended as alternatives, from which the entrepreneur would be allowed to choose in calculating his tax liability He thought that much of the discussion had been too academic: the practical question remained, what type of incentives would promote employment? He did not agree that the financing of his proposal was as large a problem as had been suggested. The administrative costs were high (not relative to the administrative costs of the Maharashtra Employment Guarantee Scheme, though!) but they could be shifted on to private firms who wanted to benefit from the incentives.

Dr Ahluwalia attempted to sum up the part of the discussion related to government controls. There was a distinction between government intervention and government controls. One could quite properly, as Professor Lakdawala had, defend interventionism while agreeing on the need to rationalise the use of quantitative controls. The only real scope he saw for such rationalisation was a gradual switch from quantitative controls to control based on prices as

argued by Dr Lal, while recognising the validity of exceptional, short-term use of quantitative controls as argued by Dr Toye. The benefit from such a desirable rationalisation would, however, be in the form of a general increase in economic efficiency, and not of a large increase in employment.

The lack of empirical analysis which had been pointed out by Dr Heimenz was, according to Dr Gupta, unavoidable until the work of the , Committee on Tax Incentives for Employment was published. The effectiveness of existing incentives had been doubted: one study had suggested that they had failed in India, and that this failure was attributable to nothing more esoteric than delays in making the appropriate payments to firms. Perhaps a simpler and more effective way to raise investment was simply to cut the rate of corporation tax

Professor Robinson warned against an uncritical attempt to promote labour-intensive production. Economists always needed to ask the question, 'does the capital-intensive method or the labour-intensive method actually exhibit the lower capital-intensity''' Moreover much of the cause of high capital-intensity could be traced through to the institutional environment. On the one hand, trades unions were less likely to resist the displacement of labour if their members were to share the benefits of such displacement. On the other hand, the institutions of capital, in the form of banks and other financial intermediaries, were more happy when financing highly capital-intensive investments.

Dr Heimenz added a rider to the question that economists needed to ask, that indirect as well as direct effects of the use of a particular technique must be considered. The concern for general rather than partial equilibrium analysis was a concern for the considerations of all the side-effects of any policy. The very difficulty of general equilibrium analysis pointed to the need to reduce the structure of incentives to manageable proportions, as had been advocated. More generally, he aligned himself with the views of Professor Wellisz: one should search for a first-best state, but in a piecemeal way and without neglecting distribution-centred policies. To do so would have positive effects on growth and employment

Sombrely, Professor Mathur prophesied that if incentives sufficiently powerful to change the structure of the economic system were not devised, structural change would come by other means.