

# Can Mahalanobis Do It ?

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THE main purpose of this article is to make clear and examine the theoretical implications of the Mahalanobis Plan Frame and the Tentative Framework prepared by the Economic Division of the Planning Commission in consultation with the Finance Ministry and the Indian Statistical Institute. It must be clear even to the casual reader that these documents make a marked departure in some ways from currently held economic ideas. Thus, the Outline of the First Five Year Plan had said, 'India has considerable resources of water, power and minerals still to be harnessed and exploited; there is land which can be reclaimed, and industries which can be developed. But to do this it will be necessary to divert to these capital works resources which would otherwise be utilised by the community for current consumption ..... Hence some restraint on current consumption is necessary if the country is to find resources to build up the capital-equipment required for sustained increase of production.' (p. 12, First Five Year Plan, People's Edition). But the framework of the Second Plan prepared by the Planning Commission says, "in a poor country where consumption standards are already too low, higher investment and the development of basic industries cannot be made to depend on a curtailment of consumption even in the initial stages."

## A Tentative Framework

Again, as a corollary to the statement quoted earlier, it had been said categorically, "First, however, let it be made clear that we are confronted with a definite problem of choice—a choice between, on the one hand, a small or moderate increase in the standard of living in the near future but with only relatively small additions to capital equipment and hence no marked and sustained upward trend; and, on the other, a substantially higher standard of living for the next generation at the cost of continued austerity and privation to the present generation in the interests of rapid capital formation," (P 13, First Five Year Plan, People's Edition) and also, "A large and early increase in consumption and a high rate of capital formation cannot go together." (P. 18, The First Five Year

Plan, A Draft Outline). But now it is said, "An attempt must be made, therefore, to increase both consumption and investment simultaneously by harnessing such resources as are unemployed or unutilised at present." (Tentative Framework, p. 1. bold ours). And again, Prof. Mahalanobis in his Draft Plan Frame says, "Unemployed man power and unexploited resources can be brought together to increase both consumption and investment simultaneously", (p. 4. bold ours). Indeed, in a speech delivered in Madras recently Prof. Mahalanobis seems to have gone further than this and is reported to have said, "I venture to claim that in India the right way is to increase consumption and investment at the same time. I not only claim this can be done. I also claim that this is the only way," and, surprisingly, "But this is not the way of more highly developed economies." (!) (The Hindu, Aug. 3, 1955).

It is interesting in this connection to note what the U N experts' report on Measures For the Economic Development of Underdeveloped Countries has to say on this question of the comparative possibilities of increasing consumption and investment simultaneously In the developed and in the under-developed countries. It says, "In modern industrial communities, the existence of unemployment or of this sort of under-employment, would make it possible to increase capital formation rapidly, without cutting consumption and without inflation. . . . Thus, the existence of unemployment would make possible a rapid simultaneous expansion of both consumption and investment." (p. 41) It goes on to say. "Unfortunately, in underdeveloped countries, the process is not so simple". The reasons for this, according to the report, are the high tendency to import on the part of some of these countries and the inelasticity of supply in response to increase in demand. Thus their conclusion is that it is relatively easy to increase investment and consumption simultaneously in developed economies in a situation of unemployment whereas, it is difficult, if not impossible, to do this in underdeveloped economies in spite of the admitted fact of unemployment and under-employment. Needless to say this is

quite the opposite of what Prof Mahalanobis is reported to have said in his Madras speech on August 2.

We submit that the change in the theory underlying planning of economic development which we have indicated above is a major change with significant theoretical implications. It is surprising that the Planning Commission has nowhere in the Tentative Framework taken the trouble to explain clearly in what sense they claim to be able to increase consumption and investment simultaneously and how they came to change their point of view, except for the cryptic reference to 'unutilised resources,' which term is by no means unambiguous. It is, therefore, necessary to examine this question carefully. It is possible that apparently contradictory statements really mean the same thing or can be reconciled because some of the terms are used in different senses. (e f the controversy about the equality between Saving and Investment.)

## Principal Sectors of economic Activity

Let us divide the economy into four sectors or kinds of economic activity: 1. Industries directly producing consumption goods. 2. Industries producing capital goods or machines which, when completed, can be directly and immediately used to produce consumption goods. 3. Industries producing capital goods or machines or materials which cannot be directly used to produce consumption goods but can be used to produce other machines or capital goods which can be used to produce consumption goods. In other words, Sector No. 3 produces goods or material which can be used in Sector No. 2. 4. Social services like Public Health Services and Education. This is only a rough and ready classification. We realize that it is somewhat artificial to split up investment industries into two sectors. However, we find this a useful classification for our purposes.

In Sector No 1 consumption goods are produced by using part of the existing factors of production at any given time. At any one time, more could be produced only by purchasing and using more of the existing resources. Over a period of time, however, more could be produced either by using more factors of pro-

duction (whose supplies might have increased meanwhile), or by increasing the productivity of the factors used. Increase in consumption or consumption output means increase in the output of Sector No 1.

Sector No 2 produces goods (and services) which directly make possible the maintenance and increase of factors available for use in Sector No 1 and also increase the productivity of the factors used in that Sector. Some of the goods and products in this sector will not take much time to produce, others may take a longer time: e.g. a minor irrigation work will take only a few months at the most to be completed; a huge irrigation project or a factory for producing cloth may take a few years. In an underdeveloped economy, there is bound to be scope for the production of a large number of goods, services or projects which do not cost much and which do not take much time to produce or mature. If we take a period, say, of five years, and plan, among other things, for investment in such products or projects as take less than five years to mature, we would naturally find that consumption output is higher at the end of the live-year period than at the beginning. Indeed as some of the projects need only a few months for completion, consumption output would start increasing soon after the beginning of the plan.

Sector No 3 consists mainly of heavy industries, like steel including manufacture of machines to manufacture steel, machines to make other machines, power etc. The difference between the industries in the second sector, and those in the third lies in the fact that the former produce goods which directly help to increase consumption in a sense in which the output in this sector does not. It might be said that the difference is ultimately only a difference in time-lag. But then this difference is crucial.

Social services are like consumption goods in that they directly satisfy consumers' needs or wants. But many of them, in a poor country, would increase productivity of labour and therefore represent investment in human capital.

Production in the second and third sectors together makes up the total investment in an economy in any given period. It is in this sense that the term investment is used in economic literature. Now in any programme of economic development over a period of time investible funds could and would be divided between

the second and third sectors with the result that at the end of the period total consumption output would necessarily be 'higher than at the beginning of the period. This is because investment projects in the second sector, as and when they are completed, increase the supply of factors available for Sector No 1 and; or increase their productivity. The less time-consuming these projects, the sooner will it be possible to increase consumption output. Even during the plan period, therefore, consumption output will start increasing. Further by not taking full advantage of the increasing possibilities of increasing consumption output and by diverting continually more factors to the investment sector, it would also be possible to step up the rate of investment. Thus it could be shown that in the plan period both consumption and investment are increasing. In a poor country where consumption standards are low, it follows that total investment must be judiciously divided between the second and third sectors. When Prof. Mahalanobis and the Tentative Framework speak of increasing both consumption and investment, is this what they are saying? Presumably not; it is hard to think it can be so. Undoubtedly the Plan (as a matter of fact any plan) would lead to an increase in consumption in this way and so it is true they have this also in their minds when drawing up their schemes. But if this is all that they mean, there would have been no need to make special mention of it, since this is the essence of economic development as ordinarily understood and therefore obvious.

Let it be noted that in the process we have outlined above, the increase in consumption comes about at every stage as the result of previous investment. That is to say an increase in output in Sector No 1 follows, and is made possible by, an increase in output in the second and third sectors. But the Tentative Framework as well as the Draft Plan Frame of Prof Mahalanobis speak of increasing both consumption and Investment simultaneously. Secondly, in these passages' reference is made to unutilised resources; it is the harnessing of unutilised, underutilised or unexploited resources that is supposed to make possible a simultaneous increase in consumption and investment. Prof Mahalanobis says, "Unemployed man-power and unexploited resources can be brought together to increase both consumption

and investment simultaneously." (bold ours). Again, "In an underdeveloped economy, where there are idle resources, increased investment need not imply a reduction in current consumption." (Tentative Framework p. 30, para 6.) Therefore it is fair to conclude that it is held by Prof Mahalanobis, and approved by the Economic Division of the Planning Commission, that consumption could be made to increase simultaneously with investment in other ways than by Investment at the previous stage. In other words, there can be a simultaneous increase in Investment output (Sectors No 2 & 3) and in the output in Sector No. 1.

### Strategy of the Plan-Frame

Admitting that Prof. Mahalanobis holds that investment and consumption can be made to increase simultaneously, through utilisation of resources at present remaining idle, what importance has been given to this factor in his Plan Frame? The basic strategy of the Plan seems in fact to turn on the utilisation of unutilised and underutilised resources. In the words of Prof Mahalanobis: "The basic strategy would be to increase purchasing power through investments in heavy industries in the public Sector and through expenditure on health, education, and social services; and to meet the increasing demand for consumer goods by a planned supply of such goods so that there would be no undesirable inflationary pressures." (bold ours)

This is indeed a novel strategy in planning for economic development. Ordinarily, it would be argued by most economists that in any plan for economic development, the rate of investment must be stepped up at first with as little addition to purchasing power, and, therefore, as little increase in consumers' demand as possible in order to avoid inflationary pressures and that when investment projects have matured consumption output will increase. But such an argument, of course, is based on the assumption of the absence of unutilised resources that could be readily utilised in order to increase consumer goods to meet the increased demand for them. If there are such resources, this argument breaks down. The strategy then could be one of increasing purchasing power. Similarly, the Mahalanobian strategy would break down in the absence of unutilised resources and could be justified, and could succeed, only if there are substantial underutilised or unutilised but really

utilisable resources in the economy which could be drawn into; use to increase consumption output (in Sector No 1) at the same time as investment is undertaken. We have already seen that an increase in the output of Sector No, 1 at any given time can take place only by purchasing and using more resources.

Prof. Mahalanobis was asked to draw up a scheme which would lead to the creation of 9 to 10 million jobs to cure unemployment. At the same time it was necessary to step up investment in heavy industries in the long-range interests of the economy. The strategy he has conceived would, if it succeeded, achieve not only the two objectives mentioned above, but also a third one, namely, a substantial increase in consumption output which would raise living standards. It is his preoccupation with the question of unemployment that leads him to put the accent on increase in purchasing power. In one of his recent speeches in Madras, he is reported to have said, "The objective of the plan in India should be to create a demand for consumer goods and also to arrange for the supply of consumer goods." (The Hindu dated, Aug. 9, 1955). A truly unorthodox statement; but Prof. Mahalanobis has set before himself the task of creating a large volume of new employment and that could be done, if at all, mainly by expanding the household and hand goods sector for producing consumption goods.

It is not difficult to see that the strategy advocated by Prof. Mahalanobis is substantially the same as that advocated by Keynes for a developed economy in a situation of (involuntary) unemployment and underemployment. Both wish to cure unemployment to the maximum extent possible in the short-run; both desire to increase demand, and therefore, purchasing power; and for this both rely on public investment. We do not refer to Keynesian theory as such, because there is no overt macro-economic theory behind the Mahalanobian strategy. Keynes, it is well known, advocated deficit financing in order to increase effective demand and thus to draw into production unemployed or idle resources. Created or borrowed money could be spent on public works or public investment and the resulting increase in money income or purchasing power, would, via the operation of the principle, of the multiplier, continually increase, up to a point, money incomes, and since there are idle resources in most sectors of the economy in, a depression, real income

too (i.e. consumption output too). It is, necessary that there be increase in investment in this process, as otherwise the increase in National Income cannot be sustained, the marginal propensity to consume being considerably less than unity.

What would we have, if this strategy were adapted to the needs of an under-developed economy? Unutilised resources are to be used to increase investment and consumption. Public Investment could, therefore, be undertaken in such a way as to lead to an increase in purchasing power. But since the marginal propensity to consume is very high, the increased incomes, unlike in the Keynesian system, are not likely to generate the required savings to match the original investment. Hence suitable policy measures, like additional taxation, are necessary to supplement increased voluntary savings. This is, in substance, the main argument of the Tentative Framework adduced in support of deficit financing in the

Second Five Year Plan. "For initiating a process of higher Investment and higher incomes by fuller utilisation of unemployed and underutilised services, it is not necessary that savings come first and only these are invested later. Credit has to be taken in advance for the additional savings that are likely to arise as incomes and investment increase. Some initial credit creation, therefore, is an essential part of development programme. Nonetheless, if planned investments are to be realised without generating serious inflationary pressures, the initial credit creation must be limited with reference to what savings are likely to be available or can be created by suitable policy measures." (Tentative Framework page 29, para 2.) This, of course, corresponds to the "basic strategy" mentioned by Prof. Mahalanobis, and is clearly seen to be nothing but an adaptation of the Keynesian technique.

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