Economic&PoliticalWEEKLY

ISSN (Online) - 2349-8846

A Note On The Macroeconomics Of The Twelfth Five Year Plan

PRABHAT PATNAIK

Vol. 47, Issue No. 51, 22 Dec, 2012

Prabhat Patnaik (prabhatptnk@yahoo.co.in) recently retired from the Centre for Economic Studies and Planning at the School of Social Sciences, Jawaharlal Nehru University.

The macroeconomics underlying the Twelfth Plan is flawed because the picture that the Planning Commission paints of a higher savings ratio being associated with a reduced current deficit ratio will hold only through a reduction in income. If exports are going to be restricted by world demand conditions, then the way to increase output is by lowering the import propensity, not by raising the saving propensity, as advocated in the Twelfth Plan.

The purpose of this note is to argue that the macroeconomics underlying the Twelfth Five Year Plan is theoretically flawed. There are *inter alia* three propositions in the realm of macroeconomics that the Plan accepts as being characteristic of the Plan period. First, India's current account earnings are likely to be affected by world economic conditions and cannot be deemed to be supply-constrained. Second, India's GDP cannot be deemed to be demand-constrained. And, third, India's current account deficit can be brought down by raising its savings rate relative to its investment rate. *These three propositions cannot hold simultaneously,* except in a very special case which has little relevance in this context and which the Twelfth Plan neither invokes nor subscribes to.

The first proposition, figures in the section "Implications for the Balance on Current Account in Chapter 1 of Volume 1 of the Twelfth Plan document. The section begins with the statement: "Slower growth in the industrialized countries means that our exports to these countries will be adversely affected." The second proposition can be inferred from the fact that the Twelfth Plan assumes an incremental capital-output ratio that is almost exactly the same as was actually experienced in the Eleventh Plan (which, except in its last year, did not, according to the Twelfth Plan, face any demand constraints, and where, even for the last year, infrastructure constraints are also brought in to explain slower growth). The Twelfth Plan expects a growth rate of 8.2 percent over the plan period with an average fixed investment ratio of 34%, which gives an incremental capital-output ratio (ICOR) of 4.15 years. The corresponding figures for the Eleventh Plan were 7.9 and 32.9 respectively, giving an ICOR of 4.16 years. Since growth in the Eleventh Plan, except in the last year if at all, was not supposed to have been constrained on the demand side, the fact of taking an identical incremental capital-output ratio clearly suggests that it is not expected to be

Economic&PoliticalWEEKLY

ISSN (Online) - 2349-8846

constrained on the demand side in the Twelfth Plan either, which is the second proposition above. The third proposition figures in the section "Longer Term Increase in Investment and Savings" again of Chapter 1 of Volume 1, where it is said: "Higher levels of investment have to be supported by a sufficient expansion in domestic savings to keep the investment-savings gap, which is also the current account deficit, at a level which can be financed through external capital".

The fact that these three propositions cannot hold simultaneously except in a special case can be seen very simply in the context of a single period. Consider the national income identity Y=C+I+G+X-M where C and I refer to private consumption and private investment respectively. Let us denote C+I+G, which refers to total domestic absorption, as A, and let us assume that X is given by demand side factors (proposition 1 above) and equals a constant X*. It follows that a reduction in A, which is what a rise in total savings relative to total investment in the domestic economy amounts to, will reduce the current deficit (M-X*) while leaving Y unchanged, *only if the entire reduction in absorption falls on imports*, i.e. if there is no reduction in the demand for domestic goods because of the reduction in A. This is the special case mentioned earlier. In every other case, as long as there is any part of the reduction in domestic absorption that reduces demand directly for domestically produced goods, there must be a fall in Y accompanying the fall in imports (also caused by the same reduced domestic absorption).

In other words, apart from the special case where reduced domestic absorption causes directly an equal fall in imports, i.e. its direct impact is entirely on imports, income Y cannot remain unchanged with a reduced M, i.e. proposition 2 above cannot hold along with propositions 1 and 3. Neither the Planning Commission nor the government obviously believes the special case to be realistic; for if they did then they would not be suggesting a curtailment in the fiscal deficit as a remedy for inflation (since in the special case a curtailment of the fiscal deficit, which is a means of reducing domestic absorption, would have no impact on the demand for domestic goods and hence on their prices). Indeed in the special case there cannot be any excess-demand caused inflation at all since any increase in domestic absorption would only raise imports and not demand for domestic goods.

Let us now move from the single period to the plan period. The Plan's argument can be reconstructed as follows: the average I/Y over the Plan period determines the output growth rate g over the period. The rate of growth of imports g_m is determined by g, and since g_x, the rate of growth of exports, is given by demand-side factors in the world economy, the average current deficit/income ratio, D/Y, becomes a function of g. In other words, (I/Y)/ β = g, and D/Y = f(g), f'>0, where β is the incremental capital-output ratio. It follows that if the maximum sustainable D/Y gets fixed by the availability of external finance at some (D/Y)*, then that determines the Plan target g as f^{-1}(D/Y)*, which in turn gives us the target I/Y for the Plan. And I/Y –(D/Y)* gives the requisite average S/Y for the Plan period.

But this argument is flawed for the same reasons that we discussed in the single-period

Economic&PoliticalWEEKLY

ISSN (Online) - 2349-8846

case. For any investment ratio I/Y, a rise in the savings ratio, since it affects the demand for domestic goods, *ipso facto* affects the ICOR, which naturally depends, apart from the *technological capital-output ratio* β taken into account by the Planning Commission, also upon *the degree of capacity utilization* that is influenced by demand. The only exception to this is the special case where the rise in savings ratio has no impact on the demand for domestically-produced goods. When this special case does not hold, the *modus operandi* of a rise in savings ratio through which import demand is reduced is precisely through lowering Y. Hence when the special case does not hold, the Planning Commission's reasoning becomes untenable.

What actually happens when the special case does not hold can be seen if we take a slice of one single period from the entire plan period and look at it cross-sectionally. The observed ICOR will be higher relative to the technological capital-output ratio β (i.e. the level of capacity utilization will be lower), and the output lower, for the given capital stock of the period, the higher the level of savings relative to the (given) investment. In fact the monotonic relationship between higher savings (for a given level of investment) and lower output will be *observable*, i.e. *ex post*, and hence entail a monotonic relationship between the observed savings ratio and the observed incremental capital-output ratio. This can be seen as follows.

Since imports are a function of income, except in the special case which we ignore, let us for simplicity, and without any loss of generality, assume M=m.Y, where m is the import propensity. (Since exchange rate changes are not being considered we do not need to introduce price terms explicitly). The current deficit m.Y-X* can be reduced through a lowering of income which can be brought about, for instance, by a lowering of the fiscal deficit effected through a higher tax rate. Since the current deficit is lowered through a reduced Y, the excess of domestic investment over savings must also be lowered. With investment given, the *ex post* savings must be higher; with income reduced the *ex post* savings *ratio* must therefore be higher. And obviously, with reduced income, not only will the ICOR be higher, but the *ratio* of current deficit to income must also be lower. It follows then that once we move away from the special case, the picture that the Planning Commission is painting of a higher savings ratio being associated with a reduced current deficit ratio holds, *but only through a reduction in income*. Proposition 2 above cannot hold simultaneously.

The case I have been labouring all this while is nothing else but the familiar one of the foreign trade multiplier. Income in any period is determined simply by Y=X*/(m-d*), where d* merely denotes (D/Y)*, i.e. the availability of external finance during the period as a proportion of income. The income determined by the foreign trade multiplier however is not the full capacity income. The macroeconomics of the Twelfth Plan document does not reckon with this fact, or indeed with the foreign trade multiplier at all.

If it had done so then it would not have ignored an obvious conclusion, namely that the way

Economic&PoliticalWEEKLY

ISSN (Online) - 2349-8846

to raise income in any period (and hence the profile of income), for given X* and d*, is by reducing the import propensity m. In a foreign exchange-constrained economy, where exports are restricted by world demand conditions, the way to increase output is by lowering the import propensity, *not by raising the saving propensity*, as is advocated in the Twelfth Plan. The level of income at which the current deficit becomes "manageable" is higher if the import propensity is reduced than if the saving propensity is raised to achieve the same end.

Of course any reduction in import propensity would require some measure of import restrictions (since exchange rate depreciation must be ruled out because it would exacerbate inflation); and this may frighten financiers from bringing funds into the Indian economy which would reduce d*. Even so however, it can be argued that the level of income can be maintained at a higher level, with still tighter import restrictions to counteract their possible adverse effects on d*, than by raising the savings ratio through curtailments in subsidies and transfer payments. *And all this is quite apart from the distributional implications of the two alternative strategies.* The Planning Commission may think differently; but then it should argue its case without producing a flawed macroeconomics that erroneously suggests that the rise in the savings ratio through cutting subsidies and transfer payments has no adverse effects on aggregate demand and the level of income and employment.