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SAVING ESTIMATES IN INDIA

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THE purpose of this brief note is to focus on some questions connecting the data and assumptions underlying the official estimates of saving, and on the need for more analytical work on the trends in savings rates and their impact on growth.

1. **Estimational Problems**

The concepts, procedures and the data base underlying the CSO's estimates of capital formation and savings have been quite clearly detailed in the Raj Committee Report; the changes in estimation procedure in the latest revision of the series are also documented. It is clear that except for capital consumption and the estimated savings of the public and the private corporate sectors, the basic methodology of the estimates as adopted in the early 1970s remains substantially intact. While the rationale for the recent changes can no doubt be found, it seems worthwhile to remind ourselves of the many weaknesses of the basic procedure underlying both series and address the problems of remedying these defects.

It is well known that the capital formation estimates, which also form the basis of the estimates of aggregate savings and household savings, are derived from "the commodity flow" method which suffers from a number of defects. These are:

- (i) lack of reliable and complete data on the volume and value of various construction materials and machinery/equipment entering capital formation;
- (ii) the numerous assumptions made to fill in the gaps;

- (iii) arbitrary assumptions on the (a) percentage of the total absorption of various commodities used for capital formation, (b) the ratio of the value of material inputs to total value of capital formation in the form of construction and in machinery/equipment;
- (iv) from the viewpoint of reliability of the series in judging *trends* in capital formation, the weak and tenuous data base to assess changes in brick output, the output of various kinds of equipment manufactured in the small factories and unregistered workshops, the unverified assumptions on the proportion of output of items like transport vehicles, sewing machines, air conditioners, etc., going into consumption; and the treatment of components and parts, have been specifically noted;
- (v) the validity of assuming a constant ratio between (a) value of the selected material inputs of construction materials and the total value of construction, (b) value of machinery absorbed to total value of investment in plant and equipment, has also been questioned.

These points were sharply raised by Ashok Rudra in 1972 and reiterated by Mihir Rakshit recently. However, there has been very little attempt to meet these objections and remedy these deficiencies.

Several things could be done:

First, we need to devise some practical ways of getting reasonably reliable estimates of the output of principal construction materials and machinery/equipment in the non-ASI Census sector at periodic intervals.

Second, we need periodic surveys on the end-use of different types of equipment which can be used both as durable consumer goods and as capital equipment so that the allocation as between these two issues can be estimated properly.

Third, we need to find some way of verifying that the assumption of a constant ratio of material input to total value of construction is reasonably accurate. Changes can and do occur in the composition of construction, the type of construction in each category of building and the technique of construc-

tion. Each of these could have significant effect on the material-to-total-value ratio. The surveys should therefore capture changes in all these dimensions.

Fourth, systematic comparisons of the estimates of capital formation, by type of asset and sector, obtained from independent sample surveys of savings and investment with those derived by the commodity flow method. The NCAER Surveys and the NSS Debt and Investment Surveys are obvious cases in point. But their potential for better understanding of the structure of capital formation and changes therein, and as a basis for checking and improving the commodity flow estimate, have not been explored.

Fifth, it is with examining what we can learn from the experience of the various sample surveys in this area (including construction activity surveys done by NSS) as the basis for designing better enquiries on a regular periodic basis.

Sixth, the revised estimates for sectoral savings and capital formation differ substantially from the earlier ones. The basis for blow-up of estimates of corporate savings and investment, as well as likely biases in the estimate of household sector investment in financial assets deserve special discussion.

2. Analysis and Interpretation of Capital Formation and Savings Trends

We need not only better estimates of savings and investment in the aggregate and by sectors, but also more analytical work on the determinants of savings behaviour. Rakshit has pointed to the lack of a convincing explanation for the trends in savings behaviour revealed by the official series. Hardly any studies are available explaining the trends in aggregate savings as revealed by the official series.

We clearly also need more disaggregated analysis of savings behaviour. A minimum classification could be government, private corporate sector and households. There are relatively few studies on the determinants of corporate savings; in the case of households we have some analytical studies on the determinants of household savings based on cross-section survey

data available from the NCAER. The NCAER-type surveys offer the advantage of disaggregated analysis of the household sector—unincorporated enterprises, rural and urban households, types of household etc.—and should be a useful complement to analysing aggregate savings behaviour. The potential for using periodic surveys of the NCAER/NSS type to get an independent monitoring of the level and composition of savings in the Household sector needs to be explored more systematically.

Rakshit also pointedly referred to the necessity both to verify the basis for the phenomenal growth of savings in the form of financial assets and explicate its significance. He has pointed to the likely upward biases in the estimated accumulation of certain categories of financial assets which need discussion.

A particularly important question, which cries out for study, concerns the reasons for and significance of the wide divergence between real and nominal savings trends. The Raj Committee had argued that the real investment (and by implication, savings) has risen considerably more slowly than the nominal rates because the price of capital has risen relatively faster than that of consumer goods. One implication of this is that the *real* rate of capital formation (and in particular of fixed capital formation) did not rise much. Indeed, according to the Raj Committee, estimates of the real rates of fixed investment in the early eighties was barely equal to the peak achieved in 1965-66 and that for most of the time since it has been hovering at considerably lower levels. If this is true, it would follow that the nominal savings rate of 24% gives a misleading impression that Indian economy has achieved a significant growth in the rate of accumulation and that the rate has reached relatively high levels. It would also throw doubt on the thesis that the failure of the Indian economy to accelerate the overall growth despite the rise in investment reflects a progressive decline in the efficiency of capital use. On the contrary, in real terms, as some recent studies have shown, there is no basis for asserting a secular rise in the ICOR, either overall or in the public sector. When we look at trend in real investment the problem seems not mainly one of inefficiency but more one of inadequate accumulation. The implications of this are rather profound

and yet the question has not received much attention from analysts.

Another puzzle is: Given that relative prices of capital goods rose, the real returns to investment in terms of consumer goods must have steadily fallen in the last two decades. How is it that despite this, nominal savings rate rose so sharply? Has the shift in relative prices induced any significant changes in choice of technique, capacity utilisation, etc., leading to more efficient use of capital at least in the private sector?