

## COMMENT

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The basic theme of Mr. Webster's practical and uncontentious paper is that unreliability undermines credibility. In the following comment specific issues he mentions will be considered in more detail to illustrate some of the principal general points made in his paper.

One measure of the reliability of the national accounts is the frequency with which published estimates are subsequently amended. In developing countries there is usually only one published estimate and there are neither independent external measures nor adequate internal consistency checks for assessing the reliability of aggregate macro-economic data. It is necessary to rely primarily on individual qualitative judgements as to the accuracy of a particular set of national accounts while attempting to improve the overall consistency of the accounts by collecting more independent data.

The most important questions to ask, therefore, are: "What do the estimates conceal?" and "How much will any unrevealed change or concealed bias in the estimates affect policy decisions and prospective development?"

The second question is perhaps easier to answer than the first. At least in the short term it must be noted that statistical estimates and economic variables may have little effect on actual policy decisions. Furthermore, the impact of policy itself may have little to do with the actual economic change that takes place. To discuss the reasons for the failure of development planning one must look not only at the data deficiencies but also at the political and administrative context, the institutional constraints and the technical economic questions. It is evident that the quantitative and professional aspects of planning are still not the most important factors in development policy in many low income countries. Indeed, both the degree of control that can be exercised in dependent economies and the scope for action are strictly limited. Quite apart from this, most social objectives contain elements which have so far defied acceptable, practical quantification in development planning circumstances. The effects of such policies are not easily quantifiable and they must be studied qualitatively.

Nevertheless, fiscal, monetary and trade policies have an impact at the macro-economic level and therefore their formulation presupposes some hypothesis about the general economic situation. Furthermore, the impact of any government on the economy is still primarily through aggregative policy tools and the analysis of their effect—despite the data inadequacies and uncertainty—is important and at least as much so as individual project analysis.

In this respect the national accounts provide a means of organizing what is known about the economy and they assist in identifying important inter-relationships. Such an overall quantitative framework is necessary to help determine a sensible allocation of resources. However, although the system of national accounts is formally comprehensive, only some parts will have any real operational significance in a developing country. Their use will primarily depend on the degree of sophistication of the macro-economic techniques adopted in planning. But the overall accounting framework nevertheless permits the logical fitting together of micro data and the more reasoned estimation and extrapolation of certain information gaps relating to components which are important in themselves.

The question "what do the estimates conceal?" is far more complex.

Many of the measurement and accounting problems arise from the rural character and open nature of poor countries. To a relatively great extent the economies of low income countries are exposed to factors that are exogenous and uncertain. Such factors tend to breed considerable short term instability which

either goes unrecorded or is recorded too late for any effective official remedial action to be taken.

The economic activities of these countries are also fragmented into very small units within which, nevertheless, there exists a wide spectrum of economic activities associated with only a limited division of labour. The informal nature of most of these activities, particularly in the rural household sector, means that they do not result in any recorded market transaction and this makes it difficult to assemble reliable data. The measurement problem is not only what to include in physical terms but also what basis of valuation should be adopted. Generally speaking, avoiding any complex discussion of the relative merits of using different valuation bases, it is generally true that rural incomes tend to be valued on a basis which attaches lower prices to transactions than in the urban case. In assessing relative deprivation and poverty, therefore, existing national accounts estimates of rural and urban income will not provide a very useful basis for comparison. Furthermore, the contrast between urban and rural incomes may obscure equally important differentials within these two sectors.

In this area of distribution policy the importance attached to GDP estimates has often served to mystify and divert official attention rather than elucidate and direct planning objectives. If the composition of output and distribution of income are changing significantly, it is not possible to attach any real meaning to measures of output change. In other words, inter-temporal comparisons become most suspect just when economic policy may be having its most meaningful impact. On the other hand, if an observed growth has come about primarily through industrialisation and a protective policy (implying a shift in the internal terms of trade) then such growth may merely represent a form of transfer payment from the agricultural sector to the manufacturing sector. In addition, improvements in efficiency in the services sector (especially in transport and retail distribution) and government may lead to a fall in the recorded value of output. Underestimation, however, may not be confined to quality changes and the under-recording of informal services in the rural and urban sectors but may also apply to rural and personal capital formation such as land clearing and own house building.

Accepting that expansion in the capacity to produce must still be a primary objective of policy (whilst recognizing that economic growth in itself will not necessarily solve other problems) development planning will generally proceed by projecting investment and output by industry, and by estimating changes in final demand. But few low income countries compile systematic output and capital formation data on an industry basis. The capital formation estimates for the private sector are usually incomplete and tend to be built up from piecemeal construction data and a standard breakdown of import figures with the total adjusted for known government capital expenditure. In many cases, the private capital formation estimates are therefore derived as a residual. In the case where planning hinges primarily on forecasting expected changes in final demand, the projection of aggregate consumption, investment, exports and stock changes poses equally difficult problems. In the latest UN National Accounts Statistics Report only a few exceptional developing countries show consumption to be less than 60 per cent of GNP and this estimate is often derived as a residual. As far as

the other aggregates are concerned actual government investment invariably tends to fall short of projected investment because of physical and financial constraints. Exports are exogenous in that they are more prone to changes in climate and international prices (than government policy) and are therefore difficult to project. Data on stocks are notoriously bad and are often lumped with consumption.

Inadequate and approximate data may be useful if some reliance can be placed on orders of magnitude of major components and on directions of change. However, adequate measures of a change and the ability to make development planning projections implies that suitable constant price deflators are available.

But here, too, recalling that the economist may wish to use only part of the accounts, the statistician again runs into serious difficulty. He may approach the problem of measuring real changes in output from two angles:

- (i) Via the GDP (product) approach deflating estimates of net output by industry.
- (ii) Via the GNP (expenditure) approach by deflating individual components of final demand.

Professor T. P. Hill in his detailed study of the measurement of real product in OECD countries has shown how difficult the former approach can be and, in general, developing countries should attempt to deflate GNP from the expenditure side using individual price series for consumption, investment, exports and imports. But here exists the nub of the problem; approximately two-thirds of GNP will comprise the deflation of a residual by contrast with which the errors and biases involved in the construction of appropriate price indices for investment, exports, imports and stocks pale into insignificance. One can only conclude that with general growth rates of less than 10 percent per annum in developing countries the degree of change must lie within the margin of error of the estimates. In other words, it is not generally possible to discern whether the figures indicate a new trend (for which there may be no immediately obvious explanation) or whether the information has been subject to bias or error. In addition, as Mr. Webster points out in his paper, as soon as any item in the accounts is derived as a residual, an important check on the internal consistency and individual accuracy of the estimates used is removed.

From a purely economic viewpoint, however, perhaps the most relevant measure of real product in a developing country is the import purchasing power of exports. If this is so, then there will have been many occasions when physical output has improved but real product, i.e. the equivalent goods and services available to the nation, has deteriorated.

Given that valid and relevant data are scarce, their availability considerably lagged and subject to unknown but substantial margins of inaccuracy, some would argue that it is logically inconsistent and practically counter-productive to use the derived national accounts estimates because they must be too imprecise and unreliable for practical policy purposes. But the estimates need not be perfect to be reasonable and usable, provided consistent data collection methods are followed and strategic sectors are identified. It is perhaps also important to point

out that other indicators of social change and development progress will invariably be more approximate and ambiguous.

Improvements in data, however, present their own problems because the continuity of a series is interrupted and there may be no basis on which to compile comparable estimates. In this respect, Mr. Webster makes a very sound practical suggestion and any changes in the actual methods of collecting data should be recorded. In the final analysis probably more knowledge is gained about an economic system by actually carrying out the process of constructing a set of national accounts estimates over a series of years and observing the nature of the changes in the smallest micro components than by testing the sensitivity of a plan model to different assumptions and data.