

USE OF NATIONAL ACCOUNTS IN ECONOMIC ANALYSIS

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One of the most significant developments in the field of macro-economic statistics in recent times has been the rapid expansion in the scope of national accounts and related statistics and their usage in economic analysis and decision making.

It is now widely recognized that the arrangement of basic economic data in the form of national accounts provides a useful tool for economic analysis, forecasting, and economic planning and policy making. A system of national accounts provides a systematic presentation of basic economic magnitudes within the framework of a comprehensive accounting system, thereby facilitating an understanding of the structure of the economy as well as between its main components. They provide a general picture of past and present conditions and trends in the economy, a knowledge of which furnishes the basis of any form of analysis or decision making.

For planning purposes, national accounts are useful for setting up targets for aggregate economic growth and sector development, for evaluating economic performance with regard to set targets and updating programmes. They provide useful data for estimating strategic parameters relating to propensity to save, capital output ratios, investment coefficients etc, which are necessary for making projections. For short-term national budgeting and economic and fiscal policy purposes, they are used to ascertain possible inflationary or deflationary tendencies

in the economy, production activity, effect of price changes, revenue estimation, economic aspects of public works programmes, possible levels of international trade and balance of payments.

The use of national accounts for such purposes, of course, implies a fully integrated system of accounts covering the economy as a whole. In many developed countries considerable progress has been made in recent years in developing a comprehensive system of economic accounts, which include, besides national accounts, input-output tables, flow of funds accounts etc. This has been made possible because of the highly monetized and advanced character of the economies where reliable accounts are generally available for various types of transactions, and the existence of a highly developed statistical system for systematic collection, compilation and analysis of data.

Most developing countries like Sri Lanka are, however, not in a position to compile comprehensive national accounts of the type required for any exhaustive analysis of the workings of the economy or for evaluating economic performance, making projections and building economic models using sophisticated analytical techniques. But even in these countries substantial progress has been made in recent years in developing national accounts along the lines recommended by the United Nations that do provide adequate material for assessing overall economic performance and identifying significant short term movements and trends which

are vital for economic policy and planning purposes. In this connection, it ought to be realized that even a simple set of accounts for a given year or a period of years yields information on certain structural properties of the economy. For instance, it is relevant to know what part of the total product is devoted to consumption as opposed to capital formation; the extent to which the economy is dependent on foreign trade; the relative amounts of production originating in the various industrial sectors such as agriculture, manufacturing, trade etc; the extent to which different parts of the economy make saving available for capital development etc. Answers could be found and useful conclusions drawn with regard to such matters, without any elaborate analysis, from a simple set of accounts.

This paper, which is concerned primarily with the use of national accounts statistics in economic analysis, seeks to national accounts statistics in developing countries such as Sri Lanka.

Important developments in the field of national accounts:

Before the second world war, national accounts estimates were the results of pioneering efforts of such celebrated economists such as Bowley, Stamp and Colin Clark in UK, King and Kuzaets in U.S.A, Lindhall in Sweden and Rao in India. But these exercises, which were mainly confined to the estimation of National Income or Product, proved to be inadequate to meet the growing demand for more up-to-date and refined estimates. In

the late thirties, governments in the west began to establish official agencies which took over the work. The emphasis was no longer exclusively or mainly on the national income, but also its relation to other economic flows such as consumer expenditure, government revenue and expenditure, asset formation, saving, balance of payments etc. In some countries, like UK for example, it was discussion of the problems of the war economy and finance which actually stimulated the governments to undertake the preparation of national accounts on an annual basis.

The first major step which helped promote the systematic development of national accounts in the immediate post-war years was the establishment of a UN Commission to make recommendations and provide guidelines for compiling national accounts on a uniform basis. The original document on the system of national accounts published by the UN in 1953 provided a basic framework for recording and presenting the main flows in the economic system (in current prices only) relating to production, consumption, accumulation and external trade. It consisted of a set of six accounts and twelve supporting tables and its main objectives was to provide a uniform basis for countries to report national accounts statistics. Although it was considered only as a first step towards developing a more comprehensive framework for organizing and presenting statistical information needed for analyzing the economic process in all its many aspects, it nevertheless constituted the basic for international reporting of national accounts statistics for almost two decades (1950-1970).

In the meantime the growing needs of economic analysis necessitated the development of more elaborate accounts including national accounts at constant prices, input-output tables, flow of funds accounts and more recently the construction of national and sector balance sheets. The construction of disaggregated models as an aid to economic analysis and policy created a new demand for national accounts, sub-divided and re-classified in various forms. The principal technical consequence of all these developments was that it became necessary to maintain coherence in a much enlarged system of related national accounts concepts. The new

SNA, which provides a comprehensive and detailed framework for the systematic and integrated recording of flows and stocks of an economy, grew out of work on national accounting carried out over a period of fifteen years and the uses made of national accounts data in economic analysis, planning and decision making.

The standard accounts of the system which are set out in annex 1 consist of three classes of accounts viz. (1) Consolidated accounts of the nation comprising the Gross Domestic Product and Expenditure Accounts, the National Disposable Income and its appropriation, the Capital Finance and External Transactions Accounts; (2) Production, Consumption and Capital Formation Accounts, which represent a decomposition of Accounts (1) on GDP on the available Supply and Disposition of Goods and Services and the domestic production of these goods and services and (3) Income, Outlay and Capital Finance Accounts for Institutional sectors of the system (Non-financial Enterprises, Financial Enterprises, General Government, Private non-Profit Institutions and Households).

The Standard tables (25 in number), in calling for tabulation of data of considerable interest for social and economic analysis, supplement the standard accounts in a number of ways, especially by providing more detailed classifications. Some of the tables set out the data of the system on flows valued at constant prices.

Information on national accounts statistics on the lines prescribed in the SNA are collected annually by the UN Statistical Office through a country questionnaire which provides for the collection of basic data on flows and stocks of the economy for a series of years, which are of particular interest to those engaged in the utilization of such statistics for economic analysis, planning and policy making. It is gratifying to note that D. C. & S has been able to supply most of the summary information required in part I, which contains the most crucial data on national accounts. In addition, detailed breakdowns of final expenditure components of GDP both in current and constant prices are provided. Detailed flow accounts for institutional sectors are compiled only for the general government sector and in part for the household sector. Tables on

kind of activity breakdowns of value added and on supply and disposition of goods and services (agricultural sector only) are also compiled. A separate account on External Transactions is prepared.

The Central Bank also produces a limited series of national accounts statistics which are used primarily in its Annual Report to review overall economic performance. It is observed that apart from GDP/GNP estimates which are compiled both at current and constant prices, all other aggregates relating to expenditure on GDP are prepared only in current prices.

However, a few additional tables relating to real National Income and the availability and utilization of resources and on domestic savings derived from other recorded flows are also compiled.

In the course of reviewing some of the more important developments in the field of national accounts, reference was made to some of the more important uses to which such data could be put, depending on the scope, content and reliability of such data. At this point, it would be pertinent to take a closer look at some of the more important accounts, and supporting tables which provide most of the information needed for economic analysis.

Consolidated Accounts of the Nation:

These accounts are designed to summarize the transactions which take place in an economy so that attention is focussed on the main features of economic conditions and the strategic relationship between various facets of the economy. The Gross Domestic Product and Expenditure account depicts the cost components of total domestic product and the matching composition of expenditure. It shows at a glance what proportion of GDP is devoted to consumption, capital formation and net exports as well as the proportionate costs of compensation of employees, operating surplus and net indirect taxes in total product. These key economic variables are indispensable for assessing overall economic performance and changes in business activity, depicts how the total income accruing to the nation which, besides national income, includes net transfer income received

from abroad and indirect taxes, is used either for consumption purposes or is saved. This information, if available for a series of years, would help calculate some useful coefficients such as the propensity to save, which could be very useful in planning overall investment policy. The Capital Finance Account provides a useful summary of capital accumulation of which gross fixed capital formation and increases in stocks are the main constituents. Domestic savings, Consumption of fixed capital, net capital transfers and net borrowing are the major sources of finance. An analysis of these real and financial flows both in absolute and relative terms could not only help evaluate past performance, but would also provide useful guidelines for formulating future investment programmes.

The External Transactions account records transactions between the residents of a country and rest of the world and as such is useful for analyzing the effect of such transactions with the rest of the world on domestic economic activity. This account corresponds very closely to the balance of payments account of the IMF, although there are a few important differences in concepts and classifications, and serves very much the same purpose.

Production, Consumption Expenditure and Capital Formation Accounts

These accounts and supporting tables constitute an integral part of the SNA which most countries are in a position to compile at least in part. They cover three types of economic agents viz. industries, other producers (mainly government) and households. A basic distinction is made between commodities, which are characteristic products of industries and other goods and services, which are mainly produced by government.

The commodity accounts show the supply of commodities (cross-classified by major commodity groups) from all sources, (both domestic and foreign) as well as the disposition of the supply to intermediate and final uses. They are very often the subject of studies of supply and demand, input-output analysis, quantities and prices and markets. On the other hand, other goods and services are mainly

are produced by government and private non profit institutions for their own consumption and are important primarily from the point of view of the purposes for which they are used. The accounts of domestic production are classified separately by the different types of producers (industries, government etc) because of fundamental differences in their nature, role in the economy and cost structure of production.

The supporting tables in current prices are designed to present data in respect of kind of economic activity, output, cost structure and gross capital formation of various producers of the economy, the supply and disposition of categories of commodities and the cost - composition and purpose of final consumption expenditure of government, private non-profit institutions serving households and households.

While estimates of total GDP and per capita GDP are frequently used as summary indicators of changes in living conditions over time as well in inter-country comparisons of levels of living, GDP by kind of economic activity provides an overall picture of the structure of the economy and, if analyzed over a period of time, reveals any significant changes in the relative contributions of different industrial sectors to total product. The supplementary tables on the derivation of value added and the cost composition of value added provide invaluable information for making an in-depth analysis of the structure and efficiency of various industries.

The cross classification of government expenditure by function and cost components facilitates a more thorough review of budgetary expenditure and provides a useful guide to fiscal policy. Final consumption expenditures of households, if prepared in sufficient detail, provide useful material for analyzing the general living conditions of the community and the changes over time. Such information could also be utilized in studies relating to consumer demand analysis.

Capital formation data classified according to type of capital goods, by industrial use and purchaser could be used for many different purposes and more specially for the preparation of national investment programmes, model building etc.

Constant Price Data

For purposes of analyzing the flows of goods and services, accounts at constant prices are perhaps more useful than original accounts at current prices. While total or per capita GDP/GNP aggregates in constant prices are commonly used as summary indicators of the rate of growth of the economy, it is possible by using the full range of data provided by national accounts at constant prices to take a realistic view of the process of economic growth in all its complexity. The relative expansion or contraction of particular sectors or industries may be at least as important as the average rate of growth of the economy as a whole, and these major structural changes can be properly analyzed only within the framework of a set of accounts at constant prices. Structural changes associated with the process of economic growth and development are particularly important for countries at the early stages of economic development.

Constant price data are used not only to measure past trends in real output, but also to estimate the growth of potential output or productive capacity both at the industry level as well as the economy as a whole. For this purpose it is necessary to relate the growth of inputs to outputs in a systematic way, which is achieved most effectively within the framework of a set of accounts at constant prices including an input/output table. Income on employment has also been incorporated into the system for purposes of such studies as the rates of growth of labour productivity on total factor productivity.

It is not possible to draw up realistic plans on projections for the future without knowing the existing state of the economy and how it is changing, information which can only be properly derived from accounts at constant prices. For instance, in assessing planned or projected real output, account has to be taken of recent levels and changes in real output, productive capacity, capital formation etc. From a policy point of view, the need for accounts at constant prices as a framework for making forecasts, projections, targets or plans for the future is self-evident.

Private consumption expenditure figures at constant prices are widely used to measure changes in standards