CHAPTER 3

NATIONAL PRODUCT AND RELATED AGGREGATES

Performance of an economy depends on the amount of goods and services produced in that economy. In monetary terms the measure is the Gross Domestic Product (GDP), Gross National Income (GNI), Net national Product (NNP) and Net national Income. GDP per capita is often used a measure of a persons welfare. Countries with higher GDP per capita are seen in the top echelons of human Development Index. Thus measurement of Gross Domestic Product is an extremely important exercise, which requires collection and analysis of large volume of data. In India the Central Statistical Office of Ministry of Statistics and Programme Implementation have been measuring National Income and other related macroeconomic aggregates.

The major concepts used in National Accounts Statistics and the inter relationship particularly of those relating to macro-economic aggregates of national product, consumption, saving and capital formation are given in the following paragraphs.

National Product

National product by definition is a measure in monetary terms of the volume of all goods and services produced by an economy during a given period of time, accounted without duplication. The measure obviously has to be in value terms as the different units of production and different measures of services are not directly added. In the case of a closed economy the measure amounts to domestic product.

National Product and National Income

The national product measures all goods and services arising out of economic activity while national income is the sum of all incomes as a result of the economic activity. Since the production of goods and services is the result of the use of primary factors of inputs, namely, capital and labour, along with the raw materials, the process automatically generates income. This income is in the form of return to capital and labour used in production process. National income includes only those incomes which are derived directly from the current production of goods and services which are called factor incomes.

National Product and Expenditure

The production within the economy over a given period of time is spent either for consumption of its members or for addition of fixed assets or for addition to the stock of existing productive assets within the country. Hence, production can also be measured by considering the expenditure of those who purchase the finished or final goods and services. The national expenditure is the sum of expenditure of all spending of institutional sectors viz., government, households and enterprises. The expenditure on final goods and services may be purely for consumption purposes like consumption of food, clothing, shelter; services etc., or for capital formation such as addition to buildings, plant, machinery, transport equipment, etc. Some goods may not be immediately sold and may be kept aside as stocks. These goods which are added to stocks are also accounted for as final expenditure.

Production/Income/Expenditure

The national income of a country can be measured in three different ways, from the angle of production, from income generation and from final utilization. These three forms are circular in nature. .

Gross National Income (GNI)

The economy of India is not closed as there are transactions with rest of the world in the form of exports, imports, loans etc. This gives rise to the concept of national or domestic. Gross Domestic Product refers to production of all resident units within the borders of a country, which is not exactly same as the production of all productive activities of residents. Some of the productive activities of residents may take place abroad. Conversely, some production taking place within a country may be attributed to temporary and seasonal foreign labour.

GNI = GDP + compensation of employees and property income receivable from the rest of the world – compensation of employees and property income payable to the rest of the world.

Categories of expenditure

The income available to the individuals in the form of labour income or capital income or to the productive units in the form of retained income is then spent. This utilisation of the income can take various forms, namely, (a) household consumption expenditure, (b) government consumption expenditure, and capital formation comprising fixed capital formation, and stock accumulation.

Household consumption expenditure

The household consumption expenditure referred to as private final consumption expenditure (PFCE) in National Accounts Statistics (NAS), consists of expenditure by households (including non-profit institutions) on non-durable consumer goods and services and all durable goods except land and buildings.

Government final consumption expenditure

Government final consumption expenditure comprises the compensation of employees and purchases of goods and services by the government including purchases abroad. Compensation of employees of general government consists of wages and salaries and social security contribution.

Gross capital formation

Gross capital formation includes only produced capital goods (machinery, buildings, roads, artistic originals etc.) and improvements to non-produced assets. Gross capital formation measures the additions to the capital stock of buildings, equipment and inventories, i.e. additions to the capacity to produce more goods and income in the future. The components of gross capital formation are

- gross fixed capital formation
- changes in inventories
- acquisition less disposal of valuables(such as jewelry and works of art)

Gross fixed capital formation includes purchases of new assets within the domestic market like buildings, transport equipment, machinery, breeding stock etc.; import of new assets; own account production of new assets such as production of rail engines, wagons, trucks, aero-planes, farm machinery, breeding stock of fish, sheep, cows etc. by the enterprise; purchase of new houses by consumer households and net purchase of second hand physical assets from abroad.

Change in stocks (inventories) consists of the difference between the opening stock and the closing stock.

Saving

Saving represents the excess of current income over current expenditure of various sectors of the economy. It is the balancing item on the income and outlay accounts of the producing enterprises, households, government administration and other final consumers. For the closed economy savings equals capital formation during the year whereas for the open economy savings equals capital formation plus net capital inflow from abroad during the year.

Gross Versus Net Value Added

GDP does not take into account the depreciation factor because of which it does not reveal the complete flow of goods and services through various sectors. Thus, the term net product is considered more suitable which is obtained by subtracting depreciation cost from the gross domestic product. Capital goods like machines, equipment, tools, factory building, tractors etc. get depreciated during the process of production. After some time these capital goods need

replacement. The decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage is called Consumption of Fixed capital (CFC). Deduction of CFC from GDP provides with the net domestic product.

Current versus Constant Prices

National income regardless of the concept is obviously measured at prices prevailing during the period or in other words at current prices. When calculated over a number of years, the changes in national income would, therefore, include implicitly not only the effect of the changes in production but also the changes in prices. This estimate compared over the period would not, therefore, give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. Therefore, it would be necessary to eliminate the effect of prices, or in other words to recompute the whole series at given prices of one particular base year. National income thus computed is termed as national income at constant prices or in real terms.

Sources of DATA

Administrative records, Census and Surveys

Some of the important sources of data, which have been used in the new series, are as follows:

(i) NSS 61st round (2004-05) on employment and unemployment and consumer expenditure;

(ii) NSS 62nd round (2005-06) on unorganized manufacturing;

(iii) NSS 63rd round (2006-07) on services sectors;

(iv) All India Livestock Census, 2003;

(v) NSS 59th round (2002-03) on All India Debt and Investment Survey;

(vi) Population Census, 2001; and

(vii) Fourth All India Census of Micro, Small and Medium Enterprises, 2006-07.

Further, the results of various studies undertaken by the CSO through the Ministry of Agriculture, Ministry of Environment and Forestry and State Governments and also the CSO's input output transactions tables and the Ministry of Agriculture's Cost of Cultivation Studies have been used in the new series for updating the rates and ratios used to estimate the production/consumption of fodder, market charges paid by the farmers, yield rates of meat, meat products and meat by products for different categories of animals, input rates for agriculture and forestry and the trade and transport margins.

Industrial Classsification used

ISIC Rev 3

National Industrial Classification 2004

HS classification for Foreign Trade.

Coverage

In the system of national accounts, the accounts relating to the resident institutional sectors portray various facets of economic activity, i.e., production, the generation and distribution pertaining to the following institutional units:

Public sector

- Government Administrative Departments
- Departmental Commercial undertakings
- Non Departmental Commercial Underatkings

Private Corporate Sector

Households including NPISHs

Highlights

- Growth Rate (% of increase over the previous year) in Gross National Product at the current price of the years 2005-06 to 2008-09 varied between 14.5 % to 15.5 %. However in 2009-10,it dropped to 10.72 % as per the advance estimates
- Growth Rate (% of increase over the previous year) in Gross National Product at the constant price of the years 2005-06,2006-07,2007-08 and 2008-09 are 9.47, 9.72, 9.57,6.75,7.13
- As the economy is expanding the contribution of Agriculture Sector in the Net Domestic product is reducing over the years. It has reduced to 17.8% in 2008-09 from 19.6 % in 2004-05.
- Contribution of Financing, insurance, real estate & Business Services is increasing over the years. It has increased from 14.9 % in 2004-05 to 16.5 % in 2009-10.
- Contribution of Construction Sector is also increasing at a steady rate over the years.
- Private Final Expenditure on Food decrease from 33.5 % to 29.2 % from 2004-05 to 2008-09 whereas Private Final Expenditure on Hotel and Restaurant is increasing over the Years.
- Contribution of Household Sector Saving is maximum and over the years, it is in-between 62 % to 72 %.

- Contribution of Household Sector in Capital Formation is maximum, then follows Private Corporate Sector.

- Contribution of Public Sector in Gross Domestic Product is decreasing over the period whereas the contribution of Private Sector is increasing.

This chapter contains the following tables:

Table 3.1-National Product at Factor Cost

Table 3.2-National Product at Factor Cost

Table 3.3- Net Domestic Product by Economic Activity

Table 3.4- Net Domestic Product by Economic Activity

Table 3.5- Private Final Consumption Expenditure in Domestic Market

Table 3.6- Private Final Consumption Expenditure in Domestic Market

Table 3.7- Domestic Saving By Type of Institution

Table 3.8- Capital Formation by Type of Assets and By Type of Institutions

Table 3.9- Capital Formation by Type of Assets and By Type of Institutions

Table 3.10- Performance of Public Sector