National Income Statistics

Needs for national income statistics

1. To measure living standard in an economy
2. To make a comparison of living standard in an economy in different years.
3. To make a comparison of living standard between different countries.
4. To measure efficiency and contribution of different sector of an economy towards national income.

Concepts of national income statistics

Gross domestic product (GDP)

It is the measure of flow of goods and services in an economy over a period of time, which is usually one year. It is obtain by valuing outputs of goods and services at market price and then aggregating. All intermediate goods are excluded, and only goods used for final consumption and investment are included. The word 'gross' means no deduction of depreciation cost. Because of word 'domestic' income arising from investments and possessions owned abroad is not included, only the value of the flow of goods and services produced in the country is estimated.

Gross Domestic Product (GDP) at market price= C+I+G+(X-IM)

Gross Domestic Product (GDP) at factor cost= GDP at market price + subsidies –taxes on Expenditure

Gross national product (GNP)

It includes gross domestic product and the income accruing to domestic residents arising from investment abroad and excludes income earned in the domestic market by foreigners.

Gross National Product (at factor cost) = GDP (at factor cost) + net property income from abroad

Net national product (NNP)

Net National Product (at factor cost) = GNP- depreciation
It is also called as national income. It includes total income of residents of an economy in a given period after providing capital consumption.

Personal disposable income= Personal income – direct tax-national insurance contribution

Money GDP and real GDP

Money or real GDP is calculate at current year prices and is a measure which has not been adjusted for inflation. It gives a misleading impression about the performance of the economy. This is because value of money GDP may rise because of an increase in money value but not because of more goods and services.
Real GDP is calculated at constant prices, that is, at prices of base year. In this way distorting effect of inflation can be removed.

$$\text{Real GDP} = \text{Nominal GDP} \times \frac{\textit{Price index in base year}}{\textit{Price index in current year}}$$

The price index, used to convert nominal GDP into real GDP is called as GDP deflator.

$$\text{Per capita income} = \frac{\textit{National income}}{\textit{populatio}}$$

How to measure GDP

Three different methods to measure GDP

Total output method

According this method we add money value of all goods and services which produce by all firms in an economy in specified period of time which is usually one year. It is the most direct method to measure GDP. Only those goods and services are included which are actually produced and sold. Selling of second hand goods or intermediate goods are not included. However, the result is many times greater then the true value of the national output. It is because of the arise of double counting problem. It can be avoided if just added values are taken or to consider the final value of the product.

Total income method

According to this method incomes earned by all factors of production are added. It includes wages, rents, interests and profits. In this method only those incomes are included which have been earned for services rendered or for which there is some corresponding value of output is included. Therefore, transfer payments are not included. These payments are in form of social security payments, unemployment benefits, old age benefits, pension etc.

Total expenditure method

According to this method expenditures incurred by all sectors of an economy are included. It includes expenditures incur by household, firms, government, and exports. Expenditures on imports are subtracted from these expenditures.

AE= C+I+G+(X-IM)

In this method we just add expenditures incurred on final goods and services. Expenditures on intermediate goods are not included. Similarly, expenditures on second hand goods are not included too. Incase of government expenditures only that part is considered which represents payments for goods and services. Once again expenditures on transfer payments are excluded.

Is GDP good indicator to measure living standard in an economy?

Real GDP figures are used to assess changes in living standard. Increase in real GDP shows availability of more goods and services. It apparently shows an improvement in living standard. However, account must be taken of changes in population because it is income per head which is relevant when living standards are being discussed.

Flaws in the calculation of GDP

Many statistical errors occur during calculation of GDP. These are may be because of untrained staff or gathering of data or some other human errors. Therefore accurate figures are not gained.

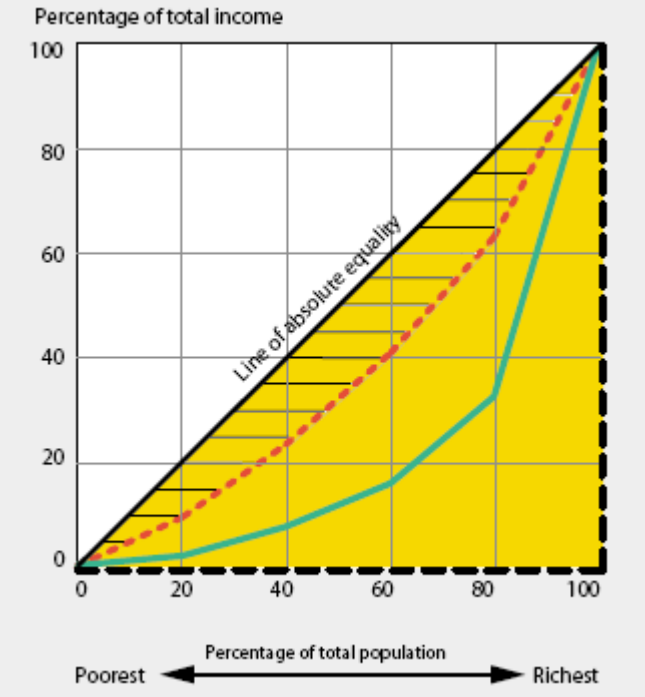
Official real GDP figures may understate the true changes in GDP, because of hidden economy or informal or shadow economy. These terms are used for undeclared economic activities, where people do not declare their income to authorities. For example, a person who works in over time does not declare his income or a person who does not declare because to evade taxes. Another reason may be because of earning of income through illegal activities which he cannot declare. However, if size of the hidden economy is relatively constant, the rate of economic growth can be calculated reasonably accurately.

Limitations of GDP

It is necessary to take account of the composition of total output. For instance, an increase in the real GDP occurs because of increase in production of capital goods or defence products or because

of increase in government spending on space exploration will have no short run impact in the improvement of living standard. However, if such goods are produced which satisfy consumer wants, living standard can be improved.

Real GDP per capita tells average income per person ad nothing to do with the distribution of income. Living standard is improved if income is fairly distributed. Incase of unfair distribution, disparities increase because wealth is concentrated in few hands and no improvement in the living standard of mass.



This concept can be explained with the help of Lorenze curve which shows distribution of income in an economy. 45˚ line shows absolute equality which is not possible. As income distribution curves move away from 45˚ line, it worsens distribution of income. In the above graph, dotted line shows better distribution of income as compare to the dark line.

Higher GDP figures may also give a misleading picture of changes in economic welfare if workers have to spend more time at work and there is reduction in leisure hours or other working conditions are declined.

Economic and political freedom also plays an important role in the changes of living standard. Economic freedom means that consumers are allowed to consume anything and producer can produce according to their will and similarly, people have freedom to choose their occupation. In political freedom people should have a right to cast vote. If GDP rises but people lose their freedoms, there may be a fall in the living standard.

GDP figures are a measure of the material standard of living rather then the quality of life. They measure quantity of goods and services but simply neglect the quality of goods and services which may offset the living standard.

Increase in GDP leads to increase in economic activities. Therefore negative externalities are created. No adjustment is made about external cost in GDP, so it is unable to depict true picture.

Purchasing power parity (PPP) should be considered when comparison is made between different economies. PPP allows comparing the standard of living between countries by taking into account the impact of their exchange rates.

Other indicators of living standards

Net Economic Welfare

This measure seeks a fuller picture of living standard by adjusting real GDP per capita at purchasing power parity in terms of $ to take into account other factors which have an impact on the living standard. Factors which improve living standards such as increase in leisure hours, improvement in the quality of goods or improved working conditions are added to the GDP figures, whilst factors which reduce living standards including rising crimes and pollution levels, are deducted.

Human Development Index

A tool developed by the United Nations to measure and rank countries' levels of social and economic development based on four criteria: HDI takes into account real GDP per head (PPP$), life expectancy at birth and educational attainment as measured by adult literacy and combined primary secondary and tertiary enrolment ratio. The thought behind this theory is that people's welfare is influenced not only by the goods and services available to them but also by their ability to lead a long and healthy life and acquire knowledge. The HDI makes it possible to track changes in development levels over time and to compare development levels in different countries. Maximum value of the index is '1'. Any country which has an improved HDI, have been improved its living standard. Similarly, that country which has higher HDI as compare to another or other countries will have better living standard.

Distinguished features between developed and developing economies:

Real GDP per capita
Low income economies
Middle income economies
High income economies
National debts
Distribution of income
Nature of GDP
Nature of international trade
Nature of population
Problems of urbanization
Life expectancy
Literacy rate
Infrastructure