

Economics: An Introduction

Definition

Economics as a word comes from the Greek : oikos means 'family, household, or estate', and nomos stands for 'custom, law' etc. Thus, "household management" or management of scarce resources is the essential meaning of economics. Economic logic is applied to any problem that involves choice under scarcity.

Take for example, land. It is a scarce resource. India has 15% of global population but only 2.4% of the global land. Thus there is huge pressure on land. It is needed for agriculture (food and non-food); manufacturing; residential purposes and so on. There should be rational and judicious use of land for which economics can help to make public policy. The challenges associated with land use are being grappled with presently , for instance in the Land Acquisition and Rehabilitation and Resettlement Act 2013 where the land claims of farmers, industry and other sections are addressed.

Similarly, water is scarce and is becoming even more so. There are demands for agricultural, industrial, domestic and other uses. How to apportion the existing amount of water among all these users is a public policy challenge being considered by the **Draft National Water Policy (NWP, 2012)**. **Similar is the purpose of the food security law and land acquisition law.**

Broadly, economics is a social-science that studies human activity aimed at satisfying needs and wants. It encompasses production, distribution, trade and consumption of goods and services

Initially, economics focused on "wealth" and later "welfare". That is, initially, it did not deter economists from advocating maximum production regardless of who benefited from it and how much misery it produced. Later, by the late 19th century, there was hue and cry about children being made to overwork and receive paltry payment for their work, to give one example. Then welfare became the focus of the discipline.

As a policy science, economics is always confronted with trade offs as scarcity of resources is the basis of the discipline. Trade offs involve making choices in policy making wherein there is a compromise on one goal to achieve another goal. It is a way of balancing among desirable goals. Presently, the policy of Reserve Bank of India aims at moderating inflation that it is the overriding objective of its monetary policy, even as some growth is eroded in the process. Thus, a bit of growth is traded off for price stability. Similarly, government wants to give subsidies to the poor and weak. It may mean more borrowings and thus some fiscal excess but poverty is addressed and thus political stability. Thus, fiscal prudence may be traded off to some extent in pursuit of welfare. The current state of public finance is an accurate description of this dilemma with fiscal deficit targeted at 4.8% of GDP(2013-14). In the land acquisition law, compensation for the land owners is increased to balance the interests of the industrialists and the farmers and others. Investment may moderate in the process, but social justice gets addressed.

The focus on tradeoffs arises from the scarce resources that make it necessary to choose between competing alternatives. Choosing one benefit implies forgoing another alternative to a greater or lesser extent. Thus, there is an opportunity cost to the available resources and there is a continuous process of weighing alternatives and balancing them (opportunity cost is the cost of foregoing an opportunity while choosing another).

Adam Smith, generally regarded as the Father of Economics, author of *An Inquiry into the Nature and Causes of the Wealth of Nations* (generally known as *The Wealth of Nations*) defines economics as "The science of wealth." Smith also offered another definition, "The Science relating to the laws of production, distribution and exchange."

Definitions in terms of wealth emphasize production and consumption, and do not deal with the economic activities of those not significantly involved in these two processes, for example, children and old people. The belief is that non-productive activity is a cost on society. It meant that man was relegated to the secondary position and wealth was placed above life. In democratic times, it is not acceptable. There was a demand to balance wealth creation with focus on social and human welfare. Thus arose the shift in the focus to welfare economics- study of man and of human welfare, not of money and goods alone. Economics since then involved study of social action connected with the attainment of human well being.

Beyond, wealth, welfare and trade offs, there has been an intense search in the discipline for right foci- sustainable development, green economy, well being, national happiness and so on.

Economics is usually divided into two main branches:

Microeconomics, which examines the economic behavior of individual actors such as consumers, businesses, households etc to understand how decisions are made in the face of scarcity and what effects they have on larger economy.

Macroeconomics, on the other hand, studies the economy as a whole and its features like national income, employment, poverty, balance of payments and inflation.

The two are linked closely as the behavior of a firm or consumer or household depends upon the state of the national and global economy and vice versa.

'Mesoeconomics' studies the intermediate level of economic organization in between the micro and the macro economics like institutional arrangements etc. Meso is relative. Study of a sector of economics like auto, infrastructure may be considered mesoeconomics while the study of each unit may fall under micro.

DIVISION OF ECONOMICS	FOCUS
Microeconomics	Production/output in individual industries and businesses and consumer and behavior, How much steel, How much office space, How many cars, Consumer behaviour
Macroeconomics	National production/output, Gross domestic product, employment, Poverty, Inflation, BOP

There are broadly the following approaches in the mainstream economics, the basis of all the streams being the same: resources are scarce while wants are unlimited (often mentioned as the economic problem)

- Keynesian macroeconomics based on the theories of twentieth-century British economist John Maynard Keynes. It says that the state can stimulate economic growth and restore stability in the economy through expansionary policies. For example through massive programme of spending on infrastructure when the demand is low and growth rate is falling. In the recessionary phase that the economies of the western world in particular and rest of the world in general are going through due to 2008 financial crisis, the relevance of Keynes is growing. The intervention by State is only when the economic cycle turns down and growth slows down or is negative. In normal times, it is the market that drives growth through the force of supply and demand though the respective roles of State and market are coming under critical scrutiny post-Lehman. Indian government stepped up expenditure with fiscal and monetary stimuli in the 2008-10 period to withstand the recessionary winds from the west. With growth spurting, the gradual and calibrated exit from the stimulus was begun in the 2010-11 Union Budget. The theories of Keynesian economics were first presented in *The General Theory of Employment, Interest and Money* (1936).
- **Political economy** was the original term used for studying production, buying and selling, and their relations with law, custom, and government, as well as with the distribution of national income and wealth. *Political economy* originated in moral philosophy. It was developed in the 18th century as the study of the economies of states, or *polities*, hence the term *political economy*. Today, *political economy* may refer to examining how political forces affect the choice of economic policies, especially as to distributional conflicts and political institutions. *Political economy* most commonly refers to interdisciplinary studies drawing upon economics, law, and political science in explaining how political institutions, the political environment, and the economic system—capitalist, socialist, or mixed—influence each other.
- Neoliberalism refers to advocacy of policies such as individual liberty, free markets, and free trade. Neoliberalism "proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade". With the communist model of economic management through state ownership of economy failing by the mid-1980s and industrial democracies registering a history victory over it with their free market model, market forces returned as the winning format for economic success. It is the return of the liberalism of the Adam Smith era and is referred to as neo-liberalism in its present form since mid-1980s. India's economic reforms are largely centred around it. The expression of neoliberalism is used by some as leaving too much role to the market forces and can be detrimental to genuine human and sustainable growth.
- In distinction to the above, there is the school of socialist economics based on public (State) ownership of means of production to achieve greater equality and give the workers greater control of the means of production. It comes in many forms—Nehruvian socialism where there is public and private sector coexisting and complementing called mixed economy. It may also establish fully centrally planned economy which is also called command economy—economy is at the command of the State. Private ownership of assets is not allowed. For example, erstwhile USSR,

Cuba etc. The latter (no private property, total economy being owned by the state etc) is known as communist model.

- Development economics is a branch of economics which deals with not only promoting economic growth and structural change but also improving the well being of the population as a whole through focus on health and education and workplace conditions, whether through public or private channels. Its thrust is mainly on low income countries. The most prominent contemporary development economists are Nobel laureates Amartya Sen and Joseph Stiglitz.

Structural change of an economy refers to a long-term and broad based change of the fundamental structure, rather than microscale or short-term change. For example, a subsistence economy is transformed into commercial economy or a regulated mixed economy is liberalized. An insulated and protectionist economy becomes open and globalized. India has been structurally reorienting its economy since the early 1990s under which there is more room for markets; privatization of the public sector; greater flow of foreign investment and foreign goods etc.

Green economics focuses on and supports the harmonious interaction between humans and nature and attempts to reconcile the two. It is referred by many names like sustainable development, green economy (Rio Plus 20, 2012)

Economic growth

Economic growth is the change- increase or decrease, in the value of goods and services produced by an economy. If it is positive, it means an increase in the output and the income of a country. It is generally shown as the increase in percentage terms of real gross domestic product (GDP adjusted to inflation) or real GDP.

Measuring Growth

Measures of national income and output are used in economics to estimate the value of goods and services produced in an economy. Common measures are Gross National Product (GNP) and Gross Domestic Product (GDP).

National income accounting

National income accounting refers to a set of rules and techniques that are used to measure the output of a country. It is used almost synonymously with GDP.

GDP is defined as the total market value of all final goods and services produced within the country in a given period of time- usually a calendar year or financial year or a fraction like quarter.

GDP can be real or nominal. Nominal GDP refers to the current year production of final goods and services valued at current year prices. Real GDP refers to the current year production of goods and service valued at base year prices. Base year prices are constant prices.

In estimating GDP, only final marketable goods and services are considered. When it is compared to the base year figure, the real growth levels are seen.

To explain further, gains from resale are excluded but the services provided by the agents are counted. That is, when a used car or house is sold, no new goods are being produced. But the

real estate or the auto agent makes some money through commission which adds to the service economy. Similarly, transfer payments (pensions, scholarships etc) are excluded as there is income received but no good or service produced in return.

However, not all goods and services from productive activities enter into market transactions. Hence, imputations are made for these non-marketed but productive activities : for example, imputed rental for owner-occupied housing.

The value of intermediate goods is a part of the final goods and services and so are not counted separately as it amounts to double counting and exaggerates the value of the output.

Market Price and Factor Cost

Market price refers to the actual transacted price and it includes indirect taxes- custom duty, excise duty, sales tax , service tax etc.

Factor cost refers to the actual cost of the various factors of production and it includes government grants and subsidies but it excludes indirect taxes.

Relationship between market price and factor cost

GNP at factor cost = GNP at market price – indirect taxes + subsidies

GDP at factor cost = GDP at market price – indirect taxes + subsidies

Factor costs

Factor costs are the actual production costs at which goods and services are produced by the firms and industries in an economy. They are really the costs of all the factors of production such as land, labor, capital, energy, raw materials like steel etc that are used to produce a given quantity of output in an economy. They are also called factor gate costs (farm gate, firm gate and factory gate) since all the costs that are incurred to produce a given quantity of goods and services take place behind the factory gate ie within the walls of the firms, plants etc in an economy.

Transfer Payments

Transfer payment refers to payments made by government to individuals for which there no economic activity is produced in return by these individuals. Examples of transfer are scholarship, pension.

Estimating GDP/GNP

Three approaches

There are three different ways of calculating GDP. The expenditure approach adds consumption, investment, government expenditure and net exports (exports minus imports). On the other hand, the income approach adds what factors earn: wages, profits, rents etc. Output approach adds the market value of final goods and services. The three methods must yield the same results because the total expenditures on goods and services (GNE) must by definition be equal to the value of the goods and services produced (GNP) which must be equal to the total income paid to the factors that produced these goods and services.

In reality, there will be minor differences in the results obtained from the various methods due to changes in inventory levels. This is because goods in inventory have been produced (and therefore included in GDP), but not yet sold. Similar timing issues can also cause a slight discrepancy between the value of goods produced (GDP) and the payments to the

factors that produced the goods, particularly if inputs are purchased on credit. Inventory is a detailed list of all the items in stock

Final goods are goods that are ultimately consumed rather than used in the production of another good. For example, a car sold to a consumer is a final good; the components such as tyres sold to the car manufacturer are not; they are intermediate goods used to make the final goods. The same tyres, if sold to a consumer, would be a final goods. Only final goods are included when measuring national income. If intermediate goods were included too, this would lead to double counting; for example, the value of tyres would be counted once when they are sold to the car manufacturer, and again when the car is sold to the consumer.

Only newly produced goods are counted. Transactions in existing goods, such as second-hand cars, are not included, as these do not involve the production of new goods.(mentioned earlier)

GDP considers only marketed goods. If a cleaner is hired, his pay is included in GDP. If one does the work himself, it does not add to the GDP. Thus, much of the work done by women at home- taking care of the children, aged; chores etc which is called 'care economy' is outside the GDP. Even what the elder sibling teaches the younger one is outside the scope of national accounts.

Gross means depreciation (wear and tear of machinery in their use) of capital stock is not subtracted. If depreciation is subtracted, it becomes net domestic product.

Calculating the real GDP growth -inflation adjusted GDP growth-allows us to determine if production increased or decreased, regardless of changes in the inflation and purchasing power of the currency.

Output expressed as GDP at factor cost at constant prices makes more genuine sense as inflation/deflation is factored out and the distortions of subsidies and indirect taxes are also deducted. Thus, quantitative levels of production changes are expressed.

The data from the current prices is adjusted to the constant prices by using deflators- it helps take out the contribution of inflation to the value of the output. Errors can occur in the process of deflating the figure based on which deflator is used. GDP data for the first quarter of 2010-11 was miscalculated because the price deflator was wrongly used. For GDP by output and expenditure figures, two different deflators were used and the shrinkage went wrong. For one figure, CPI was used as deflator and for the other GDP figure, WPI was used.

GDP and GNP

The two are related. The difference is that GNP includes net foreign income- what foreigners produce in the country is subtracted from what Indians produce abroad or vice versa. That is meant by net foreign income. GNP adds net foreign income compared to GDP. GDP shows how much is produced within the boundaries of the country by both the citizens and the foreigners. GDP focuses on where the output is produced rather than who produced it- it is a geographical concept. GDP measures all domestic production, disregarding the producing entities' nationalities.

In contrast, GNP is a measure of the value of the output produced by the "nationals" of a country- both within the geographical boundaries and outside. That is, all the output that the Indian citizens produce in a given year – both within India and all other countries makes up

the GNP of India. For example, there are Indian and foreign firms operating in India. Together what they produce within the Indian geography is the GDP of India. The profits of foreign firms earned within India are included in India's GDP, but not in India's GNP.

In other words, income is counted as part of GNP according to who owns the factors of production rather than where the production takes place. For example, in the case of a German-owned car factory operating in the US, the profits from the factory would be counted as part of German GNP rather than US GNP because the capital used in production (the factory, machinery, etc.) is German owned. The wages of the American workers would be part of US GDP, while the wages of any German workers on the site would be part of German GNP.

GDP is essentially about where production takes place. GNP is about who produces. If it is an open economy with great levels of foreign investment (FDI) and lesser levels of outbound FDI, its GDP is likely to be larger than GNP.

If it is an open economy but more of its nationals tend to move economic activity abroad or earn more from investing abroad compared with non-nationals doing business and earning incomes within its borders, its GNP will be larger than GDP.

If it is a closed economy where nobody leaves its shores, nobody invests abroad, nobody comes in and nobody invests in the country, its GDP will be equal to GNP.

Japan used to belong in the last category. Until the mid-1990s, the difference between Japan's GDP and GNP amounted to less than one percentage point of GDP. With only limited numbers of people doing business abroad, the GDP and GNP were essentially the same thing.

Presently, Japan's GNP tends to be around 2 percentage points larger than its GDP. Japanese economy is globalised with Japanese investment in China, USA, Europe etc. In stark contrast to the Japanese case, there are other nations where the difference between GDP and GNP is not only large, but inverted as well. That is to say, GDP is larger than GNP. Ireland is a case in point. That country's GDP has tended over recent years to eclipse its GNP by as much as 20 percent.

This is typical of a very small and very open economy. When such a country manages to attract a lot of foreign direct investment, domestic economic activity expands quite quickly. But the earnings from all that economic activity, if they are sent home by the companies in question, may not leave the country richer at all.

Analysts tend to say that GDP is a better measure than GNP, and that now seems to have been accepted by all the major industrial countries. The reason is that GDP is domestic production where employment is created; inflation is moderated; tax revenues are more and so on. GNP also has its advantages and India is a big beneficiary of it- remittances from abroad; acquisition of foreign companies; invest abroad to tap on foreign opportunities etc. But the consensus is that former is of greater value than the latter.

There are other related concepts too.

Gross National Product and Net National Product

We have seen GDP and GNP above.

Net National Product

In the production process a country uses machines and equipment. When there is depreciation, we have to repair or replace the machinery. The expenses incurred for this are called the depreciation expenditure. Net National Product is calculated by deducting depreciation expense from gross national product.

$$NNP = GNP - \text{Depreciation}$$

National Income is calculated by deducting indirect taxes from Net National Product and adding subsidies. National Income (NI) is the NNP at factor cost.

$$NI = NNP - \text{Indirect Taxes} + \text{Subsidies}$$

Per Capita Income is per capita GDP: GDP divided by mid year population of the corresponding year. Similarly, per capita GNP can also be calculated.

The growth of GDP at constant price shows an annual real growth.

The real GDP per capita of an economy is often used as an indicator of the average standard of living of individuals in that country, and economic growth is therefore often seen as indicating an increase in the average standard of living.

Base year

For examining the performance of the economy in real terms through the measurement of Gross Domestic Product (GDP), national income, consumption expenditure, capital formation etc., estimates are prepared at the prices of selected year known as base year. Base year is a specific year from which the economic growth is measured. It is allocated the value of 100 in an index. The estimates at the prevailing prices of the current year are termed as "at current prices", while those prepared at base year prices are termed "at constant prices". The comparison of the two estimates gives the measure of real growth. It means the production of the current year is valued at base year prices so that the real growth is worked out by deducting the impact of inflation or deflation. That is, the increase in the value of the GDP due to inflation is excluded and the 'real increase' is found out.

The base year of the national accounts is changed periodically to take into account the structural changes which take place in the economy and to depict a true picture of the economic growth.

The first official estimates of national income were prepared by the Central Statistical Office (CSO) with base year 1948-49 for the estimates at constant prices. These estimates were published in the publication, "Estimates of National Income" in 1956. With the gradual improvement in the availability of basic data over the years, a comprehensive review of methodology for national accounts statistics has constantly been undertaken with a view to updating the database and shifting the base year to a more recent year. As a result, base years of the National Accounts Statistics series have been shifted from 1948-49 to 2004-05 which is the new series of national accounts being followed from 2010.

Normally, when the base year of national accounts statistics is changed, there is some change in the levels of GDP estimates. This happens due to widening the coverage.

A base year has to be a normal year without large fluctuations in production, trade and prices of commodities in general. Reliable price data should be available for it. It should be as recent as possible. The National Statistical Commission wants that the base year should be revised every five years.

GDP deflator - most inclusive/comprehensive price index.

GDP Deflator is a comprehensive measure of inflation, implicitly derived from national accounts data as a ratio of GDP at current prices to constant prices. It encompasses the entire spectrum of domestic economic activities including services, it is available on a quarterly basis with a lag of two months since 1996. Given the delay involved in obtaining the GDP deflator, national income aggregates extensively use WPI for deflating nominal price estimates to derive real price estimates.

Unlike some price indexes, the GDP deflator is not based on a fixed basket of goods and services. It covers the whole economy.

The Central Statistical Office (CSO) in the Ministry of Statistics and Programme Implementation (MoSP&I) is responsible for the compilation of NAS. At the State level, State Directorates of Economics and Statistics (DESSs) have the responsibility of compiling there State Domestic Product and other aggregates.

The statistics that are released by the CSO and the State DESSs relate to various macro-economic aggregates of the Indian economy. The aggregates compiled and released (at current and constant prices) at annual periodicity by the CSO include gross and net domestic product by economic activity, consumption, saving, capital formation and capital stock, public sector transactions and dis-aggregated statements, as well as the consolidated accounts of the nation namely like Gross Domestic Product. The CSO also releases the quarterly GDP estimates.

The CSO revises the base year of the NAS series periodically. The CSO releases the current series of NAS with 2004-05 as Base Year. The first estimates for a reference year are released by the CSO, about two months before the close of the year, in the form of Advance Estimates (AE) of National Income. These estimates present at both current and constant prices and at factor cost, the Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP), Net Domestic Product (NDP), and Per Capita Income. These estimates are subsequently revised and released as updates of advance estimates. Quick Estimates of NAS and the Revised Estimates of the earlier years are released by the CSO utilising the available data of various sectors provided by the statistical system, in the month of January or February of the following year (with a 10-month lag). Along with the Quick Estimates for the previous financial year, estimates for the earlier years are also revised using the detailed data supplied by various source agencies and final figures released.

a) It is given info after year.
b)

The need to measure economic growth

The following aims can be attributed to the study of economic growth

- when growth is quantified , we can understand whether it is adequate or not for the given goals of the economy
- we can understand its potential and accordingly set targets
- we can adjust growth rates for their sustainability
- we can prevent inflation or deflation to some extent if we see the performance of the economy in quantitative terms
- we can balance the contributions of the three sectors of the economy and steer the direction of growth towards national goals- away from agriculture to manufacturing as in the case of India in recent years
- target appropriate levels of employment creation and poverty alleviation
- forecast tax revenues for governmental objectives
- corporates can plan their business investments

Problems in calculating National Income

The measurement of national income encounters many problems. The problem of double-counting has already been noted. Though there are some corrective measures, it is difficult to eliminate double-counting altogether. And there are many such problems and the following are some of them.

Black Money

Illegal activities like smuggling and unreported incomes due to tax evasion and corruption are outside the GDP estimates. Thus, parallel economy poses a serious hurdle to accurate GDP estimates. GDP does not take into account the 'parallel economy' as the transactions of black money are not registered.

Non-Monetization

In most of the rural economy, considerable portion of transactions occurs informally and they are called as non-monetized economy- the barter economy. The presence of such non-monetary economy in developing countries keeps the GDP estimates at lower level than the actual.

Household Services

The national income accounts do not include the 'care economy'- domestic work and housekeeping. Most of such valuable work rendered by our women at home does not enter our national accounting.

Social Services

It ignores voluntary and charitable work as it is unpaid.

Environmental Cost

National income estimation does not account for the environmental costs incurred in the production of goods. For example, the land and water degradation accompanying the Green revolution in India. Similarly, the climate change that is caused by the use of fossil fuels. However, in recent years, green GDP is being calculated where the environmental costs are deducted from the GDP value and the Green GDP is arrived at.

Business cycles

Alternating periods of expansion and decline in economic activity is called business cycle. That is, the ups and downs of the economy. There are four stages in the business cycle: expansion, growth, slowdown and recession. Recession may not follow every time. When recession takes place, it may not be of the same intensity every time. For example, the 2008 global financial meltdown is the deepest since the WW2 and is called the Great Recession. If recession deepens, it is called depression and occurred only once in the last century in 1930's. All economies experience economic cycles. Explaining and preventing these fluctuations is one of the main focuses of macroeconomics.

Recession may end with the corrective measures taken by the government and the market. One such measure is stimulus. If it does not end and relapses for any reason, due to external or internal shocks, it is called double dip recession. In 2012, UK is in double dip recession. When recession worsens, with de-growth becoming stubborn and deeper and more and more people lose jobs, it is called depression- statistical markers may differ. Greece in 2012 is in depression with 50% of the young people out of work.

Economic Growth: Its benefits and side effects

The first benefit of economic growth is wealth creation. It helps create jobs and increase incomes. It ensures an increase in the standard of living, even if it is not evenly distributed. Government has more tax revenues: fiscal dividend. Economic growth boosts tax revenues and provides the government with extra money to finance spending projects. For example, the flagship programmes of the government like the NREGA are a direct result of the tax buoyancy of growth the country experienced since 2003 till 2011. It sets up the positive spiral: rising demand encourages investment in new capital machinery which helps accelerate economic growth and create more employment.

Economic growth can also have a self-defeating effect: violate the principles of fairness and equity thus setting off social conflicts. Environmental costs are another risk.

Reliability of GDP as a measure of progress

Economic growth is generally taken as the measure of advancement in the standard of living of the country. Countries with higher GNP often score highly on measures of welfare, such as life expectancy. However, there are limitations to the usefulness of GNP as a measure of welfare:

- GDP does not value intangibles like leisure, quality of life etc. Quality of life is determined by many other things than economic goods.
- the impact of economic activity on the environment may be harmful- pollution, climate change, unsustainable growth, ecological refugees, life style diseases etc
- It only gives average figures that hide stratification. Economic inequality is not revealed by GDP figures
- Condition of poor is not indicated For example, Indian economy grew at 8.4% in 2010-2011 but the food inflation was over 14% causing immiserization of the lower classes
- Gender disparities are not indicated
- It does not matter how the increase in wealth takes place- whether by civilian demand or war
- GDP does not measure the sustainability of growth. A country may achieve a temporarily high GDP by over-exploiting natural resources

The major advantages to using GDP per capita as an indicator of standard of living are that it is measured frequently, widely and consistently. Frequently in that most countries provide information on GDP on a quarterly basis, which allows a user to spot trends more quickly. Widely in that some measure of GDP is available for practically every country in the world, which allows crude comparisons between the standard of living in different countries. And consistently in that the technical definitions used within GDP are relatively consistent between countries, and so there can be confidence that the same thing is being measured in each country.

The major disadvantage of using GDP as an indicator of standard of living is that it is not, strictly speaking, a measure of standard of living. For instance, in an extreme example, a country which exported 100 per cent of its production would still have a high GDP, but a very poor standard of living.

The argument in favour of using GDP is not that it is a good indicator of standard of living, but rather that (all other things being equal) standard of living tends to increase when GDP per capita increases. This makes GDP a proxy for standard of living, rather than a direct measure of it.

Because of the limitations in the GDP concept, other measures of welfare such as the Human Development Index (HDI), Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI) and Sustainable National Income (SNI), Gross National Happiness (GNH), Green GDP, natural resource accounting have been suggested.

They are proposed in an attempt to give a more complete picture of the level of well-being and the position with reference to natural resource depletion, but there is no consensus as to which is a better measure than GDP. Some of the above defy quantification. GDP still remains by far the most often-used measure.

Alternatives to GDP

Some economists have attempted to create a replacements for GDP which attempt to address many of the above criticisms regarding GDP. Other nations such as Bhutan have advocated gross national happiness as a standard of living, claiming itself as the world's happiest nation. (Read ahead for Recent advances in the concept)

HDI

The UN Human Development Index (HDI) is a standard means of measuring well-being. The index was developed in 1990 by the Pakistani economist Mahbub ul Haq, and has been used since 1993 by the United Nations Development Programme in its annual report.

The HDI measures the average achievements in a country in three basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weight).
- A decent standard of living, as measured by gross domestic product (GDP) per capita at purchasing power parity (PPP) in US Dollars.

Each year, UN member states are listed and ranked according to these measures.

India ranks at 134 among 187 countries in terms of the human development index (HDI) in 2011. It is placed in the "medium" category. India's ranking in 2010 was 119 out of 169 countries.

The HDI goes beyond a nation's gross domestic product (GDP) to measure the general well-being of people under a host of parameters, such as poverty levels, literacy and gender-related issues.

The 2010 Human Development Report came up for the first time with an Inequality-adjusted Human Development Index (IHDI), which factors in inequalities in the three basic dimensions of human development (income, life expectancy, and education).

HPI

An alternative measure, focusing on the amount of poverty in a country, is the Human Poverty Index. The Human Poverty Index is an indication of the standard of living in a country, developed by the United Nations.

Indicators used are:

- Life span
- functional literacy skills
- Long-term unemployment
- Relative poverty (poverty with reference to the average per capita income)

GPI

The Genuine Progress Indicator (GPI) is a concept in green economics and welfare economics that has been suggested as a replacement metric for gross domestic product (GDP) to measure economic growth. Unlike GDP it is claimed by its advocates to more reliably distinguish uneconomic growth - harmful economic growth under which inequalities pile up and environmental damage is huge.

A GPI is an attempt to measure whether or not a country's growth, increased production of goods, and expanding services have actually resulted in the improvement of the welfare (or well-being) of the people in the country.

GNH

Gross National Happiness (GNH) is an attempt to define quality of life in more holistic and psychological terms than Gross National Product.

The term was coined by Bhutan's former King Jigme Singye Wangchuck in 1972 to indicate his commitment to building an economy that would serve Bhutan's unique culture based on Buddhist spiritual values. While conventional development models stress economic growth as the ultimate objective, the concept of GNH is based on the premise that true development takes place when material and spiritual development occur side by side to complement and reinforce each other. The four dimensions of GNH are the promotion of equitable and sustainable socio-economic development, preservation and promotion of cultural values, conservation of the natural environment, and establishment of good governance.

Natural Resources Accounting and Green GDP

Natural resources are essential for production and consumption, maintenance of life-support systems, as well as having intrinsic value in existence for intergenerational and other reasons.

It can be argued that natural capital should be treated in a similar manner to man-made capital in accounting terms, so that the ability to generate income in the future is sustained by using the stock of natural capital judiciously. By failing to account for reductions in the stock of natural resources, standard measures of national income do not represent economic growth genuinely. Soil, water and biodiversity are the three basic natural resources.

National Biodiversity Action Plan published by Government of India, Ministry of Environment and Forests in 2008 highlights as an action point the valuation of goods and services provided by biodiversity. More specifically, the Action Plan states: to assign appropriate market value to the goods and services provided by various ecosystems and strive to incorporate these costs into national accounting.

In the Nagoya (Japan) meet in 2010 on biodiversity protection, India declared that it will adopt natural resource accounting. The 2010 UN biodiversity summit decided to respect the link between economic policy, natural capital and human wellbeing. There should be global partnership is to mainstream natural resources accounting into economic planning. India, Colombia and Mexico accepted it. This will plug deficiencies in traditional accounting systems. As mentioned above, India's national biodiversity action plan has already incorporated some of these concepts.

Green GDP

Green Gross Domestic Product (Green GDP) is an index of economic growth with the environmental consequences of that growth factored in. From the final value of goods and services produced, the cost of ecological degradation is deducted to arrive at Green GDP.

In 2004, Wen Jiabao, the Chinese premier, announced that the green GDP index would replace the Chinese GDP index. But the effort was dropped in 2007 as green GDP figures shrank the size of the GDP to unimpressive levels.

India and green accounting

India aims to factor the use of natural resources in its economic growth estimates by 2015 -to make "green accounting" part of government policy on economic growth.

The green GDP estimates account for the consumption of natural resources as well. This would help find out how much of a natural resource is being consumed in the course of economic growth, how much being degraded and how much being replenished.

In the calculation of Green GDP, there are methodological concerns about how to monetize the loss of biodiversity; how to measure the economic impacts of climate change due to green house gas emissions etc.

Sarkozy's Alternative metric

The Commission on the measurement of economic performance and social progress was set up in 2008 on French government's initiative.

Increasing concerns have been raised since a long time about the adequacy of current measures of economic performance, in particular those based on GDP figures. Moreover, there are broader concerns about the relevance of these figures as measures of social well-being, as well as measures of economic, environmental, and social sustainability.

Reflecting these concerns, President Sarkozy decided to establish this Commission, to look at the entire range of issues. Its aim is to identify the limits of GDP as an indicator of economic performance and social progress, to consider additional information required for the production of a more relevant picture etc. The Commission is chaired by Professor Joseph E. Stiglitz. Amartya Sen and Bina Agarwal are also associated with it. The commission gave its report in 2009.

The Stiglitz report recommends that economic indicators should stress well-being instead of production, and for non-market activities, such as domestic and charity work, to be taken into account. Indexes should integrate complex realities, such as crime, the environment and the efficiency of the health system, as well as income inequality. The report brings examples, such as traffic jams, to show that more production doesn't necessarily correspond with greater well-being.

Stiglitz explains: The big question concerns whether GDP provides a good measure of living standards. In many cases, GDP statistics seem to suggest that the economy is doing far better than most citizens' own perceptions. Moreover, the focus on GDP creates conflicts: political leaders are told to maximise it, but citizens also demand that attention be paid to enhancing security, reducing air, water, and noise pollution, and so forth – all of which might lower GDP growth. The fact that GDP may be a poor measure of well-being, or even of market activity, has, of course, long been recognized.

More recent developments

Details, discussion and dictation in the class

Moral economy

"Moral economy" is a name given in economics, sociology and anthropology to the interplay between cultural mores and economic activity. It describes the various ways in which custom and social pressure coerce economic actors in a society to conform to traditional norms even at the expense of profit. It is also an economy in which the stake holders like workers expect respect and dignity along with salary and working conditions- the latter not being all, the former being quite important as well. If moral economy breaks down, industrial unrest may result.

Laissez-faire

A market economy is an economic system in which goods and services are traded, with the price being determined by demand and supply.

Laissez-faire is a French phrase meaning "let do, let go, let pass." Its proponents make arguments against government interference with economy and trade. It is synonymous with free market economics. It is generally understood to be a doctrine opposing economic interventionism by the state beyond the extent which is perceived to be necessary to maintain peace and property rights.

Supporters of a market economy generally hold that the pursuit of self-interest is actually in the best interest of society. Adam Smith says:

"By pursuing his own interest [an individual] frequently promotes that of the society more effectually than when he really intends to promote it." (Wealth of Nations)

Adam Smith calls it the invisible hand- the force that combines the individual self interest into a collective social interest. However, as we have seen in the melt down of the western economies since 2008 and as Nobel laureate Joseph Stiglitz commented, invisible hand may not exist. That is why it is invisible!

There are a variety of critics of market as an organizing principle of an economy. These critics range from those who reject markets entirely, in favor of a planned economy, such as that advocated by communism to those who wish to see them regulated to various degrees. One prominent practical objection is the environmental pollution generated. Another is the claim that through the creation of monopolies, markets sow the seeds of their own destruction. Still another, since 2008, is the excessive speculation and financialization of the market and its crash.

Social market

Some proponents of market economies believe that government should intervene to prevent market failure while preserving the general character of a market economy.

It seeks an alternative economic system other than socialism and laissez-faire economy, combining private enterprise with measures of the state to establish fair competition, low inflation, low levels of unemployment, good working conditions, and social welfare.

Market economy and poverty

Free market economists argue that the only way to solve poverty is by creating new wealth. According to them, planned economies and welfare will not solve poverty problems but only make them worse. Low levels of government regulation and interference, free trade, and tax reform are the way to achieve growth. Open economy, competition and innovation generate growth and employment.

Advocates of the third way -social market solutions to poverty- believe that there is a legitimate role the government can play in fighting poverty. They believe this can be achieved through the creation of social safety nets such as social security and workers compensation.

Most modern industrialized nations today are not typically representative of Laissez-faire principles, as they usually involve significant amounts of government intervention in the economy. This intervention includes minimum wages to increase the standard of living, anti-monopoly regulation to prevent monopolies, progressive income taxes, welfare programs to provide a safety net for those without the capacity to find work, disability assistance, subsidy programs for businesses and agricultural products to stabilize prices - protect jobs within a country, government ownership of some industry, regulation of market competition to ensure fair standards and practices to protect the consumer and worker, and economic trade barriers in the form of protective tariffs - quotas on imports - or internal regulation favoring domestic industry.

Market and Government failure

The inability of an unregulated market to achieve allocative efficiency is known as market failure. The main types of market failure are: monopoly, steep inequality, pollution etc. The western economic recession since 2008 is the result of market failure where excessive speculation and borrowings have disoriented the economies with huge human and economic cost.

Government failure is the public sector analogy to market failure and occurs when government does not efficiently allocate goods and/or resources consumers. Just as with market failures, there are many different kinds of government failures. Inefficient use of resources, wastage and retarded economic growth due to government monopolies and regulation are the results of government failure. Often, the performance of the public sector in India is cited to exemplify government failure. The sickness of Air India resulting from its mismanagement is an example of government failure.

Structural composition of the economy

The three-sector hypothesis is an economic theory which divides economies into three sectors of activity: extraction of raw materials (primary), manufacturing (secondary), and services (tertiary).

According to the theory, the main focus of an economy's activity shifts from the primary, through the secondary and finally to the tertiary sector. The increase in quality of life, social security, growth of education and culture and avoidance of unemployment with reduction of poverty are the effects of such transition.

Countries with a low per capita income are in an early state of development; the main part of their national income is achieved through production in the primary sector. Countries in a more advanced state of development, with a medium national income, generate their income mostly in the secondary sector. In highly developed countries with a high income, the tertiary sector dominates the total output of the economy.

The primary sector of the economy involves changing natural resources into primary products. Most products from this sector are considered raw materials for other industries. Major businesses in this sector include agriculture, fishing, forestry and all mining and quarrying industries.

Primary sector is a larger sector in developing countries; for instance, animal husbandry is more common in Africa than in Japan.

The secondary sector of the economy includes those economic sectors that create a finished, usable product: manufacturing and construction.

This sector generally takes the output of the primary sector and manufactures finished goods or where they are suitable for use by other businesses, for export, or sale to domestic consumers. This sector is often divided into light industry and heavy industry.

Light industry is usually less capital intensive than heavy industry, and is more consumer-oriented than business-oriented (i.e., most light industry products are produced for end users rather than as intermediates for use by other industries). Examples of light industries include the manufacture of clothes, shoes, furniture and household items (e.g. consumer electronics). Heavy industry means: traditional production industries in the auto, steel, rubber, petroleum, and similar areas, requiring high capitalization and producing large quantities. Some more examples are heavy machinery, big factories, chemical plants, production of construction equipment such as cranes and bulldozers.

The tertiary sector of economy (also known as the service sector) is defined by exclusion of the two other sectors. Services are defined in conventional economic literature as "intangible

or invisible goods". The tertiary sector of economy involves the provision of services to businesses as well as final consumers. Services may involve the transport, distribution and sale of goods from producer to a consumer as may happen in wholesaling and retailing, or may involve the provision of a service, such as or entertainment. The service sector consists of the "soft" parts of the economy such as insurance, government, tourism, banking, retail, education, and social services. Examples of service may include retail, insurance, and government.

The quaternary sector of the economy is an extension of the three-sector hypothesis. It principally concerns the intellectual services: information generation, information sharing, consultation and research and development. It is sometimes incorporated into the tertiary sector but many argue that intellectual services are distinct enough to warrant a separate sector. The quaternary sector can be seen as the sector in which companies invest in order to ensure further expansion. Research will be directed into cutting costs, tapping into markets, producing innovative ideas, new production methods and methods of manufacture, amongst others. To many industries, such as the pharmaceutical industry, the sector is the most valuable because it creates future branded products which the company will profit from. This sector evolves in well developed countries and requires a highly educated workforce.

The quinary sector of the economy is the sector suggested by some economists as comprising health, education, culture, police, fire service, and other government industries not intended to make a profit. The quinary sector also includes domestic activities such as those performed by stay-at-home parents or homemakers. These activities are not measured by monetary amounts but make a considerable contribution to the economy.

Some terms

A developing country is a country that has not reached the Western-style standards of democratic governments, free market economies, industrialization, social programs, and human rights guarantees for their citizens.

Countries with more advanced economies than other developing nations, but which have not yet fully demonstrated the signs of a developed country, are grouped under the term newly industrialized countries.

Development entails a modern infrastructure (both physical and institutional), and a move away from low value added sectors such as agriculture and natural resource extraction. Developed countries, in comparison, usually have economic systems based on economic growth in the secondary, tertiary and quaternary sectors and high standards of living. The category of newly industrialized country (NIC) is a socioeconomic classification applied to several countries around the world.

NICs are countries whose economies have not yet reached first world status but have, in a macroeconomic sense, outpaced their developing counterparts. Another characterization of NICs is that of nations who were till a decade or so back had regulated economies but are open now and are undergoing rapid economic growth. Incipient or ongoing industrialization is an important indicator of a NIC. In many NICs, social upheaval can occur as primarily rural, agricultural populations migrate to the cities, where the growth of manufacturing concerns and factories can draw many thousands of laborers.

NICs usually share some other common features, including:

- A switch from agricultural to industrial economies, especially in the manufacturing sector.
- An increasingly open-market economy, allowing free trade with other nations in the world.
- Emerging MNCs
- Strong capital investment from foreign countries.

A **high-income economy** is defined by the World Bank as a country with a per capita income of US\$12,476 or more in 2011. While the term "high income" may be used interchangeably with "First World" and "developed country," the technical definitions of these terms differ. The term "first world" commonly refers to those prosperous market economies like the west, Japan etc.

According to the United Nations, for example, some high income countries may also be developing countries. The GCC (Persian Gulf States) countries, for example, are classified as developing high income countries. Thus, a high income country may be classified as either developed or developing. GCC countries for example are rich but not developed. They have pockets of export economy based on oil and gas and the rest of the economy is under developed.

The term developed country, or advanced country, is used to categorize countries that have achieved a high level of industrialization in which the tertiary and quaternary sectors of industry dominate. Countries not fitting this definition may be referred to as developing countries.

This level of economic development usually translates into a high income per capita and a high Human Development Index (HDI) rating. Countries with high gross domestic product (GDP) per capita often fit the above description of a developed economy. However, anomalies exist when determining "developed" status by the factor GDP per capita alone. Second world was the communist countries with command economies but they do not exist today.

Third world was made up of the developing countries.

Least Developed Countries (LDCs or Fourth World countries) are countries which according to the United Nations exhibit the lowest indicators of socioeconomic development, with the lowest Human Development Index ratings of all countries in the world. A country is classified as a Least Developed Country if it meets three criteria based on:

- low-income (three-year average per capita income of less than US \$905, which must exceed \$1,086 to leave the list(2013-14)
- human resource weakness (based on indicators of nutrition, health, education and adult literacy) and
- economic vulnerability (based on instability of agricultural production, instability of exports of goods and services and the percentage of population displaced by natural disasters)

The classification currently applies to 48 countries.

Vital Statistics

The per capita income of Indians for the first time crossed the Rs 50,000-mark in 2010-11, although using current prices as the barometer. The per capita income at current prices during 2012-13 is estimated to be Rs 68,747 as compared to Rs 61,564 during 2011-12, showing a rise of 11.7 per cent, according to the CSO.

The huge figure is seen to be illusionary as economists prefer to use factor cost at constant prices to weed out the impact of inflation. It is not a great milestone to celebrate. It may be the other way as inflation actually hurt the poor and the low income groups rather than cushioning them as the higher figure shows.

Growth and the value of output

National income of India in terms of Gross Domestic Product (GDP) is composed of contributions made by three sectors namely, primary sector, secondary sector and tertiary sector. The primary sector consists of agriculture, forestry, fishing, mining and quarrying. Secondary sector includes manufacturing, construction and electricity, gas and water supply, while the tertiary sector comprises of trade, transport etc, finance & real estate, community and personnel services.

In terms of growth of the economy, sharp fall in Indian currency against the US dollar and slower economic growth have caused India's GDP for Fiscal Year 2012-13 to shrink in US \$ terms to \$1.84 trillion from \$1.87 trillion a year earlier.

The Indian economy grew at its slowest pace in four years at 4.4% in the first quarter (Q1, or April-June) of the current fiscal year 2013-14, compared with 4.8% during the preceding quarter (January-March) of the last fiscal.

Seen from another, less reliable, yardstick of gross domestic product (GDP) at market prices, India actually grew at 2.4%.

While agriculture grew 2.7% in the first quarter, mining and manufacturing contracted 2.8% and 1.2%, respectively. Electricity grew 3.7% and construction 2.8% during the quarter.

In services, only community, social and personal services—representing government expenditure—grew faster in the first quarter at 9.4%, compared with 8.9% during the same quarter a year ago.

Trade and hotels grew at a meagre 3.9%, while financing, insurance and business services grew at a robust 8.9% in the fiscal first quarter.

The Central Statistics Office (CSO) data shows GDP growth at market price was only 2.4% against GDP growth at factor cost of 4.4% for the first quarter. GDP at market price is calculated by adding indirect taxes to GDP at factor cost while subtracting subsidies, as discussed above.

The lower GDP at market price compared to GDP at factor cost is because the subsidy component is growing extremely fast and the government is borrowing to fund subsidy.