Aggregate Demand-Aggregate demand represents the total demand for goods and services at any given price level in a given period. Aggregate demand over the long-term equals gross domestic product (GDP) because the two metrics are calculated in the same way. GDP represents the total amount of goods and services *produced* in an economy while aggregate demand is *the demand or desire* for those goods. As a result of the same calculation methods, the aggregate demand and GDP increase or decrease together.

Technically speaking, aggregate demand only equals GDP in the long run after adjusting for the price level. This is because short-run aggregate demand measures total output for a single nominal price level whereby nominal is not adjusted for inflation. Other variations in calculations can occur depending on the methodologies used and the various components.

Aggregate demand consists of all consumer goods, capital goods (factories and equipment), exports, imports, and government spending programs. The variables are all considered equal as long as they trade at the same market value.

Aggregate supply- also known as total output, is the total supply of goods and services produced within an economy at a given overall price in a given period. It is represented by the aggregate supply curve, which describes the relationship between price levels and the quantity of output that firms are willing to provide. Typically, there is a positive relationship between aggregate supply and the price level.

Price Level-A price level is the average of current prices across the entire spectrum of goods and services produced in the economy. In more general terms, price level refers to the price or cost of a good, service, or security in the economy.

Price levels may be expressed in small ranges, such as ticks with securities prices, or presented as a discrete value such as a dollar figure.

In economics, price levels are a key indicator and are closely watched by economists. They play an important role in the purchasing power of consumers as well as the sale of goods and services. it also plays an important part in the supply-demand chain.

Level of output - An economy's **natural level of output** occurs when all available resources are used efficiently. It equals the highest level of production an economy can sustain. It is "natural" because an economy returns to its natural level of output following a recession or overheated period. The natural level of output is also referred to as the natural level of production, long-run aggregate supply or the full employment output.

Full employment- is an economic situation in which all available labour resources are being used in the most efficient way possible. Full employment embodies the highest amount of skilled and unskilled labour that can be employed within an economy at any given time.

True full employment is an ideal, and probably unachievable, benchmark where anyone who is willing and able to work can find a job and unemployment is zero. It is a theoretical goal for economic policymakers to aim for rather than an actually observed state of the economy. In practical terms, economists can define various levels of full employment that are associated with low but non-zero rates of unemployment.

Savings-according to Keynesian economics, are what a person has left over when the cost of his or her consumer expenditure is subtracted from the amount of disposable income earned in a given period of time. For those who are financially prudent, the amount of money left over after personal expenses have been met can be positive; for those who tend to rely on credit and loans to make ends meet, there is no money left for savings. Savings can be used to increase income through investing in different investment vehicles.

Investment-Investing is putting money to work to start or expand a project - or to purchase an asset or interest - where those funds are then put to work, with the goal to income and increased value over time. The term "investment" can refer to any mechanism used for generating future income. In the financial sense, this includes the purchase of bonds, stocks or real estate property among several others. Additionally, a constructed building or other facility used to produce goods can be seen as an investment. The production of goods required to produce other goods may also be seen as investing.

Taking an action in the hopes of raising future revenue can also be considered an investment. For example, when choosing to pursue additional education, the goal is often to increase knowledge and improve skills in the hopes of ultimately producing more income. This is also the main goal of reading articles on Investopedia. Because investing is oriented toward future growth or income, there is risk associated with the investment in the case that it does not pan out or falls short. For instance, investing in a company that ends up going bankrupt or a project that fails. This is what separates investing from saving - saving is accumulating money for future use that is not at risk, while investment is putting money to work for future gain and entails some risk.

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Macro Economics, Policies and Practice

-Akshay Ugale

Module 01

Introduction to Macro Economics

Meaning and Definition of Macro Economics

- Macro Economics is concerned with the analysis of the behaviour of the economic system in totality.
- Macro studies how the large aggregates such as Total Employment, National Product, or National Income of an economy and the general price level are determined. Also Macro explains how the productive capacity and National Income of the country increases over time in the long run.

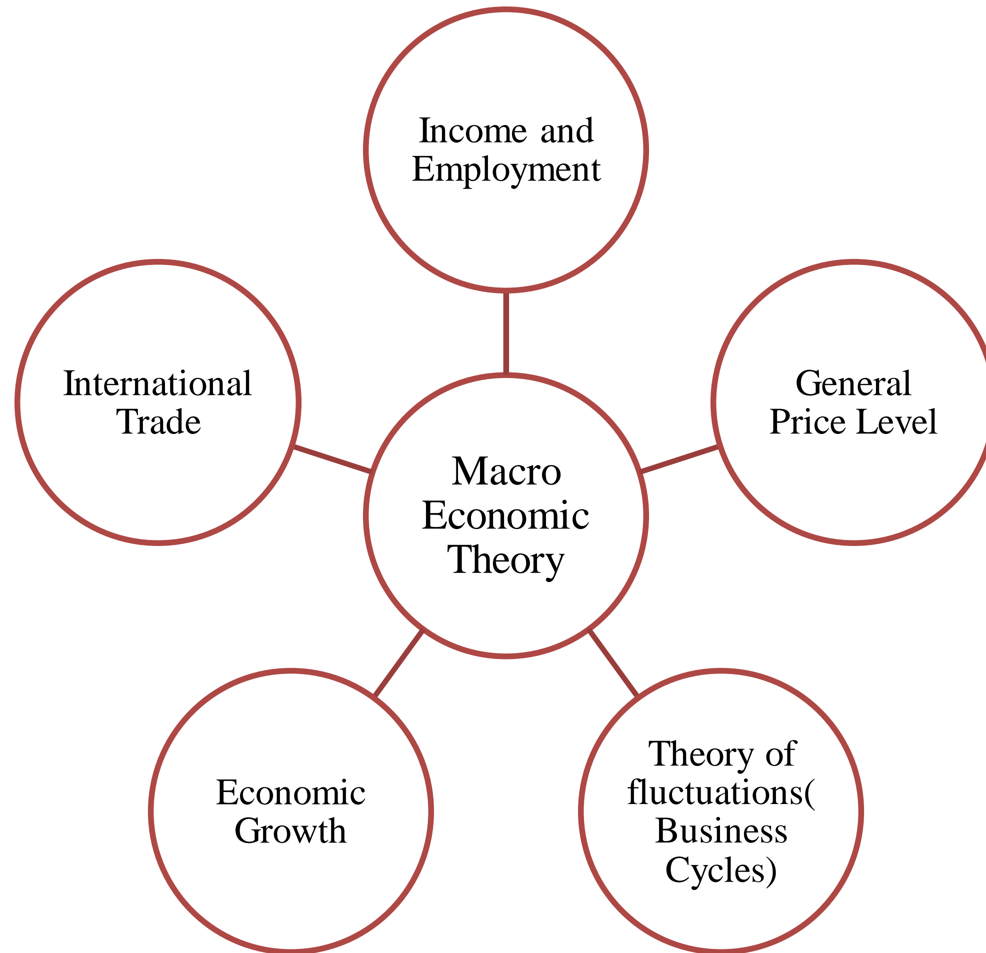
Meaning and Definition of Macro Economics

- Macro Economics is to explain what determines the level of total economic activity and fluctuations in the short run.
- Macro economics is a branch of the economics that studies how the aggregate economy behaves. In macro economics a variety of economy wide phenomenon are thoroughly examined such as inflation, price levels, rate of growth, national income, GDP, and the changes in unemployment

Meaning and Definition of Macro Economics

- Macro Economics is the branch of economics that studies the behaviour and the performance of an economy as a whole. It focuses on the aggregate changes in the economy such as unemployment growth rate, GDP and Inflation.

Meaning and Definition of Macro Economics



Difference between Macro and Micro Economics

Micro Economics	Macro Economics
Study of an individual firm, household or product	It is the study of the whole economy, total production and total consumption
It studies the principles, problems and policies concerning the optimum allocation of resources	It studies the problems, policies and principles relating to the full employment, and the growth of resources
It deals with the determination of price consumer's equilibrium, distribution and welfare etc.	It deals with the full employment, National Income, General price level, Trade Cycles, economics of growth etc based on general equilibrium analysis
Concerned with the rational behaviour of individuals	It is based on variables as aggregate output of the economy.
It is a static analysis	It is concerned as a dynamic analysis

Scope and Importance of Macro Economics

1. To understand the working of the economy.

- Total Income
- Total Output
- Price Level
- Total Employment

Scope and Importance of Macro Economics

2. <u>In Economic Policies</u>

Main responsibility of these governments rest in the regulation and control of overpopulation, general prices, general volume of trade, general outputs etc

Problem of over population, inflation, Balance of Payment, General underproduction etc.

Interdependence between Macro and Micro Economics

- The theory of relative prices of products and factors is essential in the explanation of the determination of general price level.
- Not only does macroeconomics depend upon to some extent on micro economics, microeconomics also depends upon some extent on macro economics. The determination of rate of profit and rate of interest are well known in microeconomic topics, but they greatly depend upon the macro economic aggregate.
- The theory of rate of interest has now become a subject of macroeconomic theory, but the theory of partial equilibrium theory of interest belongs to the microeconomic theory

Module 02

National Income

Meaning and definition of National Income

- National Income: The labor and capital of a country acting on its natural resources produce annually a certain amount of goods and services. This is called national income of the country. It can be defined as the total market value of all the final goods and services produced in the economy in a year.
- *National Income=National Product=National Expenditure*

Meaning and definition of National Income

- Three measures of national income of a country

The sum of all values of all final goods and services produced

The sum of all incomes, in cash and kind, accruing to factors of production in a year

The sum of consumer's expenditure, net investment expenditure and government expenditure on goods and services

GDP as a measure of welfare

- It has been asserted by several modern economists that national income as it is usually defined is not a satisfactory measure of economic welfare. According to them, in order to obtain a true measure of economic welfare, some adjustments both in the form of additions and subtractions have to be made in the aggregates of national income. The true measure of economic welfare is now called "Net Economic Welfare"
- As regards to the things that ought to be added to obtain the index of NEW the first important thing is the value of satisfaction that people derive from leisure.
- The other important items that ought to be added to obtain a true measure of welfare are the non-marketed personal services(that is, the personal services which are not sold and purchased in the market) which also greatly raise the satisfaction and welfare of the people.
- For preparing a measure of net welfare, negative values ought ot be assigned to the environmental pollution that results from the production of Goods and services. The various forms of pollution of environment have often been referred to as costs of economic growth, which like other costs, have to be deducted to obtain the index of net economic welfare

Deficit Finance

- Practice in which a government spends more money than it receives as revenue, the difference being made up by borrowing or minting new funds. Although budget deficits may occur for numerous reasons, the term usually refers to a conscious attempt to stimulate the economy by lowering tax rates or increasing government expenditures.
- The influence of government deficits upon a national economy may be very great. It is widely believed that a budget balanced over the span of a business cycle should replace the old ideal of an annually balanced budget. Some economist have abandoned the balanced budget concept entirely, considering it inadequate as a criterion of public policy

Module 03

Business Cycle and Inflation

Inflation

- Inflation- Friedman said, “Inflation is always and everywhere a monetary phenomenon... And can be produced only by a more rapid increase in the quantity of money than output”
- Economist define Inflation in terms of a continuous rise in prices.
- Dernberg and McDougall are more explicit when they write that “the term usually refers to a continuing rise in prices as measured by an index such as the consumer price index or by the implicit price deflator for GNP

Deflation

- The opposite of Inflation is deflation. It is a "state in which the value of money is rising i.e. prices are falling" it is usually associated with falling activity and employment. As pointed out by Coulborn "Involuntary unemployment is the hall mark of deflation. Deflation is caused when prices are falling more than proportionately to the output of goods and services in the economy as a result of decrease in the money supply.

Investment Multiplier

- The concept of multiplier was first developed by R.F.Kahn in his article "The relation of home investment to unemployment"
- Kahn's multiplier was the employment multiplier. Keynes took the idea from Kahn and formulated the investment multiplier.
- Keynes considers his theory of multiplier as an integral part of his theory of employment . The multiplier, according to Keynes, 'establishes a precise relationship, given the propensity to consume, between aggregate employment and income and the rate of investment. It tells us that, when there is an increment of investment. Income will increase by an amount which is K times the increment of investment"
- i.e $\mathbf{\Delta Y = K\Delta I}$

Investment Multiplier

- In the multiplier theory, the important element is the multiplier co-efficient, K which refers to the power by which any initial investment expenditure is multiplied to obtain a final increase in income. The value of the multiplier is determined by the marginal propensity to consume. The higher the marginal propensity to consume the higher is the value of the multiplier and vice versa.

Investment Multiplier

$$\Delta Y = \Delta C + \Delta I$$

$$\Delta Y = c\Delta Y + \Delta I$$

$$\Delta Y - c\,\Delta Y = \Delta I$$

$$\Delta Y(1-c) = \Delta I$$

$$\Delta Y = \Delta I/1-c$$

$$\mathbf{K = 1/1-c}$$

Where,

Y=income, I=investment, Δchange(increase or decrease) and K=Multiplier

Principle of Accelerator

- The principle of acceleration was first introduced into economics by J.M.Clark in 1917. it was further developed by hicks, Samuelson and Harrod in relation to the business cycle.
- The principle of acceleration is based on the fact that the demand for capital goods is derived from the demand of consumer goods which the former help to produce. The acceleration principle explains the process by which an increase or decrease in the demand for consumption goods leads to an increase or decrease in investment and an initial change in consumption expenditure.

Phases of Business Cycles

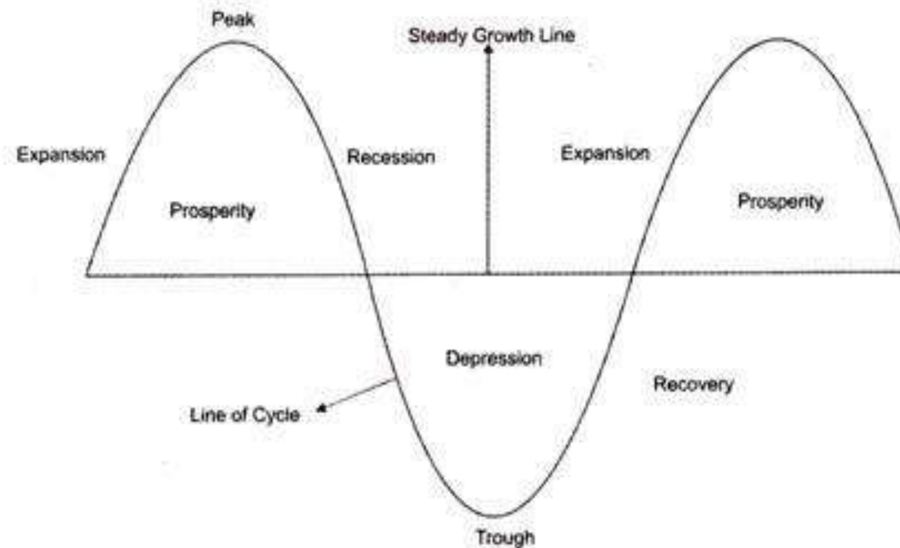
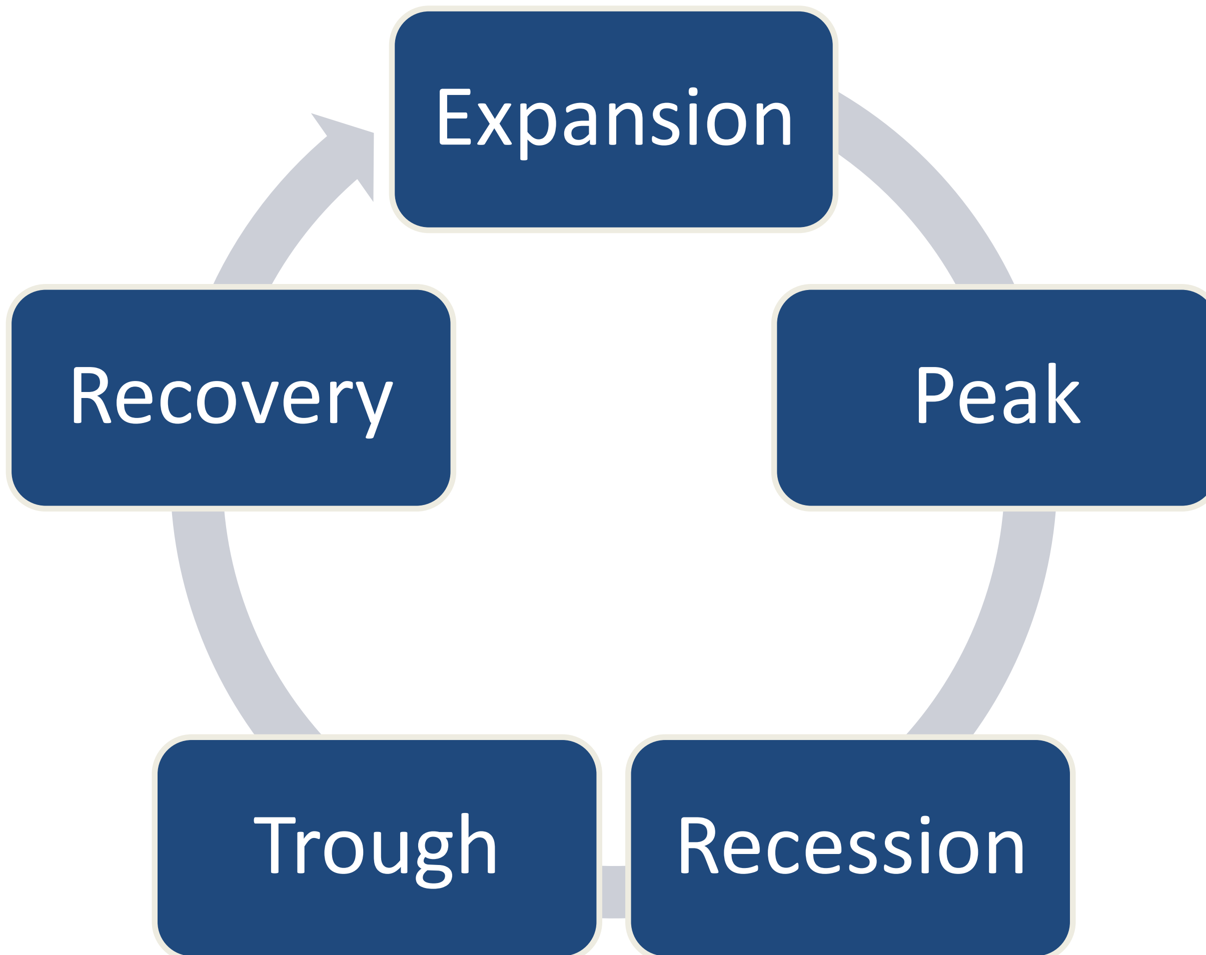


Figure-2: Representation of Phases of a Business Cycle

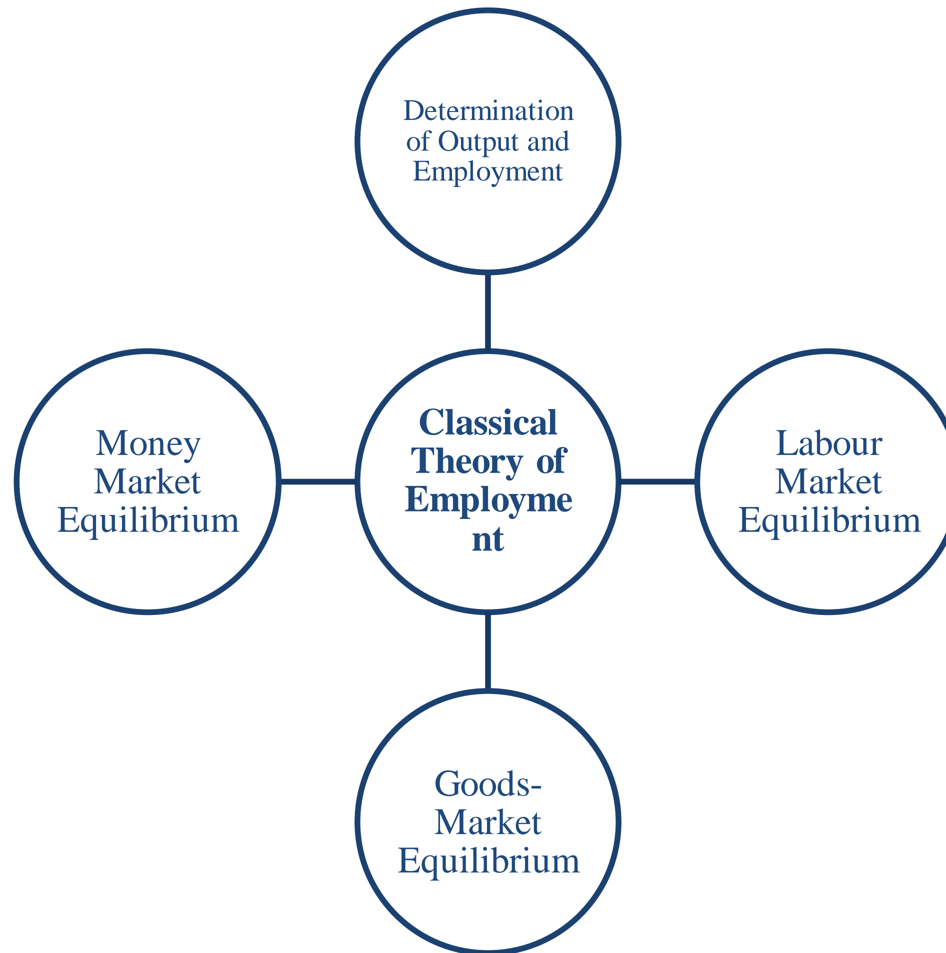
Phases of Business Cycles



Module 04

Output and Employment

Classical Theory of Employment



Module 04

Economic Growth

Meaning of Economic Growth

- Economic Growth has been defined in two ways. In the first place, economic growth is defined as a sustained annual increase in an economy's real national income over a long period of time. In other words economic growth means rising trend of NNP at constant prices.
- According to the second view, economic growth means the annual increase in real per capita income of a country over a long period.

Economic Growth vs. Economic Development

Economic Growth	Economic Development
It focuses on the rise in real per capita income or increased flow of goods and services in the economy	It includes increase in economic welfare along with increase in real per capita income
It is merely a quantitative concept, concerned with the rate of production	It is both a quantitative and qualitative concept concerned with quality of life along with increase per capita rate of production
Economic growth may not be associated with increase in productivity	Economic development is essentially associated with increase in productivity
Growth may occur without any change in outlook of people towards quality of life	Development is associated with change in the outlook of the people towards quality of life
It may occur independently of any structural, institutional or technical change in the economy	It is invariably associated with some structural, institutional or technical changes in the economy
It is a narrow concept	It is a broader concept

Indicators of Economic Growth

- Supply of natural resources
- Capital formation which depends upon the rate of domestic saving and investment and inflow of foreign capital
- Education and health
- Technological Progress
- Growth of population

Government policies for removing unemployment

Swaranajanati Gram Rozgar Yojana

Swarana Jayanti Shahari Rozgar Yojana

Prime Minister's Rozgar Yojana

The National Rural Employment Program

The Rural Landless Employment Guarantee Program

Government policies for removing unemployment

- The Integrated Rural Development Program
- The Scheme of training Rural Youth for Self-employment
- Jawahar Rozgar Yojana
- The Employment Assurance Scheme
- Jawahar Gram Samriddhi Yojana

- **Revenue Deficit:**
  Revenue Deficit is the excess of its total revenue expenditure to its total revenue receipts. Revenue Deficit is only related to revenue expenditure and revenue receipts of the government.

  The difference between total revenue expenditure to the total revenue receipts is Revenue Deficit.

  What does it mean?
  A revenue deficit indicates that the government doesn't have sufficient revenue for the normal functioning of the government departments. In other words when the government starts spending more than it earns it results in Revenue Deficit. Revenue Deficit forces the government to disinvest or cover the shortage by borrowing.
- **'Fiscal Deficit'**

  Definition: The difference between total revenue and total expenditure of the government is termed as fiscal deficit. It is an indication of the total borrowings needed by the government. While calculating the total revenue, borrowings are not included.

  Description: The gross fiscal deficit (GFD) is the excess of total expenditure including loans net of recovery over revenue receipts (including external grants) and non-debt capital receipts. The net fiscal deficit is the gross fiscal deficit less net lending of the Central government.

  Generally fiscal deficit takes place either due to revenue deficit or a major hike in capital expenditure. Capital expenditure is incurred to create long-term assets such as factories, buildings and other development.

  A deficit is usually financed through borrowing from either the central bank of the country or raising money from capital markets by issuing different instruments like treasury bills and bonds.

- **Primary deficit**
  refers to the difference between the current year's fiscal deficit and interest payment on previous borrowings. It indicates the borrowing requirements of the government, excluding interest. It also shows how much of the government's expenses, other than interest payment, can be met through borrowings.
  Primary deficit can be calculated by finding the difference between current year's fiscal deficit and interest payment on the borrowings for the previous year.

  What is the difference between primary deficit and fiscal deficit?
  Primary deficit indicates the amount of borrowing which the government needs excluding the interest component. Fiscal deficit, on the other hand, is the difference between the government's total expenditure and total income. In other words, primary deficit is the difference between the government's income-expenditure gap and its interest payment on previous borrowings.

- **Monetised deficit**

is the monetary support the Reserve Bank of India (RBI) extends to the Centre as part of the government's borrowing programme. In other words, the term refers to the purchase of government bonds by the central bank to finance the spending needs of the government.

Also known as debt monetisation, the exercise leads to an increase in total money supply in the system, and hence inflation, as RBI creates fresh money to purchase the bonds. The same bonds are later used to bring down inflation as they are sold in the open market. This helps RBI suck excess money out of the market and rein in rising prices.