

What Economics is all about?

The science of economics was born with the publication of Adam Smith's book entitled 'An Inquiry into the Nature and Causes of Wealth of Nations' in the year 1776. So Adam Smith is known as the father of Economics. At its birth, the name of economics was 'Political Economy'. Towards the end of the 19th century there was a definite change from use of word 'Political Economy' to 'Economics'.

The word 'Economics' was derived from two Greek words *oikou* (a house) and *nomos* (to manage). Thus, the word economics was used to mean home management with limited funds available in the most economical manner possible.

Lionel Robbins defines economics as a science of scarcity. Prof. Robbins in his book *Nature and Significance of Economic Science* states, "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses". Paul A. Samuelson defines economics as "the study of how men and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time and distribute them for consumption now and in future among various people and groups of society. This definition emphasizes growth over time. It is modern and wider in scope. The definition takes into account consumption, production, distribution and exchange of goods. Hence, it is most satisfactory definition of economics. This definition has been accepted universally.

Before 1930, there was only one 'economics'. Norwegian economist Ragnar Frisch coined the words 'micro' and 'macro' in 1933 to denote the two branches of economic theory, namely, microeconomics and macroeconomics.

Meaning of Microeconomics

The word 'Micro' is derived from the Greek word 'mikros' meaning small. Hence the microeconomics deals with small economic activity of the society.

Microeconomics is a branch of economics that studies the behavior of individuals and firms in making decisions regarding the allocation of scarce resources and the interactions among these individuals and firms.

Microeconomics is defined as the study of behavior of individual decision-making units, such as consumers, resource owners and firms. It is also known as Price Theory since its major subject-matter deals with the determination of price of commodities and factors.

As the name suggests, microeconomics takes microscopic view of the economy. It is like dealing with individual trees in the economic forest. As A.P. Lerner puts it, 'Microeconomics consists of looking at the economy through a microscope, as it were, to see how the millions of cells in the body of economic, the individuals or households as consumers, and the individuals or firms as producers, play their part in the working of the whole economic organism

According to Prof. K.E. Boulding, "Microeconomics is the study of particular firm, particular household, individual price, wage, income, industry and particular commodity." It is primarily

concerned with the determination of prices of Individual commodities and factors. It explains how prices of wheat, cloth, shoes, pens and thousands of other goods are determined.

Similarly, how prices (remuneration) of factors of production (i.e., rent, wages, interest, etc.) are determined. Thus, the theory of product pricing and theory of factor pricing fall within the domain of microeconomics. Since prices of products and factors occupy the central place, microeconomics is, therefore, also called 'Price Theory'. Examples of microeconomics are: individual income, individual saving, consumer equilibrium, price determination of a good, demand of a commodity, etc.

In microeconomics, problems of individual economic units are studied such as equilibrium of a consumer (i.e., state of maximum satisfaction), equilibrium of a firm (i.e., state of maximum profit) and an industry. It explains how a consumer, a producer and an industry attain equilibrium. An individual household (or consumer) is said to be in equilibrium if it gets maximum satisfaction from allocation of its expenditure on various goods and services.

Since microeconomics splits up the entire economy into smaller parts for the purpose of intensive study, it is also known as "Slicing Method".

Features of Microeconomics

1. It studies the individual units of the economy
2. It is based on other things being unchanged
3. Major assumptions are full employment, perfect competition,
4. It focused on maximum utilization of scarce resources,
5. It follow the partial equilibrium approach, slicing method
6. It is also called price theory.
7. Mostly applicable on free market economy.

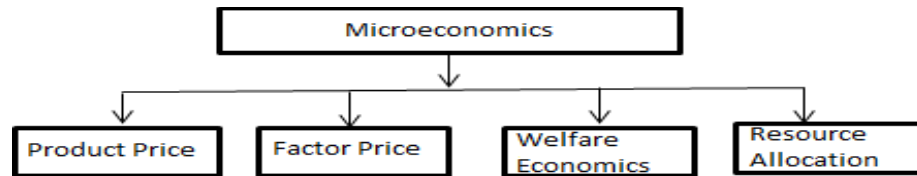
Microeconomics has both theoretical and practical importance. It solves the three central problems of an economy, i.e., what, how and for whom to produce. Subject-matter of microeconomics is vast and includes the following topics as shown

Scope or Subject-matter of Economics

Before 1930, there was only one 'economics'. Ragnar Frisch coined the words 'micro' and 'macro' in 1933 to denote the two branches of economic theory, namely, microeconomics and macroeconomics.

Microeconomics is primarily concerned with the determination of prices of Individual commodities. It explains how prices of wheat, cloth, shoes, pens and thousands of other goods are determined. Similarly, how prices of factors of production (i.e., rent, wages, interest, etc.) are determined. It attempts to gain efficiency in production, consumption, distribution to attain overall efficiency and provides answers for 'What to produce?', 'When to produce?', 'How to produce?', and 'For whom it is to be produced?'

The scope or the subject matter of microeconomics is concerned with following areas



Product Price

Microeconomics is concerned with the analysis of determination of prices of large number of individual commodities. Price of an individual commodity is determined by the market forces of market demand and supply. Microeconomics is concerned with demand analysis i.e. individual consumer behavior, and supply analysis i.e. individual producer behavior, resource allocation and welfare.

Factor Price

Microeconomics helps in determining the factor prices for the use of land, labor, capital, and entrepreneurship in the form of rent, wage, interest, and profit respectively. Land, labor, capital, and entrepreneurship are the factors that contribute to the production process and create surplus income. Factor of production get their share value according to their contribution makes in production.

Theory of economic welfare

Welfare economics in microeconomics is concerned with solving the problems in improvement and attaining economic efficiency to maximize public welfare. It attempts to gain efficiency in production, consumption/distribution to attain overall efficiency and provides answers for 'What to produce?', 'When to produce?', 'How to produce?', and 'For whom it is to be produced?'

Optimum allocation of resources

Microeconomics is also concerned with the optimum allocation of resources, i.e. how efficiently resources are distributed among the consumers and producers. A consumer or producer will be in equilibrium when there is optimum allocation of resources. Microeconomics, therefore, studies the conditions necessary for achieving equilibrium.

Types of Microeconomics

The variables in any economic model can be a stock and/or a flow. A relationship is postulated among these variables in the model. If all the variables in the model relate to the same time period, then it is a static relationship, while if the variables relate to different time periods it is a dynamic relationship. Following are the major types of Microeconomics

1. Simple Micro Static

Micro static show the state of balance between two opposite forces at the particular point of time. It's the equilibrium in which there is no intention to change the position at the given time. Under this system, all the factors included in the model do not want to change their status but remains constant. And here the point of equilibrium is determined, and it is always constant. It is the analysis of micro economics equilibrium at a point of time. For example the price of the commodity is determined in the market with the interaction of demand and supply forces. Demand is the inverses function of price and supply is the positive function with price, they make interaction for state of balance at a particular point of time.

$$Q_d = f(P_t)$$

$$\text{in linear form } Q_d = a - bP_t \dots\dots\dots 1.1$$

$$Q_s = f(P_t)$$

$$\text{In linear form } Q_s = c + dP_t \dots\dots\dots 1.2$$

Equilibrium is observed when

$$Q_d = Q_s$$

For example demand and supply equations are

$$Q_d = 200 - 20p_t \dots\dots\dots 1.3$$

$$Q_s = 50 + 10p_t \dots\dots\dots 1.4$$

Equilibrium is observed when

$$Q_d = Q_s$$

$$200 - 20p_t = 50 + 10p_t$$

Solving

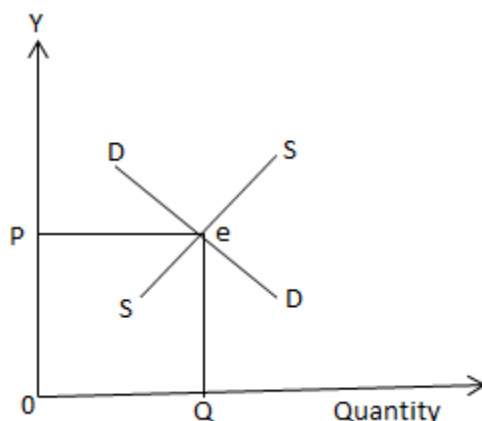
$$P = 5$$

Substituting value of p

$$Q_d = 200 - 20(5) = 200 - 100 = 100$$

$$Q_s = 50 + 10(5) = 50 + 50 = 100$$

Graphically



Above figure assumes both demand and supply is constant they are equilibrium at point E where equilibrium price is OP (5) and quantity is OQ (100). Both the groups' buyers and sellers

are ready to exchange their money and goods. An economy is always equilibrium at price (P) and quantity Q with the interaction of demand (DD) and supply (SS). And hence it always gains the equilibrium at point E the given time. Here static equilibrium concerns with the simultaneous determinations price and quantity of products by the mutually interdependent relation at a time.

2. Comparative Micro Static

This economics fall between simple statics and micro dynamics. It makes the comparison between equilibriums. It is like two steel pictures taken randomly. And the comparison made between those two pictures. Under this, all the factors in an economy may change. Equilibrium situation may change. As old equilibrium point get break down, another form. And finally the comparison between those two equilibrium points is done. But it doesn't explain why the first equilibrium is broken and new is formed. It only compares.

For example demand and supply equations are

$$Qd_t = 200 - 20p_t \dots\dots\dots 1.1$$

$$Qs_t = 50 + 10p_t \dots\dots\dots 1.2$$

Equilibrium is observed when

$$Qd_t = Qs_t$$

$$200 - 20p_t = 50 + 10p_t$$

Solving

$$P = 5$$

Substituting value of p

$$Qd_t = 200 - 20(5) = 200 - 100 = 100$$

$$Qs_t = 50 + 10(5) = 50 + 50 = 100$$

Let us suppose there is increase in income of buyers as a result demand curve shift to the right at constant supply.

New demand curve is

$$Qd_t = 500 - 20p_t \dots\dots\dots 1.3$$

Supply is same in the short run

$$Qs_t = 50 + 10p_t \dots\dots\dots 1.2$$

New requilibrium is observed when

$$Qd_t = Qs_t$$

$$500 - 20p_t = 50 + 10p_t$$

Solving

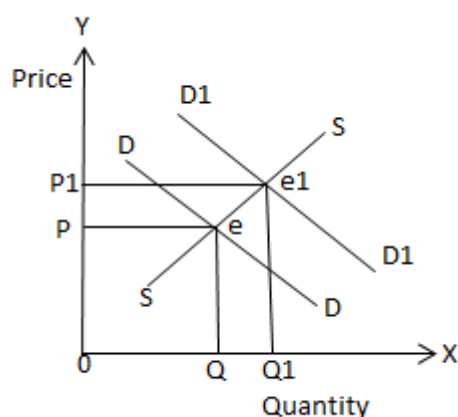
$$P = 15$$

Substituting value of p in new demand and supply

$$Qd_t = 500 - 20p_t = 500 - 20 (15) = 200$$

$$Qs_t = 50 + 10p_t = 50 + 10 (15) = 200$$

Its explain in the following figure



In the figure the initial equilibrium point is e where price and quantity are OP (5) and OQ (100) respectively. Due to the increase in income of the buyers in an economy demand may shift to the right from DD to $D1D1$, which leads the change in equilibrium position from e to e_1 where equilibrium price and quantities are OP_1 (15) and OQ_1 (200) respectively. Here at different time, we compare two unique static equilibrium e and e_1 without making any process.

3. Micro Dynamics

As like the comparative micro static, it not only compares the two equilibrium points: old and new, but it also fully explains about the process of breaking of old equilibrium point and formation of new one over the time. It shows the overall path where there are many ups and down in micro variable and that leads disequilibrium between demand and supply and again reaches in equilibrium over time. Micro dynamics explains the lagged relationship among micro variables in supply with no lagged in demand. The producer produce output considering the price of previous period ($t-1$) but consumers demand quantity of goods by considering current market price and current level of income only. Therefore when lagged time enters in the economic analysis it takes the form of dynamic.

Here the equilibrium of demand and supply is changed due to the bargaining and convincing relation of buyer and seller for quantity and price of the product. We assume that the producers produce output considering the price of previous period ($t-1$) so the supply function of produces is:

$$Q_{s_t} = f(P_{t-1}) \dots \dots \dots 1.1$$

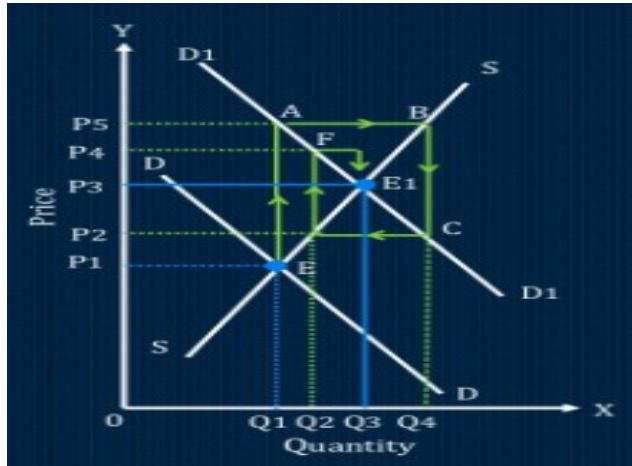
We also assume that consumers demand quantity of goods by considering current market price and current level of income only therefor demand function is:

$$Q_{d_t} = f(P_t, Y_t)$$

Equilibrium is observed when

$$Q_{d_t} = Q_{s_t}$$

We further assume that consumers income have been constant over several period of time after an initial adjustment. Micro dynamics equilibrium can be explain using following figure



↘

In the figure, E is the initial equilibrium point where initial price and quantity are OP_1 and OQ_1 respectively. When demand increase at the initial time, the demand curve shift upward from DD to D_1D_1 . This means demand is exceeding by EA over supply that put upward pressure on price. This increases the price from OP_1 to OP_5 . OP_5 is the price that the consumers are willing to pay at that output level OQ_1 . But at price OP_5 suppliers are ready to supply OQ_4 in the next period of time. Now, producer have to reduce price to sell all the quantity supply because quantity demand is less than quantity supply by AB units of output. This put downward pressure on price so price is reducing OP_2 . If the market set price OP_2 in the second period firms cuts their output from OQ_4 to OQ_2 again there is supply shortage in the market. This process continues in different steps until the new equilibrium E_1 is obtained. The arrows show the process of change. Thus, micro dynamics shows the process of adjustment from one equilibrium point to disequilibrium and final equilibrium over time.

Meaning of Macroeconomics

The word 'macro' is derived from the Greek word 'makro: which means large, as we take an economy-wide perspective. In macroeconomics we study the aggregate outcomes of economic behavior.

It is that part of economic theory which studies the economy in its totality or as a whole.

Macroeconomics is the study of aggregates and averages of the entire economy. Such aggregates are national income, total employment, aggregate savings and investment, aggregate demand, aggregate supply general price level, etc.

Prof. K.E. Boulding, "Macroeconomics deals not with individual quantities as such, but with aggregates of these quantities, not with individual income but with national income, not with individual price but with price level, not with individual output but with national output".

According to Gardner Ackley, "Macroeconomics deals with economic affairs in the large." It concerns the overall dimensions of economic life...to use a metaphor, "it studies the character of the forest independently of the trees which compose it".

Here, we study how these aggregates and averages of the economy as a whole are determined and what causes fluctuations in them. Having understood the determinants, the aim is how to ensure the maximum level of income and employment in a country.

In short, macroeconomics is the study of national aggregates or economy-wide aggregates. In a way it is like study of economic forest as distinguished from trees that comprise the forest.

Main tools of its analysis are aggregate demand and aggregate supply.

Since the subject matter of macroeconomics revolves around determination of the level of income and employment, therefore, it is also known as 'Theory of Income and employment.

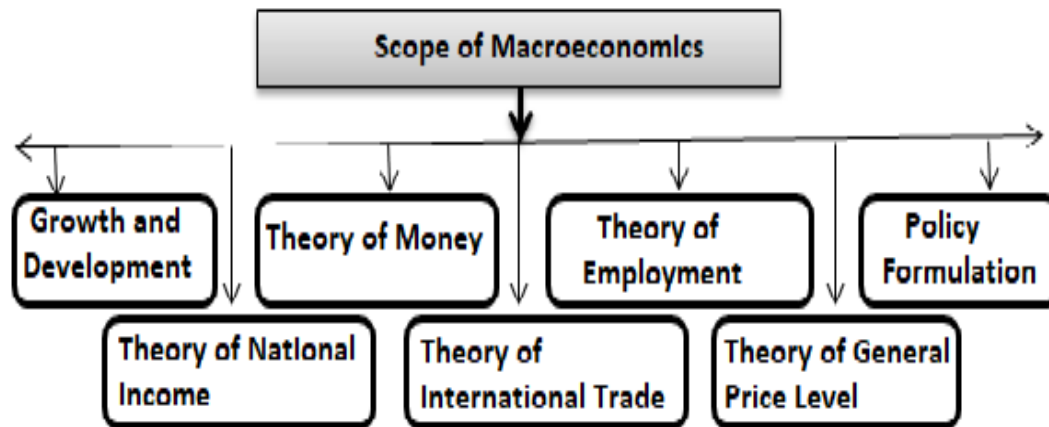
Features of Macroeconomics

1. Its new and modern science developed after the publication of J.M. Keynes book.
2. It studies the aggregative units of the economy
3. It is based on constant relative price and given resource
4. Major assumptions, full employment, perfect competition,
5. It focused optimum allocation of resources,
6. It follow the general equilibrium approach,
7. It is also called theory of income and employment.
8. Mostly applicable on socialist market economy.
9. It determines the magnitude and rate of the total output of a country during some given period of time,
10. It provides employment to nation's work force,
11. It determines the levels of a country's exports and imports.

We shall be considering the theory of employment, the theory of price level and the theory of economic growth. In other words, we shall be examining such aggregates as output, employment, consumption, investment, supply of money, general price level, exports and imports. Besides, our study will require an appreciation of the role of government in determining the levels of these aggregates and the manner in which it uses its policy instruments for these objectives.

Scope of Macroeconomics

Macroeconomics is a vital field of study for the economists, government, financial bodies and researchers to analyze the general national issues and economic well-being of a country. Macroeconomics widely cover two major fundamentals which are further sub-parted into multiple topics, as explained below:



1. **Economic Growth and Development:** The status of a country's economy can be evaluated in terms higher and sustainable economic growth and development. There are various factors determinants of economic growth in the nation. Under macroeconomics there are various theories like classical theory, neo-classical theory, and modern theory introduced and developed by different scholars in the different time. It studies the growth and development of both developing and developed countries.
2. **Theory of National Income:** It's one of the importance scopes of macroeconomics. It covers the various topics related to the evaluation of national income, including the income, expenditure and production. It focused on various concepts like gross domestic product (GDP), gross national product (GNP), net national product (NNP), disposable income (DI), and personal income (PI), national saving. It studies the various national income estimating techniques, as well as different theoretical and applied difficulties of national income estimation.
3. **Theory of Money:** Macroeconomics analyzes the functions of the central bank in the economy. it analyzed the inflow and outflow of money. It deals with money demand that the public wants to hold money as a financial assets. Macroeconomics focused on supply of money and its determinants, market rate of interest, bank rate, along with its impact on the economic growth, employment level, and inflation.
4. **Theory of International Trade:** It is a field of study that enlightens upon the export and import of goods or services. It consist different concept, principle, theory of international trade, balance of trade, balance of payment, reserve of foreign currency. In brief, it determines the impact of cross-border trade and duty charged, on the economy.
5. **Theory of Employment:** This stream of macroeconomics helps to figures out the level of unemployment and prevailing employment conditions in the country. We study different theory range from classical to Keynesian. Also, to know how it affects the total supply, demand, savings, consumption, expenditure behavior.
6. **Theory of General Price Level:** The most important of all is the analysis of product pricing and how these price levels fluctuate because of inflation or deflation. In this we study demand pull supply push theory of inflation, different types, causes and impacts of inflation and deflation and stagflation on economy.

- 7. Policy Formulation:** Fiscal policy and monetary policy are the major macroeconomic policy. As we know, fiscal policy is a means of meeting the deficit of income over the expenditure; it is a form of budgetary decision under macroeconomics. Monetary Policy: Monetary policy is framed by the reserve bank in collaboration with the government. These policies are the measures taken to maintain economic stability and growth in the country by regulating the various interest rates.

Types of Macroeconomics

The variables in any economic model can be a stock and/or a flow. A relationship is postulated among these variables in the model. If all the variables in the model relate to the same time period, then it is a static relationship, while if the variables relate to different time periods it is a dynamic relationship. A given set of relationships between the variables may lead to equilibrium or a disequilibrium solution. An equilibrium solution can be analyzed through a static methodology, whereas a disequilibrium solution can be analyzed through a dynamic methodology. If the model pertains to a situation where one equilibrium position is succeeded by another equilibrium position, then it can be analyzed through comparative statics.

1. Simple Macro-statics:-

Macro static is concerned with the study of the relationship between different macroeconomic variables such as total consumption, and total saving, total demand and supply, and total import and total export. Macro-statics deals with the relationship between different macroeconomic variables at a point of time under the final equilibrium of the economy. Macro static assumes that there is no change in the equilibrium position of economy and established the relationship between the variables.

- a. Study of one static equilibrium point of the economy.
- b. Study of the relationship between aggregate economic variables from a still picture point of view.
- c. Don't deal with the comparison and process of attaining and breaking the equilibrium points.
- d. Related with a single point of time. Macro static can be explain with the help of Keynesian two sector economy

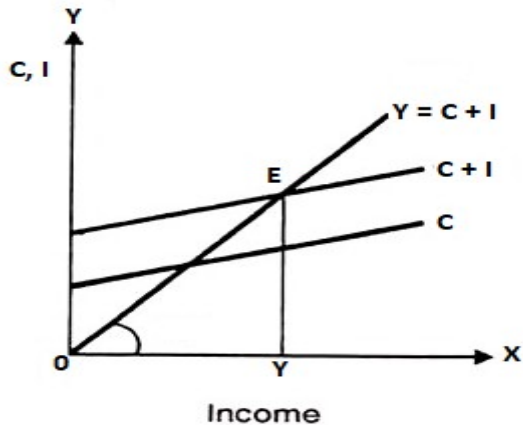
$$Y = C + I$$

Where,

Y = Total Income

C = Total Consumption,

I = Total Investment.



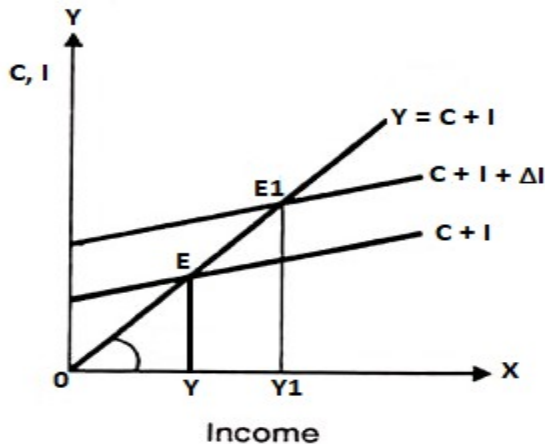
In the figure, the consumption schedule is shown by C and the combined consumption and investment are shown by $C+I$. The equilibrium point will be attained at E with the interaction of income and expenditure where the equilibrium national income is OY . This equilibrium position will be studied under the same point of time, is simple macro-statics.

2. Comparative Macro-Statics

Comparative macro static is an analysis of change in equilibrium from one position to another. So, it compares equilibrium positions of macro variables at different points of time. Macro variables in an economy are subject to change over time and such changes disturb the equilibrium position in an economy. After a certain time new equilibrium is achieved. Comparative macro static concerned with the comparative study equilibriums without any process of adjustment. Comparative macro-statics makes a comparative study between two equilibriums and draw the conclusions. Don't deal with the process of attaining and breaking equilibrium points.

Don't answer the following questions:

- i. What are the causes responsible for breaking the initial equilibrium point?
- ii. What are the causes responsible for attaining the final equilibrium point?
- iii. What is the actual process in between them?

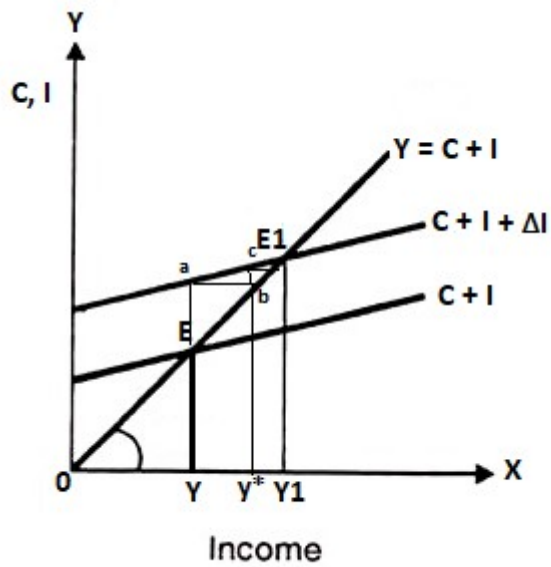


In the figure let, E is the initial equilibrium to the economy with equilibrium income (OY). If there is an increase in investment, then the initial level of the equilibrium will be disturbed. The new equilibrium is attained at the point E_1 , where the new level of equilibrium income OY_1 . Comparative macro-statics studies these two equilibrium positions E and E_1 and does not talk about the process through which the equilibrium takes place. It states that when aggregate investment increase and increase aggregate in income will be Y. It also implies that OY is greater than OY_1 .

3. Macro Dynamic

Macro-dynamics studies the lagged relationship between macroeconomic variables. It describes the time and path taken by macroeconomic variables to move from the old equilibrium position to the new equilibrium position. It shows the process of breaking old one and attaining new equilibrium points. Dynamic analyses the macroeconomic variables from the motion picture point of view. It involves the analysis of the period of time rather than a point of time. It answers all the following questions:

- i. What are the causes responsible for breaking the initial equilibrium point?
- ii. What are the causes responsible for attaining the final equilibrium point?
- iii. What is the actual process in between them?



In the figure, let E be the initial equilibrium and OY be the initial equilibrium income. Now, there is an investment that leads to an increase in aggregate expenditure. The community would increase its expenditure from YE to Ya at the OY level of national income. This increase in community expenditure, increase the level of aggregate income in the next period at the level of OY^* at this increase new level of income people will spend more on consumption goods and This process continues in different steps (as shown by the points a, b, c, \dots) until the new and final (long-run) equilibrium point E_1 is attained where the new level of equilibrium income of OY_1 . Hence the entire process is studied under macro-dynamics.

Goal/objectives of Macroeconomics

Macroeconomics refers to the study of the aggregate economy. The primary goals of macroeconomics are to achieve stable economic growth and maximize the standard of living. Monetary policy and fiscal policy are tools used by the government to control economic performance and reach macroeconomic objective and goals. Following are the goals of macroeconomics;

(i) Full employment:

Performance of any government is judged in terms of goals of achieving full employment. Unemployment refers to involuntary idleness of mainly labor force and other productive resources. Unemployment (of labor) is closely related to the economy's aggregate output. Higher the unemployment rate, greater the divergence between actual aggregate output (or GNP/CDP) and potential output. So, one of the objectives of macroeconomic policy is to ensure full employment.

(ii) Price stability:

By price stability we must not mean an unchanging price level over time but within a reasonable limit. Sustained increase in price level as well as a falling price level produces destabilizing effects on the economy. Therefore, one of the objectives of macroeconomic policy is to ensure (relative) price level stability. This goal prevents not only economic fluctuations but also helps in the attainment of a steady growth of an economy.

(iii) Economic growth:

There is a conflict between the objective of economic growth and economic stability (in prices). Policy makers focused that macroeconomic policy should promote economic growth with reasonable price stability.

A country seeks to achieve higher economic growth over a long period so that the standards of living or the quality of life of people, on an average, improve. There are three major sources of economic growth, viz. (i) the growth of the labor force, (ii) capital formation, and (iii) technological progress

(iv) Balance of payment equilibrium and exchange rate stability:

All countries aim at balanced flow of goods, services and assets into and out of the country. Whenever this happens, total international monetary reserves are viewed as stable. If a country's exports exceed imports, it then experiences a balance of payments surplus. When the country loses reserves, it experiences balance of payments deficit. However, depletion of reserves reflects the unhealthy performance of an economy and thus creates various problems. That is why every country aims at building substantial volume of foreign exchange reserves.

(v) Equal distribution of wealth:

Macroeconomic policy is also used to attain some social ends or social welfare. This means that income distribution needs to be more fair and equitable. In a capitalist market-based society some people get more than others. In order to ensure social justice, policymakers use macroeconomic policy instruments.

Macroeconomic Instruments

Macroeconomic policy instruments include monetary policy, fiscal policy, and income policy in a narrow sense. But, in a broader sense, these instruments should include policies relating to labor, tariff, agriculture, anti-monopoly and other relevant ones that influence the macroeconomic goals of a country. Confining our attention in a restricted way we intend to consider two types of policy instruments the two monetary (credit) policy and fiscal (budgetary) policy. These two policies are employed toward altering aggregate demand so as to bring about a change in aggregate output (GNP/GDP) and prices, wages and interest rates, etc., throughout the economy.

Fiscal policy, on the other hand, aims at influencing aggregate demand by altering tax-expenditure-debt programs of the government. As fiscal policy has come into scrutiny in terms of its effectiveness in achieving the desired macroeconomic objectives, the same is true about the monetary policy. One can see several rounds of ups and downs in the effectiveness of both these policy instruments consequent upon criticisms and counter-criticisms in their theoretical foundations.

The two main instruments of fiscal policy are government taxation and expenditure. Changes in the level and composition of taxation and government spending can impact the following variables in the economy: (1) aggregate demand and the level of economic activity; (2) the pattern of resource allocation; and (3) the distribution of income.

The three main stances of fiscal policy are:

- **Neutral fiscal policy:** It's usually undertaken when an economy is in equilibrium. Government spending is exactly equal or fully funded by tax revenue and overall the budget outcome has a neutral effect on the level of economic activity.
- **Expansionary fiscal policy:** Role of modern government is increasing therefore government spending exceeding tax revenue. It's usually undertaken during recessions, government need to invest to control economy.
- **Contractionary fiscal policy:** Its usually occurs when government spending is lower than tax revenue. When the economy is suffering from hyperinflation and prosperity, contractionary fiscal policy is common by reducing tax exemption. It is usually undertaken to pay down government debt.
- Following are major fiscal instruments:

A. Budget:

Budget is the political documents of government. Its revenue and expenditure policy move forward to get desire goals over a year. Budget of a nation is a useful instrument to assess the fluctuations in an economy. During inflation and prosperity, excessive spending activities are curbed with budgetary surpluses while budgetary deficits during recession with rising extra purchasing power. The government can easily adjust its finances according to the needs. It works smoothly in all times like depression, inflation, boom and recession. Budget simply ensures high economic growth and stability but gives no guarantee that the system will get stabilized at the level of full employment.

B. Taxation:

Taxation is a powerful instrument of fiscal policy in the hands of public authorities which greatly affect the changes in disposable income, consumption and investment. An anti- depression tax policy increases disposable income of the individual, promotes consumption and investment. Obviously, there will be more funds with the people for consumption and investment purposes at the time of tax reduction.

C. Public Expenditure:

The active participation of the government in economic activity has brought public spending to the front line among the fiscal tools. The appropriate variation in public expenditure can have

more direct effect upon the level of economic activity than even taxes. The increased public spending will have a multiple effect upon income, output and employment exactly in the same way as increased investment has its effect on them. Similarly, a reduction in public spending can reduce the level of economic activity through the reverse operation of the government expenditure multiplier.

D. Public Works:

Keynes General Theory highlighted public works program as the most significant anti-depression device. There are two forms of expenditure i.e., Public Works and 'Transfer Payments. They include expenditures on public works as roads, rail tracks, schools, parks, buildings, airports, post offices, hospitals, irrigation canals etc. Transfer payments are the payments such like interest on public debt, subsidy, pension, relief payment, unemployment, insurance and social security benefits etc.

E. Public Debt:

Public debt is a sound fiscal weapon to fight against inflation and deflation. It brings about economic stability and full employment in an economy. Government collects and expenses the money from public and private by selling security to curb the inflation. Government injects money on the economy to increase aggregate demand, investment, and employment at the time of crisis.

Instruments of Monetary Policy

Monetary policy may be defined as a policy employing the central bank's control of the supply of money as an instrument for achieving the macroeconomic goals.

Monetary policy attempts to stabilize aggregate demand in the economy by influencing the availability and supply of money or price of money, i.e., the rate of interest, and credits in an economy.

The instruments or methods of credit control

1. Quantitative/General Control

It seeks to control the total quantity of money and bank credit or to make the bank lend more or less. This method regulates the lending ability of financial institutions of the whole economy without any discrimination of sectors. Following are important method of quantitative control.

- **Bank Rates/Refinance policy**

Bank rate is the rate at which the central bank provides credits to the others bank and financial institutions. It's also policy stance, higher the bank rate, tighter the monetary policy and vice-versa. Bank rates are different from "Market Rate". The market rate is that rate of which the money market is willing to discount bill of exchange. The market rate is influenced by the bank's rate. A rise in bank rate is generally followed by a rise in market rate and similarly, a fall or rise in the bank rate is followed by increase and decrease in the borrowing, and the volume of credit will be adjusted accordingly to the requirements of the market.

- **Open Market Operation**

Open market operation (OMO) is the most important instrument of monetary policy. It refers to purchase or sale of government securities, as a function of the central bank, and deliberate credit policy. When central bank buys securities, it injects the cash on economy and when it sells it withdraws the liquidity from the market. OMO are conducted to manage the short term as well as medium term liquidity. If the economy is suffering from inflation, central bank sells securities and withdraws the liquidity from the system. Bonds and securities are purchased or sold from or to the commercial banks and the general public in the country.

- **Change in Cash Reserve Ratio**

It's the proportion of deposit that the bank and financial institution maintain in the central bank. The commercial banks are required to keep a limited percentage of their deposits by law with the central bank. The central bank changes the ratio according to the need of controlling the credit. If the ratio is raised, the cash available with the bank will be reduced, which will compel them to contract the volume of credit. Similarly, lower CRR ratio will helps to expand the loanable capacity; as a result the credit creation power will expand.

- **Credit Rationing**

This instrument of monetary policy is applied only in time of financial crises. The bank can collect by re-discounting bill of exchange when credit is rationed by fixing the amount. This method of controlling credit can be justified only as a measure to meet exceptional emergencies because it is open to serious abuses. There can be a danger, the rationing may not be satisfactory and the central bank may abuse the power by giving preferential treatment to favorite customers.

- A. **Qualitative/ Selective Method of Control**

In this method central bank regulate the flow of credit into particular directions. It aims to influence the special type of credit, or to divert bank advances into certain sectors, or to discourage from lending for a certain purpose rather than size of credit. These methods managing monetary policy are as below.

- **Change in Margin Requirement of Securities**

Central bank controls the margin requirement of securities to check the loan in the market. Margin requirement is the difference between market value of securities and its amount of loan available. An increase in margin requirement will reduce loan against the securities and vice-versa. So margin requirement is the control over the down payment that must be made while buying securities on credit. Recently central bank of Nepal used the cap of 4/12 rate of securities on loan available against the collaterals to control the rising price of share market.

- **Consumer Credit Rationing**

Under the consumer credit method, a certain percentage of prices of durable goods paid by consumers in cash. Other major amount is paid on installments. It is applied to check the excess demand and rising price. The central bank will impose specific restraints on consumer credit by raising the required down payments and shorting the maximum period of payment.

- **Moral Persuasion**

The central bank of the country also implies a minor instrument of moral persuasion to influence the total borrowing at the central bank. Moral Persuasion, refer to the appealing, advising, requesting to the commercial bank to act according to the monetary policy of the central bank. The central bank may issue directives to commercial banks to follow the policies of the central bank.

- **Direct Action**

Direct action refers to the direction issued by central bank to the other bank and financial institutions regarding their lending and investment policy. The central bank may take direct action if his policies are not followed by commercial banks. Direct action involves direct dealings of a central bank with the commercial banks. Direct action may be a refusal on the part of the central bank to re-discount the bill of exchange or it may be in the shape of penalty rate of discounting for the banks not following the required policies.

Distinction between 'Micro' and 'Macro' Economics:

The distinction between micro and macroeconomics is not very clear cut, because what is macroeconomics in one situation or from one view point may become microeconomics in another situation or from another viewpoint. For example, in the case of a closed economy a study of income, saving, consumption, employment etc. for the whole economy is macroeconomics—as it is the study of aggregates.

If, however, the country has trade relations with other nations, then a single country becomes just one unit in the international set-up and the study of its economic entries becomes microeconomics. In this sense, it seems that a micro-economy is an open economy while a macro-economy is a closed one.

Microeconomic theories are concerned with the analysis of price-output determination under different market conditions and the allocation of economic resources to particular uses; whereas macroeconomic theories are concerned with the analysis of the levels of national product and employment.

Microeconomic theory depends upon the technique of partial equilibrium analysis on the assumption of ceteris paribus. It examines the problem of relative prices and changes in these prices. Macroeconomic theory, on the other hand, depends on the technique of general equilibrium analysis and studies the interdependence between different market prices and outputs of goods and services produced in the economy.

What microeconomics takes essentially as given—namely, the total output for the economy as a whole—is what microeconomics takes— as the main variable whose size or value is to be determined. Similarly, what macroeconomics takes as given—namely, the distribution of output, employment, expenditure amongst particular goods and services of individual industries and firms—are all variables in microeconomics. Again, microeconomics takes the general price level as given and relative prices as variables; whereas macroeconomics treats general price level as variable and relative prices as given

Macroeconomics VS Microeconomics

Table: Difference between Microeconomics and Macroeconomics

Microeconomics	Macroeconomics
It studies individual, particular economic units like income and expenditure of a consumer, profit of a firm.	It studies aggregate economic units like unemployment rate, GDP, GNP, PCI of the country.
It deals with determination of price and output in individual markets, so it is also known as price theory, value theory.	It deals with determination of general price level and national output in the country. So it is also known as the theory of income and employment.
The basic parameter of microeconomics is price, wage, rent. On which consumers and producers takes economic decision.	The basic parameter of macroeconomics is income, that is, economic decision relating to total consumption, saving, investment etc. are on the basis of national income.
It uses the partial equilibrium method under other things being unchanged like full employment, perfect competition, open market are presumptions.	It uses the general equilibrium method, under constant relative price clause.
It aims to study principle, policy, problems concerning optimal allocation of scarce resources.	It aims at determination of aggregate output, national income, price level and full employment level in an economy.
Its suitable to solve the individual problems.	It's suitable to solve the problems of economy as a whole.
Foundation was started from the publication of Wealth of Nation in 1776.	Foundation was started from the publication of The General Theory of Employment Money and Interest in 1936.

Examples: Individual demand, supply, individual, wage, income, expenditure etc.	Examples: Aggregate demand, national income, output, total saving etc.
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MCQ

1. The terms 'micro' and 'macro' are derived from....
 - A. Greek Language
 - B. Latin Language
 - C. French Language
 - D. Russian Language.
2. ...is named as the father of modern macroeconomics.
 - A. Alfred Marshall
 - B. J.M. Keynes
 - C. Gregory Mankiw
 - D. J. R. Hicks
3. Microeconomics looks at what happens at particular parts of the economy and macroeconomics looks at the economy as a whole. Who said this?
 - A. Marshall B. Macconnel C. Stoneir and Hague D K.E. Boulding
4. Which of the following has relation with microeconomics?
 - A Comparative statics, general equilibrium and positive economics
 - B Comparative statics, partial equilibrium and positive economics
 - C. Comparative statics, general equilibrium and normative economics
 - D. Comparative statics, partial equilibrium and normative economics.
5. Which of the following is a tool of macroeconomics?
 - (a) Monetary Policy (b) Fiscal Policy (c) Income Policy (d) All of the above.
6. Microeconomics splits up the entire economy into smaller parts for the purpose of intensive study, it is also known as
 - A. Slicing Method
 - B. General equilibrium Method
 - C. deductive method
 - D. inductive method.
7. The study of groups and broad aggregates of the economy is known as...
 - (a) Microeconomics (b) Macroeconomics (c) International Economics (d) None of the above.
8. In which concept the macroeconomics is based?
 - (a) Measurement of the economic sector (b) Concept of full employment (c) Trade promotion
 - (d) To solve all the economic problems
9. Which of the following is a central issue in macroeconomics?

- (a) The deregulation of the bank (b) The effect of excise taxes on consumer's buying patterns (c) General price level (d) Inflation of drug prices
10. Macroeconomics is the study of the forces or factors that determine the level of aggregate production, employment and prices in an economy and their rates of change over time', who said this?
- (a) K.E. Boulding (b) Gardner Ackley (c) J.M. Keynes (d) Sargent
11. The instruments of macroeconomic policy are...
- A. Fiscal Policy, B. Monetary Policy, C. Income policy, D. All of the above
- A. What is the goal of fiscal policy ? Full employment, B. High economic growth, C. Balance development, D. Above all
12. Which of the following statements is not true?
- A. There is no interdependence between micro and macroeconomics.
 B. General price level, employment and national saving are the subject matter of macroeconomics.
 C. The study of behaviour of a consumer, a producer and a market comes under microeconomics.
 D. Microeconomics does not study about aggregate macroeconomic problems.
13. The another name for microeconomics is...
- A. Price Theory B. Demand and Supply Theory C. Market Theory D. Equilibrium Theory
14. Which of the following is the subject matter of microeconomics?
- B. Income and Employment B. International Trade C. Inflation and Interest Rate D None of the above
15. ...is the equilibrium condition of price determination.
- C. Demand = Supply B. Demand > Supply C. Demand < Supply D. Demand is not equal to supply.
16. What is monetary policy mainly related to?
- A. Managing taxes, public debt and public expenditure
 B. Managing money supply, interest rate and public expenditure
 C. Managing money supply, bank credit and public debt
 D. Managing money supply, bank credit and interest rate
17. Which of the following is the most pursued goal of monetary policy?
- A. Economic Growth
 B. Price Stability
 C. Balance of Payment Stability
 D. Financial Development
18. Which of the following is a prominent feature of monetary policy?
- A. Adjusting government expenditures to stimulate the economy
 B. Adjusting interest rates to stimulate the economy
 C. Adjusting tax rates to stimulate the economy
 D. Adjusting discretionary spending to stimulate the economy
19. How could the Central Bank encourage bank lending?
- A. Reducing the discount rate
 B. Raising the required amount of reserve

- C. Increasing the prime rate
 - D. Reducing the money supply
20. Who is responsible for formulating and implementing fiscal policy?
- A. National Planning Commission
 - B. Central Bank
 - C. Government
 - D. Private Sector
21. Open market operations are...
- A. The processes by which money enters into circulation.
 - B. Reserves greater than the required amounts.
 - C. Buying and selling of government securities to alter the supply of money.
 - D. Rates of interest that banks charge on short-term loans to their prime customers.
22. The rate Central Bank charges commercial banks for a loan is called
- A. Discount rate
 - B. Interest rate
 - C. Reserve ratio
 - D. Prime rate
23. The use of taxes and government spending to affect the economy comes under....
- A. Monetary policy
 - B. Fiscal policy
 - C. Trade policy
 - D. Government revenue policy
24. Which of the following is not an instrument of monetary policy?
- A. Bank rate
 - B. Minimum Reserve Ratio
 - C. Open Market Operation
 - D. Mobilization of Debt
25. What is fiscal policy mainly related to?
- A. Managing taxes, public debt and public expenditure
 - B. Managing Money supply, interest rate and public expenditure
 - C. Managing Money supply, bank credit and public debt
 - D. Managing Money supply, bank credit and interest rate
26. A plan to reduce aggregate demand and slow the economy is called....
- A. Contractionary Fiscal Policy
 - B. Expansionary Fiscal Policy
 - C. Expansionary Monetary Policy
 - D. None of the above
27. During a recession, which of the following is likely to occur?
- A. An increase in real wages
 - B. An increase in production

- C. Increase in the GDP growth rate
 - D. Increase in the unemployment rate
28. If government is attempting to encourage spending by consumers and businesses, a fiscal policy best serving this purpose would be...
- A. Curtailing taxes.
 - B. Decreasing government spending.
 - C. Reducing the investment tax credit.
 - D. Balancing the budget.
29. A budget deficit occurs when...
- A. Government revenue exceeds its spending.
 - B. Money supply exceeds its demand.
 - C. Tax rates are greater than interest rates.
 - D. Government spending exceeds its revenue.
30. The advocate of deficit budget was...
- A. J.M. Keynes
 - B. Adam Smith
 - C. Friedman
 - D. Ben Bernanke
31. The expansion or contraction of the money supply in order to influence the cost and the availability of credit is...
- A. Monetary Policy
 - B. Fiscal Policy
 - C. Contractionary Policy
 - D. Expansionary Policy

• Answer Key

1 A	2 B	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21 C	22 A	23 B	24 D	25 A	26 A	27 D	28 A	29 D	30 A
31 A									

Theoretical Questions and Answer

- What is microeconomics? Is microeconomics a positive or a normative science? Give arguments for your answer.
- What are types of microeconomics?
- What are uses and importance of microeconomics?
- What are scope of microeconomics
- What is Macroeconomics? What are its types?

6. What is Macro dynamic?
7. What are scopes of macroeconomics?
8. What are uses and importance of macroeconomics?
9. Differentiate between microeconomics and macroeconomics.
10. Discuss the need for macroeconomics from the viewpoint of the consumers, firms, and governments.
11. Distinguish between static and dynamic models in Micro and Macroeconomics.
12. What is macro comparative statics? How is it different from statics?
13. What are the various goal and instrument of Macroeconomics?
14. are major fiscal instruments
15. main stances of fiscal policy are
16. What are major Instruments of Monetary Policy
17. What are main Qualitative/ Selective Method of credit control