Macroeconomics

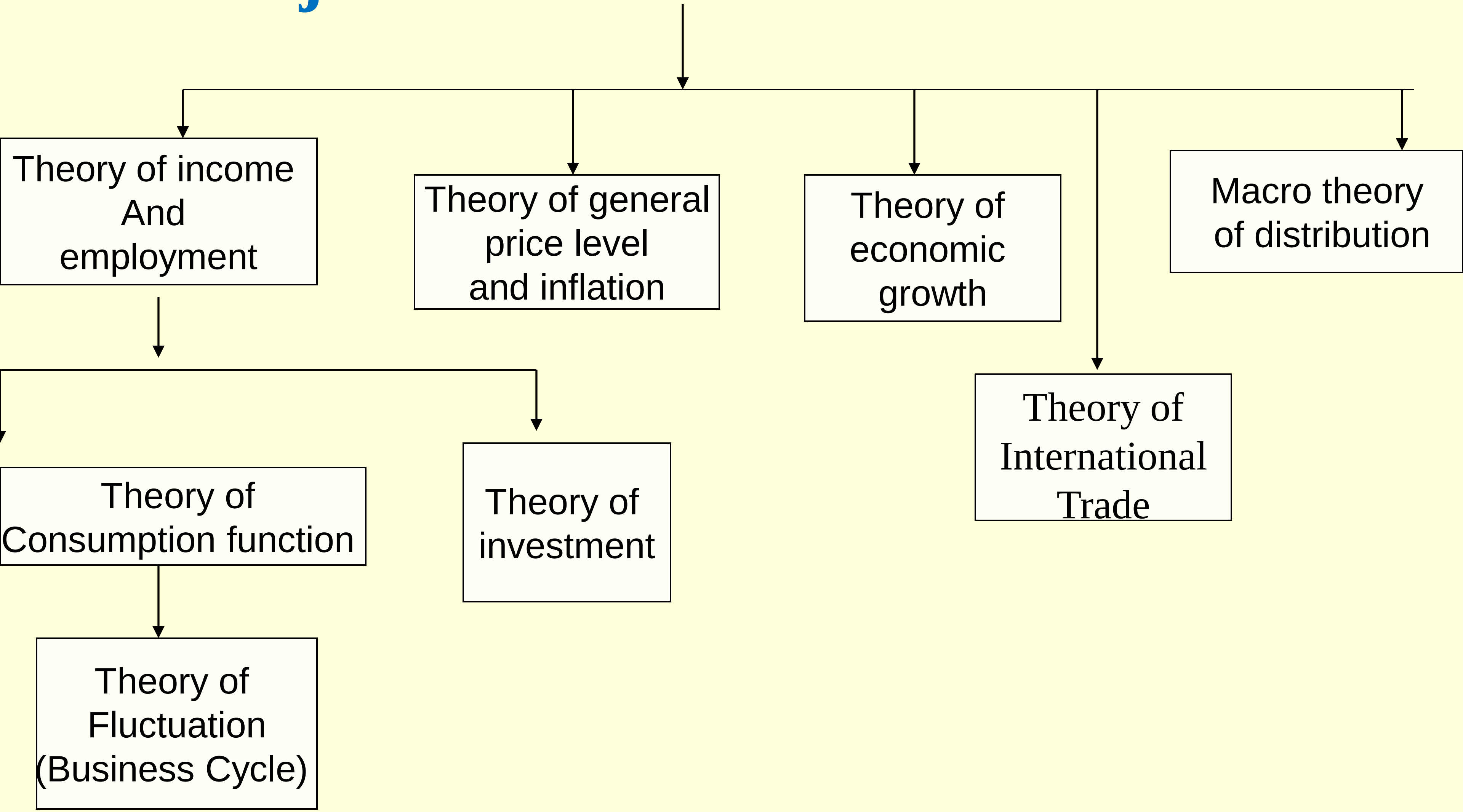
Nature and scope of Macroeconomics

- The term ‘macro’ was first used in economics by Ragner Frisch in 1933. But a group of thinkers of the 16th and 17th century known as ‘mercantilists’ were concerned with the functioning of the whole economic system.
- In 18th century, the physiocrats adopted it in their *Table Economique* to show the circulation of wealth among the three classes represented by farmers, landowners and the sterile class.
- Malthus, Sismondi and K. Marx in the 19th century dealt with macro economic problems.
- Some economists like; Cassel, Marshall, Pigou, Robertson, Hayek and Hawtrey developed a theory of money and general prices. But credit goes to J.M. Keynes who finally developed a general theory of income, output and employment in the wake of the Great Depression.

Definition of Macroeconomics

- Macroeconomics is the study of aggregates or averages covering the entire economy, such as total employment, national income, national output, total investment, total consumption, total savings, aggregate supply, aggregate demand, and general price level, wage level, and cost structure.
- Macro economics is aggregative economics which examine the interrelations among the various aggregates their determinants and causes of fluctuations in them.
- In the words of K.E. Boulding; "macro economics deals not with individual quantities as such but with aggregates of these quantities; not with individual incomes but with the national income, not with individual prices but with the general price level, not with individual outputs but with the national output."
- Macro economics is also known as the theory of income and employment or simply income analysis.
- It studies the factors that retard growth and those which bring the economy on the path of economic development.

Subject Matter of Macroeconomics



Uses or Importance of Macroeconomics

- *To understand the working of the economy*: our main economic problems are related to the behavior of total income, output, employment and the general price level in the economy. The study of macro economic variables is indispensable for understanding the working of the economy.
- *In economic policies:* macroeconomics is extremely useful from the point of view of economic policy. Modern governments, especially of the underdeveloped economies, are confronted with innumerable national problems such as overpopulation, inflation, balance of payment, general underproduction.
- *In the study of cause and effects of unemployment:* the level of employment is determined by effective demand and this effective demand itself is determined by the aggregate demand and the aggregate supply.
- *In understanding the theory of the value of money:* in the theory of the value of money we make a study of the rise and fall in the value of money, or deflation and inflation respectively.

Uses or Importance of Macroeconomics

- *In analyzing the national income:* the physical welfare of the country depends upon the total income and employment of the country. Macro economics explains the determination of the level of income and employment in a country and changes on them.
- *In the study of economic development of a country*: the process of economic development is a part of the study of macro economics. The problems of development like; overpopulation, underproduction, inflation, poverty, unemployment mal-nutrition etc.
- *In explaining the fluctuations in business activities i.e. trade cycle*: depression, recovery, prosperity, boom, recession, etc. Macro economics explains the causes effects and remedies of trade cycle.
- *In the study of microeconomic analysis:* the analysis of demand and cost fall under the domain of micro economics but the change in demand and cost depend upon the aggregate demand, supply of money, resources which are studied under macro economics.

Uses or Importance of Macroeconomics

- To understand the business environment

a. The type of economic system in the country
b. General trends in national income, prices, savings and investment etc.
c. Structure and trends in the working of financial institutions eg. Banks, financial corporations, insurance companies.
d. Magnitude of trends in foreign trade
e. Trend in labor supply and strength of the capital market
f. Government economic policies e.g. industrial policy, monetary policy, fiscal policy, price and foreign trade policies.
g. The degree of globalization of the economy and the influence of multinational companies in the domestic markets.

Uses or Importance of Macroeconomics

- Understand macroeconomic environment for business decision making:

a. To study the trends of domestic business environment.

b. To study the trends of international business

c. To examine nature and extent of externalities of business environment

Macroeconomic Concepts

- **Stock and Flow variables:** the stock variable refers to the quantity of a variable given in at a point of time. Stock of capital in a country, the total money supply etc.
- The flow variables are the variables that are expressed per unit of time, i.e. per day, per week, per months. Investment, national income, exports etc.
- **Equilibrium and Disequilibrium:** equilibrium refers to a state or situation in which opposite economic forces are in balance and there is no in-built tendency to deviate from this position. An economy is said to be in equilibrium when aggregate demand equals aggregate supply.
- Disequilibrium is the state in which the opposite forces are in imbalance. Imbalances between market forces are a routine matter in a market economy.
- **Static and Dynamic Analysis of Macroeconomics**

Simple Macro Static Analysis

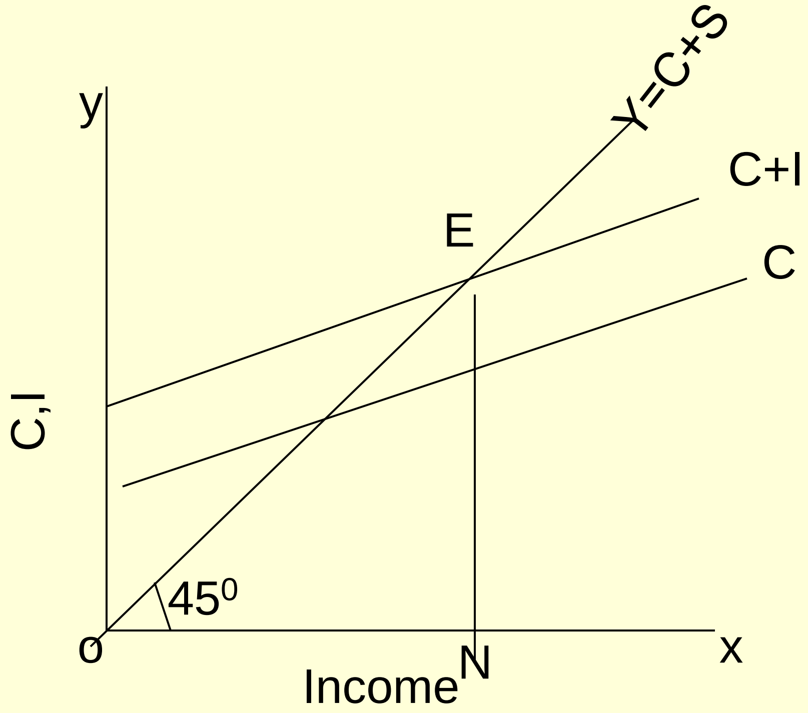
- Statics implies a state characterized by movement at a particular level without any change. Macro static analysis explains the static equilibrium position of the economy.
- Simple macro-statics explain the total elements of the economy, their interrelations and equilibrium state of the whole economy in a fixed period of time.

$Y = C + I.$

Where, *Y* is the total income, *C* is the total consumption expenditure and *I* is the total investment expenditure.

The level of national income is determined by the interaction of aggregate supply function and the aggregate demand function.

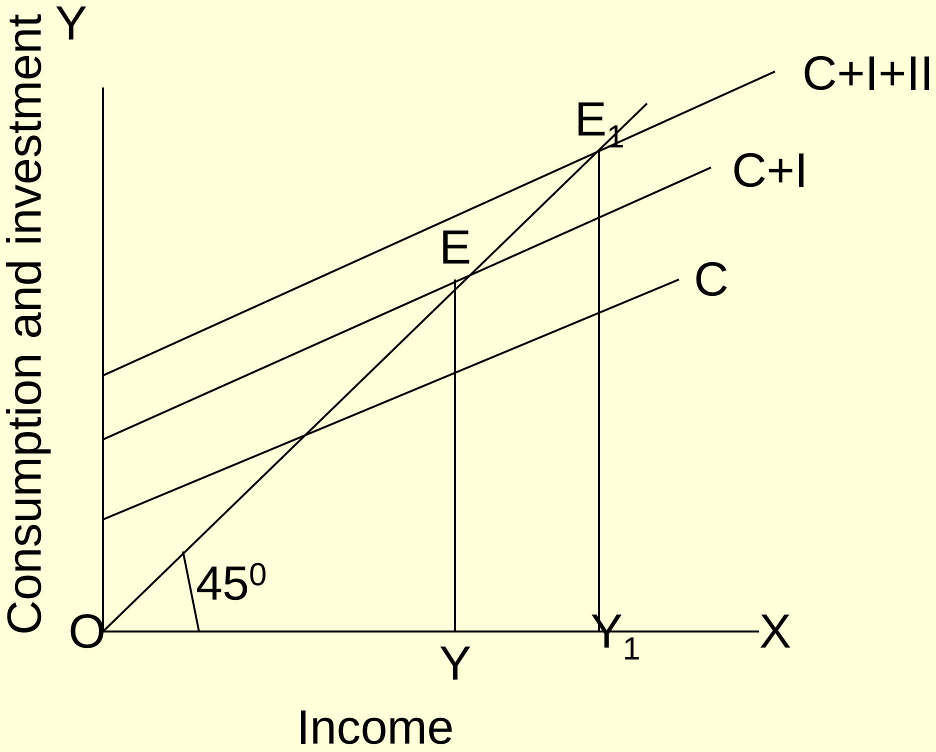
It studies about the equilibrium situation of the economy at a particular time period. It is the view on economy as a steel photograph.



According to Keynes theory of national income determination, national income is determined at a point where aggregate demand curve (C+I) and aggregate supply curve OY intersect each other. In the above figure, the economy is equilibrium at point E where aggregate consumption expenditure and aggregate investment expenditure is equal with total national income of ON.

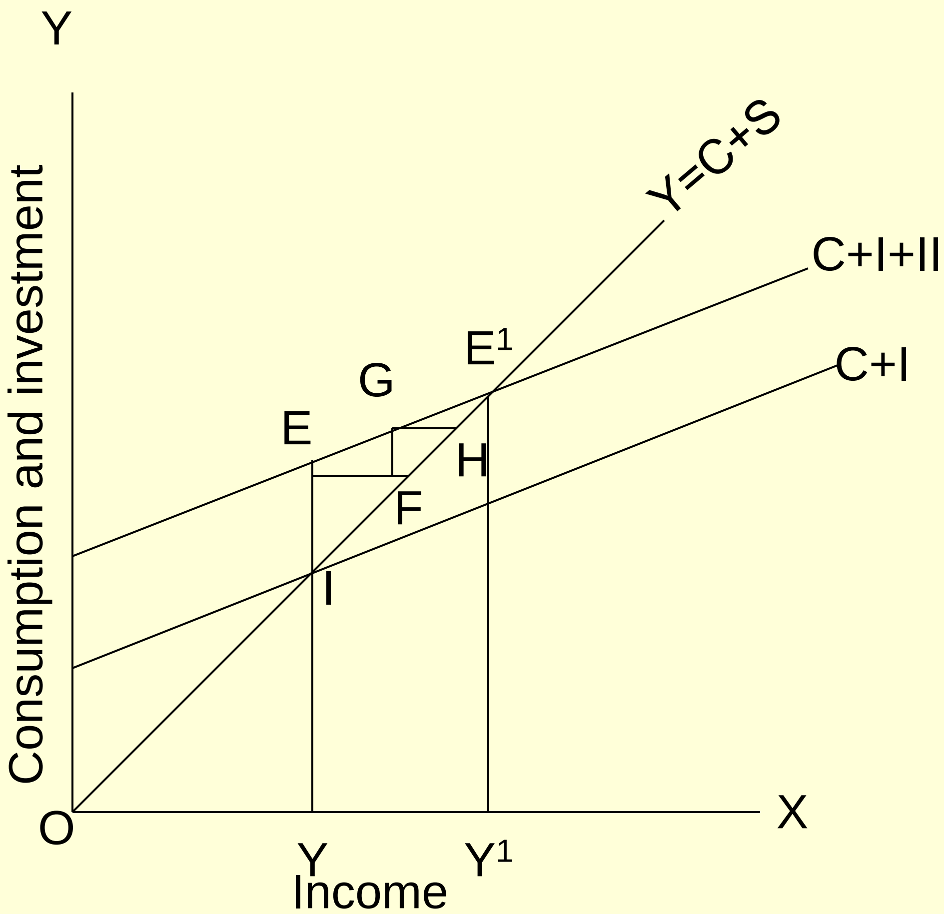
Comparative macro statics

- Comparative macro statics makes the comparative study of different equilibrium attained by the economy in the economic activities. It compares the new and old equilibrium attained by the economy or comparative statics is the method of analysis in which different equilibrium situations are compared.
- There is a change in the equilibrium points of the economy in different time period. So the comparative macro statics studies all these changing equilibrium points . It is the comparative study of economy as two steel photograph.


Y
Consumption and investment
C+I+II
E1
C+I
E
C
450
O
Y
Y1
X
Income

Macro Dynamics

- "Macro dynamics is a method of studying the process of temporal equilibrium adjustment or the relations between variables which are functions of time and the values of which are therefore lagged in an economically significant way."~ KK Kurihara.
- If the analysis considers the relationship between relevant variables whose values belong to different points of time in known as Dynamic Analysis or Economic Dynamics.
- Macro dynamics studies all the changes changing paths, equilibrium positions of the economy before and after the change. It is the view of an economy as movie.


Y
Consumption and investment
Y=C+S
C+I+II
C+I
E1
G
E
H
F
I
O
X
Y
Y1
Income

Limitations of Macro economics

- The fallacy (mistaken belief) of composition: what is true and good in individuals is not necessarily true in the economy as a whole like, Saving.
- The representative prices to determine general price level and individual income to determine national income cannot represent all and are not uniform.
- Macro economic analysis is based on the assumption that aggregates are homogeneous. But these aggregates are composed of different individual components.
- It cannot show the change in the particular sector. The 5% change (rise) in price of agricultural product and 5%change (fall) in price of industrial product brings no change in general price level.
- The aggregate tendency may not affect all sectors equally. (rise in price benefits to the producers but hurt to the consumers.)

Basic concepts in macroeconomics

- **Consumption goods:** Consumption goods are goods that can be used to satisfy human needs without further processing or transformation. Such goods are not raw materials or semi-finished goods but goods that are taken to commodity market where they can be purchased by final users.
- **Capital Goods:** These are seen as commodities used in producing other goods, rather than being bought by consumers directly for satisfaction of their needs. Assets of organizations or firms used to produce goods and services are known as capital goods. Examples of such goods are buildings, equipment, machinery, among others.

Basic concepts in macroeconomics

- **Final goods:** Final goods are consumed directly to create satisfaction rather than used for further production process. These category of goods have been transformed from raw materials into finished products having gone through necessary stages of production. Bread, butter, furniture, cars, telephones, computer set, among others are examples of finished goods.
- **Intermediate goods:**These are goods that cannot be consumed directly but rather are used to produce other commodities. Basically, they are raw materials and partly finished goods. As inputs, they must undergo transformation or production processes before they can be consumed as outputs.

Basic concepts in macroeconomics

- **Stock:** Stock refers to the value of goods and services at a particular period. Stock as an article can be increased by addition of new items and reduced/depleted by subtracting new items from it. Hence, flows change the level of stock. Stock can also be seen as measures of available resources for production of output.
- **Flow:** Flow simply refers to change in stock over a period of time. Change can result from two economic activities, that is, inflows (increase to stock); and outflows (reduction in stock). Hence, flows typically are measured over a certain interval of time. Flow is a measure of the level of output like Gross Domestic Product (GDP).

Basic concepts in macroeconomics

- **Endogenous variable:** In economic model, endogenous variable is explained by the model. Any change in the state of the economy will cause a change in the variable so it depends on the state of the economy. In our national income model the national income (Y) depends on consumption expenditure (C), investment expenditure (I), government expenditure (G) and net export written as follows: $Y = C + I + G + (X\text{-}M)$ Where National income (Y) is an endogenous variable since the level of income will respond to change in household purchase of consumption goods and services (C), firms purchase of capital goods (I), government spending (G) and Net export (X-M).

Basic concepts in macroeconomics

- **Exogenous variable:** An exogenous variable is the opposite of endogenous variable. Exogenous variable is not explained by the economic model under consideration and is assumed not to depend on the state of the economy. Using same national income model above, government expenditure (G) is an exogenous variable because it does not change in response to change in level of income.

Basic concepts in macroeconomics

- **Nominal Value**: Nominal value is the value of variable expressed in current market price. The total monetary value of all goods and services produced in Nigeria in 2013 was put at $522.9 billion. This value measured in 2013 general price level is nominal GDP.
- **Real value:** Real value measures the changes in quantities. It is a nominal value that has been adjusted to remove the effect of general price level changes. Changes in nominal value of a bundle of commodities can occur due to changes in quantities or prices, but changes in real values express only changes in quantities.To remove the effect of prices changes, we divide nominal variable by deflator.

Interdependence Between Micro and Macro Economics

- “ There is really no opposition between micro and macro-economics. Both are absolutely vital and you are only half-educated if you understand the one while being ignorant of the other.” ~Prof. P.A. Samuelson
- **Dependence of microeconomics on macroeconomics:** micro economic analysis studies the small parts of the economy, their interrelationship and the problems. It studies a product of firms, determination of price of a product, individual consumption, wages of an individual laborer. Macro economic analysis plays an important role in all these studies. (price of a product is not determined by demand and supply of the product only but also by the aggregate D &S, circulation of money, total national income, employment etc. determination of wage rate, product of a firm, consumption are entirely based on macro economic analysis.

Dependence of Macroeconomics on Microeconomics:

- Macroeconomic analysis studies the whole economic system i.e. the general price level, value of money, total employment, total national income etc. individual units or the small parts play an important role in aggregates. We can have a clear concept of macroeconomic analysis only after we have full knowledge of individual firms, families, price etc. macro-economic analysis is incomplete without a full knowledge of microeconomics. Study of macroeconomics without microeconomics is the body without full organs.

Distinction between Micro and Macroeconomics

- Distinction in word meaning 'mikros' small and 'makros' large.
- Developed by classical and neo-classical economists and developed by J.M. Keynes.
- Study of individual variables and aggregate variables.
- Study of small aggregate such as market demand, supply and industry and study of large aggregates such as national income, general price level.
- Study of individual equilibrium process using partial eq-^{m} analysis and study of economic behavior using general eq-^{m} analysis.
- Based on assumption of full employment in economy and not assumes full employment in economy.
- Not related with policies to solve the present problems and related to present problems solving policies, like hyper inflation, unemployment, poverty, declining national income etc.
- The subject matter of microeconomics are product pricing, factor pricing, theories of economic welfare and the subject matter of macroeconomics are national income, employment, investment, general price level etc.
- The objectives of microeconomics is to maximize utility on demand side and profit maximization on supply side, whereas full employment price stability, economic growth, are the objective of macroeconomics.
- Price theory and income theory.

Goals of Macroeconomics

- The primary goals of macroeconomics are to maximize the standard of living and achieve stable economic growth.
- The goals are supported by objectives such as minimizing unemployment, increasing productivity, controlling inflation, and more.
- **Full Employment**: Achieving full employment is a crucial macroeconomic objective. Achieving the lowest possible unemployment rate where all individuals willing and able to work can find employment. Full employment doesn’t mean zero unemployment; rather, it refers to a level of unemployment consistent with the economy’s natural rate.

Goals of Macroeconomics

- **Price Stability**: While full employment remains important, the emphasis has shifted toward maintaining price stability. Price stability ensures that inflation remains under control, allowing for predictable economic conditions.
- **Economic Growth**: Macroeconomics aims to foster strong and sustainable economic growth. This growth is essential for creating jobs, wealth, and improving living standards.
- **Equitable Distribution of Income:**
  - Definition: Ensuring a fair distribution of wealth and income within a society.
  - Objective: Reduce income inequality to promote social harmony and economic stability.

Goals of Macroeconomics

- **Balance of Payments Equilibrium and Exchange Rate Stability**: Maintaining a balance in international trade (balance of payments) and stable exchange rates are critical objectives. These factors impact a country's overall economic health.
- **Social Objectives**: Beyond economic indicators, macroeconomics also considers social welfare and equity. Policies should aim to benefit society as a whole.

Macroeconomic Policy Instruments

1. **Monetary Policy**: Central banks use monetary policy to influence the money supply, interest rates, and credit availability. By adjusting these factors, they can impact economic activity, inflation, and employment.
2. **Fiscal Policy**: Governments use fiscal policy to manage public spending, taxation, and borrowing. It directly affects aggregate demand and can stimulate or cool down the economy.
3. **Exchange Rate Policy**: Countries manage their exchange rates to promote stability in international trade and investment.

Macroeconomic Policy Instruments

4. **Income Policies:**

   Tools: Wage and price controls, tax policies, and transfer payments.

   Application: Implementing measures to control inflation and ensure fair distribution of income. For instance, setting minimum wage laws or providing social welfare programs.

5. **Trade Policy:**

   Tools: Tariffs, quotas, trade agreements, and other measures that affect international trade.

   Application: Using trade policies to protect domestic industries and manage trade relations. For example, imposing tariffs to protect local businesses from foreign competition.