[Academic Script]

An Introduction to Basic Macroeconomics Concepts

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Academic Script

1. Introduction

As we know that the overall field of economics is divided into two areas which in turn are very broad; micro and macroeconomics. In today's session we will be learning about the basic concepts of Macroeconomics.

Definition

What is macroeconomics? Macroeconomics is the study of the economy's total output, employment and the price level.

- Macroeconomics deals with economic affairs in the large, it concerned the overall dimensions of economic life.
- Macroeconomic deals with the major economic issues, problems and policies of present times.
- Macroeconomic is study of major economic aggregates.
- National income, money, total savings, total investments, unemployment, inflation, balance of payments, exchange rate etc. are of the country. When all these factors together do not change, or change observed is negligible over a period of time and hence there is no change observed in Exchange rate and thus it is said to be stability in Exchange rate, etc are the crucial economic aggregates.

GOALS OF MACROECONOMICS

As we have mentioned about that macroeconomics keeps the record of the changes in total output, unemployment and the price, here are some of the precise list of goals that macroeconomic theories and policies target at level. The same are listed here:

I) PRICE STABILITY: when the given price level of goods and services does not change or are constant say for the given period of time it is known as price stability.

II) ECONOMIC STABILITY: in any given economy, changes in the output are observed gradually over a period of time with respect to given or constant rate of change the said economy is stable.

And stability in general price level with full employment level in economy is also said to be macroeconomic stability. where changes in price level is allowed to 2-3 percent and unemployment is allowed to 3-5 percent.

III) EXCHANGE RATE STABILITY: In an open market economy, the exports and imports of a country are often influenced by the exchange rate. Such exchange rate in turn is influenced by the internal interest rate, inflation rate, political stability and internal harmony of the country. when all these factors together do not change or change observed is negligible over a period of time and hence there is no change observed in exchange rate and thus it is said to be stability in exchange rate.

IV) Full employment: When every employable labour, willing to work at the given wage rate is employed. It is said to be full employment in the economy.

V) Economic growth: an increase in the amount of goods and services produced per head of the population over a period of time is said to be economic growth.

VI) Economic justice: Economic justice is a part of social justice. It deals with the set of moral principles for building economic institutions. The ultimate goal of such institutions is to create an opportunity for each person and add a

sufficient material foundation upon which to have a dignified, productive, and creative life beyond economics.

VII)Improvement in standard of living: It is said that when Human Development Index (HDI), Physical Quality of life Index (PQLI), Literacy rate i.e. Education level goes up, wherein Below Poverty Line (BPL) ratio, Mortality ratio, infant mortality rate goes down is an evidence of improvement in **standard of living**.

VIII) Eradication of poverty: When from overall population there is reduction in the people living below poverty line, it is considered as a step towards eradication of poverty.

To achieve above objectives the economists apply various tools for making theories. The monetary and fiscal policies tops the lists wherein others can be listed as below:

1. Trade policy
2. Industrial policy
3. EXIM policy
4. Banking policy
5. Planning policy

Macroeconomic Theories which you will learn in later chapters are:

1. Theory of income and employment
2. Theories of trade cycles
3. Theories of economic growth
4. Theories of inflation
5. Theory of fiscal policy
6. Theory of monetary policy

2. Different Concepts of Macroeconomics

Aggregate Demand: Aggregate demand price at any level of employment is the amount of money which all the entrepreneurs

in the economy taken, together really do expect that they will receive if they sell the output produced by this given number of labour.

Y = C + I (for two sector economy model).

Y = C + I + G (for three sector economy model).

Y = C + I + G + (X - M) (for four sector economy model).

Aggregate Supply: Aggregate supply is the total supply of goods and services produced within an economy at a given overall price level in a given time 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.

Y = C + S (For two Sector Model)

Y = C + S + T (for three sector economy model).

Effective Demand: Only that point of ADP which is equal to ASP is known as **Effective Demand.**

Equilibrium of economic entity: The point where aggregate demand and aggregate supply of the given entity is equal is known as equilibrium of the said entity. For example,

AD = AS (for goods market)

D_m (DD for money) = S_m (SS for money) [for money market]

Disequilibrium: The excess of supply over demand or excess of demand over supply in the goods market is known as disequilibrium.

Capital Goods: The goods in which long term investment is required, used over a long period of time and is use to produce other goods or services is Capital goods.

National income or National income at factor cost (NNP_{FC}) **-** It means the sum of all incomes earned by resource suppliers for their contribution of land, labor, capital, entrepreneurial ability which go into the year's net production. In other words NI shows how much it costs society in terms of economic resources to produce net output.

NI = C + I + G + NX +Net factor income - Indirect Taxes - Depreciation

3. Circular flow of income

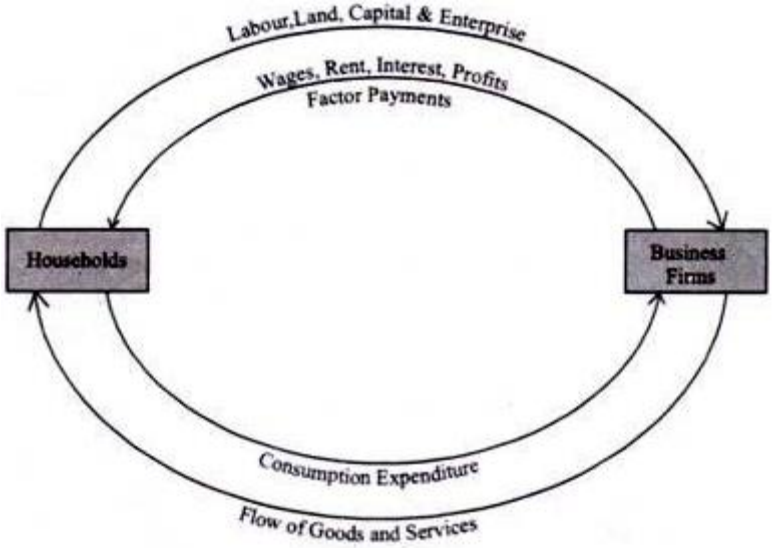
In the monetary economy, there will be flows of money, corresponding to the flows of economic resources & the flows of goods & services. But each money flow is in opposite direction to the real flow.

Circular Flow in a Two Sector Economy (Without Saving and Investments)

- In two sector Model there are only two entities i.e. Household and Firms. It is assumed as closed economy.
- Household provides the factors of production such as land, labor, capital flow where as Firms in turn pays - rent, wages, profit, and interest.
- Thus Household pays for their consumptions to firms and Firms returns the same in form of goods and services.

i.e. **Income (Y) earned is used for consumption (C) of goods and Services**

Y = C



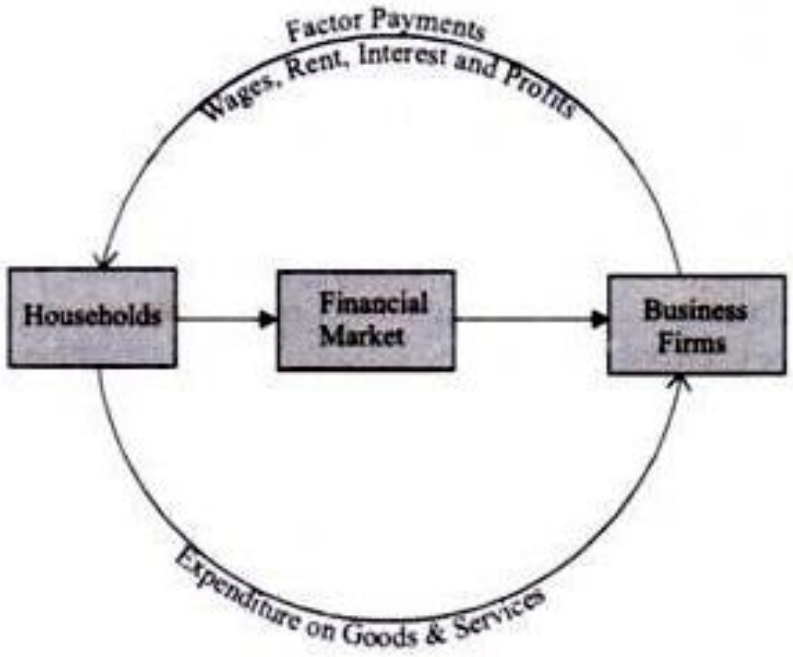
Circular Flow in a Two Sector Economy (With Saving and Investments)

In the prior model we have assumed that incomes which the households receive, they spend it on consumer goods & services. But in reality households save a part of their income, how their savings will affect money flows in the economy.

i.e.

National Income (Y) = C (consumption of goods and Services) + S (Savings)

This equation shows the total supply or the aggregate supply of the business firms to the economy. The part of money saved out of total earnings of household, is leakage in the economy as it reduces the consumption expenditure of households. Thus, there is disequilibrium between NI and consumption (Y > C). To bridge this gap Financial markets are introduced in the two sector model. Financial market is a set of institutions such as banks, insurance companies, etc where households deposit their savings. All these institutions together are called **financial institution or financial market.**



In this figure we can see the flow of money from household to financial markets and firms. The savings deposited by household in financial markets in two sector model are invested in the business firms, and thereby bridging the leakages from the income. Thus the total demand of business firm for total output Y is consumption expenditure plus investments. (Y= C + I)

Algebraically,

As explained household supplies

$$\mathbf{Y = C + S} \qquad \text{.....(i)}$$

but since the introduction of financial market the economy will be in equilibrium if all the amount saved is invested in the economy. Hence the total output of the business firm or demand should be

$$\mathbf{Y \equiv C + I} \qquad \text{.....(ii)}$$

From eqn. (i) and(ii) we get,

$$\mathbf{C + I \equiv Y \equiv C + S} \qquad \text{.....(iii)}$$

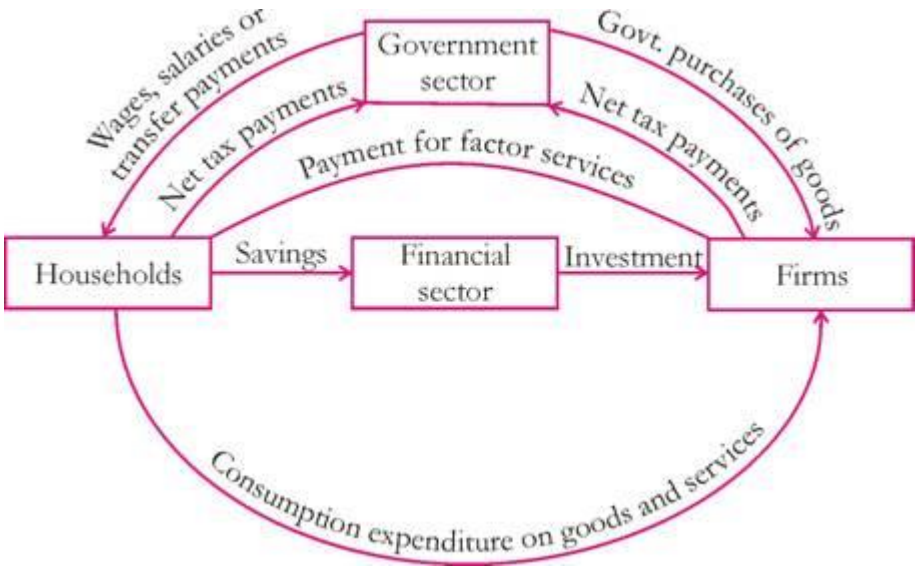
The left hand side of the eq. (iii) shows the components of aggregate demand of the business firms & the right hand side of the eq. (iii) shows supply of business firms in form of goods & services and savings. Thus the eq.(iii) shows the value of output produced or sold is equal to the total income received. It is income received that is spent on goods & services produced.

Now subtracting C from both sides of eq. (iii) we get,

$$I = S$$

Circular Income Flow in a Three Sector Economy with Government sector

The existence of government for the sake of making our circular flow model simple has been ignored. This is quite unrealistic because govt. absorbs a good part of the incomes earned by households. Govt. affects the economy in a no. of ways.



Govt. expenditure may be financed through taxes, out of assets or by borrowing. the money flow from households and business firms to the govt. is labelled as tax payments. Another method of financing govt. expenditure is borrowing from the financial market to the govt. & is labelled as govt. borrowing.

Total expenditure flow in the economy is the sum of consumption expenditure, investment expenditure and govt. expenditure.

$$\textbf{Total expenditure(E) = C + I + G}$$

.....(i)

Total income(Y) received is allocated to consumption(c),savings(s), taxes(T).

$$\mathbf{Y = C + S + T} \quad \text{.....(ii)}$$

from eqn. (i) and (ii) we have,

$$\mathbf{C + I + G = C + S + T} \quad \text{.....(iii)}$$

since C occurs on both sides, we have,

$$\mathbf{I + G = S + T} \quad \text{.....(iv)}$$

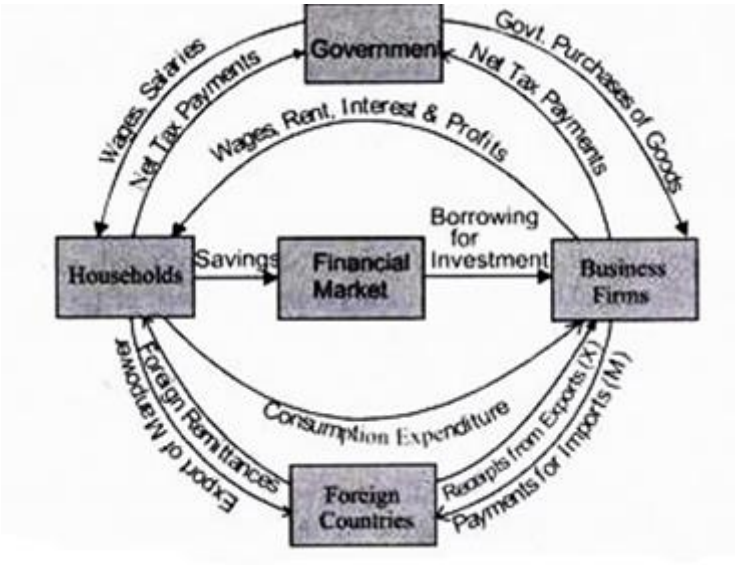
Another important conclusion that can be drawn from NI account identity incorporating government expenditure relates to the condition for equilibrium in the financial market. National income identity with govt. expenditure is

$$\mathbf{Y = C + I + G}$$

Circular Income Flow in a Four Sector Adding Foreign Sector

The inclusion of the foreign sector will reveal to us the interaction of the domestic economy with foreign countries. Foreigners interact with the domestic firms & households through exports & imports through goods and services as well as through borrowing & lending operations through financial market. goods and services produced within the domestic territory which are sold to the foreigners are called exports.

On the other hand, purchases of foreign made goods and services by domestic households are called imports.



This fig. illustrates the additional money flows that occur when exports and imports also exist in the economy. We assume it is only the business firms of the domestic economy that interact with foreign countries and therefore export & import goods and services. A flow of money spending on imports have been shown to be occurring from the domestic business firms to the foreign countries. If exports are equal to imports, then there exists a balance of trade. If value of exports exceeds the value of imports, trade surplus occurs. On the other hand if value of imports exceeds value of exports, trade deficit occurs.

Per-capita Income: The total National Income divided by total population of the country is the Per-Capita Income of the country.

Personal Income - It is the sum of all incomes realized by all individuals or households during a given year. It is different than NI as some incomes which are earned are not actually received by households in the same year for example, contribution to PF. Contrary to the same, some incomes which are received in the

given year are not earned in the same year. Example, rebate on taxes.

PI = Wages received + Interest received + Rent received + Dividends + Transfer Payments

Disposable Income – The amount of money that is available for an individual's expenses and savings after the deduction of taxes from his/her personal income.

DI = PI - Personal Income Tax Payments

Gross Domestic Product (GDP) – As an aggregate measure of total economic production for a country, GDP represents the market value of all goods and services produced by the economy during the period measured, including personal consumption, government purchases, private inventories, paid-in construction costs and the foreign trade balance that is net exports (Export - Imports).

GDP = C + I + G + (X-M)

Gross National Product (GNP)–

Gross national product (GNP) is an estimate of total value of all the final products and services produced in a given period by the means of production owned by a country's residents. GNP is commonly calculated by taking the sum of personal consumption expenditures, private domestic investment, government expenditure, net exports, and any income earned by residents from overseas investments, minus income earned within the domestic economy by foreign residents.

GNP = GDP + Net Income Inflow From Abroad - Net Income Inflow To Foreign Countries

Net National Product (NNP)- In the production of GNP of a year we consume or use up fixed capital. This consumption of fixed capital or fall in the value of fixed capital due to wear &

tear is called depreciation. When charges for depreciation are deducted from the GNP we get NNP. It means the market value of all final goods and services after providing for depreciation.

NNP = GNP – Depreciation

4. Summary

So today we have learnt about the basic concept of Macroeconomics which includes the definition of macroeconomics. The topics studied by us were various terminology which will be used during the sessions of macroeconomics such as aggregate demand, aggregate supply and so on. We also learnt about the major national income concepts, like GDP, GNP and NNP.