Module 4
Macroeconomic Concepts

Hingston Xavier

Assistant Professor

Christ College of Engg – IJK

The Circular Flow of Income

- The circular flow of income and expenditure refers to the process whereby the national income and expenditure of an economy flow in a circular manner continuously through time.

3 Models:

1. Circular Flow in a Two Sector Economy
2. Circular Flow in a Three- Sector Economy
3. Circular Flow in a Four - Sector Economy

Two Sector Economy

Y = C + I

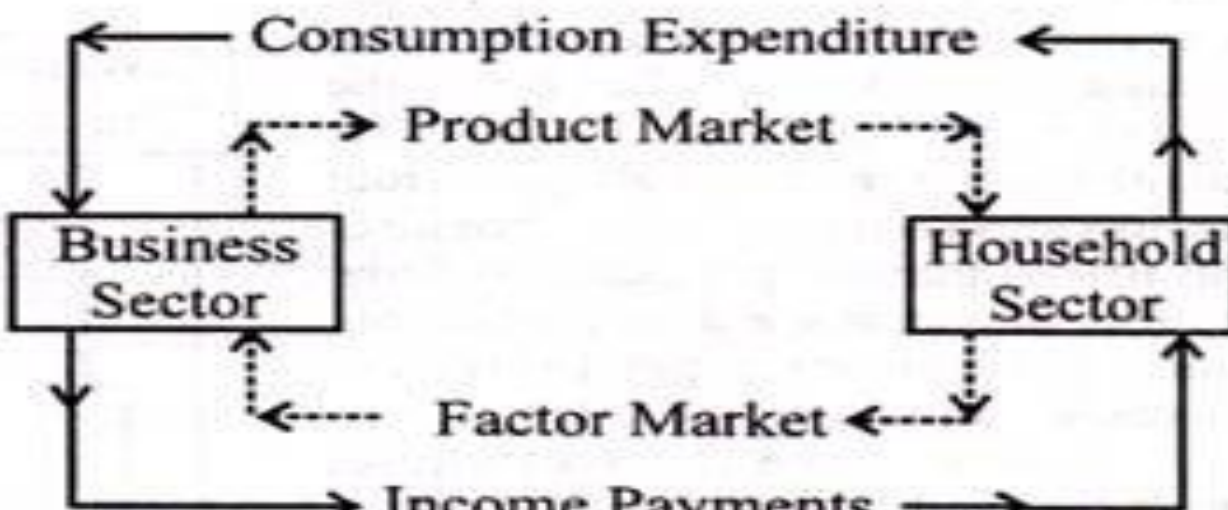

Fig. 1.

Two sector model with Banking system

$(Y = C + I)$

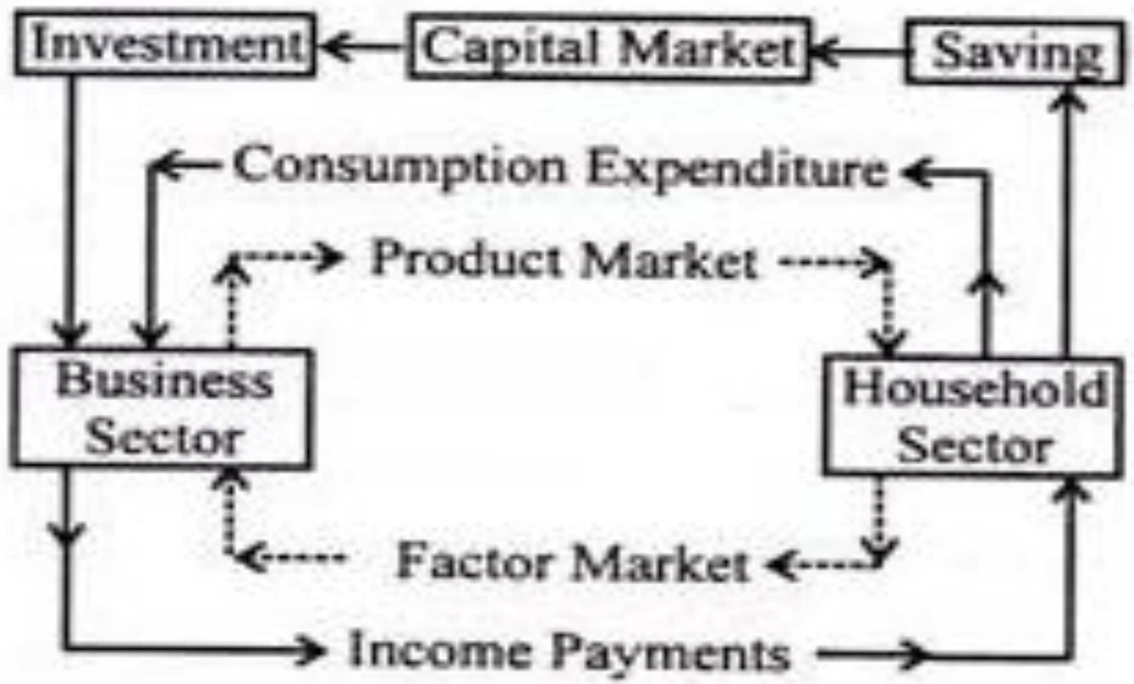

Fig. 2.

Three- Sector Model

Y = C + I + G

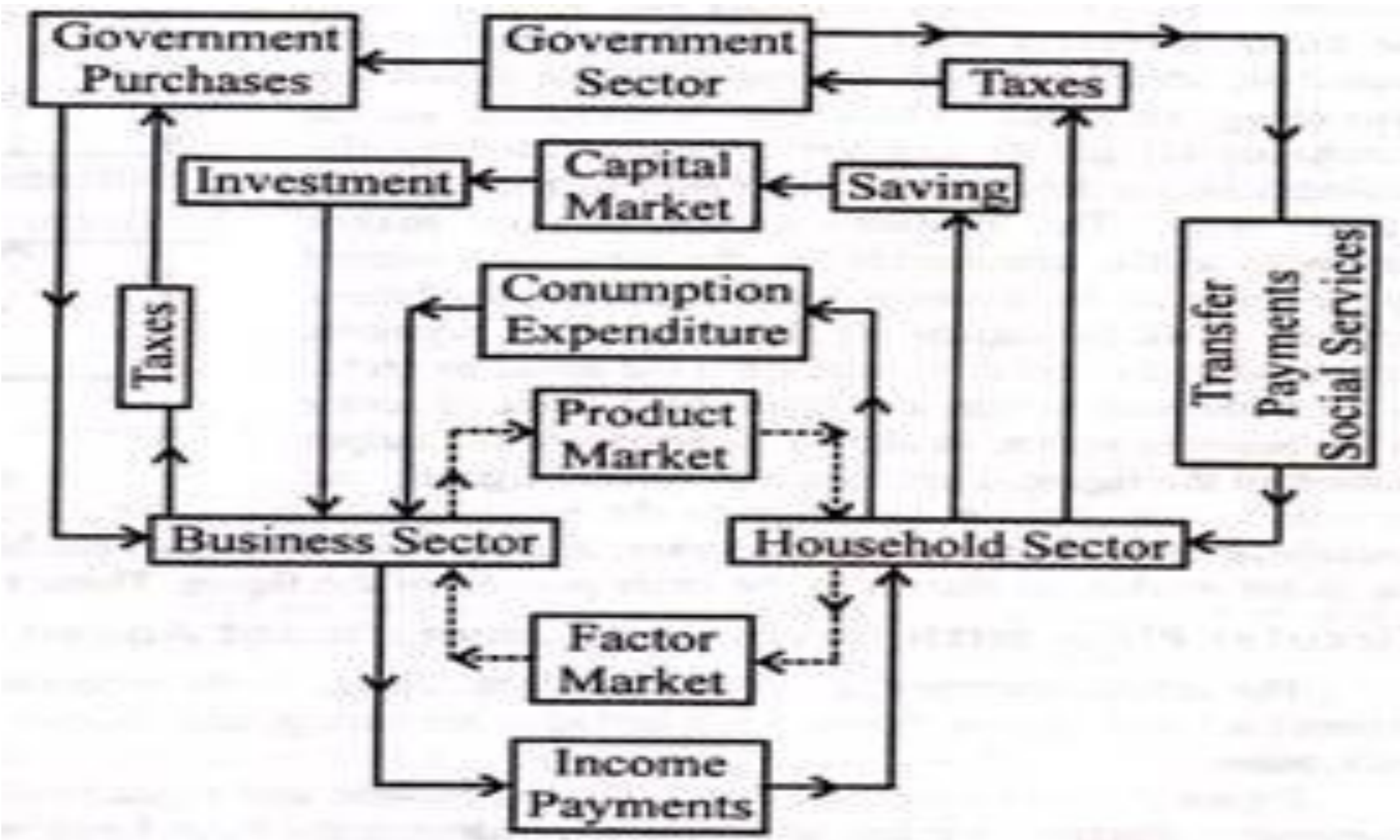

Fig. 3.

Four Sector Model

$Y = C + I + G + (X-M)$

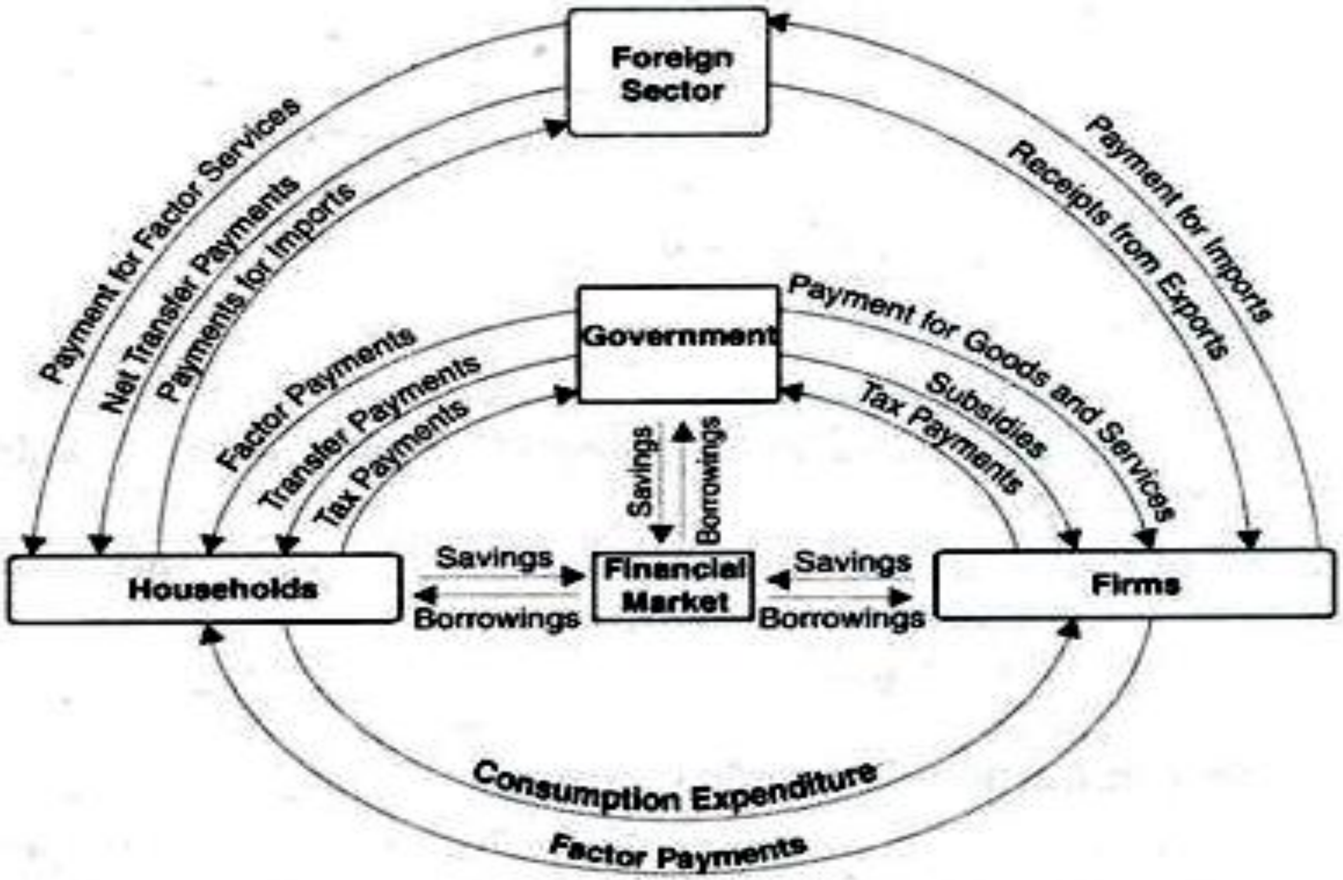

Fig. 1.7

Stock and Flow

- Stock is a quantity measurable at a particular point of time. e.g. total wealth of a person.
- Flow is a quantity measured over a period of time. e.g. annual salary of an individual.

Stock	Flow
Point of time	Over a period of time
No time dimension	Involves time dimension
Static concept	Dynamic concept

Final Goods and Intermediate Goods

- Intermediate goods are referred to as those goods that are used by businesses in producing goods or services. These goods are also known as producer goods.
- Final goods are referred to as those goods which do not require further processing. These goods are also known as consumer goods and are produced for the purpose of direct consumption by the end consumer.

National Income (NI)

- NI is defined as the money value of the total goods and services produced in a country during a financial year
- It is the total income of nation
- In India, it is central statistical organization (CSO) who is responsible for national income accounting

Gross Domestic Product (GDP)

- It is the market value of all final goods and services produced in an economy during a financial year

Gross National Product (GNP)

- It is the market value of all final goods and services produced in an economy during a financial year plus net factor income from abroad (NFIA)

$$\underline{\mathbf{GDP = GNP - NFIA}}$$

$$\underline{\mathbf{GNP = GDP + NFIA}}$$

National domestic product (NDP)

- It is the market value of all final goods and services produced in an economy during a financial year after deducting depreciation (consumption of fixed capital)
- Deprecation refers to the fall in value of capital due to wear and tear

NDP = GNP – Deprecation

Market price & Factor cost

- Market price is the price paid by the buyer of a commodity in the market
- Factor cost is the cost paid by the producer to the factor of production for their contribution in the production of commodity
- MP = Cost of production + Indirect taxes – Subsidies
- FC = Cost of production - Indirect taxes + Subsidies

Personal Income (PI)

- It is the sum of all income actually received by an individual from different sources in a country during financial year

Disposable income (DPI)

DPI = Personal income – Direct taxes

Percapita Income (PCI)

It is the per person average national income

PCI = NI / Population

METHODS FOR ESTIMATING NATIONAL INCOME

3 METHODS

1. Output method / Production method

2. Income method

3. Expenditure method

Output method / Production method

- It is also known as value added method .

Steps

1. Production units divides into different sectors like agriculture , industry , services sectors
2. Estimating the net value added by each sector
3. Summing it up to get the value of the domestic product (GDP)
4. Add NFIA with the domestic product > NI

Income Method

- Using this method , NI is obtained by adding up all the income of all individuals and business enterprises in the economy

- Income earned in the form of Rent (Land) , Wage (Labour) , Interest (Capital) , Profit (Organization)

- NI = Rent + Wage + Interest + Profit

Steps

- Production units divides into different sectors like agriculture , industry , services sectors
- Estimating factor income (Rent , Wage , Interest , Profit)
- Calculate NFIA

Domestic Factor Income + NFIA = NI

Expenditure Method

- It is also known as consumption – saving method
- This method considers the computation of NI by adding up all the expenditure made on goods and services during a given year

Types of Expenditures

1. Consumption expenditure (C) by households
2. Investment expenditure (I) by firms
3. Government expenditure (G)
4. Net Exports (X – M)

$$NI = C + I + G + (X - M)$$

Difficulties in the estimation of NI

- Income generated from the process of production for self- consumption
- All transfer payments
- Illegal income like smuggling , Black money etc.,
- Value of second hand goods
- Service of house-wives
- Lack of statistical data
- Problem of double counting
- Illiteracy
- Non- availability of data
- Lack of accountability

3 sectors of the economy

- Primary Sector: This sector deals with the extraction and harvesting of natural resources such as agriculture and mining.
- Secondary Sector: This sector comprises construction, manufacturing, and processing.
- Tertiary Sector: Retailers, entertainment, and financial companies make up this sector.

INFLATION

- It is the persistent increase in general price level or persistent decline in the real income of the people
- It means as the price rises, the value of money declines

Definition

- Coulborn “ Too much money chasing too few goods”

Inflation occurs due to an imbalance in demand and supply of money

Inflation

$$\frac{\text{Current year price} - \text{Base year price}}{\text{Base year price}} \times 100$$

Types of Inflation

1. Demand pull inflation
2. Cost push inflation
3. Creeping inflation > 0 – 3 %
4. Walking inflation > 3 – 10 %
5. Galloping inflation > More than 10%
6. Hyper inflation > More than 50%

Causes of Inflation

- Causes of inflation has been classified into two: Demand side factors and Supply side factors

Demand side Factors

- Increase in money supply
- Increase in disposable income
- Increase in consumer spending
- Black money
- Increase in exports
- Cheap monetary policy

Supply side factors

- Shortage in factors of production
- Industrial dispute
- Natural calamities
- Artificial scarcity (Hoarding)
- International factors

Consequences of Inflation

- Uncertainty in industry
- Deprecation of money
- Decrease in investment
- Social and political effects
- Effects on manufacturers

Methods to control Inflation

Monetary measures

- Bank Rate
- Open market operations
- Variable reserve ratio

Fiscal Measures

- Reduction of unnecessary expenditure
- Increase taxes
- Increase savings

Other measures

- Increase output
- Price control
- More imports
- Control black money

Business Financing

- Business finance refers to **funds availed by business owners to meet their needs** that may include commencing a business, obtaining top-up funds to finance business operations, obtaining finance to purchase capital assets for the business, or to deal with a sudden cash crunch faced by the business.

Sources of Capital

- Internal self – finance
- Public Deposits
- Loans from Bank
- Indigenous Bankers
- Development finance institutions

Bonds and Shares

- A **bond** is a fixed-income instrument that represents a loan made by an investor to a borrower (typically corporate or governmental).
- A **share** represents a unit of equity ownership in a company. Shareholders are entitled to any profits that the company may earn in the form of dividends.

Bonds	Shares
The investor lends money to the company	The investor owns part of the company
Risk is low	High risk
Issued by Govt. Institutions, Financial institutions etc.,	Issued by Corporate enterprises
Bond holders get interest, as a fixed payment	Shareholders get dividend
Return is certain	Return is uncertain
Maturity period is fixed	No maturity period

Money Market and Capital Market

- A financial market is a place where buyers and seller come together to trade in financial assets such as bonds, stocks, derivatives, currencies and commodities.
- The two most important components of financial market are the money market and capital market.

Money Market

- The money market is a good place for individuals, banks, other companies, and governments to park cash for a short period of time, usually one year or less.

Capital Market

- The capital market is a type of financial market where financial products like stocks, bonds, debentures are traded for a long duration of time.

Capital Market	Money Market
Long-term securities are traded in capital markets	Short-term securities are traded in money markets
Capital markets are well organized	Money markets are not that organized
Instruments in money markets are a low risk	Capital markets are the comparatively high risk
Capital markets generally give higher returns	Money markets give a low return on investments

Stock Market

- The stock market refers to public markets that exist for issuing, buying, and selling stocks that trade on a stock exchange.

Functions of Stock Market

- Fair Dealing in Securities Transactions
- Pricing of securities
- Investor Protection
- Safety of transaction
- Contributes to economic growth

Demat Account

- Demat is the abbreviation for "Dematerialization", which means to convert physical shares and securities into electronic form.
- A Demat Account or Dematerialised Account provides the facility of holding shares and securities in an electronic format.

Trading Account

- A trading account is an investment account for transacting in securities. We can buy or sell assets frequently through your trading account.
- Trading account acts as an investment account to holds your securities and other holdings.

Sensex

- It an investable index used to track the performance of India's 30 largest and most financially sound companies. These companies are listed on the BSE (previously known as the Bombay Stock Exchange) and represent some of the biggest and most important sectors of the Indian economy.
- The Sensex was launched on Jan. 1, 1986.

NIFTY

- The Nifty meaning is a derivation from the mix of two words, i.e. “National Stock Exchange” and “fifty”.
- It is an abbreviation of the National Stock Exchange Fifty.
- It is a collection of top performing 50 equity stocks that are actively trading in the index. However, 51 stocks are currently trading on Nifty. Hence, Nifty is also known as Nifty50 or CNX Nifty.