Module 4

Macro economic concepts

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
$Y = C + I$

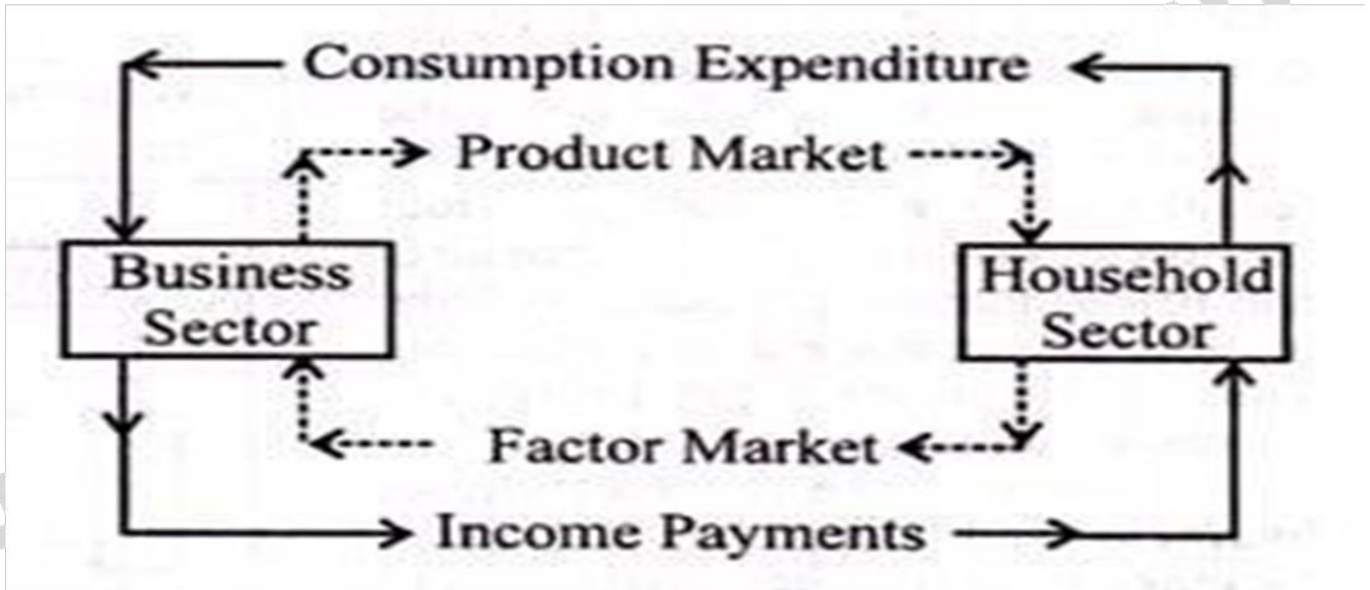


Fig. 1.

3 sector model-
Y=C+I+G

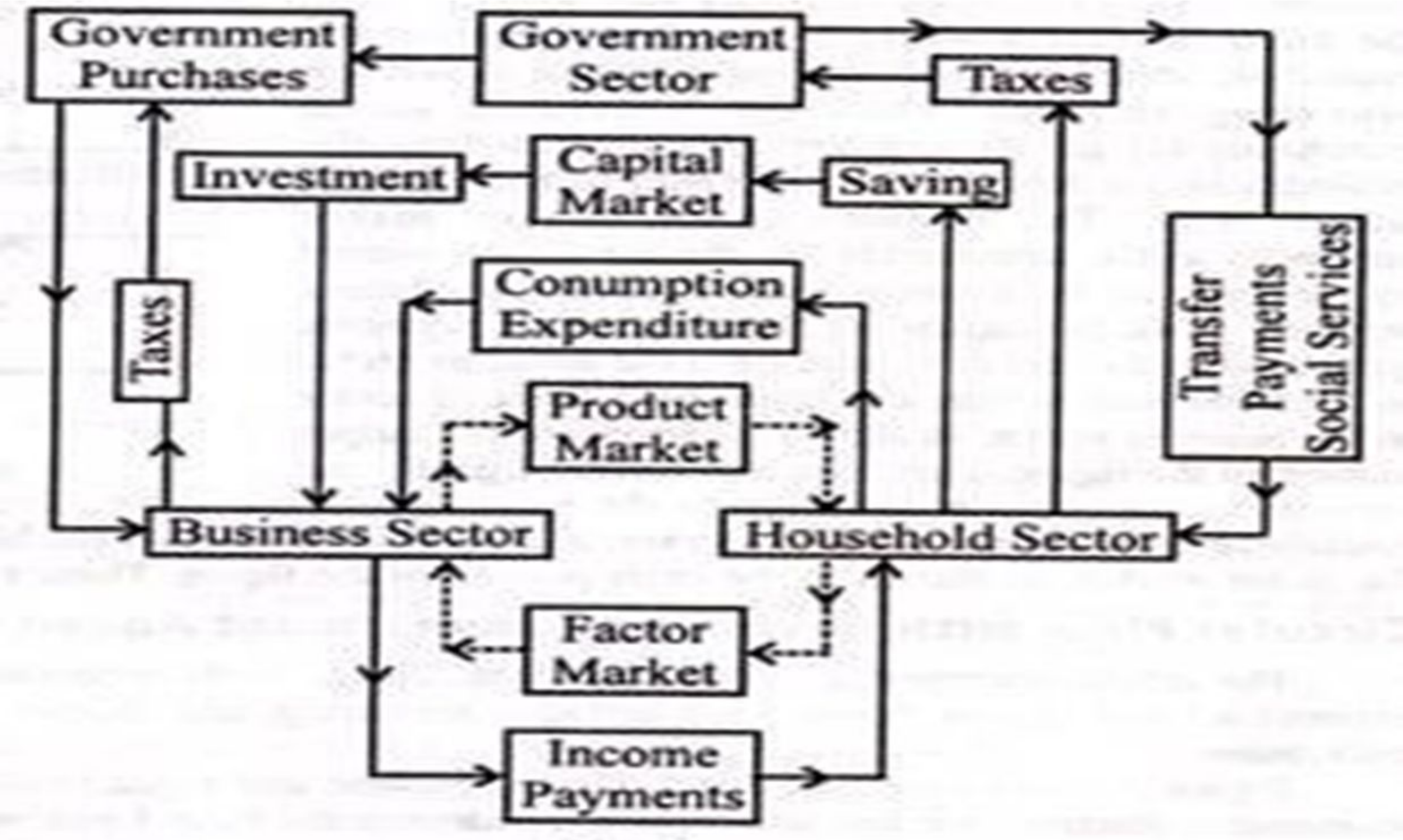


Fig. 3.

# 4 sector Model
Y= C+I+G+(X-M)

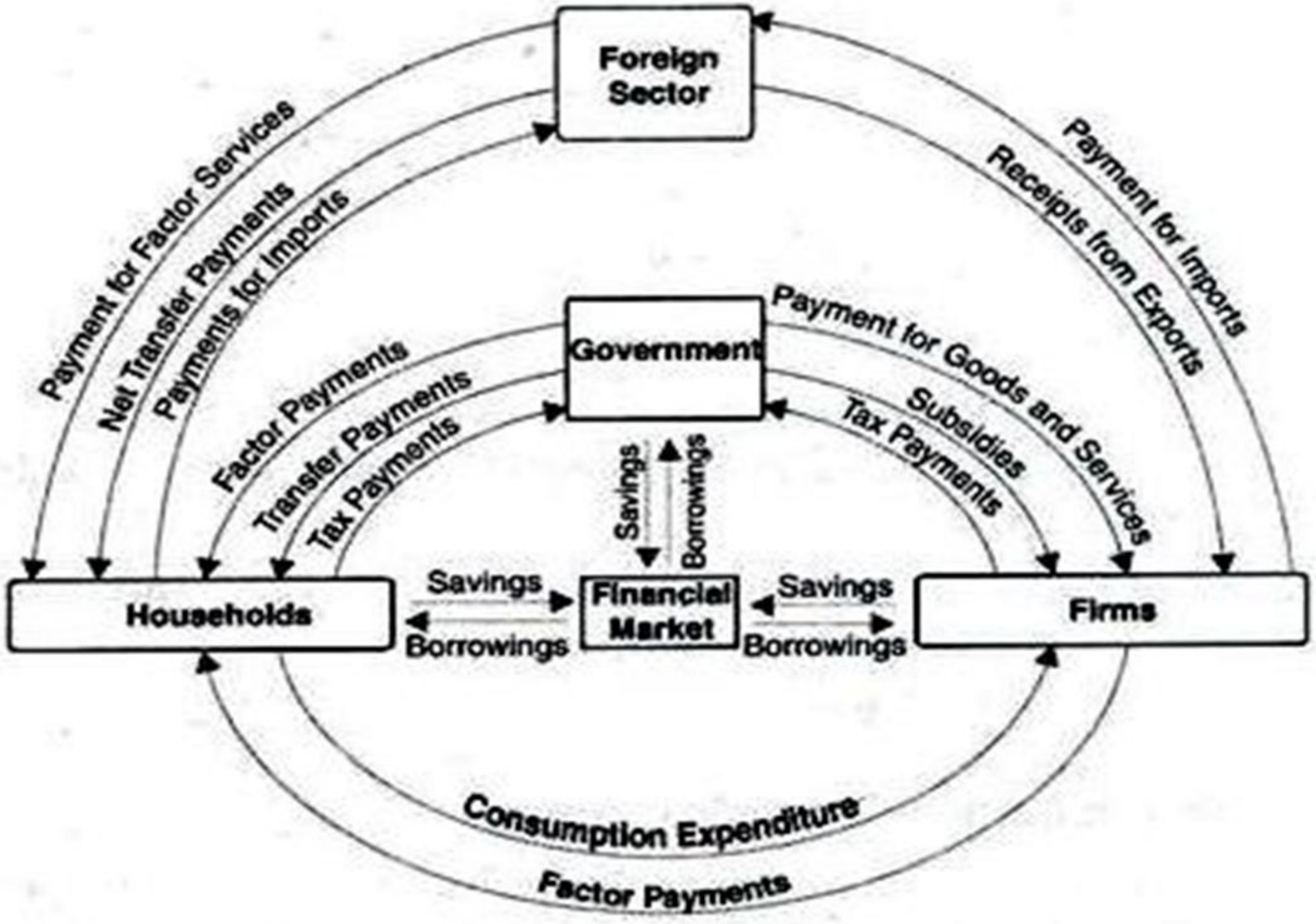


Fig. 1.7

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.

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.

National Income (NI)

NI is defined as the money value of the total goods and services produced in a country during a financial year

1. It is the total income of nation
2. In India, it is central statistical organization (CSO) who is responsible for national income accounting

DEFINITIONS

1.Gross Domestic Product (GDP)

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

2.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)

GDP = GNP – NFIA

GNP = GDP + NFIA

- The NFIA is calculated by subtracting the income earned by foreigners in India from the income earned by Indians in foreign countries.

Net Factor Income from Abroad = Income earned by Indians in foreign countries - Income earned by foreigners in India.

3.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

Depreciation refers to the fall in value of capital due to wear and tear

NDP = GNP – Depreciation

- **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

4.Personal Income (PI)

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

5.Disposable income (DPI)

DPI = Personal income – Direct taxes

6.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

1.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 gross 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**

2.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

3.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

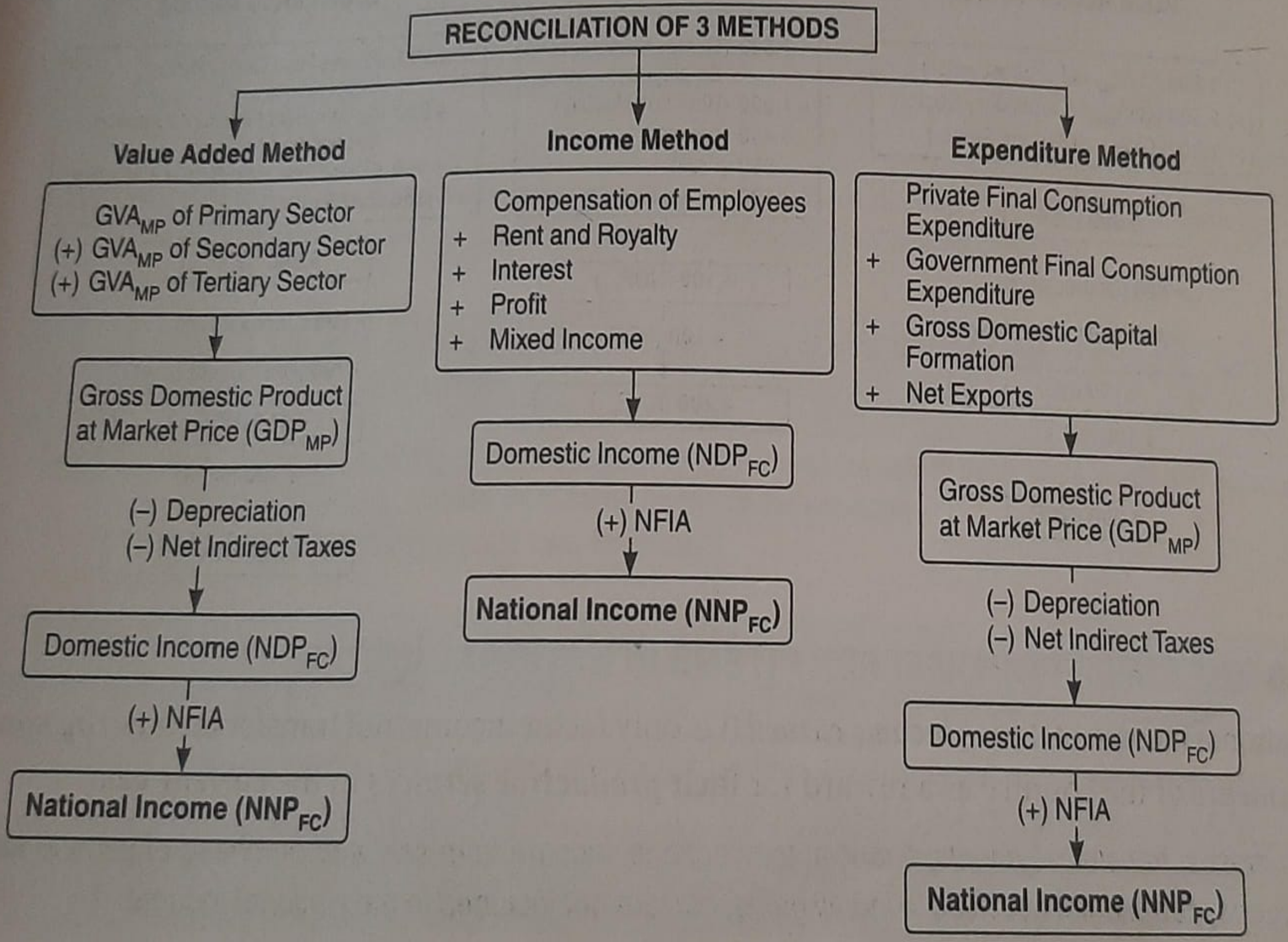
2.Investment expenditure (I) by firms

3.Government expenditure (G)

4.Net Exports (X – M)

NI = C + I + G +(X – M)

methods used for calculating National Income.

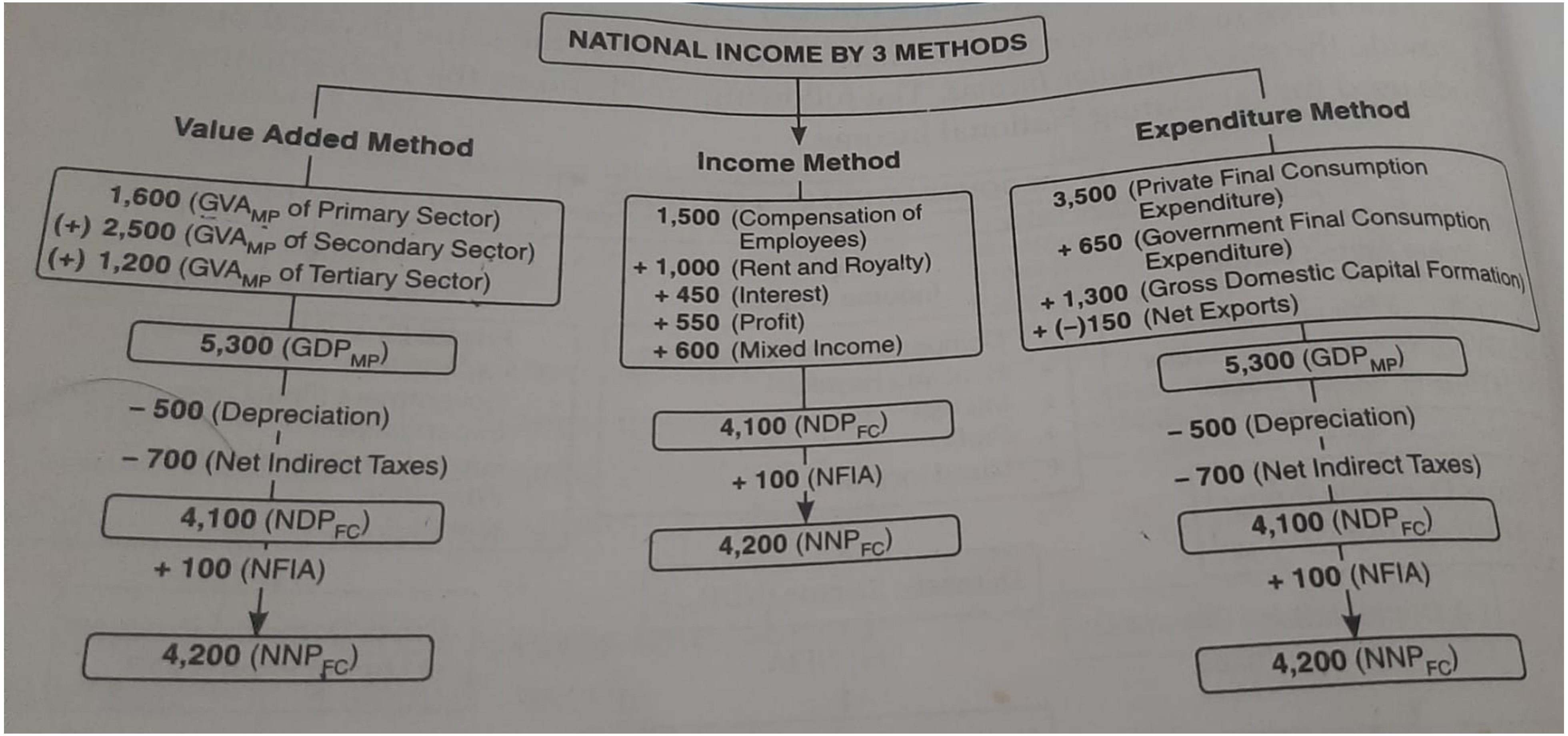


Example for Reconciliation of Three Methods

From the following data, calculate national income by (a) Value Added Method; (b) Income Method; and (c) Expenditure Method.

Particulars	₹ in crores
(i) Gross value added by Primary Sector	1,600
(ii) Gross value added by Secondary Sector	2,500
(iii) Gross value added by Tertiary Sector	1,200
(iv) Compensation of employees	1,500
(v) Rent and Royalty	1,000
(vi) Interest	450
(vii) Mixed Income	600
(viii) Profit	550
(ix) Private final consumption expenditure	3,500
(x) Government final consumption expenditure	650
(xi) Gross domestic capital formation	1,300
(xii) Net Exports	(–) 150
(xiii) Net Indirect taxes	700
(xiv) Depreciation	500
(xv) Net Factor income from abroad	100

problem


NATIONAL INCOME BY 3 METHODS
Value Added Method
1,600 (GVA$_{MP}$ of Primary Sector)
(+) 2,500 (GVA$_{MP}$ of Secondary Sector)
(+) 1,200 (GVA$_{MP}$ of Tertiary Sector)
5,300 (GDP$_{MP}$)
– 500 (Depreciation)
– 700 (Net Indirect Taxes)
4,100 (NDP$_{FC}$)
+ 100 (NFIA)
4,200 (NNP$_{FC}$)
Income Method
1,500 (Compensation of Employees)
+ 1,000 (Rent and Royalty)
+ 450 (Interest)
+ 550 (Profit)
+ 600 (Mixed Income)
4,100 (NDP$_{FC}$)
+ 100 (NFIA)
4,200 (NNP$_{FC}$)
Expenditure Method
3,500 (Private Final Consumption Expenditure)
+ 650 (Government Final Consumption Expenditure)
+ 1,300 (Gross Domestic Capital Formation)
+ (–)150 (Net Exports)
5,300 (GDP$_{MP}$)
– 500 (Depreciation)
– 700 (Net Indirect Taxes)
4,100 (NDP$_{FC}$)
+ 100 (NFIA)
4,200 (NNP$_{FC}$)

Difficulties in measuring N.I

- Statistical difficulties
- Conceptual difficulties
- Value of second hand goods
- Service of house-wives
- Problem of double counting
- Illiteracy
- Lack of accountability

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
- The value of money varies inversely with price level

Definition

- Coulborn " Too much money chasing too few goods"
- Inflation occurs due to an imbalance in demand and supply of money

Types of Inflation

1. Demand pull inflation/wage inflation
2. Cost push inflation
3. Creeping inflation > 0 – 3 %- good
4. Walking inflation > 3 – 10 %-measures taken
5. Galloping inflation > More than 10%- never good
6. Hyper inflation > More than 50% - financial crisis

- 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

Effects of Inflation

- uncertainty in industry-During inflation the price of raw materials rises. The wage costs are also increasing.
- discourage saving-the value of saving s also decline with that of oney. Money saved earlier has been used for purchasing goods at current period.
- social and political effects-inflation disrupts social life by making rich more richer. The standard morality goes down and people will loose faith in democratic government.
- Effect on distribution of income and wealth; and
- Effect on economic growth.

- 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

- 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

- 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 frequentlyyour 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