INTRODUCTORY MACRO ECONOMICS
Unit VI: NATIONAL INCOME AND RELATED AGGREGATES:

MACRO ECONOMICS

KEY CONCEPTS

- Macro Economics: Its meaning
- Consumption goods, capital goods, final goods, intermediate goods, stock and flow, gross investment and depreciation.
- Circular flow of income
- Methods of calculation of national income
- Value added method (product method)
- Expenditure method
- Income method
- Concepts and aggregates related to national income
- Gross national product
- Net National product
- Gross and Net domestic product at market price and at factor cost.
- National disposable income (Gross and net)
- Private income
- Personal income
- Personal disposable income
- Real and Nominal GDP
- GDP and welfare

Macro Economics: - Macroeconomics is the study of aggregate economic variables of an economy.

Consumption goods:- Are those which are bought by consumers as final or ultimate goods to satisfy their wants.

Eg: Durable goods car, television, radio etc.

Non-durable goods and services like fruit, oil, milk, vegetable etc.

Semi durable goods such as crockery etc.

Capital goods – capital goods are those final goods, which are used and help in the process of production of other goods and services. E.g.: plant, machinery etc.

Final goods: Are those goods, which are used either for final consumption or for investment. It includes final consumer goods and final production goods. They are not meant for resale. So, no value is added to these goods. Their value is included in the national income.

Intermediate goods intermediate goods are those goods, which are used either for resale or for further production. Example for intermediate good is- milk used by a tea shop for selling tea.

Stock: - Quantity of an economic variable which is measured at a particular point of time.

Stock has no time dimension. Stock is static concept.

Eg: wealth, water in a tank.

Flow: Flow is that quantity of an economic variable, which is measured during the period of time.

Flow has time dimension- like per hr, per day etc.

Flow is a dynamic concept.

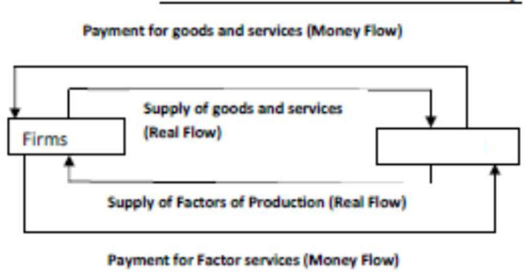
Eg: Investment, water in a stream.

Investment: Investment is the net addition made to the existing stock of capital.

Net Investment = Gross investment – depreciation.

Depreciation: - depreciation refers to fall in the value of fixed assets due to normal wear and tear, passage of time and expected obsolescence.

Circular flow in a two sector economy.



Circular flow in a two sector economy.

Producers (firms) and households are the constituents in a two sectors economy. Households give factors of production to firm and firms in turn supply goods and services to households.

Related aggregates

Gross Domestic product at market price

It is the money value of all final goods and services produced during an accounting year with in the domestic territory of a country.

Gross National product at market price:

It is a money value of all final goods and services produced by a country during an accounting year including net factor income from abroad.

Net factor income from abroad:

Difference between the factor incomes earned by our residents from abroad and factor income earned by non-residents with in our country.

Components of Net factor income from abroad

- Net compensation of employees
- Net income from property and entrepreneurship (other than retained earnings of resident companies of abroad)
- Net retained earnings of resident companies abroad

Formulas

- NNP Mp = GNP mp - depreciation
- NDP Mp = GDPmp - depreciation
- NDP Fc = NDP mp – Net indirect taxes (indirect tax – subsidies)
- GDP Fc = NDP fc + depreciation
- NNP Fc = GDP mp - depreciation + Net factor income from abroad – Net indirect taxes
- (NNP FC is the sum total of factor income earned by normal residents of a country during the accounting year)
- NNP fc = NDP fc + Net factor income from abroad.

Concept of domestic (economic) territory

Domestic territory is a geographical territory administered by a government within which persons, goods and capital circulate freely. (Areas of operation generating domestic income, freedom of circulation of persons, goods and capital)

Scope identified as

*Political frontiers including territorial waters and air space.

*Embassies, consulates, military bases etc. located abroad but including those locates within the political frontiers.

*Ships, aircrafts etc., operated by the residents between two or more countries.

*Fishing vessels, oil and natural gas rigs etc. operated by the residents in the international waters or other areas over which the country enjoys the exclusive rights or jurisdiction.

Resident (normal resident):-

Normal resident is a person or an institution who ordinarily resides in that country and whose center of economic interest lies in that country.

(The Centre of economic interest implies :-(1) the resident lives or is located within the economic territory. (2) The resident carries out the basic economic activities of earnings, spending and accumulation from that location 3. His center of interest lies in that country.

Relation between national product and Domestic product.

Domestic product concept is based on the production units located within domestic (economic) territory, operated both by residents and non-residents.

National product concept based on resident and includes their contribution to production both within and outside the economic territory.

National product = Domestic product + Residents contribution to production outside the economic territory (Factor income from abroad) - Non- resident contribution to production inside the economic territory (Factor income to abroad)

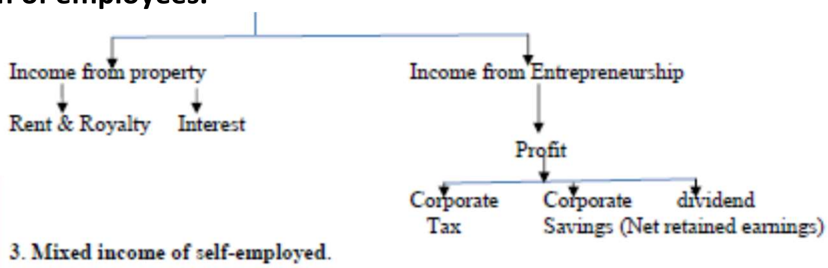
Methods of calculation of national income

I - PRODUCT METHOD (Value added method):

- Sales + change in stock = value of output
- Change in stock = closing stock – opening stock
- Value of output - Intermediate consumption = Gross value added (GDPMp)
- NNP Fc (N.I) = GDPMp (-) consumption of fixed capital (depreciation)
  (+) Net factor income from abroad
  (-) Net indirect tax.

Income method:

1. Compensation of employees.



3. Mixed income of self-employed.

- NDP fc = (1) + (2) + (3)
- NNP fc = NDP fc (+) Net factor income from abroad
- GNP mp = NDP fc + consumption of fixed capital + Net indirect tax
  (Indirect tax – subsidy)

Expenditure method:

1. Government final consumption expenditure.

2. Private final consumption expenditure.

3. Net Export.

4. Gross domestic capital formation.

Gross Domestic fixed **+** Change in stock

Capital formation

GDPmp = (1) + (2) + (3) + (4)

NNP fc = GDPmp - consumption of fixed capital + NFIA- Net indirect taxes Note: If capital formation is given as <u>Net domestic capital formation</u> we arrive at NDPmp. Capital formation = Investment

CALCULATION OF NATIONAL DISPOSABLE INCOME, PRIVATE INCOME, PERSONAL INCOME AND PERSONAL DISPOSABLE INCOME

National Disposable income	**Private Income includes factor income as well as Transfer income (Earned income + Unearned income)**	**Personal Income**
It is the income from all the sources (Earned Income as well as transfer payment from abroad) available to resident of a country for consumption expenditure or saving during a year. NNP_{FC} + Net Indirect tax + Net current transfer from abroad =Net National disposable income. (Gross National Disposable Income includes depreciation)	*Factor income from net domestic product accruing to private sector includes income from enterprises owned and controlled by the private individual.* *Excludes:-* *1. Property and entrepreneurial income of the Gov. departmental enterprise* *2. Savings of the Non-departmental Enterprise.* Factor Income from NDP Accruing to private sector = NDP_{FC} (-) income from properly entrepreneurship accruing to the govt departmental Enterprises (-) savings of Non departmental enterprises. **<u>Private Income Includes</u>** * Factor income from net domestic product accruing to private sector. + Net factor income from abroad + Interest on National Debt + Current transfer from Govt. + Current transfer from rest of the world.	*PI is the income Actually received by the individuals and households from all sources in the form of factor income and current transfers.* Personal income = Private Income (-) corporation tax. (-) Corporate Savings OR Undistributed profits **<u>Personal disposable income</u>** Personal income (-) Direct Personal tax (-) Miscellaneous Receipts of the govt. Administrative department (fees and fines paid by house hold.)