UNIT – 7

National income account

1. Nature and meaning of National income account

❖ **Textures of National income**

- ✓ **National income** is the aggregate monetary value of all final goods and services produced in a country in a given year.
- ✓ Its features are
- counted for a period a period of one year
- measure the flow of goods and services during a year
- includes only final goods and services
- expressed interims of monetary value
- ✓ **National income** also the sum factor incomes in a country

❖ Importance of NIA (National income account) NIA is :-

- ✓ indicator of economic progress
- ✓ For investment, consumption, employment etc..
- ✓ significant in business policy making
- ✓ significant for trade union
- ✓ for measure of economic growth
- ✓ to compare with other countries
- ✓ for knowledge of structural change
- ✓ Significant for economic analysis.

2. Measure of NIA

❖ the two common measure are

1. gross domestic product (GDP)
2. gross national product (GNP)

1. GDP (gross domestic products
   - ✓ is the monetary value of all final goods and services produced in the country in a given year
   - ✓ from this definition we understand
   - it is gross measure
   - only use market value
   - only count new products
   - includes only new products
   - includes only finished product
   - intermediate good not included
   - took final goods I.e. final for consumption
   - all goods and services domestically produced
2. GNP (gross national products
   - ✓ is also the monetary value of all final goods and services produced by factor owner irrespective of their resident in a given year
   - ✓ GNP = GDP ± NFI

     Where NFI ⟹ net factor income

❖ Approach to measure GDP

- ✓ there are 3 approaches to measure GDP
  - i. value added method
  - ii. income method

iii. expenditure method

i. value added method :- in this method there are two approach

a) final product approach

$$GDP_{NP} = P(Q) + P(S)$$

Where P (Q) = is price of quantity goods

P (S) = is price of services.

b) <u>value added approach</u>

<u>Value added</u> = is the difference b/n total value of output of a firm and value of input used to produce it

ii. income method

- ✓ National income from the sale of payment to factor owners in form of rent, wage, interest and <u>profits</u>
- ✓ we get GDP_{MP} by adding all income incurred by factor of production plus depreciation and indirect business tax

iii. Expenditure Methods

- ✓ is calculated by expenditure on the final use of domestically produced goods and services.

$$GDP_{MP} = C + Ig + G + (x - m)$$

Where C = personal consumption

Ig = gross private investment expenditure

G = government expenditure

X- m = net export

Problems in measuring GDP

❖ ***the central problems are***

A. Which method is appropriate? it is a constant problem raised by enumerator
B. different opinion regard to definition of national income
C. no clear cut demarcation b/n productive and non productive activates
D. non – availability of data
E. batter system
F. the problem of double counting and /or omission
G. production for self consumption
H. non – maintenance of accounts

❖ ***Real GDP and nominal GDP***

➢ ***<u>Real GDP-</u>***

- ✓ is when goods and services included in GDP are valued at constant price
- ✓ is it is constant birr GDP

➢ ***<u>Nominal GDP</u>***

- ✓ when the GDP measured on current market price
- ✓ it is current birr GDP

❖ real GDP affected by – change in physical output but nominal GDP affected by Bach

- ✓ change in physical output
- ✓ change in price

❖ conversion of nominal GDP into real GDP

$$Real\,GDP = \frac{nominal\,GDP}{CPI\ of\ current\ year} \times 100$$

Where CPI is consumer price index

3. other national income account
   - ✓ along with GDP and ENP there are other measure of NIA, these are

i. net domestic product at market price

NDP mp = GDP – depreciation

Depreciation – is consumption of assets of production process

ii. net national product at market price

$NNP_{mp} = GNP_{MP} - deperciation \vee NNP = NDP + NFI$

iii. net national product at factor cost

- ✓ it is sometimes also national income NNP_{FC} or NI = NNP_{MP} - indirect tax

iv. **Personal income (Y) -** is the sum of earned income and transfer income received by house hold from all sources outside and inside of the country

v. personal disposable income (yd)

- ✓ the money income received by households after taxed

UNIT – 8

Consumption, saving and investment

1. ***consumption-*** is expenditure made by house hold for final goods and services
   - ✓ consumption is depend on income but there is consumption if there no income

❖ ***types of consumption***

A. autonomous consumption :- is a consumption independent of income, or if no income or zero there is consumption
   - it is consumption for survival

B. Induced consumption – is consumption depending on income or parts of consumption varies with income.

Determinates of consumption

- ✓ the major determinants of consumption expenditure are
  - money income
  - distribution of income
  - level of direct tax
  - expectation of the future
  - rate of interest
  - level of wealth

Consumption function

Is shows the relationship B/n consumption and income in mathematical equation.

$C = f(Yd)$

Where C = consumption expenditure

Y = disposable income

Also shown as

C = a + byd where

C= consumption a = autonomous consumption

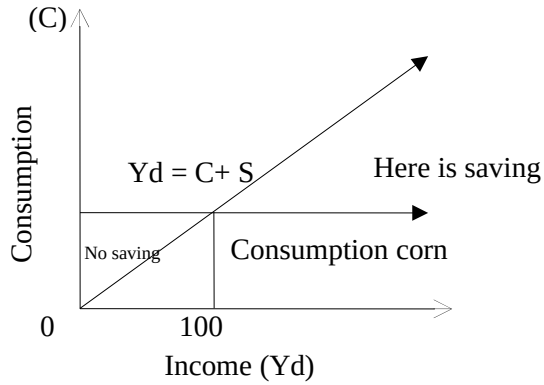
b = induced consumption

Example = $C = bo + 0.8\ yd$ if income is 200 birr per day

- 60 birr = for autonous expenditure B/C C = 60 + 0.8 (0) = 60
  I.e. it not affected by income
- induced consumption is 0.8 (200) = 160 birr
- total consumption is C = 60 + 160 birr 220 birr
  - ✓ let see consumption schedule

Y	C
0	50
50	75
100	100
150	125
250	175

Let draw the curve for the above schedule



Average and marginal propensity to consumption

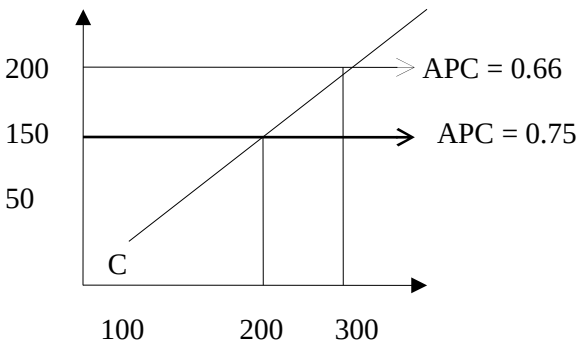
1. average propensity to consumption is (APC)
   - $APC = \frac{C}{Yd}$

Example:- at income 200 birr (is 150)

$$APC = \frac{150}{200} = 0.75$$

at income 300 birr C is 2000

$$APC = \frac{C}{Yd} = \frac{200}{300} = 0.66 \text{ Therefore}$$



- the curve show that As income increase APC decrease

2. marginal propensity to consumption (MPC)

   it is also extra consumption

   $$MPC = \frac{\Delta C}{\Delta Yd}$$

Example:- if in consumption crease from 50 to 75 as income in crease from 100 to 150 birr MPC is

$$MPC = \frac{\Delta C}{\Delta Yd} = \frac{25}{50} = 0.50$$

properties of MPC are:

- MPC > 0 but not more than one is as income increase
- MPC falls as income falls
- MPC of the poor greater than the rich one
- MPC stable in short run

3. saving – is part of income which is not spent for consumption
   - ✓ is also an excess of income over consumption S = Yd - C

Determinants of saving : are

- level of income
- distribution of income
- expectation of future
- rate of interest
- level of wealth
- level of direct taxes
- individual nature

Saving function:- is the relationship B/n saving and in come in mathematical equation.

Average and marginal propensity to save

i. average propensity to save (APS)

   $$APS = \frac{S}{Yd}$$

ii. marginal propensity to save

   $$MPS = \frac{\Delta S}{\Delta Yd}$$

Properties of MPS are

- value of MPS range B/n 0 and 1
- MPS increase as income in crease
- MPS of the poor lower – than rich

❖ the relation B/n saving and consumption

Show mathematically as follow

Yd = C + S

$$\frac{Yd}{Yd} = \frac{C}{Yd} + \frac{S}{Yd}$$

$$1 = \frac{C}{Yd} + \frac{S}{Yd}$$

1 = $APC + APS$

APC = 1 – APS and APS = 1 – APC

Also = Yd = C + S

$$\frac{\Delta Yd}{\Delta Yd} = \frac{\Delta C}{\Delta Yd} + \frac{\Delta s}{\Delta Yd}$$

1 = MPC + MPS

MPC = 1 – MPS or MPS = 1- MPS

4. Investment – addition of money for producing products by consuming other goods and services as input.

Types of investment

i. induced investment – is an investment made with motive of profit
ii. autonomous investment – is an investment made irrespective of income

Determinates of investment are

- profit expectation
- rate of interest
- corporate tax
- level of national income

UNIT – 9

INTERNATIONAL TRADE

- ***international trade:-*** is exchange of commodities among two or more countries of the world
  - Types of intention trade
- factors determining international or foreign trade are
  - un equal distribution of resources
  - un equals distribution of population
  - un equal distribution of capital
  - level of technological development
  - increasing future to scale
  - difference in demand
- advantages of foreign trade are
  - Varity of goods
  - availability of raw materials
  - specialization and division of labor
  - increase in efficiency through widening of market
  - cheaper goods
  - competition
  - optimum allocation of resources
  - vent for surplus production
  - possibility of eco – development
- theories of foreign trade

- ***Absolute advantage*** – each countries should specialized in the production of that commodity which enjoy to export to other countries and vice verse.
- ***comparative advantage*** - if one country has an absolute advantage on both goods export only which has yeast cost.

- Types of international trade
  a) **surplus trade** – when export more than import
  b) **deficit trade** – when export less than import
  c) **balance trade** – when export equality import
- restriction on international trade imposed in form of
  - tariff
  - quota

2. balance of payment (BOP)

- ✓ is a systematic record of all international economic transaction, visible and invisible, of a country during a given period of time usually a year

- **categories of BOP**
  - ✓ are components of balance of payment they are

a) current account of BOP

- ✓ inflow and out flow of foreign currency that result from flow of goods and services and unilateral transfer

b) **capital account** – is a transaction B/n the resident of a country and the rest of world which cause change in asset or liability status of the citizen of a country

- **foreign exchange** – is all currencies other than domestic currency of a country
- types of exchanges are –

a) fixed exchange rate is a rate at which officials fixed interims of gold or any other currency by the government adjusted only
   - ✓ when country raise or down the value of currency interims of foreign currency
     - raising value called revaluation
     - downing value called devaluation

b) Floating exchange rate – us a rate at which is determined by forces of supply and demand in foreign exchange market.
   - ✓ fall in value of currency called depreciation
   - ✓ an increase in value of a currency is called appreciation

- a change in the value of the currency of a country in terms of foreign currency affect balance of payment

UNIT – 10

macroeconomic policy instrument

1. aggregate demand and supply

a) aggregate demand

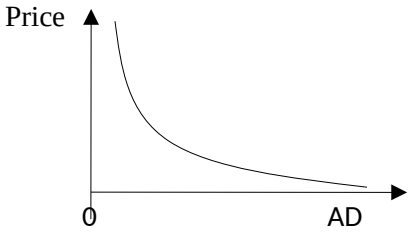
- is the total amount of money which all section of the economy are ruddy to spend one the purchase of commodities in an economy in a given year

  AD = C+I_g+G+¿

- determinants of aggregate demand are
  - ✓ price
  - ✓ level of income
  - ✓ real interest rate
  - ✓ level of economic activities in the country

- ✓ availability of credit

➢ AD curve indicate the output which will be demanded in the economy at various price level.
it is down ward sloping curve



b) Aggregate supply – is the total output that producers in an economy are willing to produce and sell at various price in a given year.

➢ **<u>determinates of aggregate supply are</u>**

- price
- cost of input
- availability of capital and labor
- managerial efficiency
- state of technology
- tax policy of a government
- weather condition

2. <u>types of macroeconomic policies</u>

➢ there are 3 types of macroeconomic policy

i. **<u>fiscal policy:-</u>** is a policy deals about government expenditure and revenue
   - ✓ it grouped in two
     a) expansion fiscal policy
     b) contraction fiscal policy

ii. **<u>monetary policy</u>** – is the policy of the central bank related to supply, availability and cost of money

iii. **<u>income policy –</u>** is the control of government over workers wage

➢ major instruments of expansionary fiscal policy are:-
   - ✓ increase of government expenditure
   - ✓ reduce of tax rate
   - ✓ reduction of public borrowing

➢ major instruments of contraction fiscal policy are
   - ✓ reducing the in the government expenditure
   - ✓ increase in tax rate
   - ✓ increase public borrowing

➢ major instrument of expansion many policy reduce are
   - ✓ reduce in bank rate
   - ✓ buying of bond and treasure bill
   - ✓ reduce in cash reserve ratio

➢ major instrument measure of contraction money policy are :
   - ✓ increase in bank rate
   - ✓ selling of bonds and treasure bill
   - ✓ increase in cash reserve ratio
   - ✓