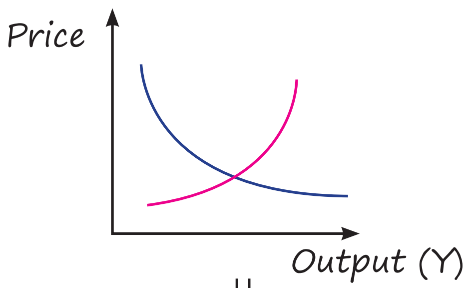
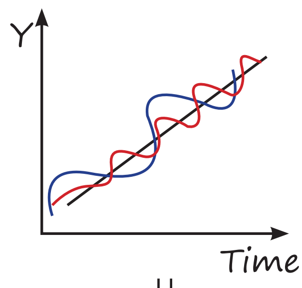
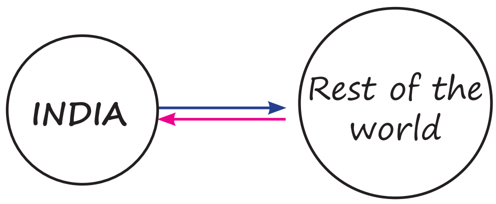
INTRODUCTION TO MACRO ECONOMICS

AD & AS | Business Cycle | Globalization







⇓ National Income (Chap I)

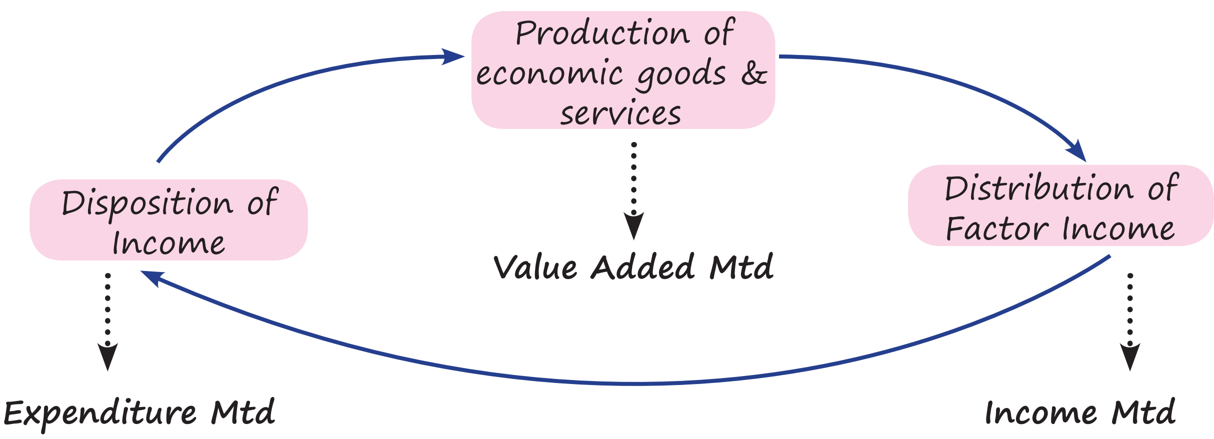
⇓ Fiscal Policy (Chap II) & Monetary Policy (Chap III)

⇓ International Trade (Chap IV)

NATIONAL INCOME

UNIT-I

1. Circular Flow of Income (NI Computation)



2. Measures of NI

Measures

$MP = FC + NIT$

- Market Price (MP)
  - Gross
    - Domestic: GDP_{MP}
    - National: GNP_{MP}
  - Net
    - Domestic: NDP_{MP}
    - National: NNP_{MP}
- Factor Cost (FC)
  - Gross
    - Domestic: GDP_{FC}
    - National: GNP_{FC}
  - Net
    - Domestic: NDP_{FC}
    - National: NNP_{FC}

Gross Value – Depreciation = Net Value

Domestic Value + NFIA = National Value

GDP_{MP} → Measures of Mkt. value of all final economic goods & services produced within the domestic territory/ frontier, gross of depreciation in a given time period

NNP_{FC} → Net value of all economic goods & services produced within the domestic territory/frontier of a country in an accounting year plus Net Factor Income from Abroad

3. Measurement of NI

A. Expenditure Method : C + I + G + (X–M)

C ⇒ Consumption by Household

- Produced this years consumed this year
- Produced last year consumed this year
- Imports by household

I ⇒ Investment by Business Sectors

- Fixed Investment. (Flat, Buildings etc)
- Inventory Investment (Cl St – Op St)

If Depreciation is considered then we get Net Invt. ∴Net Product

G ⇒ Govt. Spendings

Fixed Invt. (Incl. in I)

Current Goods & Services

(X–M) ⇒ Export – Import (NX)

If NFIA is considered then National Product

B. Income Method : R + I + P + W

R ⇒ Rent & Royalty

I ⇒ Interest

P ⇒ Profit

W ⇒ Wages or compensation to employees

Mixed Income is also included

C. Production Method OR Valued Added Method :

Value of All Output – Value of All Intermediate Goods

4. Other Points

Economic Activities

Creation of goods & services by exchange & has a mkt. value.

Non-Economic Activities

If Either it is not exchanged on it has no Mkt. value.

All Non-Economic activities are excluded from NI except

1. Self-consumption of Agricultural Produce.
2. Imputed or Original Rent
3. Expenditure done by Govt. on current goods & Services.

Transfers Payment are excluded from NI.

Financial Transactions are excluded from NI

Exchange of previously produced goods are excluded from NI.

Any value of service that occur during the sale of above 2 pts are included in NI.
Illegal activities are excluded from NI.

5. Personal Income & Disposable Personal Income

PI = NI + Income received but not earned – Income earned but not received

= NNP_{Fc} + TP – Corporate tax, R/E

DPI = PI – Personal Income tax

6. Nominal GDP v/s Real GDP

Value of Current year Production at current year prices = Nominal GDP

Value of Current year Production at base year prices = Real GDP

$$\text{GDP Index OR NI Index OR NI deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100\%$$

7. Per Capital Income = $\frac{\text{Real GDP}}{\text{Total Popln.}}$

8. Misc. Topics

- Usefulness of NI
- Measurement of NI in India
- System of Regional Accounts in India
- Limitation & Challenge of NI Computation

9. Sums from ICAI

UNIT –II

1. Assumption

Supply is perfectly elastic (i.e., at bottle neck)

∴Y only depends upon AD.

Eql pt ⇒ Y = AD & NI = PI= DPI.

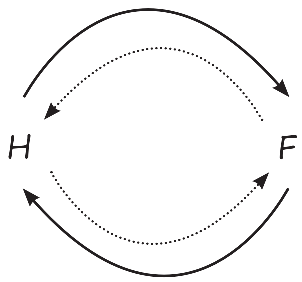
∴If Y increases, disposable Income increases, C increases.

2. Component of AD

Two Sector Economy (H&F)

∴ AD = C+I

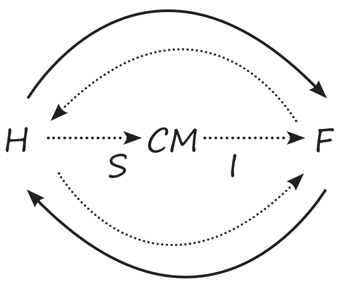
Without savings & Invt.



Eqlu : Total production = Total Consumption

Y = AD

With savings & Invt.



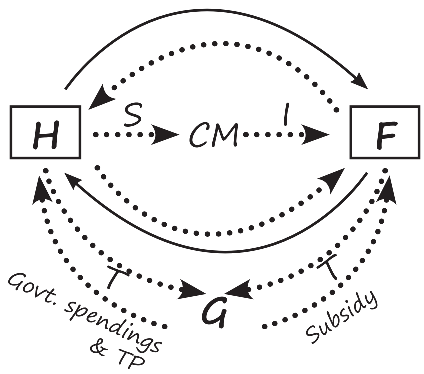
Eqlu : C+S (Leakage) = C+I (Injection)

Y = AD

Investment Multiplier = $\frac{1}{1-b}$

Three Sector Economy (H,F & G)

∴ AD = C+I+G



Eqlu : S+T = I+G

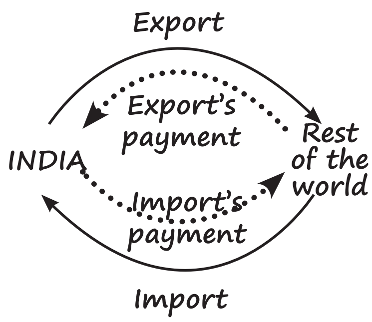
C+S+T = C+I+G

Y = AD

Govt Multiplier = $\frac{1}{1-b}$

Four Sector Economy (H,F, G & O)

∴ AD = C+I+G+(X–M)



Eqlu : C+S+T+M = C+I+G+X

C+S+T = C+I+G+(X–M)

Y = AD

X is exogenous (World's Income)

M is indogenous (India's Income)

∴ Y depends upon M

Magical Prosperity to Import

M = V Y

V (↑) = M/Y (↓)

∴ Keynes Multiplier = $\frac{1}{1-b+v}$

Note :

1. The rate of change of C with respect of Y is called Marginal Prospensity to consume (b)

$$0 \leq MPC \leq 1$$

2. MPS = 1-MPC

3. There is a minimum level of consumption known as autonomous consumption which exist even if Y = 0 [a].

4. $C = a+bY$ & $S = -a+(1-b)Y$

PUBLIC FINANCE

UNIT-I

1. Introduction

A. Public Finance – It is a study of income & expenditure of government at central, state or local level.

B. Fiscal Policy – Policies under which govt uses the intrument of taxation, public spendings & public borrowings to achieve various economical objectives.

2. Various economical objectives

1) Economic Stability :
2) Full employment output
3) Optimum employment
4) Economic growth.
5) Price stability
6) Equality of Income
7) External equilibrium

3. Public Revenue v/s Public Receipt

Public Revenue	Public Receipt
Taxation	Public Revenue
Profit or Revenue	Public Borrowings
Div or Interest form Securities	Issue of New Currency

4. Functions of Government

Given of Richard Musgrave in his classic treatise "the theory of public finance". The 3 functions or 3 branch Taxonomy are :

Resource Allocation

We need best use of resources with minimum wastage. If resources left only in hands of market there is misuse of such recources hence govt performs Resource Allocation Function.

Income Redistribution

To achieve equality govt performs Income Redistribution Function through following tools :

1. Progressive taxation scheme
2. Farmer Loan Waiver
3. Free Medicine & food distribution
4. Preferential treatment of targetted problems

Macro Economic Stabilization

There is huge fluctuation in business cycle due to market mechanism so to smoothen it govt. came up with policies. Stabilization issue becomes more complex as because of globalization causes forces of instability to get easily transmitted from one country to another called CONTAGION EFFECT

UNIT II

1. Market Failure

It is a situation in which the free market leads to misallocation of societies scarce resources in the sense that there is either over/under production/ consumption of particular goods & services leading to less optimal outcome.

Why do Market Fails -

- **Market Power/ Monopoly Power**
  - Misuse of monopoly power by either underproduction of goods or charging high price.
- **Externalities**
  - Refer next point
- **Under production of public goods**
  - Refer next point
- **Incomplete information**
  - Complexities of product & services, misunderstanding, misinterpretation & ignorancy. This can be divided into 2 problems
    - Assymetric Information
      → Buyer or seller knows more than the other
      → This eliminates high quality goods as low quality goods will be flooded
      [lemon problem]
      [Adverse Selection]
    - Moral Hazard
      → Individual knows more about his or her action
      → When someone is pro-tected from paying the full cost of their harmful actions they attend to act irresponsible making the harmful consequence more likely.

2. Externalities

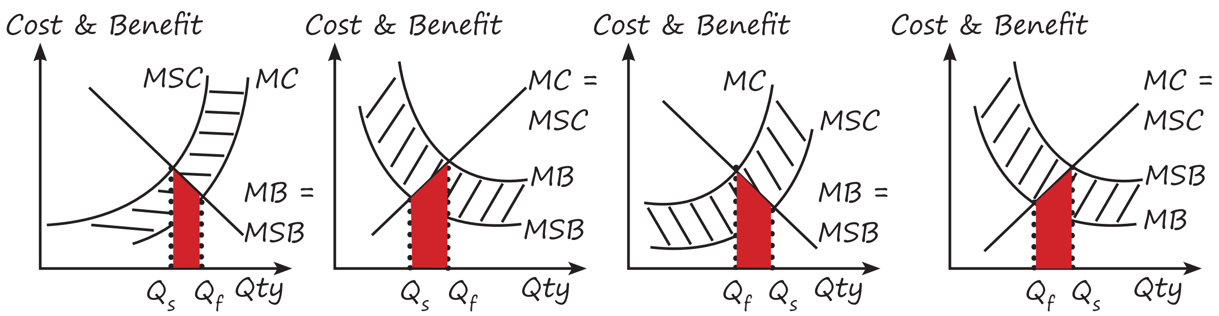
Spill over effect/ third-party effect/ neighbourhood effect/ side effect

- Negative externalities (Social/ External Costs)
  - External cost of production → Reduce production (MSC>MC)
  - External cost of consumption → Reduce consumption (MSB< MB)
- Positive Externalities (Social/ External Benefits)
  - External Benefit of production → Increase production (MSC<MC)
  - External Benefit of consumption → Increase consumption (MSB>MB)

Note :

Social cost (Supply side) = Private Cost + Net externalities of production (External Cost of production – External Benefit of production)

Social Benefit (Demand side) = Private Benefit + Net externalities of consumption (External Benefit of consumption – External Cost of consumption)



Note :

Other two types of externalities → Unidirectional & Reciprocal.

3. Public Goods

CLASSIFICATION	Excludable	Non-Excludable
Rivalrous	Private Goods	Common access resources
Non Rivalrous	Impure Public Goods	Public Goods (Free Rider Problem)

4. Impure Public Goods / Quasi Goods / Near Public Goods / Mixed Goods

Defence, Education, Medical Treatment etc.

- Clubs Goods (by Buchanan) Replicable
- Variable use public goods (By Oakload & Sandmo) Non-Replicable

5. Common Access Resources

e.g. Fisherman collecting fish from pond, honey bee collecting honey from flowers etc Cause depletion & degredation of environment & is a threat for Sustainability for future generation (TRAGEDY OF COMMON).

UNIT III

1. Govt. Intervention to Minimize Market Power

Competition base regulation

1. Pomote competition
2. Prohibit actions like contracts, combination, collusion, cartels etc.
3. restrict other anti-competitive actions like predators pricing, loss leader etc.

Price based Regulation

1. Maximum price that a firm can charge.
2. Acceptable price to ensure fair rate of return for the producers.
3. Setting Price caps based on firms cost & social cost.

2. Govt. Interview to Minimize negative externalities & Maximize positive externalities

- Direct Control
  - On +ve externalities ⇓ Coming into the market as a pro-ducer
  - On -ve externalities ⇓ Ban & Prohibition of such goods & services
- Indirect Control
  - On +ve externalities ⇓ Subsidies & grants
  - On -ve externalities ⇓ high taxes & issuing permits

Notes

1. Taxes as a measure of Indirect control

Procedure & Benefits

a) It is also called Pigouvian tax as it was introduced by A.C. Pigou.

b) Making the Polluter pay

c) Tax is calculated on the amount of harm not on final output.

d) For every unit of pollution pay tax.

e) It will increase private cost of production and so firms will produce less.

Problems & demerits

a) Difficult to determine the tax rates and administration.

b) It is very costly as it require high end machineries, technical workers.

c) Higher product prices leading to inflationary effect.

d) It will have a negative impact on investments & employment.

2. Issuing permits as a measure of Indirect Control

Procedure & Benefits

a) Liscencing the industries to emmit limited quantity of Pollutants. If crossed industry would be penalised.

b) Permits are transferable i.e., high polluters may buy more permits from low pollutants.

Problems & demerits

a) It is an indirect incentive for polluting the environment.

b) Due to purchase of permits, cost will be high and again inflation will rise.

3. Government intervention in case of merit goods and Demerit goods

Merit Goods
(Desirable Goods)
e.g., Schools, hospitals etc.

⇓

Reasons for Govt. Intervention

a) Under production
b) Low Margin

⇓

Methods of implementation

a) Direct production
b) Collaborate with private players to produce such goods.
c) More awareness

NOTE : All goods with negative externalities are not necessarily demerit goods.

E.g., Production of steel causes pollution but steel is not socially undesirable.

Demerit Goods
(Undesirable Goods)
e.g., Alcohol, drugs etc.

⇓

Reasons for Govt. Intervention

a) Over production
b) High Margin

⇓

Methods of implementation

a) Prohibition/ ban
b) High tax
c) Negative advertisement & awareness.

⇓

Limitations faced by Govt.

a) These goods have inelastic demand.
b) Practical difficulties in imposition of taxes.
c) Hidden market or black market will arise.

4. Govt. intervention in case of incomplete information

a) Regulations of advertising & setting up of advertising standards to make people more informative & aware.

b) Mandatory to have accurate labelling & content disclosures in various goods & services by the producers.

UNIT IV

1. Types of Fiscal Policies

Non Discretionary
OR
Automatic Stabilizer
e.g., Personal income tax, corporate tax, Various transfer payments.
$\Downarrow$
Mechanism

- **During Boom**
  more income/ less TP, more tax, less Disposable income
  AD $\downarrow$
- **During Recession**
  less income/ more TP, less tax, more Disposable income
  AD $\uparrow$

NOTE: Any Policy which tends to decrease AD is called Contradictionary Policy & increase AD is called Expansionary policy

Discretionary
e.g., Changes in taxations, Subsidies, controlling Consumption, investment & net exports indirectly & Govt. spendings directly.
$\Downarrow$
Mechanism

- **During Boom**
  Increase taxation &/or Decrease Govt. expenditure
  G $\downarrow$
  C $\downarrow$ I $\downarrow$
  AD $\downarrow$
- **During Recession**
  Decrease taxation &/or increase Govt. expenditure
  G $\uparrow$
  C $\uparrow$ I $\uparrow$
  AD $\uparrow$

2. Tools of Fiscal Policies

- Taxation
  - Determine the size of disposable income
- Government spendings
  - Current exp. (G)
  - Capital expenditure (I)
  - TP

  There will be a multiplier effect due to G & I
- Public Debt. (Internal & external) (like Mkt. loans & small savings)
  - Mechanism
    - **During Boom**
      Borrow more, reduce disposable income, AD ↓
    - **During Recession**
      Repay more, increase disposable income
      AD ↑
- Government Budget [R–E]
  - Surplus
  - Balanced
  - Deficit
  - Mechanism
    - **During Boom**
      Try to have a surplus (leakage> injection)
      AD ↓
    - **During Recession**
      Try to have a deficit (leakage< injection)
      AD ↑

NOTE : Budget deficit adds up to National Debt.

3. Limitations of Fiscal Policies

- Lags
  - Recognition Lag
  - Decision Lag
  - Implementation Lag
  - Impact Lag
- Bad timing
- Difficulty in reducing Govt. spendings
- Gestation Period
- Uncertainty in forecasting
- Policy conflict
- Conflict between Govt. & Private Sector Crowding Out Effect
- Increase Govt. borrowings