

Money Market

Unit: 1

- Money can be anything that has
 - i. store of value
 - ii. Unit of account
 - iii. medium of exchange

Functions of Money:

1. Generally acceptable
2. Durable
3. Recognisable
4. Difficult to counterfeit.
5. Relatively scarce
6. Portable
7. Possess uniformity
8. Divisible

- National currencies
 - Transferable Deposits
 - Other deposits → F.D, saving deposits
- } Narrow Money
 } Broad Money

• Demand for Money :

- Derived Demand.
- Liquidity & store value

1. $\uparrow \text{Income} \Rightarrow \uparrow \text{Demand}$
2. $\uparrow \text{Prices} \Rightarrow \uparrow \text{Demand}$
3. $\uparrow \text{Interest Rates} \Rightarrow \uparrow \text{Opportunity Cost} \Rightarrow \downarrow \text{Demand}$
4. Innovations (ATM, Net banking, upi) $\Rightarrow \downarrow \text{Demand}$

Theories of Demand for Money

Classical Approach

Cambridge Approach

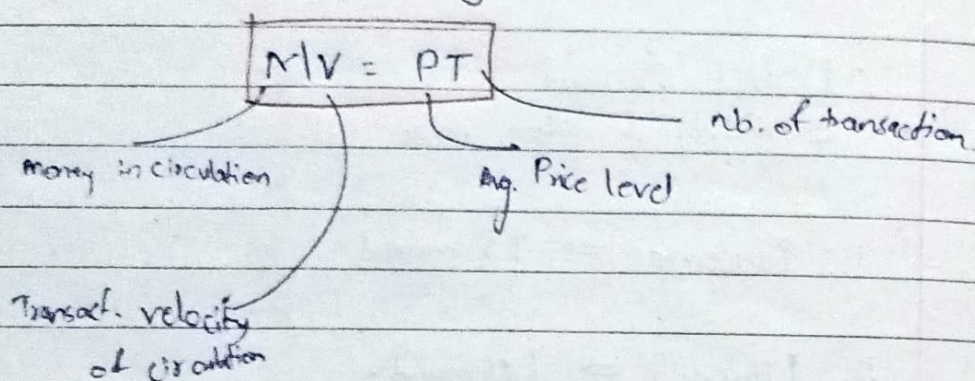
Keynesian Theory
(imp)

1. Classical Approach. (Quantity Theory of Money - QTM)

Irving Fisher $\rightarrow$ Book $\rightarrow$ Purchasing Power of Money 1911

Demand for money
is for Transaction Purpose.

Fischer $\Rightarrow$ Eqⁿ of Exchange



2. Cambridge Approach (Cash-balance)

↳ Alfred Marshall D.M. Robertson
A.C. Pigou J.M. Keynes

Transaction Motive & Precautionary Motive

$$M_d = KPY$$

M_d = Demand

Y = Real Nation income / Real output

P = Avg. Price level of currently produced goods & ser.

PY : nominal income

K : Proportion of nominal income ~~to~~ to hold as cash balance.

3. Keynesian Theory of Demand for Money

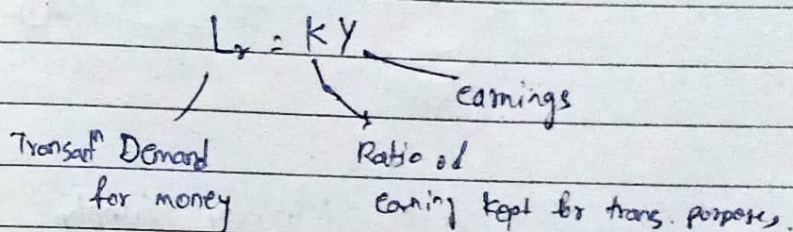
(Liquidity Preference theory)

JM Keynes → 1936 → General Theory of Employ., int, & money.

3 motive

- Transaction Motive
- Precautionary Motive
- Speculative Motive

1. Transaction motive



• Speculative Motive:

1. Interest payments
2. expected rate of Capital Gain

Invest in Bonds

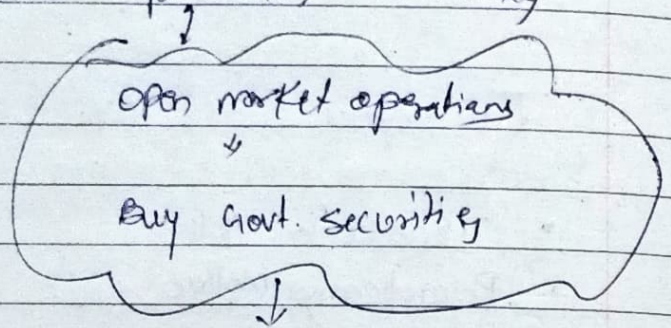
• Current rate is high :- Low spec. demand

• Current rate is low :- High spec. demand


 Inverse

Liquidity Trap. (Ineffective Monetary Policy)

RBI follows expansionary mon. policy



To increase money supply

To increase income

To -||- AD

Unit 2: Money Supply

1. M_1 is Narrow Money (currency with public)

(+) Demand Deposits with banking system

2. M_2 is M_1 + Saving deposit of post office savings bank

3. M_3 is Broad Money = M_2 (+) Time deposits with Bank
↳ F.D

M_3 as at 31st Mar 22 : ₹ 2,04,93,729 crore

Measurement of Money Supply:

M_1 = Currency Notes & coins with public
 (+) Demand deposits with banks
 (+) other deposits with RBI

M_2 = M_1 + Saving deposit with Post off. sav. banks

M_3 = M_1 (+) Time deposits

M_4 = M_3 (+) Total deposits with Post office Savings organisation (excluding National Sav. cert)

★ Money Multiplier:

RBI → High powered money (H) [Monetary Base]

$$M = C + D$$

↙ Supply ↓ Currency with public ↘ Demand deposits

$$M = m \times MB$$

↓ money multiplier ↘ Monetary Base

$$m = \frac{M}{MB}$$

$$m = \frac{1}{R} \quad (\text{Reserve ratio})$$

Monetary base

$$H = C + TR$$

$$= C + ER + RR \quad \text{Total Reserve}$$

Ratio of Reserves to Depos.
(Reserve Ratio)

$$r = \frac{R}{D}$$

Currency Deposit Ratio - CDR

$$c = \frac{C}{D}$$

★ Money Supply M is affected by:

$$\left. \begin{matrix} H \\ m \end{matrix} \right\} \text{Direct.}$$

$$\left. \begin{matrix} r \\ c \\ e \end{matrix} \right\} \text{Inverse}$$

$$M = \left(\frac{C+1}{C+r} \right) H$$

↓
 m

$$M = \left(\frac{C+1}{C+r+e} \right) H$$

i * Reserve money / Central Bank money / Base money / High powered money

= Currency in circulation

(+) Bankers deposit with RBI

(+) Other deposit with RBI

ii * Currency with public = Notes in Circulation

(+) All coins in circ.

(-) Cash with banks

iii * Deposit money with public

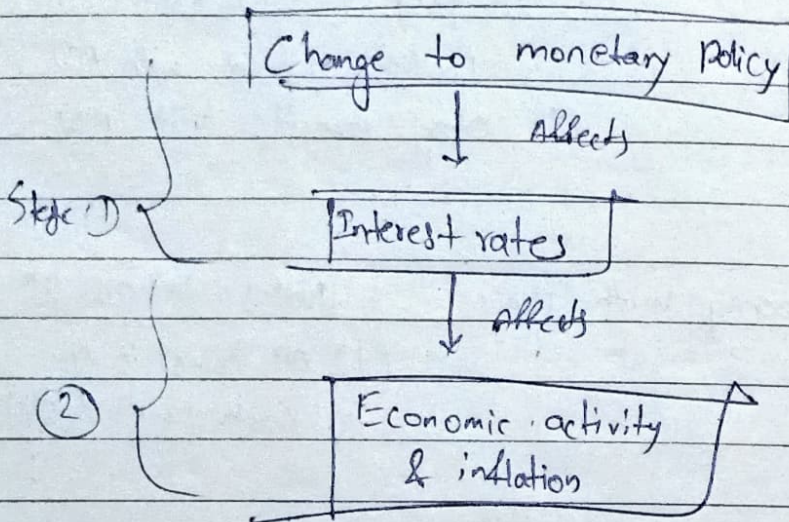
= Demand Deposit with bank

(+) Other deposit. RBI

$$iv * M_1 = \underbrace{G}_{(ii)} + \underbrace{DD + OD}_{(iii)}$$

Unit 3: Monetary Policy.

The transmission can be as:



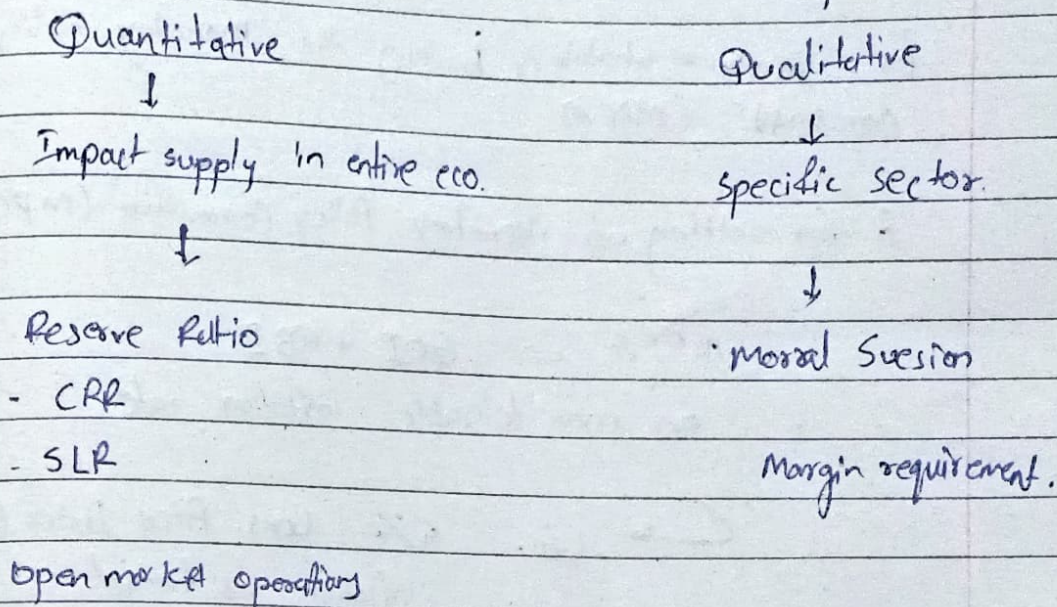
i. Saving investment channel

ii. Cash flow channel

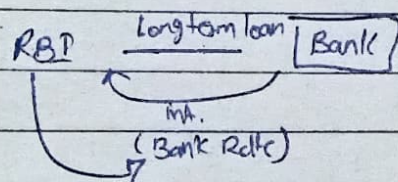
iii. Asset Prices & wealth channel

iv. Exchange Rate channel

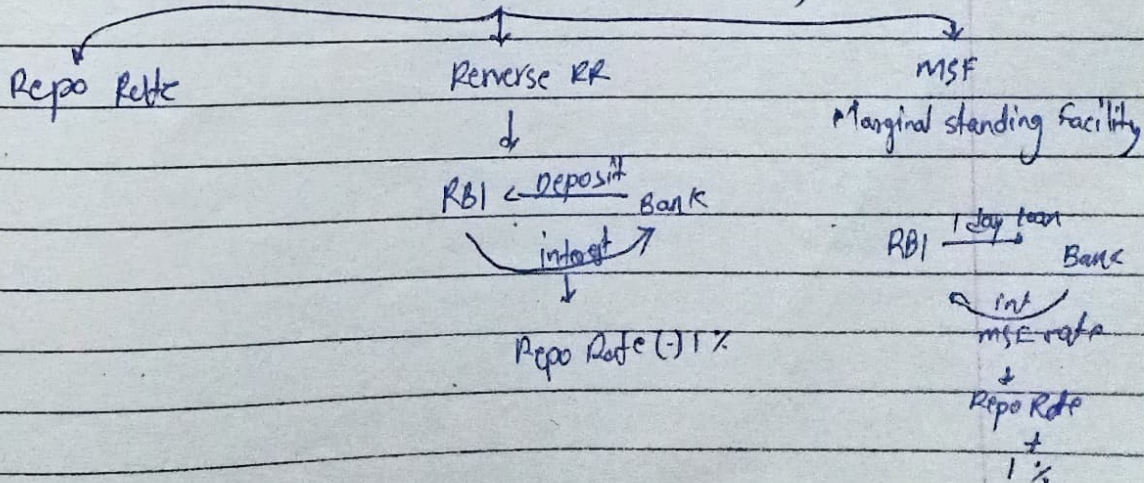
Operating Procedures & Instruments.



* Market Stabilisation Scheme (MSS)



Liquidity Adjustment Facility (LAF)



RBI Act, 1934 $\rightarrow$ amended — June 27, 2016

for giving a statutory backing the Monetary Policy Framework Agreement. (MPFA)

& for setting up Monetary Policy Committee (MPC).

MPFA $\Rightarrow$ GOI + RBI
on max tolerable inflation rate

$\hookrightarrow$ Gov. 4% Cons. Price Index (CPI)
inflation as target.

RBI publish Mon. Policy Report every 6 months

Imp Theories:

i. Mercantilist's view of international trade

Exports > Imports

(Favourable Bal. of Payment)

ii. Theory of Absolute Advantage [Adam Smith]

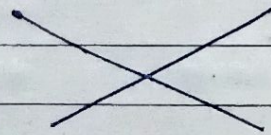
- assumed:
1. Two commodity & trade betⁿ two countries
 2. No transportation cost.
 3. Labour mobile within & immobile ~~and~~ betⁿ countries

Country A

Ko X product banana
 ✶ भरना पड रहा है Country B में

Country B

Ko Y product banana
 भरना पड रहा है A में



Both will trade for their product
 to obtain ~~max~~ minimum cost advantage

iii. Theory of Comparative Advantage [David Ricardo]

Trade was driven by Comparative rather than absolute cost.

<u>Country A</u>		<u>Country B</u>	
1 hr. labour → 3 Kg steel		1 hr. labour → 1 kg steel	
1 hr. labour → 2 shirts		1 hr. labour → 2 shirts	
2 hr. → 6 Kg steel		2 hr. → 2 shirts	
2 shirts			

A exchanges ~~2~~ 2 Kg of steel for 2 shirts from B

B will take 2 hrs for 2 shirts

A will use the 1 hr to produce steel & produce 3 kg steel

Still A will have 1 kg extra steel advantage.

iv. Heckscher - Ohlin Theory [Factor endowment Th. / Modern Th. of Trade]

Country tends to specialise

Export - Abundant resources of productⁿ

Import - Scarce resources

Theory of comparative cost Ricardo

Modern Theory of cost

- | | |
|--|---|
| • Based on <u>labour</u> theory of value | • <u>Money cost</u> (more realistic) |
| • <u>labour</u> as sole factor | • <u>labour</u> as well as <u>capital</u> |
| • Only <u>comparative cost</u> . | • <u>relative prices</u> (labour & capital) |
| • <u>Normative</u> | • <u>Positive</u> |

v. Globalisation & New International Trade theories

American economist & ~~ge~~ journalist Paul Krugman
2008 Nobel Prize

Krugman promoted Free Trade

{ In Praise of cheap labour published
in state in 1997

↙ Cheap labour ko -outsourcing
kro

Paul A. Samuelson: Factor Price equalization theorem

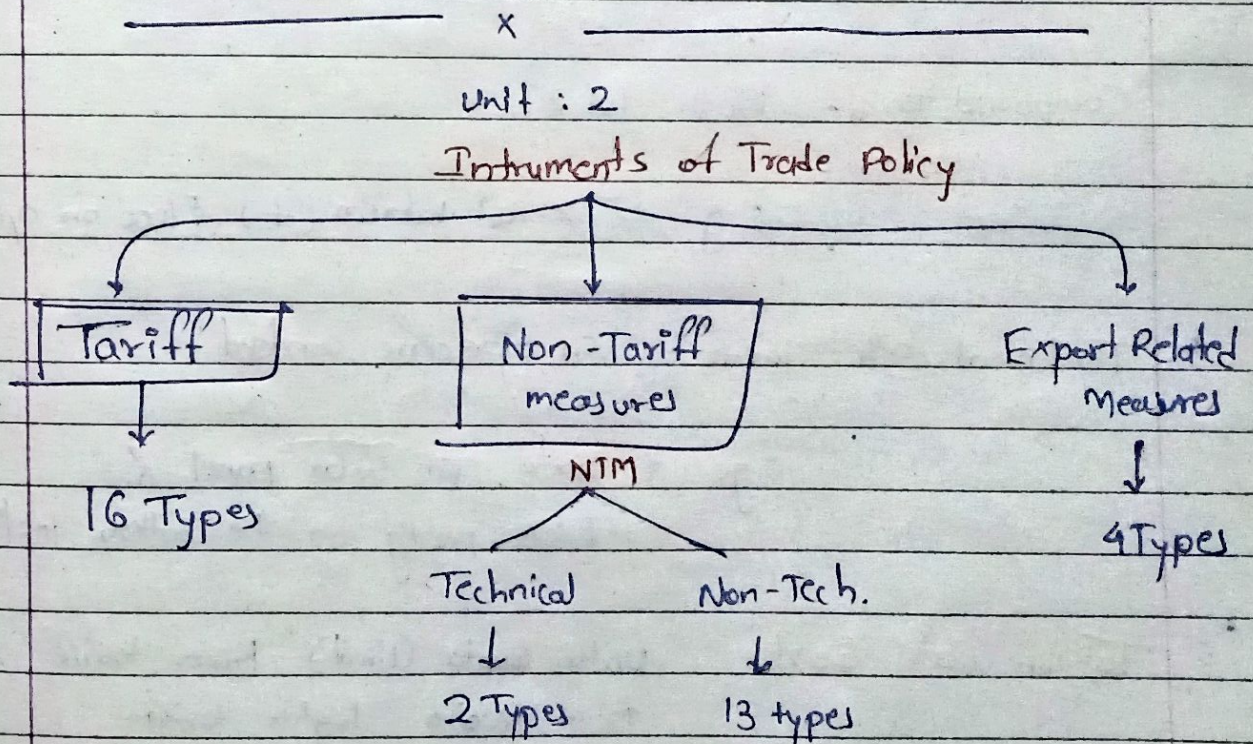
NTT (New Trade Theory) gave 2 advantages to the countries that import goods to compete with domestic goods.

1. Economies of Scale

Scale of Prodⁿ (↑) cost (↓)

2. Network Effect (Bandwagon effect)

e.g. whatsapp or windows



TARIFF (Custom Duties)

↳ Both import & export

* Import duties

1. Specific Tariff - Fixed amount

e.g. ₹1000 / cycle.

* 2. Ad Valorem Tariff - Fixed %

e.g. 20 % on value of cycle

3. Mixed Tariff - Either of 1 or 2 whichever is HIGHER

e.g. 5% ad Valorem or ₹1000 on cycle.

Compound Tariff - Both 1 & 2

e.g. 5% ad Valorem (+) ₹1000 on cycle.

4. Technical / other Tariff - on specific content

e.g. ₹3000 on Solar panel &
₹50 per kg on the battery installed.

* 5. Tariff Rate Quota - Under Quota (Limit) lower tariff
above Quota higher tariff

e.g. Limit → 3 cycles

7 cycles —

[3 cycle → 0.5 %
extra 4 cycle → 5 %]

6. Most Favoured Nations (MFN) -

Promise to impose on imports from other members of WTO

7. Variable Tariff -

To level the price of imported good up to domestic level.

$$= 2000 + 2000 = 4000$$

e.g. imported cycle ₹2000 → ₹2000 variable tariff.
domestic price ₹4000

8. Preferential Tariff -

less than MFN rate to some members

e.g. others 10% > special 8% for one

9. Bound Tariff -

WTO member binds itself to not to raise tariff.

10. Applied Tariff - Actually charged for bound.

20% - bound

17% - actually charge.

11. Escalated Tariff -

Raw material - less tax

Finished goods - more tax

e.g. RM - 5%
F.G - 12%

12. Prohibitive Tariff - so high $\Rightarrow$ zero imports.

e.g. 1000% tax.

13. Import subsidy - per unit or % of imported goods

14. Response Tariff to Trade Distortion -

on confirmation of distortion (सहारे में Product के तब)
importing country responds with tariff.

(Trigger - Price Mechanism)

15. Anti Dumping Duty

Country dumping products at cheap prices
in another country. below fair price.

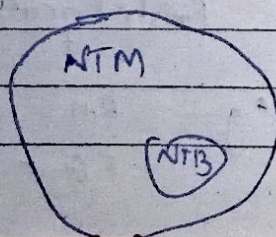
16. Countervailing Duties - off set the artificially low prices
charged by exporters who enjoys export subsidy

II NON TARIFF MEASURES (NTM)

* Mandatory, rules, requirements or regulations on export & import.

NTMs are not same as non tariff barriers

NTM $\neq$ NTB



NTB is subset of NTM

2 Types :

1. Technical Measures

a. Sanitary & Phytosanitary (SPS)

To protect biodiversity

e.g. Prohibition of Poultry from the effected countries

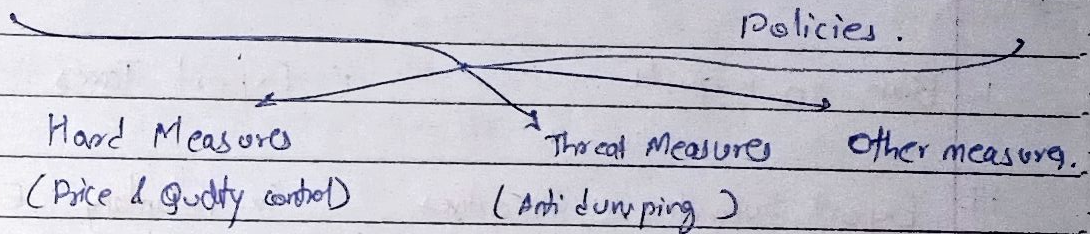
b. Technical Barriers to Trade (TBT)

Mandatory standards & Technical Regulations

e.g. Food laws, labelling

2. Non-Technical Measures -

Custom formalities, trade rules Policies.



i. Import Quotas

ii. Price control measures

e.g. MSP

iii. Non automatic licensing & Prohibitions

iv. Financial Measures

v. Measures affecting competition

vi. Govt. Procurement Policies

↳ pref. to local traders

↳ special preference
↳ limited groups.

vii. Trade related invest measures

- ↳ restricting level of imported components
- ↳ limiting purchase / use of imported products
- ↳ mandatory level of local product usage.

viii. Distribution Restrictions

- ↳ e.g. medicine sold by chemist with fridge.

ix. Restriction on Post Sale services.

- ↳ reserved to local services.

x. Administrative Procedures

xi. Rules of origin → certificate of origin

xii. Safeguard Measures.

- ↳ restrict imports temporarily

xiii. Embargoes - Total ban. (∞ time)III EXPORT RELATED MEASURES

i. Ban on Exports

ii. Export Taxes

iii. Export Subsidies & Incentives

iv. Voluntary Export Restraints

* Free Trade Agreement with Mauritius on 1 April 21

→ Economic Cooperation & Trade Agreement (ECTA) with Australia on 2nd April 22

18 Feb 22: Comprehensive Eco. Partnership Agree. with UAE (CEPA)

Unit-3 Trade Negotiations

RTA

GATT

WTO

1. Regional Trade Agree. (RTA)

↳ Group of countries reducing barriers to trade

Types of RTA

i. Unilateral TA

One way Trade

ii. Bilateral TA → 2 countries

→ 1 blocs

or 1 bloc & 1 country

(ASEAN - Indian Free Trade Area)

iii. Regional Preferential TA

↳ Group [आपस में Tariff
हटाने का समझौता]

iv. Trading Bloc

↳ Group [-11- पर बाहर ताबो
में Trade करवाते]

v. Free Trade Area

e.g. ASEAN - Indian

Free Trade Area

e.g. Arab League (AL), European Free
Trade Assoc. (EFTA)

vi. Economic & Monetary Union

↳ Free transit of goods & ser. through borders

Single currency → Euro

2. General Agreements on Tariff & Trade (GATT)

- Covers international trade in goods only.
- Working responsibility - Council for Trade in Goods (Goods Council)
- Goods Council → 10 committees.
- GATT lost its relevance by ~~the~~ 1980s because
 - i. Intellectual property rights & service trade not covered.
 - ii. Ambiguities in multilateral system.
 - iii. World Merchandise Trade increased (beyond scope of GATT)
 - iv. Inadequacy in Dispute settlement system.
 - v. Not a treaty.

URUGUAY Round (8th)

- Started in Punta del Este in Uruguay Sept. 1986
- Completed in Dec. 1993, largest round with 123 countries
- Agreement signed on 15 April 1994 & effect from 1 July 1995 marked the birth of WTO

3. WORLD TRADE ORGANISATION (WTO)

Objectives

- To set & enforce rules
- To provide forum for negotiations.
- To resolve disputes
- To increase transparency.
- To help developing nations.
- To involve in global eco. management.

• structure of WTO

- Secretariat located in GENEVA, by Director General.

- three tier system. [Top - middle - lower]

- Accounts 95% world Trade & 164 member countries (117 developing)

Doha Round (9th)

- QATAR in Nov. 2001
- Most controversial Topic was agriculture Trade.

Argentina

G20

Australia

India Presidency from 1 Dec 2022 to 30 Nov. 2023

Brazil

Canada

- Founded in 1999 after Asian Financial Crisis.

China

France

Germany

- Since COVID-19, 61% measure were Trade Facilitating
39% were Trade Restrictive

India

Indonesia

- By Oct 22, 77% of export restrictions has been repealed.

Italy

Japan

Mexico

Repub. of Korea

Russia

Saudi Arabia

South Africa

Turkey

UK

USA

European Union

Unit: 4

Foreign Exchange Rate

Direct Quote $\Rightarrow$ Amt. of local currency to exchange for 1 Foreign Currency.
 $\text{₹}80/\text{₹}$

Indirect Quote $\Rightarrow$ Amt of foreign currency to exch. for 1 local currency.
 $\text{₹}0.0125/\text{₹}$

Exchange Rate Regime (3 Regimes)

i. Free Floating exchange Rate system. [Demand & supply determining rate]

- No Govt. intervention.
- No need to maintain foreign reserves.
- Self Regulating
- less stability
- Speculation can be there
- International trade - riskier.

ii. Managed Floating system

Govt. & central Bank often seek to increase or dec. their exch. rate by buying or selling their own currencies.

iii. Fixed Exchange Rate system.

- Set by Govt.
- Stable
- less speculation
- Avoids currency fluctuation.
- Huge foreign currency reserves.
- Enhances Inter. trade

Nominal & Real Exchange Rates

↓
units of one currency
unit of other currency.

$$\text{Real E.R.} = \frac{\text{Nominal ER} \times \text{Domestic Price}}{\text{Foreign Price}}$$

$$\text{Real effective ER. (REER)} = \frac{\text{Nominal ER}}{\text{Price Deflator}}$$

Foreign Exchange Market → Commercial Banks & Brokerage (Houses).

Spot market → immediate delivery

Future market → Delivery in future

Dollar ⇒ Vehicle Currency

1. Increase in demand or Decrease in Supply of Dollar

↓

Home Currency Depreciation
(₹ weak)

2. Decrease in Demand or Increase in Supply

↓

Home Currency Appreciation (₹ strong)

Depreciation

↓

Exports rises, imports falls

Appreciation

↓

Exports falls, imports rises.

International Capital Movements

1.	Foreign Capital.
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- 1. Foreign aid or assistance
 - Bilateral or direct inter govt. grants
 - Multilateral aid from many govt.
 - Tied aid with stipulation.

2. Borrowings - Trade credit facilities
(loan) - soft loans

3. Deposits from NRIs.

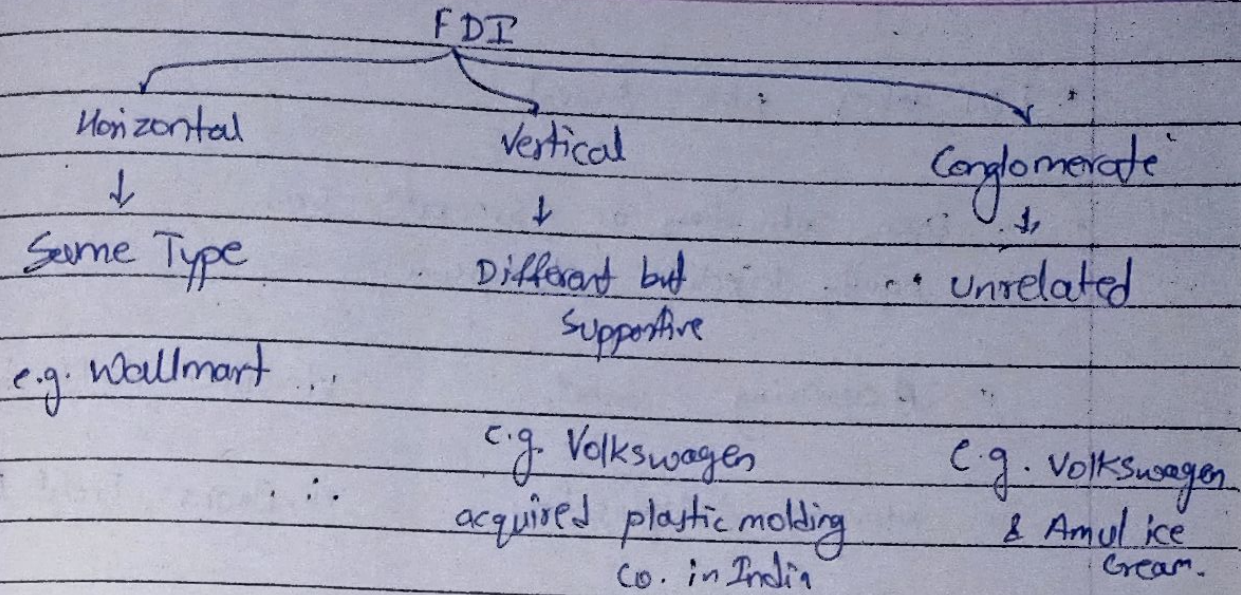
4. Investments - Foreign Portfolio Investments (FPI)
- Foreign Direct Investment (FDI)

2. FDI - Real investment.

46- to IMF & OECD, acquisition of atleast 10% of shares or voting power in public or pt. enterprise by NRI investors makes FDI

FDI $\rightarrow$ 1. Equity Capital 2. Reinvested earnings
3. Other direct Capital

(Factory, asset land, inventory.)



3. FPI - Unreal invest.

- Short term
- No physical Assets.
- less than 10%
- Easy to withdraw
- Financial assets

4. Reasons for FDI

- i. Profits
- ii. Higher Returns
- iii. Risk diversification
- iv. Emerging markets
- v. Cost effective
- vi. Tax benefits.

* FDI takes place through:

i. Open subsidiary or associate Co.

ii. Equity injection - lumpsum.

iii. Acquiring control.

vi. Green Field Investment

iv. Mergers & Acquisitions

vii. Brown Field Invest.

v. Joint Venture.

5. Problems of FDI

use of capital intensive method in labour abundant country.

Regional Disparity ↑.

• Crowding out of domestic invest.

• Diversion of Capital $\Rightarrow$ Distortion of production.

• Instability in BOP & exch. rate.

• Repatriation of Profits

• Over exploitation of resources.

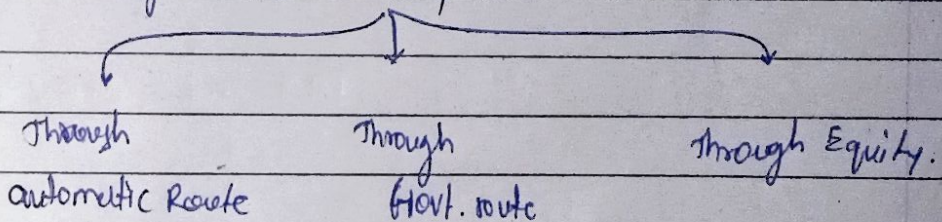
• Jeopardizing national security.

G. Benefits of FDI

- New innovations
- Higher Efficiency
- Higher employment.
- Better products
- Lower prices
- welfare of consumers
- Better access to foreign markets.
- Improvement in BOP.

* Mauritius - leading country in rest of inflow of FDI in India.

* A foreign investor may enter India :



* FDI prohibited in Chit Funds & Nidhi company.

* Acc to RBI Overseas Direct Invest.

↳ \$ 1,922.51 million in Sep 22

* World Invest. Report 22, India was 8th in major FDI recipients

(\$ 81,973 million 20-21)