

National Income

Market Price
The market price is the final value of the product being sold, which includes indirect taxes

Factor Cost
Factor cost is the cost of factors of production, or total value of inputs, where indirect tax is not included

NNP_{FC} is also called National Income

- $GDP_{FC} = GDP_{MP} - \text{Net Indirect Taxes}$
- $GDP_{FC} = GDP_{MP} - (\text{Indirect tax} - \text{Subsidy})$
- $GDP_{FC} = GDP_{MP} - \text{Indirect tax} + \text{Subsidy}$
- $GDP - \text{Depreciation} = \text{Net DP}$
- $GDP + NFA = \text{Gross NP}$
- Household income is not under GDP

Green GDP = GDP - Environmental Damage
Potential GDP - Real GDP = Recessionary Gap

- the total of money earned within a country
- Intercountry: growth within various countries such as India, US, China, etc
- Intracountry: within the country what is growth in comparison to previous year
- Per Capita Income = $\frac{\text{National Income}}{\text{Population}}$

GDP

- Gross Domestic Product
- Total value of all final goods and services produced within the territory of a country
- developed by American Economist "Simon Kuznetsk" in 1934
- second hand goods are never counted

Real GDP vs Nominal GDP

- More than Real GDP due to inflation
- Calculated on current prices
- Inflation not adjusted
- Base year is taken known as **Base effect**
- Calculated on constant prices
- It is inflation adjusted
- Irvin Fisher mentioned it as: **Concept of Money Illusion**
- GDP deflator is used to calculate this = $\frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

Measures & Aggregates

GNP

- Gross National Product
- Total value of all final goods and services produced by the nationals of the country
- $GNP = GDP - \text{Factor Income to Abroad} + \text{FI from Abroad}$
- $GNP = GDP + \text{Net factor income from abroad}$

NDP

- Net Domestic Product
- $NDP = GDP - \text{Depreciation}$
- Monetary value of an asset decreases over time due to various factors

NNP

- Financial year: 1 April to 31st March
- Net National Products
- $NNP = GNP - \text{Depreciation}$

Personal Income

total income of an individual earned from all the sources before taxes

$PI = \text{National Income} + \text{Income received not earned} - \text{Income earned but received}$

$PI = NI + \text{Transfer payment} - \text{Undistributed corporate profit}$

eg: subsidy by govt.

Personal Disposable Income: $PI - \text{tax}$

Purchasing Power Parity

A common basket of goods

India → GDP: 5th in the world

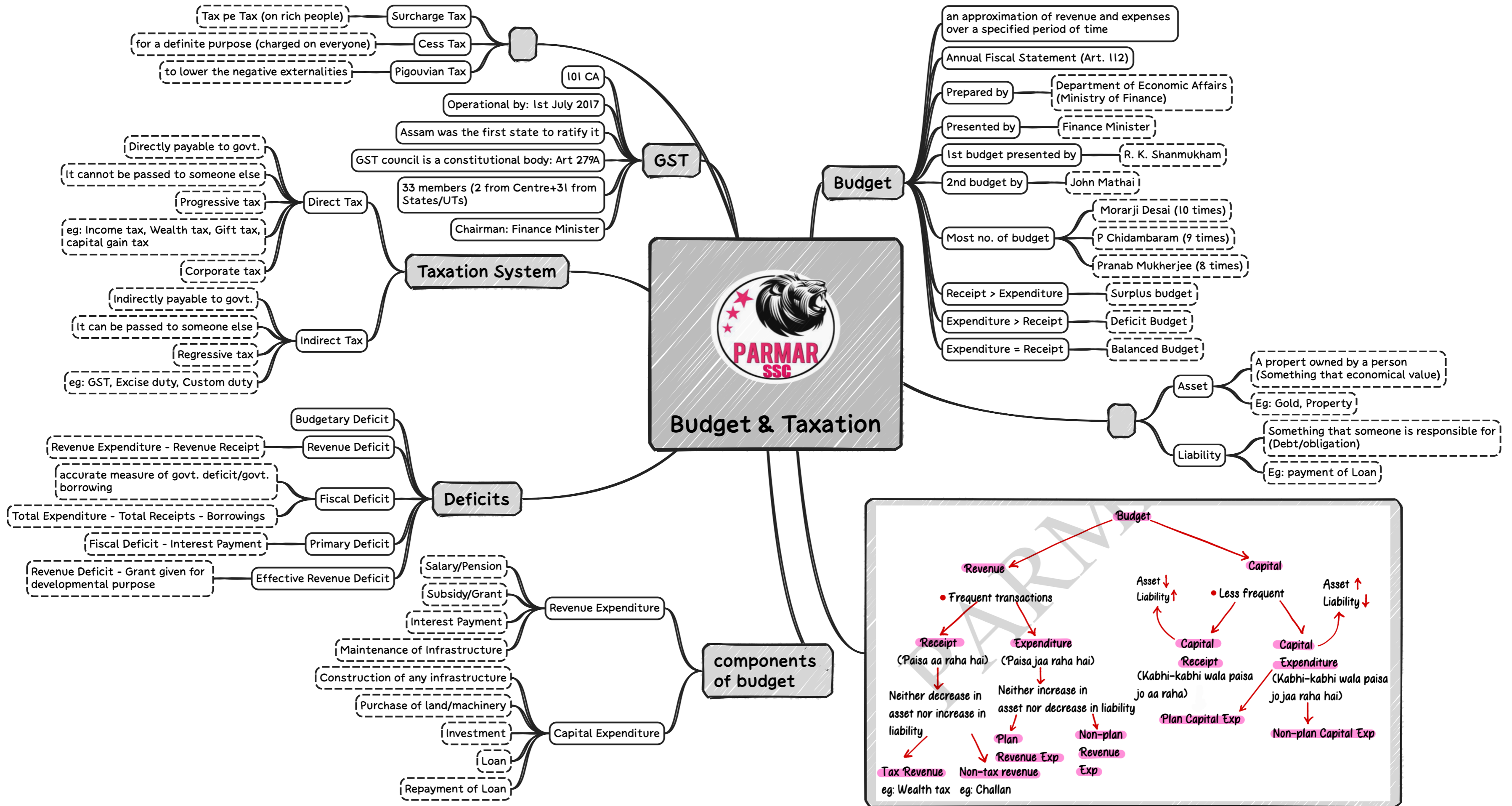
PPP: 3rd after USA and China

Economy is inflated

Methods to calculate GDP

GDP Calculation by National Statistical Office under MOSPLI (Ministry of Statistics & Program Implementation)

- Value Added Method
 - Also known as Production Method
 - Value added method = Output - Input
- Income Method
 - Compensation to employees
 - Operating surplus
 - Mixed income
- Expenditure Method
 - $C + G + I + (X - M)$
 - C: Consumption
 - G: Govt. expenditure
 - I: Investment
 - X: Export
 - M: Import





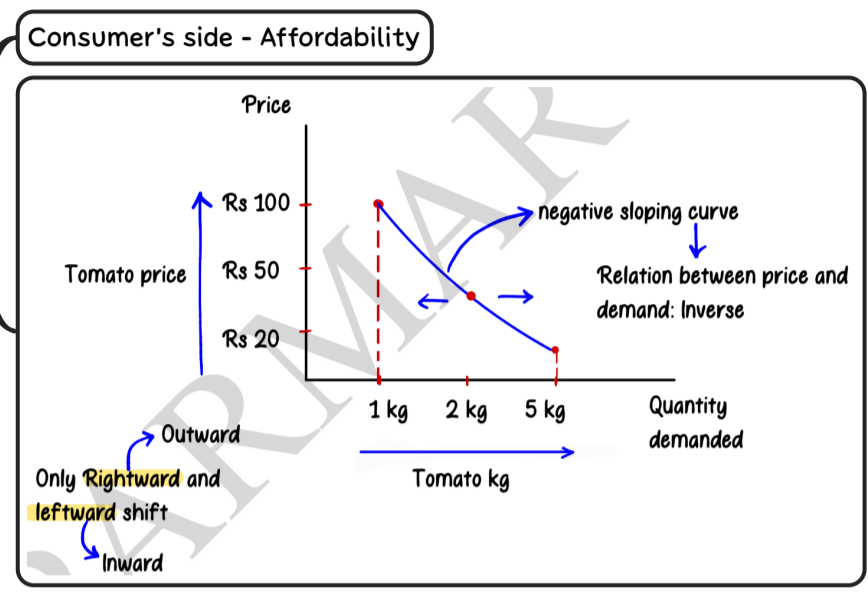
Demand

- Satisfaction - Utility
- Affordability
- Eagerness to buy something

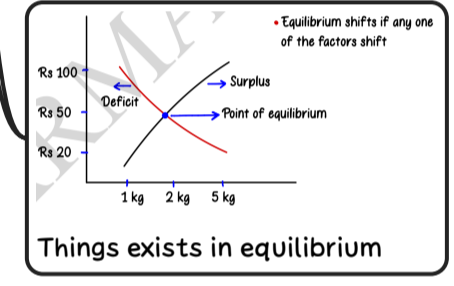
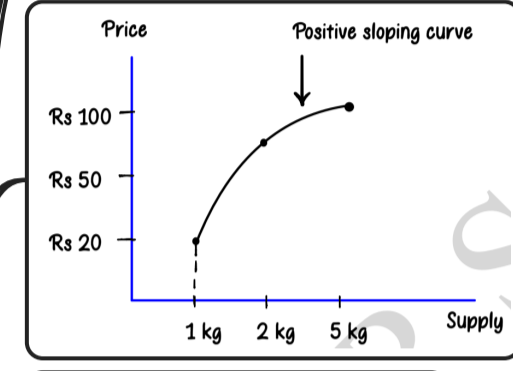
Marginal Utility

the addition satisfaction or benefit that a consumer derived from buying an additional unit of a commodity/service

Demand Curve



from producer's side/profitability



Supply Curve

Types of Market

- Monopoly**
 - only 1 seller
 - pure monopoly is rare
 - Entry barrier
 - eg: Indian railways
- Oligopoly**
 - Few dominant sellers
 - Many buyers
 - No easy entry
 - eg: Telecom sector, laptop market
- Monopolistic Competition**
 - Many sellers
 - Many buyers
 - Similar but slightly different products
 - eg: Toothpaste
- Perfect Competition**
 - Many sellers
 - Many buyers
 - Free entry and exit
 - eg: Agricultural products

People hold money for three purposes

- Transaction motive
- Precautionary motive
- Speculative motive

Demand & Supply

Exceptions

- Giffen goods**
 - non-luxurious goods
 - eg: increase in price of wheat
- Veblen goods**
 - luxurious goods
 - Demand is perfectly inelastic
 - eg: iPhone, Mercedes

Price Elasticity

- Perfectly Inelastic Demand**
 - by J M Keynes (Father of Economics)
 - Father of Modern Economics - Adam Smith
 - Vertical
 - Veblen goods
 - No changes in quantity of product demanded when the price changes
 - $e_d = 0$
- Relatively Inelastic Demand**
 - Change in price causes relatively less change in quantity demanded
 - $e_d < 1$
- Income Elasticity**
 - Relationship between change in income and demand for certain goods
 - Income \uparrow Demand \uparrow +ve slope
 - Income \downarrow Demand \downarrow +ve slope
- Cross Price Elasticity**
 - substitute of X
 - Price \uparrow Demand \downarrow
 - Shift from product X to Y due increase in price of X

Changes in price (usually -ve) affect the changes of demand

$$e_d = \frac{\% \text{ change in demand}}{\% \text{ change in price}}$$

Price Elasticity

- Perfectly Elastic Demand**
 - Horizontal
 - negligible/zero change in price causes major change in demand (infinite)
 - $e_d = \infty$
- Relatively Elastic Demand**
 - Slight change in price result in high change in demand
 - $e_d > 1$



Inflation & Unemployment

Inflation

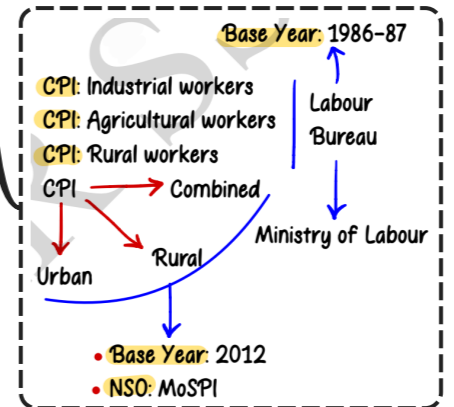
- Increase in general level of prices of goods & services
- Purchasing power decreases in case of inflation
- Irwin Fisher
 - Money illusion concept
 - $MV = PT$
- During inflation the debtor/borrower benefits more than the lender

Cause of Inflation

- Demand Pull
 - Demand side inflation
 - "Too many dollars chasing too few goods"
- Cost Pull
 - Supply side inflation
 - Increase in cost of any factors of production & input cost

Measurement of Inflation

- WPI
 - Wholesale Price Index
 - More weightage to manufactured goods
 - does not capture the changes in the prices of services
 - Base Year - 2011-12
 - Published by: Office of Economic Advisor (OEA) Ministry of Commerce & Industry
- CPI
 - Consumer Price Index
 - More weightage to food items
 - Checked from consumers perspective
 - Base Year - 2011-12
 - Published by: National Statistic Office (NSO) Ministry of Statistics & Program Implementation (MoSPI)
 - RBI uses CPI (combined) to target inflation



Types of Inflation

- Creeping — 3-4%
- Walking — 4-10%
- Running — 10-20%
- Galloping — 20-100%
- Hyper — 100%

Disinflation

Rate of inflation is decreasing

Deflation

- opposite of disflation
- Fall in the general level of prices
- Purchasing power increases

Types of Unemployment

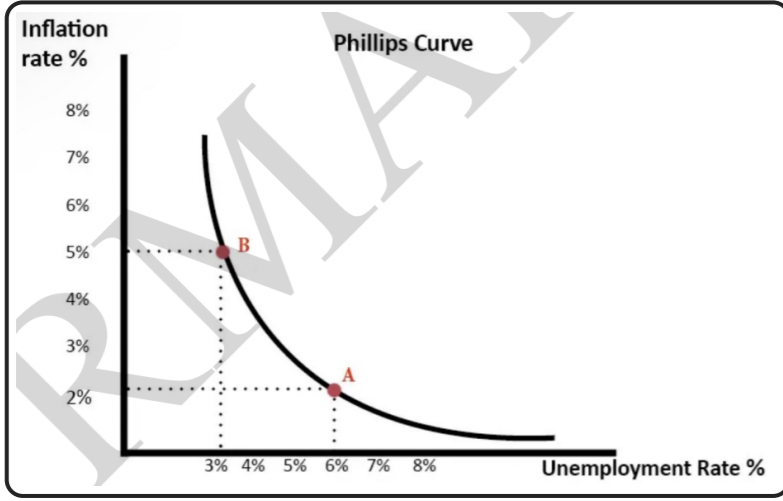
- Structural unemployment
 - a mismatch between worker's skill & availability of job
 - eg: technology advancement, like machinery replacing farmer labour
- Educated unemployment
 - degree - unemployment, seen in Urban part of India
- Frictional unemployment
 - type of unemployment while searching for a new job
 - eg: an employee leaving current job to move to a better one (seen in Urban)
- Disguised/Hidden unemployment
 - when some people seem to be employed but are not, marginal productivity is zero
 - eg: Agriculture sector
- Cyclical unemployment
 - Recession in economy (upturn & downturn)
 - When economy revives, there is opportunity to employment, seen in Urban
 - eg: Great Recession
- Seasonal Unemployment
 - Employment based on the seasonal basis
 - Seen more rural part of India
 - eg: Light or fireworks sellers during Diwali

Stagflation

- Inflation (inc.) & Unemployment (inc.)
- No economic activity
- Great Depression - 1929-1939
- Great Recession - 2007-2009

Philips Curve

Inflation (inc.) & Unemployment (dec.) have inverse relationship



IIP

- Index of Industrial Production
- Base Year: 2011-12
- Published by - NSO (MoSP)
- 8 core industries have 40% contributions
 - Refinery products
 - Electricity
 - Steel
 - Crude oil
 - Natural gas
 - Cement
 - Fertilizer
 - Crude Oil

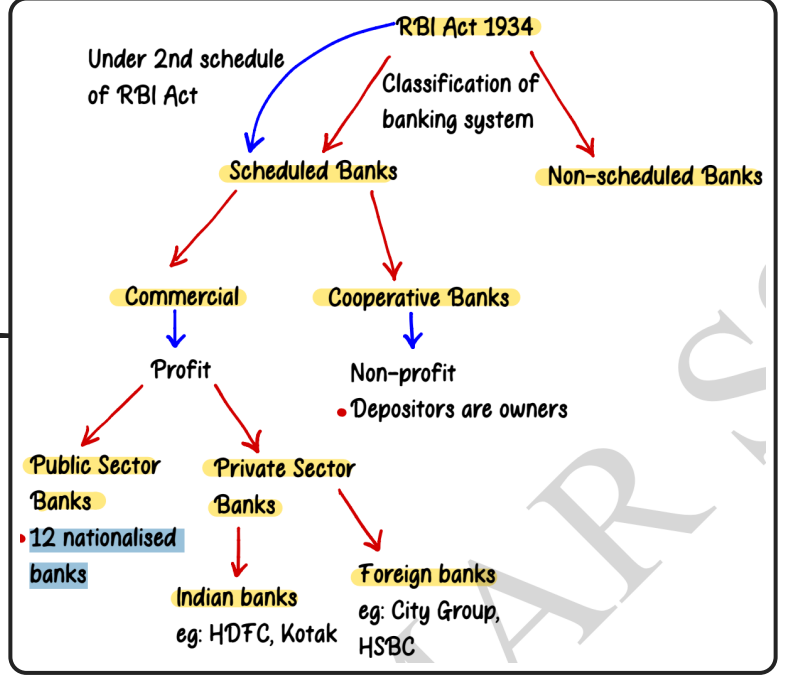


Money & Banking

Functions of RBI

- its regulates Banks
 - Banking Regulation Act, 1949
 - License
 - CRR/SLR
 - Regulate ban
- Currency printing
 - except Rs.1 note (under Ministry of Finance)
 - legal tender - FIAT Money
 - Plastic Money - Credit card, debit card, etc.
 - Hot Money - Assets such as stocks, deposits, bonds, etc
 - Currency Printing Coins → ₹1 note
 - Nasik
 - Dewas
 - Mysore
 - Salboni
 - Mumbai
 - Hyderabad
 - Calcutta
 - Noida
- Monetary Policy
- Lender of last resort and Bank of Banks

Classification of banking system



History of Banking

- 1st bank - 1770 (Bank of Hindustan)
- 1806 - Imperial Bank of Calcutta
- 1840 - Imperial Bank of Bombay
- 1843 - Imperial Bank of Madras
- Merged 1921 - Imperial Bank of India
- 1955 - State Bank of India
- 1st Indian owned bank - Allahabad Bank, in 1865
- Regional Rural Banks (RRBs)
 - RRB Act 1976
 - to enhance financial activities in rural areas
 - eg: Grameen Banks
 - 1st - Pratham Grameen Bank (2nd Oct 1975, Moradabad, UP)
 - Ownership: 15% holding by State, 35% holding by Sponsor Banks (Sponsors: RRBs), 50% holding by Centre
- SIDBI
 - 2nd April 1990
 - Headquarter: Lucknow

Other Financial Institutions

- National Housing Bank
 - 1988, through Act of 1987
- SEBI
 - Securities and Exchange Board of India
 - through SEBI Act of 1992, established on 12 April 1988
 - Statutory body
 - Headquarter - Mumbai
 - Function: To protect the interests of investors
 - Chairman - Madhabi Puri Buch (1st women, 1st non IAS chairman)
 - Insurance Regulatory and Development Authority of India
- IRDAI
 - Est'd. through IRDAI Act of 1999
 - as a statutory body April 2000

NABARD

- National Bank for Agriculture and Rural Development
- Set up - 12 July 1982, on recommendation of B. Sivaraman Committee (1979)
- Through NABARD Act 1981
- Headquarter - Mumbai
- Functions
 - Provide finance for agriculture and rural development
 - Regulate - RBI
 - Supervise - NABARD
 - Supervises cooperative banks and RRBs
 - Does not deal directly with people
 - Provides financing through PMAY, KCC, Ru Pay Kisan Cards

Micro Finance Institution

- Micro Finance, collateral free loans
- Micro Units Development and Refinance Agency, launched in 2015
- 3 types loan
 - loans upto 50,000 - Sishu
 - loans upto 50,000-5 lakhs - Kishore
 - loans upto 5 lakhs-10 lakhs - Tarun
- They offer financial services to low income population
- eg: Loan, Savings, Insurance
- Microfinance loans is given to households having income less than Rs.1.25 lakhs/annum
- Father of Micro Finance system - Muhammed Yunus (Bangladesh)
- 1st Micro Finance institution in India - SEWA Bank (1974)
- gave concept of Grameen Model Banks, 1970 and was given Nobel Prize

Non-Banking Financial Companies (NBFC)

- Provides micro loans/micro financial services
- Minimum requirement of Micro Finance Loans: 75% of total assets
- Estd. through recommendation of a committee: Malegam Committee, 2010 (also sees issues of MFIs)
- To qualify for NBFC MFI license they should have at least 75% of assets in Microfinance
- Eg: Bajaj Finance, Muthoot Finance, Mahindra and Mahindra
- They are registered under Companies Act of 1956
- Gives loans and advances on gold
- They cannot accept Demand Deposits
- Deposits not guaranteed
- They are regulated by RBI
- They need not maintain CRR and SLR

NBFC-MFI

RBI Act of 1934

- Reserve Bank of India was established as Independent body
- on recommendation of Hilton Young Commission, 1926
- 1st April 1935 - 1st setup of RBI Headquarter - Calcutta, At present
- Headquarter - Mumbai in 1937
- 1st RBI Governor - Osborne Smith
- 1st Indian RBI Governor - CD Deshmukh
- RBI was nationalised on 1st Jan 1949

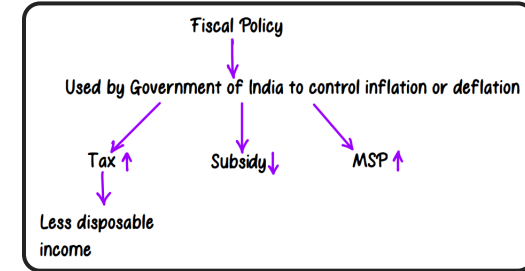
Informal groups

- group of 10-20 people come together to find ways to improve their living conditions
- Group of below poverty line (BPL)
- Usually in rural areas
- Self Help Groups (SHG)
- group of 4-10 people
- Could be a small business venture for profit
- Joint Liability Group

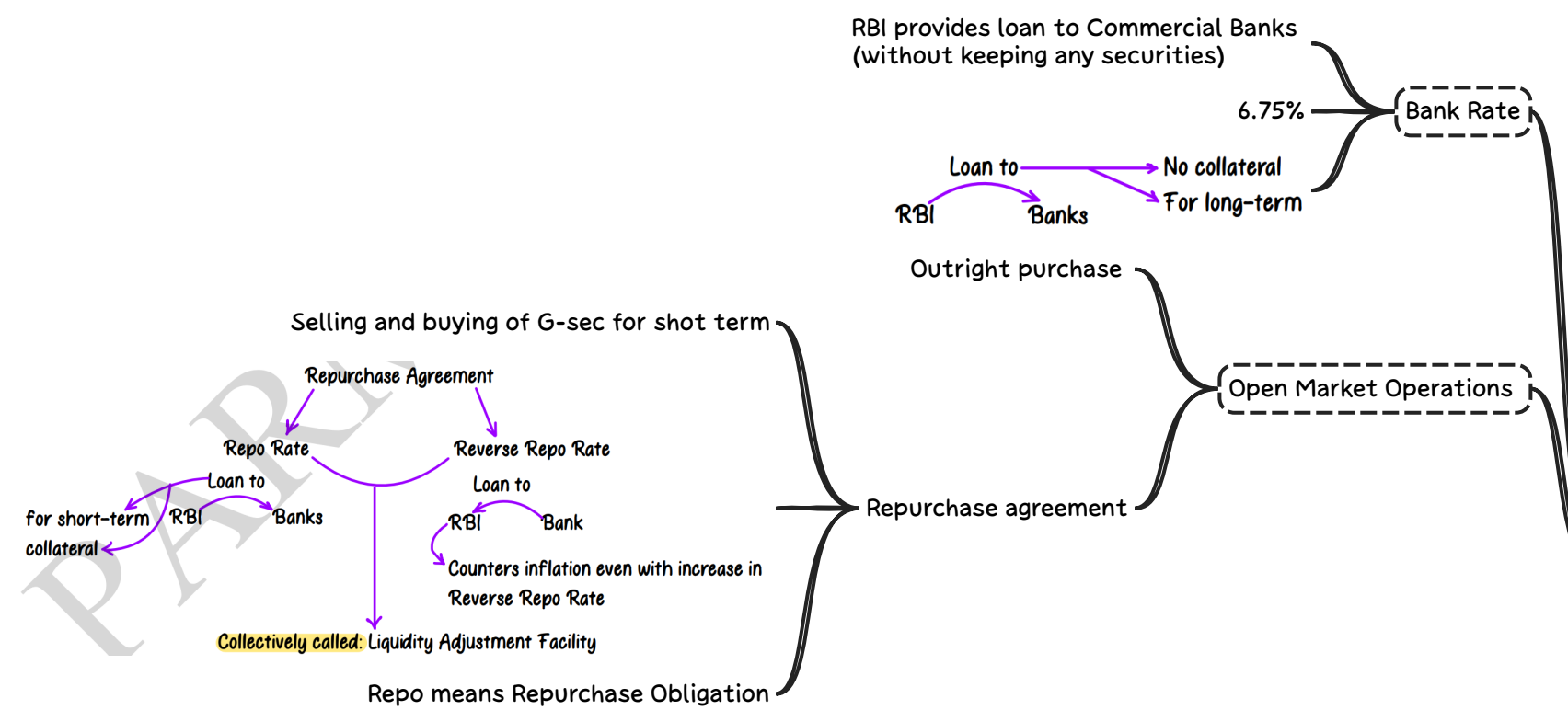


Monetary Policy

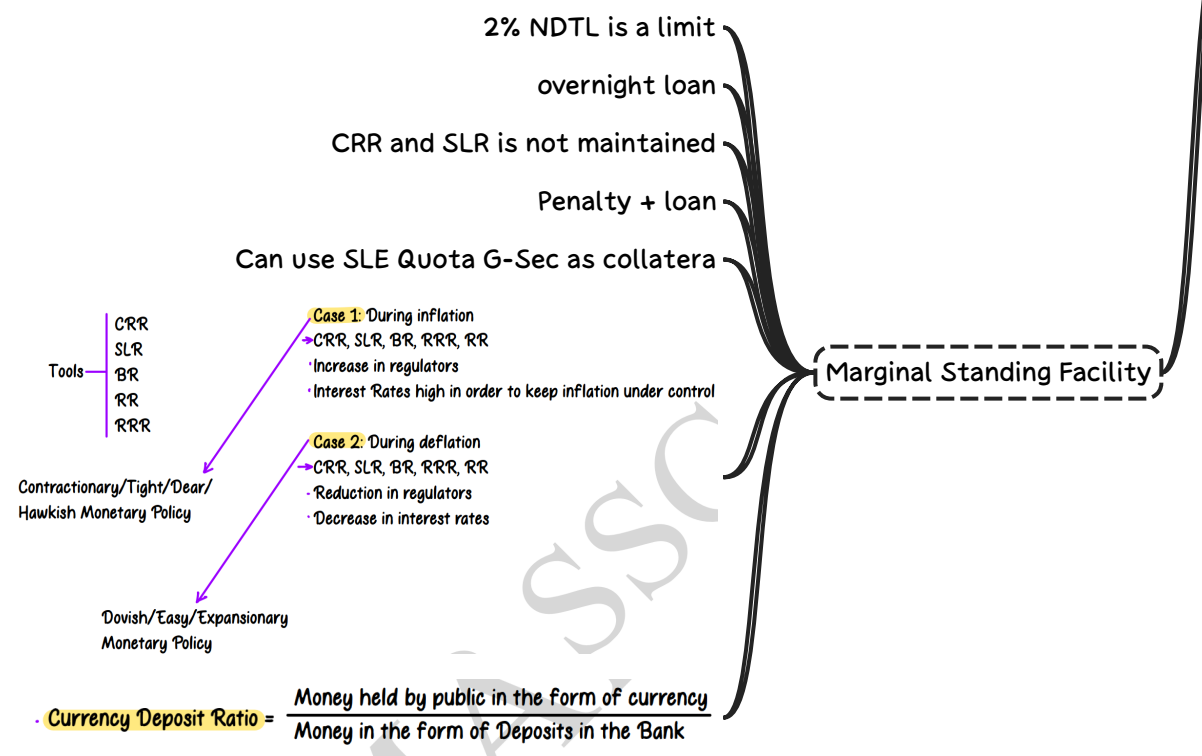
Fiscal Policy



Quantitative tools



Monetary Policy Tools



Qualitative tools

Rationing of Credit

- Certain amount is fixed for industrial, household and other purposes
- Credit supply for each commercial bank is fixed
- Add text here

Change in marginal requirements

- Margin is increased for unnecessary sectors
- Margin is decreased for necessary sectors
- Add text here

Regulation of consumer credit

- Instalment amount, down payment, loan duration are all fixed in advance
- Used to control inflation in country
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Moral suasion

- Credit limit for each sector is imposed by rules and regulations
- Guidelines and regulations are fixed by central bank for speculative purposes
- Add text here

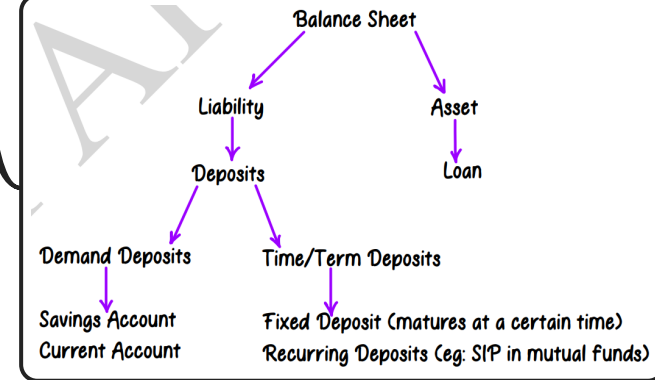
Balance Sheet

Different Assets and Liabilities of a Commercial Bank

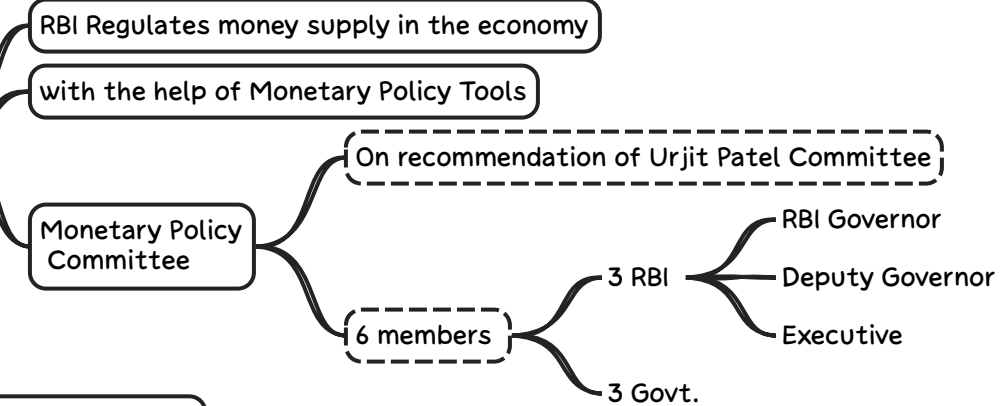
BALANCE SHEET			
LIABILITIES	AMT	ASSETS	AMT
Initial Money Invested	Share Capital	Vault Cash	
Sometimes bank borrows money from RBI	Loan taken from Central Bank if any	Deposits with Central Bank	
Saving Account, Current Account	Demand Deposits	Loans	
Fixed Deposits/Recurring Deposits	Term Deposits	Investment in Government Securities	

Annotations:

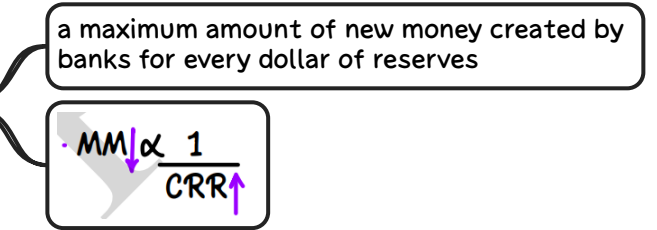
- Cash kept in Bank for Withdrawal by customers
- Amount deposited by Bank with RBI
- Loan Given to Public
- Amt invested in Government Banks



in case of Inflation/Deflation



Money Multiplier





SARFAESI Act 2002

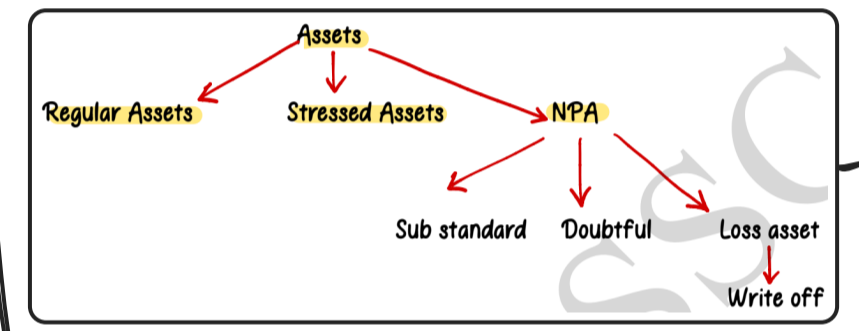
- Securitisation And Reconstruction of Financial Assets & Enforcement of Security Interest Act
- Provides power to the bank/any financial institution to seize the property of a defaulting borrower
- Wilful Defaulter: who would not pay to banks even if he has the ability to do so
- Insolvency & Bankruptcy Code, 2016: Consolidates the existing laws on bankruptcy

Bad Banks

- Financial entity setup to buy NPAs
- Recovery of NPAs
- 2021 budget: 2 bad banks to be established
- National Asset Reconstruction Company Ltd. (NARCL)
- India Debt Resolution Company Ltd. (IDRCL)

Non Performing Assets (NPA)

Delay is more than 90 days



Liquidity

- the ease with which an asset or security can be converted into ready cash without affecting its market price
- Demand Deposit is more liquid than Term Deposit
- Cash > Cheque > Bonds
- Fiduciary money: Mutual agreement, Eg: checks, bitcoins

Types of Money

- Currency in circulation: Currency with public, Currency with bank
- Deposits with Bank: Demand Deposit (Saving Account, Current Account), Term Deposit (Fixed Deposit, Recurring Deposit)
- Deposits with RBI: Bank Deposits with RBI, Other deposits with RBI
- Postal Deposit: Demand Deposit, Term Deposit (same as bank)

Monetary Aggregates

- M0: Monetary Base/High Powered Money/Reserve Money, Currency in circulation, Bankers deposit with RBI, Other deposits with RBI eg: deposits of Governmental/Quasi-Judicial authority (components)
- M1: Currency with public, Demand Deposits, Other deposits with RBI (Narrow Money)
- M2: M1 + Saving deposits with Post Office
- M3: M1 + Time deposits with Bank, Actual Money Supply (Broad Money (M3 - priority))
- M4: M3 + All deposits with Post Office
- Liquidity Order - M1 > M2 > M3 > M4

by Irving Fisher

Money illusion

The tendency to think of money in nominal terms rather than real terms

Wages - 1%	Wages + 5%
Inflation - 2%	Inflation + 7%
Real wages = +1%	Real wages = - 2%

Quantity Theory of Money

Velocity of Circulation: How many times a dollar, euro, etc. is spent purchasing finished goods and services

All Transactions: All the goods and services sold within an economy

$$M \times V = P \times T$$

Money Supply: All the money in the economy

Price Level: The price level of all goods and services in an economy

When Money Supply ↑ keeping other factors constant (Velocity of circulation/transactions) → Price level of goods ↑

eg: Currency printing → Banks

Quantity theory of money

Basel Norms

- Basel is a place in Switzerland
- Headquarter of Bank of International Settlements (BIS) - Basel, Switzerland
- Basel Committee, 1974 by G10

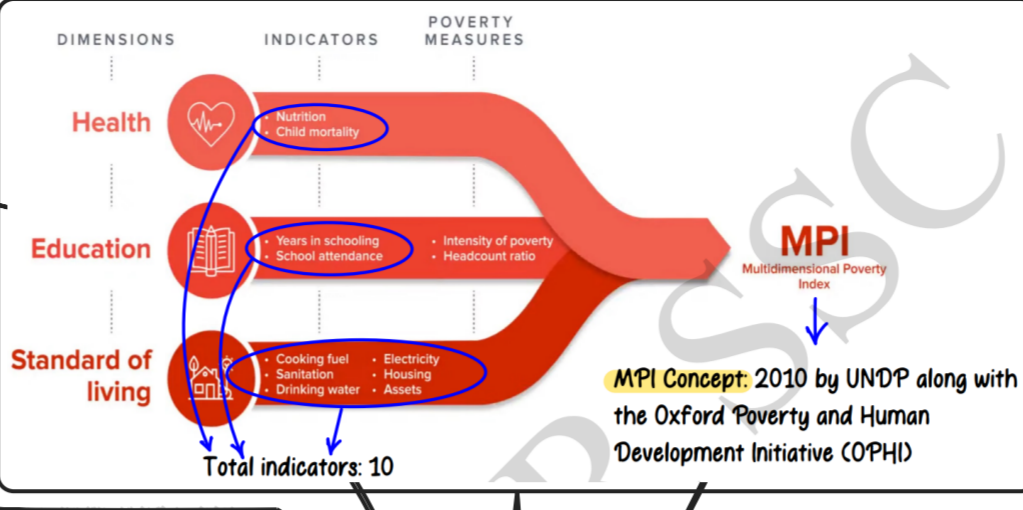
3 norms

- BASEL I - 1988: Focused on Credit Risk, Min. capital requirement at 8% of Risk Weighted Assets (RWA), Capital Adequacy Ratio
- BASEL II - 2004
- BASEL III - 2008: Capital Adequacy Ratio: 15% of RWA, NBFC cannot accept Demand Deposits, CRR/SLR maintenance: No
- Capital: Tier 1 (12.9%), Tier 2, Tier 3

Liquidity Adjustment Facility LAF

- Liquidity Trap: A situation in economy where people love to hold their money despite of any changes in interest rates which renders any Monetary Policy ineffective. No spending, happens when rates will increase, Speculative Demand: perfectly elastic.
- Money Market: Short-term loans, Call Money (to be paid within a day), Notice Money (to be paid within 2-14 days)
- Capital Market: Long-term loans
- Treasury Bills: issued by RBI, less than 1 year
- Maturity Bills: types (91 days, 182 days, 364 days), They are always listed on discount rate, No rate of interest

POVERTY



Poverty

- Absolute Poverty - severe deprivation of Basic Human needs
- Relative Poverty - Household income lower than the median income
- Subjective Poverty

Poverty Estimation

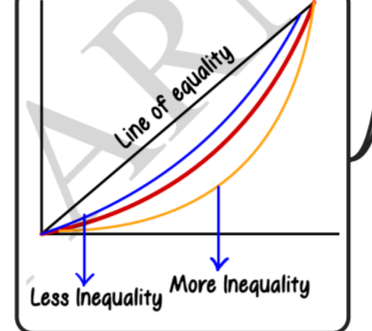
Pre Independence

- 1st done by - Dadabhai Naroji, gave unofficial poverty line through his book - Poverty and UnBritish Rule in India
- He made the earliest estimation of poverty
- National Planning Committee, 1938 by Subash Chandra Bose 1st Chairman: J L Nehru
- Bombay Plan, 1944

Post Independence

- Made the 1st systematic assessment of Poverty
- Used the data of NSSO (National Sample Survey Office) Under MoSPI
- Expenditure based poverty line
- Dandekar & Rath Committee 1971
- Alagh Committee 1979 - Nutrition based poverty line Rural - 2400 Calories Urban - 2100 Calories
- Lakdawala Committee 1993 - Poverty line based on CPI-IW (Rular), CPI-AW (Urban) State-wise poverty line
- Tendulkar Committee 2009 - Health and Education should also be taken under Basic Needs Poverty line based on Purchasing Power Parity: if someone is spending more than 33/day (not poor), not more than 33/day (poor) Uniform Reference Period replaced by Mixed Reference Period (Health/education) Poverty Line (2011-12) Rural - 816/month Urban - 1000/month % of people below poverty line - 21.9% (2011-12) Rural - 25.7% Urban - 13.7% Poverty Ratio - 29.5% Rural - 30.9% Urban - 26.4% Head count Ratio - Proportion of Population BPL Head count ratio = $\frac{\text{No. of multidimensionally poor people}}{\text{Total Population}}$
- Rangarajan Committee 2014 - Created categories within nutritional requirements - Calories, Protein, Fat Also, talked about Modified Mixed Reference Period

Lorenz Curve



NITI AAYOG

- 12 indicators - National Multidimensional Poverty Index
- Multidimensional Poverty in India since 2005-06
- 24.82 Cr people have escaped poverty
- In Uttar Pradesh max people have escaped poverty
- wealth distribution, talks about income inequality
- Gini Coefficient: - 0 to 1 0 - perfect equality 1 - perfect inequality

IMF (International Monetary Fund)

- Headquarter - Washington D.C
- UN Monetary and Financial Conference
- Bretton Woods Conference, 1944 -> 44 Nations -> 730 delegates
- IMF - World Bank -> HQ: Washington, D.C
- NOSTRO - Own account/money in your bank Eg: Bank X has an account with Bank Y in Bank Y's home currency
- VOSTRO - Your account/money in our bank Eg: City Banks partners with HDFC Bank based in India and opens an account with the denoted currency INR
- FERA - Foreign Exchange Regulation Act, 1973 replaced by FEMA - Foreign Exchange Management Act, 1999
- Depreciation - Decreases of value of domestic currency Exporters will benefit in case of depreciation
- Appreciation - Increase of value of domestic currency
- Devaluation - it is Official Depreciation
- Revaluation - it is Official Appreciation
- Foreign currency assets
- Gold reserves
- Empty of FOREX Reserves - 1991 - Balance of payment crisis in India
- Special Drawing Rights (SDR) - Currencies - USA, Euro, Yen (Japan), Yuan (China) & Pound (Britain)
- Reserve Tranche Position: required quota to be maintained within the IMF

Balance of Payment Crisis

- then PM - P V Narasimha Rao then Finance Minister - Manmohan Singh
- LPG Reforms - Liberalisation, Privatisation, Globalisation
- 1st - Argentina
- 4th - Pakistan
- Debaters in IMF

Balance of Payment

- Record of a Nation's Financial Transaction (import and export)
- Visible items - Current Account - Goods (Visible), Services (invisible), Transfer payments, Remittances
- Invisible items - Capital Account - Investments - Foreign Direct Investment (Long-term investment eg: Walmart acquired majority stakes of Flipkart), Foreign Institutional Investors/Foreign Portfolio Investments (Short-term investments Also called as Hot Money Eg: borrowing, lending, sale/purchase of assets, NRI deposits)
- Borrowing/Lending - Change in Foreign exchange reserve
- 3.3% of GDP (currently)
- Current Account Deficit (CAD) - Value of imports > Value of Exports
- Twin Deficit = CAD + Fiscal Deficit

Due to market forces Floating Exchange Rates

Government interference Fixed Exchange Rates

