Anusha Learning
Online IAS Academy

# ECONOMICS – MACRO

## Macroeconomics

- Macroeconomics sees an economy as a combination of four sectors, namely firms, government, households and external sector.
- The production units are called firms. Firm hires wage labour from the market, employs the services of capital and land as well.
- After hiring these inputs firms undertakes the task of production.
- The motive of firm is to earn profit.

## Macroeconomics

- The role of government includes:-
  - framing laws & enforcing them
  - Sometimes the government undertakes production
  - Imposing taxes
  - Spend money on building public infrastructure,
  - Run schools, colleges, providing health services etc. (Expansion of Merit Goods)

## Government Intervention

- Government tries to tackle market inequalities through regulation, taxation and subsidies.

- Government intervention can be for breaking up monopolies and regulating negative externalities like pollution or promoting positive externalities.

## Macroeconomics

- There is another major sector in an economy which is called the household sector.
- Household as a single individual takes decisions relating to her own consumption. Household also save and pay taxes.
- The people in a household work and earns money. They also earn profits the owner of land and firms.
- They also earn rent by leasing land or earn interest by lending capital.

## Macroeconomics

- The external sector is the fourth important sector.
- The countries of the world engaged in external trade exports and imports which is called as external sector.
- Capital from foreign countries may flow into the domestic country or
- The domestic country may be exporting capital to foreign countries.

## Subsidy

- A sum of money given by the state or a public body to help an industry or business to keep the price of a commodity or service low
- Subsidy is a transfer of money from the government to an entity. It leads to a fall in the price of the subsidized product.
- The objective of subsidy is to ensure the welfare of the society.
- Major subsidies in India are petroleum subsidy, fertilizer subsidy, food subsidy etc.
- Subsidy is to keep prices below the original selling price below the actual cost

## Grant

- Grants are non-repayable funds given by government foundation or trust to a recipient, often a non-profit entity, educational institution, business or an individual.
- Grants are used for defined purposes like grant for education, for buying hospital equipment or for creating sports facilities in a school, for constructing toilets in school
- Grants are not to be paid back

## Markets Kinds

- Monopoly
- Oligopoly
- Perfect competition
- Market Equilibrium
- Market Failure

## Monopoly

- A monopoly exists when a specific person or enterprise is the only supplier of a particular commodity.
- Single Seller Selling the unique product
- Entry of new firms either restricted or cost of entry is prohibitive
- Seller has no competition so can charge higher and earn higher or even unreasonable profit. Seller is price maker.
- Substitute to the product inferior or not there

  Ex. Indian Railways

- Monopolies can be beneficial to society: Lower average cost and ability of the firm to fund research and development.

# Oligopoly

- An oligopoly is a market where few industries dominate the market
- Market is shared by small number of producers

  Ex. Car manufacturers: Maruti, Hyundai, Honda
  Sports Shoes: Nike, Reebok, Adidas
  E-Commerce firms: Amazon, Flip cart

- High barrier to entry prevent smaller firms from making a large impact.
- Oligopoly are also price takers
- They are also not efficient in general.

## Perfect Competition

- In Perfect Competition situation in a market in which buyers and sellers are so numerous and well informed
- The price of a commodity is beyond the control of individual buyers and sellers
- Homogeneous products at a single price prevailing in the market
- All firms sell identical product
- Firms can enter or leave any time.

Ex. Agricultural market, Vegetable market

## Perfect Competition

- Perfect competition is a market structure where both consumers and firms are price takers.
- Perfect competition market structure has following conditions:

1. There exist a very large number of firms and consumers of the commodity, such that output sold by each firm is negligibly small compared to the total output of all the firms combined

2. The amount purchased by each consumer is extremely small in comparison to the quantity purchased by all consumers together

3. Firms are free to start producing the commodity or to stop production; entry and exit free means firms entry and exit doesn't make any difference

## Market Equilibrium

- Market equilibrium is a market state where the supply in the market is equal to the demand in the market.
- The equilibrium price is the price of a good or service when demand equals to supply in a market.
- If the market price is above the equilibrium price, quantity supplied is greater than quantity demanded, creating a surplus.
- There is no drop or rise in Price during equilibrium.
- When quantity supplied exceeds quantity demanded, price tends to fall until equilibrium is restored
- When quantity supplied is less than quantity demanded price tends to rise until equilibrium is restored.

## Market Failure

- In economics, market failure is a situation in which the allocation of goods and services by a free market is not efficient, often leading to a net social welfare loss.
- Market failure is inefficient distribution of goods and services in the free market.
- Market failure happens when price mechanism fails to allocate scarce resources efficiently.
- Reasons of market failure: Environmental concerns, under-provision of merit goods, lack of public goods, over-provision of demerit goods

## Adam Smith

- Adam Smith is regarded as the founding father of modern economics.
- He was a Scotsman and a professor at the University of Glasgow.
- His well-known work An 'Enquiry into the Nature and Cause of the Wealth of Nations (1776)
- This book is regarded as the first major comprehensive book on the subject.

## John Maynard Keynes

- He published his celebrated book The General Theory of Employment, Interest and Money in 1936.
- The dominant thinking in economics before Keynes was that all the Labourers who are ready to work will find employment and all the factories will be working at their full capacity.
- This school of thought is known as the classical tradition.
- He prophesied the breakdown of the peace agreement of the War in the book The Economic Consequences of the Peace (1919).
- His book 'General Theory of Employment, Interest and Money (1936)
- The book is regarded as one of the most influential economics books of the twentieth century.
- He was also a shrewd foreign currency speculator.

## The Great Depressions

- The Great Depression of 1929 and subsequent years saw the output and employment levels in the countries of Europe and North America fall by huge amounts.
- The Great Depression started in the US after a major fall in stock prices that began around September 4, 1929, and became worldwide news that the stock market crash of October 29, 1929. It is known as Black Tuesday.
- It affected other countries of the world as well.
- Demand for goods in the market was low, many factories were lying idle, workers were thrown out of jobs. In USA, from 1929 to 1933, unemployment rate rose from 3% to 25%. GDP fell by 15%

## The Great Depressions

- The Great depression is commonly used an example of how intensely the world's economy can decline
- Cities around the world were hit hard, especially those dependent on heavy industry.
- Keynes' book examined the working of the economy in its entirety and examined the interdependence of the different sectors.
- Farming communities and rural areas suffered as crop prices fell by about 60%
- Depression lasted until the beginning of World War II
- We can consider this as the time of beginning of Macroeconomics.

## Money Supply

- The money supply is the entire stock of currency and other liquid instruments circulating in a country's economy as of a particular time.
- The money supply can include cash, coins and balances held in current and saving accounts and other money substitutes.
- Changes in money supply are closely watched because of the relationship between money and macro economic variables such as inflation, and impact on business cycle
- The money supply can be measured in various ways using narrower or broader definitions of which classes of financial assets are considered to be money.

## Monetary Policy Committee (MPC)

- The policy interest rate required to achieve the inflation target is decided by the Monetary Policy Committee (MPC). MPC is a six-member committee constituted by the Central Government (Section 45ZB of the amended RBI Act, 1934).

- The MPC is required to meet **at least four times in a year**. The quorum for the meeting of the MPC is four members. Each member of the MPC has one vote, and in the event of an equality of votes, the Governor has a second or casting vote.

- **The resolution** adopted by the MPC is published after the conclusion of every meeting of the MPC. Once in every six months, the Reserve Bank is required to publish a document called the **Monetary Policy Report** to explain: (1) the sources of inflation and(2) the forecast of inflation for 6-18 months ahead.

## The Financial market Committee (FMC)

- **The Financial Market Committee (FMC)** meets daily to review the liquidity conditions so as to ensure that the operating target of monetary policy (weighted average lending rate) is kept close to the policy repo rate. This parameter is also known as the weighted average call money rate (WACR).

- BANK RATE:

  It is the rate at which the Reserve Bank is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate is published under Section 49 of the Reserve Bank of India Act, 1934. This rate has been aligned to the MSF rate and, therefore, changes automatically as and when the MSF rate changes alongside policy repo rate changes.

## Money Supply

- M0 M1 M2 M3 are various types of money in the money supply. This classification was given by RBI in 1977
- Reserve Money (M0)- It is also known as High-powered Money, monetary base, base money etc.
  M0 = Currency in circulation + Banker's Deposits with RBI + Other deposits with RBI
- M1 Narrow money: M1 = Currency with public + Demand deposits (CASA) + Other deposits with RBI
- M2 = M1 + Saving deposits of post office saving banks
- M3 Broad Money: M3= M1 + Time deposits with banking system
- M4 = M3 + All deposits with post office saving banks

## Money Supply

- The liquidity means how fast an instrument can be converted into cash. The liquidity of these measures are in order M1>M2>M3>M4. M1 is most liquid and M4 is least liquid
- How much money is in circulation
  Money Supply M3 in India averaged 26592 INR Billion from 1972 until 2019 reaching an all time high of 154301 INR Billion
- ₹500 and ₹2000 notes constitute about 86% of total value of currency in circulation

## National Income

- Total economic activity of a country in a year.
- Total earning of each one of us
- National income is the total value a country's final output of all new goods and services produced in one year.
- National Income in ₹
  2016-17 : 134 Lakh crore
  2017-18 : 147 Lakh crore
- India's per capita income on PPP basis was $ 5350 in 2016. India's rank was 106th
- National Income estimates are being prepared by Central Statistical Organization.

## National Income Accounting

- The economic wealth, or well-being of a country does not necessarily depend on the mere possession of resources.
- The important factor is how these resources are used in generating a flow of production and how as a consequence income and wealth are generated from that process.
- Flow of production arises when production of commodities-goods and services takes place by millions of enterprises large and small.
- All goods and services produced are to be sold to the consumers.

## National Income Accounting

- The goods produced may be for final consumption by the consumers or it may be used as raw material for further making of goods and services meant for final use.
- The good which does not require to pass through any further stages of production or refining is called a final good.
- Once the good is passed for final consumption it is said to has passed out of the active economic flow.
- Some good is transformed before consumption like tea, coffee etc.

## Consumption Goods and Capital Goods

- Goods like food and clothing and services like recreation that are consumed when purchased by their ultimate consumers are called consumption goods or consumer goods
- There are other goods that are of durable character which are used in the production process. These are tools, implements and machines.
- While they make production of other commodities feasible, they themselves don't get transformed in the production process.
- They are also final goods yet they are not final goods to be ultimately consumed.

## Capital Goods

- Capital goods are crucial backbone of any production process, in aiding and enabling the production to take place.
- Capital goods form a part of capital, one of the crucial factors of production in which a productive enterprise has invested, and they continue to enable the production process to go on for continuous cycles of production.
- Capital goods gradually undergo wear and tear, and thus are repaired or gradually replaced over time.

## Contribution to GDP

- Over the years of development, it is seen that the contribution to total GDP has shifted from Primary sector to Secondary sector and now it is gradually shifting from secondary to tertiary sector. We can say it is the process of development.
- As income levels rise, certain sections of people start demanding many more services like eating out, tourism, shopping, private hospitals, private schools, professional training, sports etc.
- Share of sectors in GDP of Primary sector is reducing and of secondary and tertiary sector is increasing

## Gross investment Depreciation Net Investment

- Addition of capital goods constitutes gross investment of an economy. These may be machines, tools and implements, buildings, office spaces, storehouses or infrastructure like roads, bridges airports or jetties.
- But all the capital goods produced in a year do not constitute an addition to the capital stock already existing capital stock suffers wear and tear and needs maintenance and replacement.
- A part of the capital goods produced this year goes for replacement of existing capital goods and is not an addition to the stock of capital goods already existing and its value needs to be subtracted from gross investment for arriving at the measure for net investment.

## Gross investment Depreciation Net Investment

- This deletion, which is made from the value of gross investment in order to accommodate regular wear and tear of capital, is called depreciation.
- So new addition to capital stock in an economy is measured by net investment or new capital formation
- Net Investment = Gross investment - Depreciation

## Circular Flow of Income

- The households receive their payments from the firms for productive activities they perform for firms. There may be fundamentally be four kinds of contributions that can be made during the production of goods and services:

  1. Contribution made by human labour : as wages
  2. Contribution made by capital : as interest
  3. Contribution made by entrepreneurship : as Profit
  4. Contribution made by land : as rent

## Circular Flow of Income

- Household disposes off their earnings- by spending their income on the goods and services produced by domestic firms

  We assume household do not save and pay taxes to government and they do not buy imported goods.

- Factors of production use their earnings to buy goods and services which they assisted in producing.

- The aggregate consumption by the households of the economy is equal to the aggregate expenditure on goods and services produced by the firms in the economy. The entire income of the economy, therefore, comes back to the producers in the form of sales revenue. There is no leakage in the system.

## Circular Flow of Income

- Money is circulated every year between producers and consumers.
- Since the value of expenditure must be equal to the value of goods and services, we can equivalently measure the aggregate income by calculating the aggregate value of goods and services produced by the firms.
- When the aggregate revenue received by the firms is paid out to the factors of production it takes the form of aggregate income.

## Circular Flow of Income

- Since the same amount of money, representing the aggregate value of goods and services, is moving in a circular way, if we want to estimate the aggregate value of goods and services produced during a year we can measure the spending.

- This method is called the expenditure method.

- If we measure the flow by measuring the aggregate value of final goods and services produced by all the firms, it will be called product method.

- Measuring the sum total of all factor payments is called income method.
  Aggregate spending of the economy must be equal to the aggregate income earned by the factors of production.

## Production Possibility Frontier

- The resources of an economy as a whole are always limited in comparison to what the people in the economy collectively want to have.
- The scarce resources have alternative usages and every society has to decide on how much of each of the resources to use in the production of different goods and services.
- Every society has to decide/ determine how to allocate its resources which are scarce, to different goods and services.
- Thus, society can have various combinations of different goods and services.

## Production Possibility Frontier

- Given the total amount of resources, it is possible to allocate the resources in many different ways and thereby achieving different mixes of all possible goods and services.

- The collection of all possible combinations of the goods and services that can be produced from a given amount of resources and a given stock of technological knowledge is called the

PRODUCTION POSSIBILITY CURVE OR

PRODUCTION POSSIBILITY FRONTIER. OR

PRODUCTION POSSIBILITY SET OF THE ECONOMY.

## Production Possibility Frontier

- Consider an economy which can produce corn or cotton by using its resources. The table below gives some of the combinations of corn and cotton that the economy can produce when its resources are fully utilized.

- If all the resources are used in the production of corn, the maximum amount of corn that can be produced is 4 units and if all resources are used in the production of cotton, at the most, 10 units of cotton can be produced. The economy can also produce 1 unit of corn and 9 units of cotton or 2 units of corn and 7 units of cotton or 3 units of corn and 4 units of cotton.

- There can be many other possibilities. The table illustrates the production possibilities of the economy.

## Production Possibility Frontier

| POSSIBILITIES | CORN | COTTON |
|---|---|---|
| ONE | 0 | 10 |
| TWO | 1 | 9 |
| THREE | 2 | 7 |
| FOUR | 3 | 4 |
| FIVE | 4 | 0 |

## Production Possibility Frontier

- If more of the scarce resources are used in the production of corn, less resources are available for the production of cotton and vice versa.
- Therefore, if want to have more of one of the goods, we will have less of the other good.
- Thus, there is always a cost of having a little more of one good in terms of the amount of the other good that has to be forgone.
- This is known as the opportunity cost of an additional unit of the goods.
- Every economy has to choose one of the many possibilities that it has. In other words, one of the central problems of the economy is to choose from one of the many production possibilities.

## Production Possibility Frontier

| POSSIBILITIES | SCOOTER | CARS |
|---|---|---|
| ONE | 10 | 0 |
| TWO | 8 | 1 |
| THREE | 6 | 2 |
| FOUR | 4 | 3 |
| FIVE | 2 | 3.5 |
| SIX | 0 | 5 |

## Centrally Planned Economy

- In a centrally planned economy, the government or the central authority plans all the important activities in the economy.
- All important decisions regarding production, distribution and consumption of goods and services on behalf of the society are taken by the central authority.
- For example if it is found some goods or services which are considered good for the society but not being produced in enough quantity government either give directions to producers that good or service by giving incentives of subsidy or tax concessions or government decides to produce that good or service to produce by itself.
- It happens generally with merit good like education and health services.

## Market Economy

- In market economy, all economic activities are organised through the market.
- A MARKET is an institution which organises the free interaction of individuals pursuing their respective economic activities.
- In a market system, all goods or services come with a price (which is mutually agreed upon by the buyers and sellers) at which the exchanges take place.
- The price reflects the society's valuation of the good or service in question.

## Market Economy

- If the buyers demand more of certain good the price of that good will rise.
- This signals to the producers of that good that the society as a whole want more of that good than is currently being produced and the producers of the good, in their turn, are likely to increase their production.
- So here, in the market system the issue of how much and what to produce are solved through the coordination of economic activities brought about by the price and demand signals.

# Indian Economy

- Indian economy is a mixed economies where some important decisions are taken by the government and the economic activities are by and large conducted through the market.
- Since independence, the government has played a major role in planning economic activities.
- However, the role of the government in the Indian economy has been reduced considerably in the last couple of decades.

## Stocks and Flows

- Total flow of production in the economy that is quantitative measure of the aggregate level of final goods produced in the economy.
- As each of these commodities is produced for sale, the sum total of the monetary value of these diverse commodities gives us a measure of final output.
- The value of intermediate goods is included in the final goods.
- Income, or output or profits are concepts that make sense only when a time period is specified.
- These are called flows because they occur in a period of time. Flows are defined over a period of time.

## Stocks and Flows

- In contrast, capital goods or consumer durables once produced do not wear out or get consumed quickly. In fact, capital goods continue to serve us through different cycles of production.
- The buildings or machines in a factory are there irrespective of the specific time period.
- These are called. Stocks.
- Stocks are defined at a particular point of time.

## Stocks and Flows

- However, we can measure addition and reduction in stock over a specific period of time.
- Such changes in stock are thus flows.
- A particular machine can be part of the capital stock for many years but that machine can be part of the flow of new machines added to the capital stock only for a single year when it was initially installed.

## Gross Investment Depreciation Net-investment

- Addition of capital goods constitutes gross investment of an economy. These may be machines, tools and implements, buildings, office spaces, storehouses or infrastructure like roads, bridges airports or jetties.
- But all the capital goods produced in a year do not constitute an addition to the capital stock already existing capital stock suffers wear and tear and needs maintenance and replacement.

## Value Added Method or Net Output Method

- In product method we calculate the aggregate annual value of goods and services produced in a year.
  Value of output:
  - It refers to market value of the goods or services produced by a firm during an accounting year. If the entire output of the year is sold during the year, value of output = sales.

- Value added is the difference between value of output of an enterprise and the value of its intermediate consumption.

- INTERMEDIATE CONSUMPTION:
  It refers to value of non-factor inputs (all inputs other than factor inputs of land, labour, capital, and entrepreneurship). Primarily it includes value of raw material used in the process of production.

# Value Added Method or Net Output Method



| Item producing enterprise | Value of output | Cost of intermediate consumption | Value added | What product |
|---|---|---|---|---|
| Farmer | 600 | 200 | 400 | Wheat |
| Flour Mill | 800 | 600 | 200 | Flour |
| Baker | 1000 | 800 | 200 | Bread |
| Shopkeeper | 1200 | 1000 | 200 | Selling bread |
| Total | 3600 | 2600 | 1000 | |

## Value Added Method or Net Output Method

- It is assumed that the production of wheat involves cost of intermediate consumption of ₹ 200.
- It may include cost of inputs like seeds, fertilizers etc. Accordingly, value added by the farmer is equal to 400.
- The flour mill buys wheat for 600 and sell flour for 800. The value added = 200
- GDP(MP) : Gross Domestic Product at Market Price
- Gross value added by all the producing enterprises within the domestic territory of a country during an accounting year is called GDP (MP)

## Value Added Method or Net Output Method

- Having estimated GDP (MP) we find out NNP (FC) at factor cost = National Income

- GDP (MP) – Depreciation = NDP (MP)

  NDP (MP) – Net indirect taxes = NDP (FC)

  NDP (FC) + Net factor income from abroad = NDP (FC) = National Income

# Value Added Method or Net Output Method

## PRECAUTIONS REGARDING VALUE ADDED METHOD

- Value of the sale and purchase of second-hand goods is not accounted for. Because value of second hand goods is already accounted for during the year they were produced.
- Commission earned on account of the sale of second-hand vehicle is added, commission is an award for services rendered
- Own account production of goods is added. Goods are produced for self consumption
- Value of intermediate goods is not included. The value will be reflected in final goods

# Income Method

- According to this method, national income is measured in terms of factor payments (compensation of employees, rent, interest and profit) to the owners of factors of production (labour, land, capital and enterprise) during an accounting year.

- National income is estimated as the sum total of factor incomes earned by the normal residents of a country as rewards for rendering their factor services during an accounting year.

- A factor income refers to income earned by a person as a reward for rendering his factor service. It can be in the form of wage/salary for his labour, rent for his land, interest for his capital or profit for his entrepreneurship. Factor income must be earned.

## Income Method

- TYPES OF FACTOR INCOME:
  - Compensation of employees - salary, perks etc.
  - Operating surplus – includes income from property and entrepreneurship which includes rent, interest and profit
  - Mixed income: incomes of the self-employed persons using their own labour, land, capital, and entrepreneurship to produce goods and services. These incomes are a mixture of wages, rent, interest and profit

## Income Method. Precautions to be taken

1. Transfer earnings like old-age pensions etc. not to be taken into account as there is no value addition by the pensioners if they are not working

2. Income from illegal activities like gambling etc. not be taken into account.

3. Commission paid on the sale of second hand goods are to be included

4. Income from lotteries should not be accounted for

5. Imputed rent of owner occupied houses is to be treated along with rent as a component of factor incomes.

## Expenditure Method

- According to this method, national income is measured in terms of expenditure on purchase of final goods and services produced in the economy during an accounting year. Since final expenditure comprises C (consumption) and I (investment)
- it is also called Consumption and Investment Method, or Income Disposal Method.
- Estimation of expenditure on the final goods produced during the year within the domestic territory of a country is equal to the market value of GDP called GDP(MP).
- It is adjusted to find NNP (FC) or national income.

## Money & Banking

- Money is the commonly accepted medium of exchange. Money is not perishable and can be stored easily. It acts as a store of value for individuals.
- We are moving towards an economy which use less of cash and more of digital transactions. Digital transactions are fast and cost of transaction to economy is greatly reduced.
- Since money is required to conduct transactions, the value of transactions will determine the money people will want to keep.
- The larger is the quantum of transactions to be made, the larger is the quantity of money demanded.

## Money & Banking

- Since the quantum of transactions to be made depends on income. A rise in income will lead to rise in demand for money.
- With higher rates of interest offered by banks people will keep less money at home as reserve, in that case the demand for money comes down.

  SUPPLY OF MONEY:
  In a modern economy, money comprises cash and bank deposits.
- There are two types of Banks- Central Bank and Commercial Banks.

## Money & Banking  Central Bank

- Central Bank is a very important institution in a modern economy.
- It is a regulator of money supply in the economy. It issues the currency of the country. It controls money supply of the country through various methods like bank rate, open market operations and variations in reserve ratios. It acts as a banker to the government.
- It is the custodian of the foreign exchange reserves of the economy. It is a bank to other banks.
- The currency issued by the central bank can be held by the public or by the commercial banks, and is called the 'high-powered money' or 'reserve money' or 'monetary base' as it acts as a basis for credit creation.

## Commercial Banks

- Commercial banks are a part of the money-creating system of the economy.
- They accept deposits from the public and lend out part of these funds to those who want to borrow.
- The interest rate paid by the banks to depositors is lower than the rate charged from the borrowers.
- This difference between these two types of interest rates, called the 'SPREAD' is the profit appropriated by the bank.

## Money Creation By Banking System

- Banks can lend simply because they do not expect all the depositors to withdraw what they have deposited at the same time. When the banks lend to any person, a new deposit is opened in that person's name. Thus, money supply increases to old deposits plus new deposit.

- EXAMPLE:
  - Assume that there is only one bank in the country. Let us construct a fictional balance sheet for the bank. Balance sheet is a record of assets and liabilities of any firm. The assets of the firm are recorded on the left-hand side and liabilities on the right-hand side.

  - Accounting rules say that both sides of the balance sheet must be equal or total assets must be equal to the total liabilities

# Money Creation By Banking System

- ASSETS are things a firm owns or what a firm can claim from others.
- For a bank apart from buildings, furniture, etc. its assets are loans given to public. Another asset that a bank has is RESERVES.
- Reserves are deposits which commercial banks keep with the Central Bank (RBI) and its cash.
- Reserves with RBI are kept partly cash and partly in the form of financial instruments like bonds and treasury bills issued by RBI. These reserves kept with RBI can be withdrawn at any time Therefore, ASSETS = RESERVES + LOANS

# Money Creation By Banking System

- LIABILITIES OF BANK = DEPOSITS
- Accounting rule states the both sides of the account must balance. Hence if assets are greater than liabilities, they are recorded on the right hand side as Net Worth.

NET WORTH = ASSETS – LIABILITIES

## Balance sheet of a Bank

- Let the bank start with a deposit of Rs. 100 from one customer. The bank has deposited Rs. 100 with RBI. If we assume that there is no currency in circulation, then the total money supply in the economy will be equal to Rs. 100.

  $M_1$ = Currency + Deposit = 0 + 100

## Money Creation By Banking System

- Suppose Mr. X comes to the bank for a loan of Rs. 500. Bank can give loan to X. X deposit the loan amount of Rs. 500 in the same bank. Now bank give loan again. This way bank can create credit unlimited number of times.

- However, the credit creation is controlled by RBI. The RBI decides a certain percentage of deposits which every bank must keep as reserves.

- This is done to ensure that no bank is over landing. This is a legal requirement and is binding on the banks. This is called the Required Reserve Ratio or Reserve Ratio or Cash Reserve Ratio.

- Cash Reserve Ratio (CRR) = Percentage of deposits which a bank must keep as cash reserve with itself

- Apart from the CRR, banks are also required to keep some reserves in liquid form in the short term. This ratio is called Statutory Liquidity Ratio or SLR.

# Money Creation By Banking System



- Let us assume that our bank starts with a deposit of ₹ 100. The cash reserve ratio is 20%. Thus, bank can give loan of ₹ 80.

| Round | Deposit in Bank | Required Reserve | Loan given by Bank |
|---|---|---|---|
| 1 | 100 | 20 | 80 |
| 2 | 180 | 36 | 64 |
| 3 | 244 | 48.8 | 51.2 |
| 4 | 295.2 | 59.04 | 40.96 |
| 5 | 336.16 | 67.23 | 32.76 |
| 6 | 368.92 | 73,78 | 26.208 |
| 7 | 395.12 | 79.024 | 20.96 |
| 8 | 416.08 | 83.216 | 16.768 |
| 9 | 432.8 | 86.56 | 13.41 |
| 10 | 446.21 | 89.24 | 10.728 |
| 11 | 456.938 | 91.387 | 8.57 |
| 12 | 465.47 | 93.094 | 6.856 |
| 13 | 472.326 | 94.4652 | 5.484 |
| 14 | 477.8 | 95.56 | 4.388 |
| 15 | 482.18 | 96.43 | 3.5104 |
| 16 | 485.69 | 97.138 | 2.80 |
| 17 | 488.49 | 97.698 | 2.24 |

Bhanu's PPT

## Money Creation By Banking System

| | | | |
|---|---|---|---|
| 18 | 490.73 | 98.146 | 1.792 |
| 19 | 492.522 | 98.50 | 1.433 |
| 20 | 493.955 | 98.79 | 1.146 |
| 21 | 495.1 | 99.02 | 0.9168 |
| 22 | 496.01 | 99.20 | 0.7334 |
| 23 | 496.7 | 99.34 | 0.58672 |
| 24 | 497.28 | 99.45 | 0.4693 |
| 25 | 497.74 | 99.50 | 0.37544 |
| 26 | 498.11 | 99.62 | 0.30035 |
| 27 | 498.41 | 99.682 | 0.24028 |
| 28 | 498.65 | 99.730 | 0.192224 |
| 29 | 498.842 | 99.7684 | 0.15377 |
| 30 | 498.99 | 99.798 | 0.12301 |
| 31 | 499.11 | 99.822 | 0.098408 |
| 32 | 499.20 | 99.84 | 0.07872 |
| 33 | 499.27 | 99.854 | 0.062976 |
| 34 | 499.30 | 99.86 | 0.050380 |
| 35 | 499.35 | 99.87 | |
| LAST | 500 | 100 | 400 |

# Balance sheet of the Bank Now

| ASSETS | | LIABILITIES | |
|---|---|---|---|
| RESERVES | 100 | DEPOSITS 100+ 400 | 500 |
| LOANS | 400 | | |
| TOTAL | 500 | TOTAL | 500 |

# Balance Sheet of the Bank

- The bank is only expected to keep 20% of its deposits as reserves. Reserve of Rs. 100 can support the deposits of ₹ 500.
  thus, bank can give loan up to ₹ 400.

- $M_1$ = Currency + Deposits
  = 0 + 500

  THUS MONEY SUPPLY INCREASES FROM ₹ 100 TO ₹ 500

  Given CRR= 20%
  The bank can not give loan beyond ₹ 400
  Hence, requirement of reserves acts as a limit to money creation.

# Money Creation

- Money Multiplier = 1/ CRR
- IN ABOVE EXAMPLE MONEY MULTIPLIER = 1/20% = 1/0.2 = 5

  THUS, RESERVES OF ₹ 100 CREATE DEPOSITS OF

  ₹ 5 X 100 = ₹ 500

## Government Budget and the Economy

- There are many ways in which the government influences economic life.
- Government Budget is main method of controlling the economic activities and giving the desired direction for development and striving for the social and economic goals set in our Constitution.
- Budget bring out the sources of government revenue and avenues of government spending.

## Government Budget and the Economy

- There is a constitutional requirement in India (Article 112) to present before the Parliament a statement of estimated receipts and expenditures of the government in respect of every financial year which runs from 1 April to 31 March.
- This 'Annual Financial Statement' constitutes the main budget document of the government.
- REVENUE BUDGET: Accounts that relate to the current financial year only
- CAPITAL BUDGET: Accounts that concern the assets and liabilities of the government

# Government Budget and the Economy

- OBJECTIVES OF GOVERNMENT BUDGET: The government plays a very important role in increasing the welfare of the people.
- Government provides certain goods and services which cannot be provided by the market mechanism.
- Examples of such goods are national defence, roads, infrastructure.
- They are also referred as Public Goods. The benefits of public goods are available to all and not only restricted to one particular consumer.
- The benefit of Government controlling the pollution will be available to all.

# Government Budget and the Economy

- One person's consumption of a good does not reduce the amount available for consumption for others.
- Ex. Street lights. Public goods are non-excludable. Everyone can enjoy the benefits even if he is not a tax payer to the government
- These non-paying users are known as 'free-riders'. Public Provision and Public Production
- Public provision means that they are financed through the budget and can be used without any direct payment.
- Public goods may be produced by the government or the private sector. When goods are produced directly by the government it is called public production.

## Government Budget and the Economy

- Private Goods are clothes, cars, food items etc. The benefit of consuming private goods is restricted to individual.
- It is not available to others. In case of private goods anyone who does not pay for the goods can be excluded from enjoying its benefits.
- REDISTRIBUTION FUNCTION OF GOVERNMENT BUDGET: The government sector affects the personal disposable income of households by making transfers and collecting taxes. It is through this that the government can change the distribution of income and bring about a distribution that is considered fair by society. This is the redistribution function.

## Government Budget and the Economy

- The redistribution objective is sought to be achieved through progressive income taxation, in which higher the income, higher is the tax rate.
- Firms are taxed on a proportional basis, where the tax rate is a particular proportion of profits.
- With respect to excise taxes (Now GST) necessities of life are exempted or taxed at low rates, comforts and semi-luxuries are moderately taxed and luxuries , tobacco, and petroleum products are taxed heavily.
  - STABILISATION FUNCTION OF GOVERNMENT BUDGET:

# Government Budget and the Economy

- STABILISATION FUNCTION OF GOVERNMENT BUDGET:
- The government may need to correct fluctuations in income and employment.
- The intervention of the government whether to expand demand or reduce it constitutes the stabilization function.
- The overall level of employment and prices in the economy depends upon the level of aggregate demand which depends on the spending decisions of millions of private agents apart from the government.

## Government Budget and the Economy

- Government spending depend on its income and credit availability.
- Government need to intervene to raise the aggregate demand for generating employment.
- In contrast, when inflation is high government has to adopt restrictive conditions to reduce demand.
- The government intervention whether to expand or reduce the demand constitutes the stabilization function.

# Government Budget and the Economy

- CLASSIFICATION OF RECEIPTS TO GOVERNMENT:
  REVENUE RECEIPTS:

- Tax and non-tax revenues are revenue receipts. These receipts are not to be returned by the government. They are therefore termed non-redeemable.

- Tax revenues are further divided in to:
  DIRECT TAXES: Personal income tax and on firms as corporation tax
  INDIRECT TAXES: Like excise taxes (duties levied on goods produced within the country) and Service tax. Now it has been replaced by GST.

- Customs duties (taxes imposed on goods imported into and exported out of India)

## Government Budget and the Economy

- Other direct taxes like wealth tax, gift tax do not bring in large amount of revenue and thus have been referred to as 'paper taxes'.
- Non-tax revenue of the central government mainly consists of interest receipts on account of loans by the central government, dividends and profits on investments made by the government.
- Cash grants-in-aid from foreign countries and international organizations are also included.

# Government Budget and the Economy

- FINANCE BILL: A Finance Bill presented along with the Annual Financial Statement, provides details on the imposition, abolition, remission, alteration or regulation of taxes proposed in the budget.
- CAPITAL RECEIPTS: The government also receives money by way of loans or from the sale of its assets. Loans will have to be returned to the agencies from which they have been borrowed.
- Thus they create liability.
  Sale of government assets, like sale of shares in PSUs which is referred as to as PSU disinvestment, reduce the total amount of financial assets of the government.
- All those receipts of the government which create liability or reduce financial assets are termed as capital receipts.

## Budget

- When government takes fresh loans in future these loans are to be returned with interest.
- These receipts are debt creating.
  When government sells an asset, then it means that in future its earnings from that assets will disappear.
- These receipts are non-debt creating.

## Budget

- CLASSIFICATION OF EXPENDITURE.

- REVENUE EXPENDITURE:
  Revenue Expenditure is expenditure incurred for purposes other than the creation of physical or financial assets of the central government.
  - expenses incurred for normal functioning of the government
  - interest payments on debt
  - grants given to state governments

- PLAN AND NON-PLAN EXPENDITURE:
  PLAN revenue expenditure relates to central Plans
  (Five Year Plans) and central assistance for State and Union Territory Plans

## Budget

- NON-PLAN expenditure covers a vast range of general, economic and social services of the government.
- The main items of non-plan expenditure are interest payments, defence services, subsidies, salaries and pensions.
- Interest payments on market loans, external loans constitute the single largest component of non-plan revenue expenditure.
- Defence expenditure, is committed expenditure in the sense that given the national security concerns.

## Budget

- There is hardly any scope of reduction in defence expenditure.
- Subsidies are an important welfare policy. Subsidies are given to education and health services.
- The government also extends subsidies to exports, interest on loans, food and fertilizers.
- THE AMOUNT OF SUBSIDIES AS A PERCENT OF GDP WAS 2.02 PERCENT IN 2014-15
  1.7 PERCENT IN 2015-16

# Budget

- CAPITAL EXPENDITURE:
  These are expenditures of the government which result in creation of physical or financial assets or reduction in financial liabilities.

- This includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, and loans and advances by the central government to state and UTs, PSUs etc.

- Capital Expenditure is also categorized as
  plan and non-plan
  Plan Expenditure relates to central plan and central assistance for state and UTs.

  Non-Plan capital expenditure covers various general, social and economic services provided by the government.

# Budget

- Budget is a significant national policy statement.
- It determines the shape of economic life.
- Along with the budget, three policy statements are mandated by the Fiscal Responsibility and Budget Management Act 2003 (FRBMA)
- The Medium-term Fiscal Policy Statement sets a three-year rolling target for specific fiscal indicators and examines whether revenue expenditure can be financed through revenue receipts on a sustainable basis and how productivity capital receipts including market borrowings are being utilized.

## Budget

- The Fiscal Policy Strategy Statement sets the priorities of the government in the fiscal area, examining current policies and justifying any deviation in important fiscal measures. The Macroeconomic Framework Statement assesses the prospects of the economy with respect to the GDP growth rate, fiscal balance of the central government and external balance.
- BALANCED BUDGET: When government expenditure is equal to the revenue it collects.
- SURPLUS BUDGET: When revenue exceeds expenditure
- DEFICIT BUDGET: When expenditure exceeds the revenue. Deficit budget is the most common feature.

## Budget

- MEASURES OF GOVERNMENT DEFICIT:

  REVENUE DEFICIT:
  The revenue deficit refers to the excess of government's revenue expenditure over revenue receipts.

  Revenue deficit = Revenue expenditure – Revenue receipts

# Receipt and Expenditure of the central Government 2015-16

| S.No. | Item | As per cent of GDP |
|---|---|---|
| 1. | Revenue Receipts (A+B) | 8.1 |
| | A. Tax Revenue | 6.5 |
| | B. Non-Tax Revenue | 1.6 |
| 2. | Revenue Expenditure of which | 10.9 |
| | A. Interest Payment | 3.2 |
| | B. Major Subsidies | 1.6 |
| | C. Defense Expenditure | 1.1 |
| 3. | Revenue Deficit 2-1 | 2.8 |

| S.No. | Item | As per cent of GDP |
|---|---|---|
| 4 | Capital Receipts (A+B+C+) | 4.5 |
| | A) Recovery of Loans | 0.1 |
| | B) Other receipts mainly PSU Disinvestment | 0.5 |
| | C) Borrowings and other liabilities | 3.9 |
| 5. | Capital Expenditure | 1.7 |
| 6. | Total Expenditure | 12.6 |
| 7. | Fiscal Deficit 3+5-4 -4(B) | 3.9 |
| 8. | Primary Deficit 7-2 (A) | 0.7 |

## Budget

- Above table shows that revenue deficit in 2015-16 was 2.8% of GDP.
- The revenue deficit includes only such transactions that affect the current income and expenditure of the government.
- When the government incurs a revenue deficit, it implies that the government is dissaving and is using up the savings of the other sectors of the economy to finance a part of its consumption expenditure.
- This situation means that the government will have to borrow not only to finance its investment but also its consumption requirements.
- This will lead to government to cut on expenditure. Since a major part of revenue expenditure is committed expenditure, it cannot be reduced.
- Often the government reduces productive capital expenditure or welfare expenditure.
- This would mean lower growth and adverse welfare implications.

# Fiscal Deficit

- Fiscal deficit is the difference between the government total expenditure and its total receipts excluding borrowing

Gross fiscal deficit = Total expenditure – (Revenue receipts + Non-debt creating capital receipts)

- Non-debt creating capital receipts are those receipts which are not borrowings and therefore, do not give rise to debt. Examples are recovery of loans and the proceeds from the PSUs.
- The fiscal deficit will have to be financed through borrowing. It indicates the total borrowing requirements of the government from all sources.
- Gross fiscal deficit = Net borrowing at home + Borrowing from RBI + Borrowing from abroad
- Net borrowing at home includes that directly borrowed from public through debt instruments.

  For example, the various small saving schemes. And indirectly from commercial banks through Statutory Liquidity Ratio (SLR).

## Fiscal Deficit

- The gross fiscal deficit is a key variable in judging the financial health of the public sector and the stability of the economy.

- Fiscal Deficit = Revenue deficit + Capital Expenditure – non-debt creating capital receipts

A large share of revenue deficit in fiscal deficit indicated that a large part of borrowing is being used to meet its consumption expenditure needs rather than investment.

## Primary Deficit

- The borrowing requirement of the government includes interest obligations on accumulated debt. The goal of measuring primary deficit is to focus on present fiscal imbalances.
- To obtain an estimate of borrowing on account of current expenditures exceeding revenues, we need to calculate what has been called the primary deficit.
- Gross Primary Deficit = Gross fiscal deficit – Net interest liabilities
- Net interest liabilities consist of interest payments minus interest receipts by the government on net domestic lending.

# Debt

- Budgetary deficits must be financed by either taxation, borrowing or printing money.
- Government have mostly relied on borrowing, giving rise to what is called government debt.
- If the government continuous to borrow year after year, it leads to the accumulation of debt and the government has to pay more and more by way of interest.
- These interest payments themselves contribute to the debt.

## Deficit Reduction

- Government deficit can be reduced by:
  -increase in taxes
  -reduction in expenditure
  -Disinvestment of PSUs by selling of shares

- The same fiscal measures can give rise to a large or small deficit, depending on the state of the economy.

- For example, if an economy experiences a recessions and GDP falls, tax revenues fall because firms and households pay lower taxes when they earn less.

- This means that the deficit increases in a recession and falls in a boom, even with no change in fiscal policy.

## Fiscal Responsibility and Budget Management Act 2003

- The enactment of the FRBMA, in August 2003, marked a turning point in fiscal reforms, binding the government through an institutional framework to pursue a prudent fiscal policy.

- The central government must ensure intergenerational equity and long-term macro-economic stability by achieving sufficient revenue surplus, removing fiscal obstacles to monetary policy and effective debt management by limiting deficits and borrowing.

- The rules under the act were notified with effect from July, 2004.

## Fiscal Responsibility and Budget Management Act 2003

- MAIN FEATURES:
  - The Act mandates the central government to take appropriate measures to reduce fiscal deficit to not more than 3% of GDP and to eliminate the revenue deficit by March 31, 2009 and thereafter build up adequate revenue surplus.
  - It requires the reduction in fiscal deficit by 0.3% of GDP each year and the revenue deficit by 0.5%. If this is not achieved through tax revenues, the necessary adjustment has to come from a reduction in expenditure.
  - The actual deficit may exceed the targets specified only on grounds of national security or natural calamity or such other exceptional grounds as the central government may specify.

## Fiscal Responsibility and Budget Management Act 2003

- The central government shall not borrow from the Reserve Bank of India except by way of advances to meet temporary excess of cash disbursements over cash receipts.
- The RBI must not subscribe to the primary issues of central government securities from the year 2006-07.
- Measures to be taken to ensure greater transparency in fiscal operations.
- The central government lay three statements before both Houses of Parliament-
  Medium-term Fiscal Policy Statement,
  The Fiscal Policy Strategy Statement,
  The Macroeconomic Framework Statement,
  along with the Annual Financial Statement.

## Fiscal Responsibility and Budget Management Act 2003

- The central government to lay before both Houses of Parliament three statements- Medium-term Fiscal Policy Statement, The Fiscal Policy Strategy Statement, The Macroeconomic Framework Statement along with the Annual Financial Statement.
- Quarterly review of the trends in receipts and expenditure in relation to the budget be placed before both Houses of Parliament.

## Fiscal Responsibility and Budget Management Act 2003

- Quarterly review of the trends in receipts and expenditure in relation to the budget be placed before both Houses of Parliament.
- The FRBMA is an important institutional mechanism to ensure fiscal prudence and support macro economic balance
- There have been fears that welfare expenditure may get reduced to meet the targets mandated by the act.

# GST

- GST: ONE NATION, ONE TAX, ONE MARKET
- Goods and Service Tax is the single comprehensive indirect tax operational from 1 July 2017, on supply of goods and services, right from the manufacturer/service provider to the consumer.
- It is a destination-based consumption tax with facility of Input Tax Credit in the supply chain.
- It is applicable throughout the country with one rate for one type of goods/service.
- It has amalgamated a large number of taxes on goods and services levied on production; sale of goods; or provision of service.

# GST

- Input Tax Credit:
  ITC is the tax that a business pays on a purchase and that it can use to reduce its tax liability when it makes a sale

- In other words, businesses can reduce their tax liability by claiming credit to the extent of GST paid on purchases.

- Ex. Tax payable on output (Final Product)= ₹ 450
  Tax Paid on inputs (purchases). = ₹ 300
  We can claim INPUT CREDIT = ₹ 300
  Tax Payable = ₹ 150

# GST

- Under GST, the tax is discharged at every stage of supply and credit of tax paid at the previous stage is available for set off at the next stage of supply of goods and or services.
- It is thus effectively a tax on value addition at each stage of supply
- It has replaced various types of taxes and cesses levied by the Central and State/UT governments.
- Some of the major taxes that were levied by Centre were Central Excise Duty, Service Tax, Central Sales Tax, Cesses like KKC and SBC

# GST

- The major State taxes were VAT/Sales Tax, Entry Tax, Luxury Tax, Octroi, Entertainment Tax, Taxes on Advertisements, Taxes on lottery, betting etc. State Cesses on goods etc.
- These have been subsumed in GST.
- Five petroleum products have been kept out of GST for time being.
- State governments will continue to levy VAT on alcoholic liquor for human consumption.
- Tobacco and tobacco products will attract both GST and Central Excise Duty.

## GST Cess

- Individual States are likely to lose money receipt due to imposition of GST
- To help these states to stay afloat as the country adjust to GST, the government created the compensation cess.
- GST is a destination based tax, which means that taxes from products we sell go to the buyer's state. This is different from India's earlier VAT regime, where the tax went to the seller's state. That means some states stand to lose money, particularly if they have high production but low consumption.

## GST - Compensation Cess

- The Compensation Cess Act identifies the products that qualify for the cess. These include:
  Pan Masala
  Tobacco
  Coal and solid fuels that are made from coal
  Aerated Waters
  Motor Cars
  Motor vehicles designed to transport 10 or more people

- The compensation cess rate varies by the type of product. The cess is calculated based on the value of the product without GST.
  Coal : Rs. 400 per tonne

- The GST law designed the compensation cess to last for five years upto 2022.

# GST

- GST is the biggest tax reform in the country since independence and was rolled out on the mid-night of 30 June /1 July, 2017 during a special midnight session of the Parliament.
- The 101st Constitution Amendment Act received assent of the President of India on 8th September, 2016.
- The amendment introduced Article 246A in the Constitution cross empowering Parliament and Legislatures of States to make laws with reference to Goods and Service Tax imposed by the Union and the States.

## GST

- Thereafter CGST Act, UTGST Act and SGST Acts were enacted for GST.
- GST has simplified the multiplicity of taxes on goods and services.
- The laws, procedures and rates of taxes across the country are standardized.
- It has facilitated the freedom of movement of goods and services and created a common market in the country.
- It is aimed at reducing the cost of business operations and cascading effect of various taxes on consumers.

## GST

- It has also reduced the overall cost of production, which will make Indian products/Services more competitive in the domestic and international markets.

- It will also result into higher economic growth as GDP is expected to rise by about 2%.

- Compliance will also be easier as all tax payments related services like registration, returns, payments are available online through a common portal www.gst.gov.in.

- It has expanded the tax base introduced higher transparency in the taxation system, reduced human interface between Taxpayer and government and is furthering ease of doing business.

# GST Rates

| Tax Rate | Products |
|---|---|
| 5% | Household necessities such as edible oil, sugar, spices, tea and coffee, Coal, Mishti, Life saving drugs, biogas, Kites, Coir mats, Fly ash blocks, Braille paper, Hearing aids, Walking sticks,, |
| 12% | Computers and processed food, exercise and note books, Playing cards |
| 18% | Hair oil, toothpaste and soaps, capital goods, Aluminium foil, Ball bearing, CCTv |
| 28% | luxury items cars, ACs and Refrigerators, Premium cars, cigarettes and aerated drinks, high end motor cycles, Cement |

## GST -No Tax Items

- Wheat, Barley Oat
- Jaggery , Salts
- Kajal
- Picture books, colouring books, Human hair
- Sanitary napkins
- Music books
- Vegetables preserved
- 3% on Gold

# Open Economy

- An open economy is one which interacts with other countries and have economic activities/ exchange with other countries in the world.
- OPEN MARKET: An economy can trade in goods and services with other countries. Consumers and producers have a wider choice, as can choose between domestic and foreign goods.
- OPEN FINANCIAL MARKET: Very often an economy can buy financial assets from other countries. This gives investors the opportunity to choose between domestic and foreign assets
- OPEN LABOUR MARKET: Firms can choose where to locate production and workers to choose where to work. There are various immigration laws which restrict the movement of labour between countries.
- Thus, an open economy is said to be one that trades with other nations in goods and services and very often, also trade in financial assets.

## Foreign Trade

- Foreign trade influences Indian aggregate demand:

A) When Indians buy foreign goods this spending escapes as a leakage from the circular flow of income decreasing aggregate demand

B) Our exports to foreigners enter as an injection into the circular flow, increasing aggregate demand for goods produced within the domestic economy.

## Foreign Exchange Rate

- The price of one currency in terms of another currency is known as the foreign exchange rate.

## Balance of Payments

- The Balance of Payments (BoP) record the transactions in goods, services and assets between residents of a country with the rest of the world for a specified time period generally a year.
- There are two main accounts in Balance of Payment:

A. Current Account

B. Capital Account

## Current Account

- Current Account is the record of trade in goods and services and transfer payments.
- Trade in goods includes exports and imports of goods. Trade in services includes factor income and non-factor income transactions
- Transfer Payments are the receipts which the residents of a country get for free, without having to provide any goods or service in return. Ex. Indian sending money from foreign country to his parents. They may consist of gifts, remittances and grants.
- Buying foreign goods is expenditure from our country and it becomes the income of that foreign country.
- The purchase of foreign goods or imports decreases the domestic demand for goods and services in our country.
- Similarly, selling of foreign goods or exports brings income to our country and adds to the aggregate domestic demand for goods and services in our country.

## Current Account

- BALANCE ON CURRENT ACCOUNT:
  Current account is in balance when receipts are equal to payments.
  RECEIPTS = PAYMENTS

  A SURPLUS current account means that nation is lender to other countries
  RECEIPTS > PAYMENTS
  A DEFICIT current account means that the nation is a borrower from other countries.
  RECEIPTS < PAYMENTS

  CURRENT ACCOUNT HAS TWO COMPONENTS

  1. Balance of Trade. Or Trade Balance
  2. Balance on Invisibles

## Current Account

- BALANCE OF TRADE: is the difference between the value of exports and value of imports of goods of a country in a given period of time.
  Export value = Import value ……….BOT in Balance
  Surplus BOT = Trade Surplus when exports exceed imports

  INVISIBLES: includes services, transfers and flows of income that take place between different countries.
  Services trade includes both factor and non-factor income.

  Factor income includes net international earnings on factors of production like labour, land and capital.

  Non-factor income is net sale of service products like shipping, banking, tourism, software services, etc.

## Capital Account

- Capital Account records all international transactions of assets. An asset is any one of the forms in which wealth can be held for example money stocks bonds, Government debt, etc.

- Purchase of assets is a debit item on the capital account. If an Indian buys a UK car company, it enters capital account transactions as a debit item AS FOREIGN EXCHANGE IS FLOWING OUT OF INDIA.

- On the other hand, sale of assets like sale of share of an Indian company to a Chinese customer is a credit item on the capital account transactions.
  These items are Foreign Direct Investments (FDI), Foreign Institutional Investments (FIIS), external borrowings and assistance.

# Capital Account

## BALANCE ON CAPITAL ACCOUNT:

- Capital account is in balance when capital inflows like receipts of loans from abroad, sale of assets or shares in foreign companies are equal to capital outflows like repayment of loans, purchase of assets or shares in foreign countries.
- Surplus in capital account arises when capital inflows are greater than capital outflows, whereas deficit in capital account arises when capital inflows are lesser than capital outflows.

## Balance of Payments surplus and Deficit

- Deficit in current account can be balanced by selling assets or by borrowing abroad. Thus, any current account deficit must be financed by a capital account surplus, that is a net capital in- flow.
  current Account + Capital Account = Zero
- The country can use its reserves of foreign exchange in order to balance any deficit in its balance of payments.
- The reserve bank sells foreign exchange when there is a deficit.
- This is called official reserve sale.
- The decrease or increase in official reserves is called the overall balance of payments deficit or surplus.

## Autonomous Transactions

- International economic transactions are autonomous when transactions are made to earn profit.
- These are not linked to settle the BoP.
- These items are called 'above the line' items in the BoP.
- The BoP is said to be in surplus if autonomous receipts are greater than autonomous payments.
- The BoP is said to be in deficit if autonomous receipts are less than autonomous payments.

## Accommodating Transaction

- They are also termed 'below the line' items.
  The official reserve transactions are made to bridge the gap in the BoP.
- They are seen as the accommodating item in the BoP.

ERRORS AND OMISSIONS:

- It is difficult to record all international transactions accurately.
- Thus, we have a third element of BoP called errors and omissions.

## Foreign Exchange Market

- An Indian going on a holiday abroad is import of tourist services.
- The market in which national currencies are traded for one another is known as the foreign exchange market. Market is world-wide.
- Market is managed by commercial banks, foreign exchange brokers and other authorized dealers and monetary authorities.

## Foreign Exchange Market

- FOREIGN EXCHANGE RATE:
  Foreign Exchange Rate also called Forex Rate is the price of one currency in terms of another. It enables comparison of international costs and prices.

  DEMAND FOR FOREIGN EXCHANGE:
  People demand foreign exchange because they want to purchase goods and services from other countries. They want to visit other countries, they want to send gifts abroad and they want to purchase financial assets of a certain country.
  A rise in price of foreign exchange will increase the cost in terms of Rs. Of purchasing a foreign good.

- This will also reduce demand for imports and hence demand for foreign exchange also decreases.

# Foreign Exchange Market

- SUPPLY OF FOREIGN EXCHANGE:
  When foreigners purchase Indian goods and services or foreigners send gifts or make transfer or assets are bought by them: Foreign currency flows into India.
  A rise in price of foreign exchange will reduce the foreigner's cost while purchasing products from India. This will increase India's exports and hence supply for foreign exchange may increase.

  DETERMINATION OF THE EXCHANGE RATE:
  Different countries have different methods of determining their currency's exchange rate. It can be determined through Flexible Exchange Rate, Fixed Exchange Rate or Managed Floating Exchange Rate.

# Foreign Exchange Market

- FLEXIBLE EXCHANGE RATE:
  This exchange rate is determined by the market forces of demand and supply. It is also known as Floating Exchange Rate. The exchange rate is the interacting point of demand and supply of currencies.
  In a completely flexible system, the Central banks do not intervene in the foreign exchange market.

  Ex. Todays exchange rate is ₹ 50 for 1$
  With increase in imports or more Indians travelling to US the demand of dollars will increase.

- Say it increases to ₹ 60 for 1$

- This means we need to pay more rupees for a dollar.

# Foreign Exchange Market

- It indicates that the value of rupees in terms of dollars has fallen and the value of dollar in terms of rupees has risen.
- Increase in exchange rate implies that the price of foreign currency $ in terms of domestic currency Rs. has increased.
- This is called DEPRECIATION of domestic currency in terms of foreign currency.
- Similarly, in a flexible exchange rate regime, when the price of domestic currency in terms of foreign currency increases, it is called APPRECIATION.

# Exchange Rate

- SPECULATION:
  Money in any country is an asset.
- If Indians believe that British pound will have higher value in near future they would like to hold pounds.
- This preference of holding may affect the exchange rate as the demand rises.

# Exchange rate

- INTEREST RATES AND EXCHANGE RATE:
- In the short run the differential interest between two countries may trigger change in exchange rate.
- There are huge funds owned by banks, multinational corporations and wealthy individuals which move around the world in search of the highest interest rates.
- Investors will move to country offering higher rates and buy the currency of that country.
- THUS, A RISE IN THE INTEREST RATES AT HOME OFTEN LEADS TO AN APPRECIATION OF THE DOMESTIC CURRENCY.

# Exchange Rate

- INCOME AND THE EXCHANGE RATE:
- When income increases, consumer spending increases. Spending on imported goods is also likely to increase. When imports increase, the demand curve for foreign exchange shifts to the right.
- There is a depreciation of the domestic currency.
- A country whose aggregate demand grows faster than rest of the world's normally finds its currency depreciating because its imports grow faster than its exports.

# Exchange Rate

## EXCHANGE RATES IN THE LONG RUN:

As long as there are no barriers to trade like tariffs and quotas exchange rates should eventually adjust so that the same product costs the same whether measured in rupees in India, or dollars in the US, yen in Japan and so on, except for differences in transportation.

Over the long run, therefore, exchange rates between any two national currencies adjust to reflect differences in the price levels in the two countries.

# Fixed Exchange Rate

- The Government fixes the exchange rate at a particular level.
- If Indian government wants to encourage exports for which it needs to make rupee cheaper for foreigners it would fix higher exchange rate then the current exchange rate.
- At this rate the supply of dollars exceeds the demand for dollars.
- The RBI intervenes to purchase the dollars for rupees in the foreign exchange market in order to absorb this excess supply.
  Thus through intervention, the government can maintain any exchange rate in the economy.
  On the other hand if government was to set an exchange rate at a lower level, there would be excess demand for dollars in the foreign exchange market.

## Fixed Exchange Rate

- To meet this excess demand for dollars the government would have to withdraw dollars from its past holdings of dollars.

- In a fixed exchange rate system, when some government action increases the exchange rate , thereby making domestic currency cheaper is called Devaluation.

- On the other hand, a Revaluation is said to occur, when the government decreases the exchange rate, thereby making domestic currency costlier, in a fixed exchange rate system.

# Flexible Exchange Rate

- ADVANTAGES OF THE FLEXIBLE EXCHANGE RATE SYSTEM: The flexible exchange rate system gives the government more flexibility and they do not need to maintain large stocks of foreign exchange reserves. The major advantage of flexible exchange rates is that movements in the exchange rate automatically take care of the surpluses and deficits in the BoP.

- MANAGED FLOATING:
  World has moved to managed floating exchange rate system.
  Central banks intervene to buy and sell foreign currencies in an attempt to moderate exchange rate movements whenever they feel that such actions are appropriate.

## Sterilization by RBI

- **Sterilization** is a form of monetary action in which a central bank seeks to limit the effect of inflows and outflows of capital on the money supply. **Sterilization** most frequently involves the purchase or sale of financial assets by a central bank, and is designed to offset the effect of foreign exchange intervention.
- Sterilization most frequently involves the purchase or sale of financial assets by a central bank, and is designed to offset the effect of Foreign Exchange intervention.
- The sterilization process is used to manipulate the value of one domestic currency relative to another, and is initiated in the Foreign Exchange market

## Sterilization by RBI

- A central bank can also intervene in foreign exchange markets to prevent currency appreciation by selling its own currency in exchange for foreign currency-denominated assets, thereby building up its foreign reserves as a happy side effect.

- Because the central bank releases more of its currency into circulation, the money supply expands.

- Money spent buying foreign assets initially goes to other countries, but it soon finds its way back into the domestic economy as payment for exports.

- The expansion of the money supply can cause inflation, which can erode a nation's export competitiveness just as much as currency appreciation would.

## Exchange Rate over the Years

1. Around World War I the system was the gold standard linked to fixed exchange rate system. All currencies were defined in terms of gold

2. If one unit of say currency A was worth one gram of gold and other currency B is worth two gram of gold. The currency B would be worth twice as much as currency A.

3. Several crises caused the gold standard to break down many times. The main reason was the production of gold equivalent to GDP.

4. Many countries adopted gold exchange standard by keeping their money exchangeable at fixed prices with respect to gold but held little or no gold.

# Exchange Rate over the Years

- THE BRETTON WOODS SYSTEM:
  The Bretton Woods Conference was held in 1944. World Bank and IMF reestablished a system of fixed exchange rates.

- The US monetary authorities guaranteed the convertibility of the dollar into gold at the fixed price of $35 per ounce of gold.

- Each member participating in the system gave commitment to convert their currency into dollars at a fixed price. This was called the official exchange rate.
  Ex. French Francs could be exchanged for dollars at roughly 5 francs per dollar
  the dollars could be exchanged with dollar $35 per ounce
  So 175 francs per ounce of gold

## Exchange Rate over the Years

- Why we adopted this:
- Gold reserves across countries was uneven with the US having almost 70% of the official world gold reserves.
- It was believed that existing gold stock would be insufficient to sustain the growing demand for international liquidity.
- The system failed quickly as US could not kept the commitment.
- In August 1971, the British demanded that US guarantee the gold value of the dollar holdings. This led to the US decision to give up the link between the dollar and gold.

## Exchange Rate over the Years

- Triffin suggested that the IMF should turned into a deposit bank for central banks and a new 'reserve asset' be created under the control of the IMF.

- In 1967, gold was displaced by creating the Special Drawing Rights (SDRs) also known as 'paper gold'
  SDR has been defined several times since then.

- At present, it is calculated daily as the weighted sum of the values in dollars of four currencies euro, dollar, Japanese yen, pound sterling of the five countries France, Germany, Japan, the UK and the US.

## Exchange Rate over the Years

- IT drives its strength from IMF members being willing to use it as a reserve currency and use it as a means of payment between central banks to exchange for national currencies.
- The original installments of SDRs were distributed to member countries according to their quota in the Fund. The quota was broadly related to the country's economic importance as indicated by the value of its international trade.
- At present, the international system is now characterized by a multiple of regimes. Most exchange rates change slightly on a day to day basis, and market forces generally determine the basic trends.
- Even those advocating greater fixity in exchange rates generally propose certain ranges within which governments should keep rates, rather than literally fix them.
-

# Foreign Exchange Management Act

- The FEMA 1999, is an Act of the Parliament of India. It replaced FERA. Foreign Exchange Regulation Act.
- FEMA facilitates external Trade and payments
- FEMA is a regulatory mechanism that enables the RBI to pass regulations relating to foreign exchange in tune with the foreign Trade policy of India.
- FEMA is for promoting the orderly development and maintenance of foreign exchange market in India
- FEMA served to make transactions for external trade and easier transactions involving current account for external trade no longer required RBI's permission.

## Prevention of Money Laundering Act, 2002

- Prevention of Money Laundering Act, 2002 is an Act of the Parliament of India enacted to prevent money-laundering and to provide for confiscation of property derived from money-laundering.
- Money Laundering is the process of concealing the origins of money obtained illegally by passing it through a complex sequence of banking transfers or commercial transactions.
- PMLA and the rules notified there under came into force with effect from July1, 2005.
- Financial Institutions, Banks have obligation to verify identity of clients, maintain records and furnish information in prescribed form to Financial Intelligence Unit-India.

## FCRA Foreign Contribution Regulation Act

- FCRA licenses of about 20,000 NGOs were cancelled
- NGOs are no longer eligible to receive foreign funds
- FCRA was amended by the Finance Bill 2016.
- The present law has mandated that FCRA licenses would expire after five years.
- The new laws also put 50% restriction on the proportion of foreign funds
- Foreign funds are a major source of financial support for NGOs in India.

# FCRA and NGOs

- Greenpeace NGO: licence cancelled for obstructing development activities in the country by organizing protests against thermal power, nuclear power, coal, and aluminium mining.

- An intelligence Bureau Report called 'Impact of NGOs on Development' published in 2014 warned that many NGOs in the country with support from international donors were planning to disrupt the developmental activities, endangering the Indian economy

- NGO Funding 2015-16 ₹ 17773 crore
  2016-17. ₹ 6499 crore

## DARPAN Portal of NITI AAYOG

- The NGO-Partnership System (NGO-PS) Portal (NGO-DARPAN) is maintained by NITI Aayog.
- NITI= National Institution for Transforming India
- NITI Aayog invites all Voluntary Organizations NGOs to sign Up on the Portal
- Vos and NGOs play a major role in the development of the Nation by supplementing efforts of the government.
- The portal is the repository of NGOs sector wise and State wise.
- Portal allots an Unique ID to each NGO. The ID is mandatory to apply for grants under various schemes of Ministries and Governments Bodies.

## Index of Industrial Production (IIP)

- IIP is released by the Central Statistics Office (CSO) of the Ministry of Statistics and Programme Implementation
- The 8 Core Industries comprise nearly 38% of the weight of items included in the Index of IIP
- The total share of Industrial sector is 27% in the GDP
- The share of Manufacturing in GDP of India -17%
- The share of Mining electricity and gas in GDP is 10%

## Pink Revolution

- Pink Revolution is a term used to denote the technological revolutions in the meat and poultry processing sector
- India has high cattle and poultry population has  high potential for growth.
- The present meat consumption is only 6 grams per day which may/ can improve to 50 grams per day
- India accounts only 2% of global market there is huge growth potential
- Challenges are standardization the quality and safety aspects of meat and poultry. Creating infrastructure of modern slaughter houses and storing facilities needed
- Authority to oversee the development -National Meat and Poultry Processing Board under Ministry of Food Processing

- Thank You