**Economics Class 01**

**A brief introduction**

**Syllabus discussion(1:10:00PM)**

- **Prelims:**
- The prelims syllabus is quite vague
- PYQs act as the best guide
- On average around 20 questions are asked in Prelims.
- Some important topics:
- Monetary Policy
- Fiscal Policy
- External sector and trade
- National Income Accounting
- **Mains:**
- Quite detailed syllabus
- Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development, and Employment.
- Inclusive Growth and issues arising from it.
- Government Budgeting,
- Agriculture
- Infrastructure, etc
- It is important to develop a comprehensive understanding of the subject by linking the various topics.

**Sources and strategy(1:26:00PM)**

- Need to carefully look at the Previous Years' Papers and try to identify the nature of the questions asked.
- **Sources:**
- **1. Basic sources:**
- **A. NCERTs**
- Class 11- Indian Economy(Must)
- Class 12- Macroeconomics(Must)
- Class 12- Microeconomics(Reading is optional, can read Chapter 1)
- **B. Printed Material**
- **2. Advance Sources:**
- **Newspapers-**
- Read 2 newspapers
- Need to read them objectively
- Over a period of time, the time required to read the newspaper will reduce
- Most of the questions are framed from the newspaper
- **Economic Survey**
- Read the survey with respect to understanding the state of the Indian economy and not for mugging up facts.
- **Monthly Current Affairs**
- **Magazines** like **Yojana and Kurukshetra** can be read if time permits.
- Retention is very important and it can be done through tests.
- Doubt resolution

**Economics(2:18:00PM)**

- It deals with the problem of limited resources and unlimited wants, whether resource utilization is optimal or not.
- **Microeconomic decision**
- A decision that affects the individual.
- Example: Choosing between a petrol/diesel car for oneself.
- **Macroeconomic decision**
- The decisions that affect the economy in general.
- Example: The decision of the government to impose a tax on diesel cars due to their polluting nature.

**Developmental Economics(2:36:00PM)**

- The topics covered to be covered:
- Poverty
- Inequality
- Unemployment

**Poverty(2:57:00PM)**

- Poverty is defined as (according to **World Bank**) pronounced **deprivation** of various aspects of **wellbeing.**
- These include lack of income, inability to afford basic necessities required for a dignified survival, lack of access to educational and health facilities, and lack of social or political voice.
- Further, it includes a lack of access to clean water and sanitation, a clean environment, and a general inability due to lack of opportunities to better one's life.
- The above description is comprehensive, however, it does not allow us to measure/identify poverty objectively.
- To objectively measure it, we would need standards.
- **Absolute poverty**
- This is poverty measured using **objectively defined standards.**
- Standards are **expert opinions** that have been accepted.
- The standards change with new information, the evolution of the society, and most importantly on the basis of what the person formulating the standards considers poverty to be.
- Once they are set, they remain unless new standards are adopted.
- Standards help in **spatial and temporal comparison**- we can compare poverty across regions fairly using the same standards, and evaluate the progress on poverty alleviation(reduction) over time in a country.
- **Relative poverty**
- This is poverty on a **comparative basis**, that is, a person is considered poor not using some universal/national standards, but rather on the basis of comparison with some other person or group of people.
- *** Absolute poverty** is called **normative poverty** (Normative statements are statements of opinion). Standards are just accepted opinions.
- **Poverty line(PL) and poverty line basket(PLB)**
- The poverty line refers to the **accepted standard of absolute poverty.**
- This is suggested by an **expert committee** and then accepted by an **authority.**
- In India, the task of estimating poverty was primarily the responsibility of the **Planning Commission**, and now **NITI Aayog.**
- Planning Commission used to constitute various expert committees to estimate the poverty line, and then to estimate poverty using it.
- The expert committee recommends the PL use the poverty line basket.
- PLB is that **basket of goods and services** that are considered to be such that it is the minimum basket of goods and services necessary to enable a household to live a **dignified life.**
- The expert committee will consider the general standards of living and aspirations of people to construct this PLB.
- The price of PLB will be collected from the relevant market, and this will be the PL of the country.
- * The price of items in PLB will change with time and hence the PL would be continuously updated. Updation is not a change.
- * Change of PL will be when PLB changes.
- **Read NCERT(Class 11-Poverty) and Tendulkar and Rangarajan Committee from Printed Material.**

**The topic for the next class-Evolution of the poverty line**
**Economics Class 02**

**Doubt resolution and a brief review of the last class**
**Evolution of the poverty line(1:12:00PM)**

- **Identification and measurement of poor**
- Identification of the poor is done for the purpose of providing them with various benefits under the government's anti-poverty programmes.
- Such programmes have their own criteria for identifying the beneficiaries.
- The criteria are such that they try to minimise both inclusion and exclusion errors. (Inclusion errors are those where an undeserving person enjoys the benefits meant for the poor, exclusion errors are those where a deserving person is deprived of these benefits).
- Measurement of the number of poor people is done by laying down the poverty line and applying this to the relevant data to check how many people are above or below it.
- **NSSO** carries out **NCES(National Consumption Expenditure Survey)**, which is the dataset on which the standard, that is the poverty line, is applied and the number of poor people estimated.
- **Head Count Ratio(HCR)**
- It is the proportion of the population which is below the poverty line.
- It is estimated by applying PL on NCES.

- * Estimating the number of poor people is in no way used to identify beneficiaries. They are identified under the respective criteria of various schemes of the government.
- **Evolution of PL**
- **A. Pre-independence estimates**
- **Dada Bhai Naoroji (1865)**
- He estimated poverty in his paper titled **"Poverty and Unbritish rule in India".**
- For him, the PL was based on a person's ability to get adequate energy for survival.
- This was equal to the food served to a prisoner.
- **National Planning Committee, 1938 and Bombay Plan, 1944**
- They also talked about the estimation of poverty and targeting schemes for the poor.
- **B. Post-independence estimates**
- **Planning Commission(PC)** was tasked with the estimation of poverty and for this, it used to constitute expert committees from time to time.
- These are:
- **a. Dandekar and Rath Committee(1971)**
- PL based on ability to acquire energy- **2250 calories pp-pd(per person per day).**
- **b. YK Alagh Committee(1979)**
- Alagh separated the PL into rural and urban PL by incorporating the differences in energy requirements, consumption patterns and prices between rural and urban areas.
- Rural PL was based on the ability to acquire **2400 calories pp-pd,** Urban PL on **2100 pp-pd.**
- **c. Lakdawala Committee(1993)**
- He further separated the PL into state-specific PLs by incorporating the differences in consumption patterns and prices in various states.
- Further, he also suggested updating the PL using standard inflation indices for the relevant market.
- He also increased the weightage of non-food items and thus the PL got revised upwards.
- * The three PLs mentioned above are purely normative in nature.

**Tendulkar Committee, 2009 and Rangarajan Committee, 2012(2:36:00PM)**

- **Tendulkar Committee**
- Till 2005(when Tendulkar Committee was constituted), the poverty lines assumed many expenses borne by the government as those expenses where the poor will not be spending any money. For example, it was assumed that the poor will not spend money on health or education as it was provided free of cost by the government.
- Tendulkar observed these expenses and incorporated them into his PLB.
- His PLB, therefore, had the normative component and this observed positive or behavioural components such as expenses on health, education, water, and sanitation.

**Rangarajan Committee(3:13:00PM)**

- Rangarajan's PL is better organised and more scientific than Tendulkar's PL.
- Rangarajan's PL is divided into two parts:
- **Normative**
- Normative has two parts- **food and non-food.**
- **Food-** According to ICMR guidelines(calories+fat+protein)
- **Non-food-** Clothing, housing, transportation, health, education
- **Behavioural**
- It includes alcohol, tobacco, entertainment, health, education, etc
- * Our official PL is Tendulkar's PL and not Rangarajan's PL.
- * Tendulkar recommended changes in NCES to make it more accurate. He introduced the concept of the **Mixed Recall Period (MRP)** from the then-existing **Uniform Recall Period(URP).**
- Items with a higher frequency of consumption had a shorter recall period whereas those with lesser frequency had a longer recall period.
- Rangarajan further modified it to **MMRP(Modified MRP).**
- * Rangarajan also suggested that poverty can be alternatively measured using the Household's ability to save.

**Multidimensional Poverty Index(OPHI and UNDP)(3:52:00PM)**

- **OPHI- Oxford Poverty and Human Development Initiative**
- MPI measures poverty as deprivation on **three dimensions of well-being**-
- **Health**
- **Education**
- **Standard of living**
- Each of these dimensions is assessed in a specific manner, with specific deprivation criteria.

- For example, it measures Health through malnourishment and mortality, Standard of Living through access to drinking water, modern sanitation, cooking fuel, etc, and Education through attendance and other means.
- There are a total of **10 criteria**, and a household is considered MPI poor if it is deprived on **3 or more out of 10.**
- * These dimensions are linked to **Sustainable Development Goals.**
- Doubt resolution.

**The topic for next class- India's progress on poverty**
**Economics Class 03**

**A brief review of the last class**
**World Bank's Poverty Line(1:10:00 PM)**

- World Bank has classified countries into **3 groups** based on **GNI per capita.**
- These are **:**
- **High-Income Countries(HIC)**
- **Middle-Income Countries(further divided into HIgh MIC and Low MIC)**
- **Low-Income Countries(LIC).**
- Each group has a group-specific poverty line.
- The PL of LICs is also called **EPL(Extreme Poverty Line).**
- Currently, it is at **1.9$ pp-pd consumption expenditure(CE)** and is frequently revised.
- It is called EPL as a person living in any group of countries whose CE is less than EPL, would be so poor that he would be classified as poor even in a LIC.
- EPL forms the basis of **SDG 1- Elimination of extreme poverty by 2030.**
- ***** To convert the dollar-denominated EPL into domestic currency equivalent, we use **Purchasing Power Parity(PPP) based exchange rates.**
- *** India** is in the **Low Middle-Income countries group** with a GNI per capita of around **2300$.**
- Doubt resolution

**India's progress on poverty reduction(1:50:00 PM)**

- **1. Using official estimates**
- Our official poverty line is **Tendulkar's poverty line** and in order to compare poverty over a time period, we need to calculate the incidence of poverty in past using the present poverty line.
- Calculating the poverty line of past from present value involves assumptions and hence it may not be very accurate.
- Still, we try to estimate India's progress on poverty reduction by estimating poverty at the time of independence and then comparing it to present times.
- In the 1950s, HCR was around 55 to 60 percent. This has reduced to around 45% in 1993.
- In 45 years, this was a very slow pace of poverty reduction.
- Comparing it to poverty in similarly places countries in the 1950s, India's progress was very slow.
- Post-1990s, with an increase in growth rate, India's pace of poverty reduction also increased.
- By 2004, we have reduced it to around 37%, by 2009 to around 29%, and by **2012 to less than 22%.**
- Growth has a high degree of correlation with the pace of poverty reduction.
- * Official statistics are available only till 2012.
- **2. Unofficial estimates**
- **a. World Bank**
- It comments that India may be overestimating its poverty, as according to World Bank, poverty in India was around **11-14% in 2015.**
- **b. World Poverty Clock**
- It is estimated that poverty in India was **8% in 2018**, and it was expected to decline to around **3% by 2023.**
- **c. MPI**
- According to the MPI report of 2020, there were around 27 Crores fewer people in MPI poverty in 2016 than in 2006.
- MPI poverty had declined from around **50% to 28% between these years.**
- **d. Latest estimates by World Bank and IMF economists**
- World Bank's economists estimate that poverty in India had declined but has marginally increased(expectedly) during Covid. It is **around 10%.**
- IMF's economists estimate that India may have **virtually eliminated the incidence of extreme poverty**.
- This is possible when we incorporate subsidized transfers of food and other such subsidies into a household's consumption expenditure.

**Critical analysis of poverty reduction(2:44:00 PM)**

- India's official poverty line is almost the same as the World Bank's EPL.
- According to the latest estimates, the Head Count Ratio(HCR) is around **8-10% for EPL.**
- However, India is now an LMIC and the group-specific poverty line is **3.2$ pp-pd-ce.**
- Independent estimates of HCR using the LMIC PL vary from **40 to 45%.** This means that even though India has uplifted a large number of people out of extreme poverty, most of them are barely above the EPL.
- As such, they are **vulnerable**, and **any emergency expense** or a loss of livelihood even temporarily would push them back into extreme poverty.
- The government's efforts should, therefore, be on **reducing the vulnerabilities,** apart from uplifting the poor.
- This is reflected in the wide coverage of the **government's anti-poverty programs** which target the poor as well as the vulnerable and try to ensure that unforeseen emergencies do not lead to a family falling back into poverty.

**Inequality(3:16:00 PM)**

- It refers to differences in various aspects of individual, social/societal, and a country's well-being.
- Economics inequality is able to capture, implicitly, most of the dimensions of well-being.
- There is a high degree of correlation between economic inequality and social or political inequality.
- Economic inequality can be measured using differences in incomes or consumption expenditure(CE) or wealth.
- CE-based inequality, even though, least in magnitude, is the more accurate one.
- Income and wealth-based inequality have a lot of fluctuations and biases with respect to the evaluator.
- Hence, these numbers are considered less reliable.

**Reasons for inequality(3:44:00 PM)**

- **1. Natural advantages**
- These are advantages due to accidents of birth or location.
- A person born in a richer or a higher social status family, or at a place with better opportunities such as access to health and education, would probably be far better off in life as compared to the person not born with these advantages.
- **2. Comparative advantages**
- There are certain natural advantages which might not be easily perceptible such as the location of the place along a river(climatic and locational advantages), the position in the family such as elder or younger child, etc.
- * Curse of resources

**Topics to be covered in next class- Reasons continued, Measurement of inequality**
**Economics Class 04**

**Doubt resolution and a brief review of the last class**

**Curse of resources(1:29:00 PM)**

- Sometimes, the lack of economic and social development of a place is attributed to the presence, rather than the absence of natural resources.
- This is described through the term "Curse of Resources".
- However, there is scarce economic evidence to suggest that the presence of natural resources is the reason for the poor development of a place.
- For example, in Africa, natural resources are inaccessible. Further, the resources found there such as diamonds and other stones have less industrial application and are conflict-causing resources.
- In India, the Eastern natural resource region is economically backwards due to reasons such as poor governance, and a history of conflict.

**Reasons of inequality contd.(1:42:00 PM)**

- **3. Economic reasons-Marxist reasoning**
- Inequality according to Marx is primarily due to the differences in the interests of the capitalists and workers.
- Capitalists are those who control the resources required for a firm(land, money/capital, entrepreneurship), versus the labour that is the general population which has control only over their labour supply.
- Profits grow but are not shared due to the differences between the capabilities of workers to negotiate higher wages, and the ability of the capitalist to continue to exploit them. As such, inequality in society is due to the differences in the interests and capabilities of labour and capitalists.
- **Modern Reasoning for inequality**

- In modern times, we explain inequality through the **monopolising tendencies** of firms, especially in a country where there is unequal application of **rule of law.**
- Firms know that the key to earning exceptional profits is survival.
- The market grows at some average pace, whereas the firm's profits grow at an average pace plus an exceptional pace.
- This exceptional pace is because of the continued demise of its competitor firms.
- In India, hardly 2% of firms survive beyond 20 years. As such, the firms that remain are able to appropriate the market share of firms that do not survive.
- The firms therefore will have monopolising tendencies, that is, they will try to facilitate the demise of their competitors.
- This can be achieved in a fair as well as unfair manner.
- Fair- by differentiating their products through innovation
- Unfair- through misuse of legal machinery, influencing government policies, etc.
- In a country, the unfair mode of a firm's monopolising behaviour has to be necessarily checked through the competition regulator as well as a generally fair implementation of rule of law.
- In a country with weak governance systems, this aspect is not efficiently controlled, rather may be facilitated, and hence inequalities are perpetuated.
- Doubt resolution

**Representation and measurement of inequality(2:48:00 PM)**

- **Kuznets curve**
- Explained with the help of a graph.
- It is a theoretical prediction about how would inequality change in a country with an increase in income over a period of time.
- Kuznets predicts that with time, the income-inequality curve would be of inverted U shape.
- According to him, inequality would first worsen, then stabilise before eventually falling with an increase in income.
- * It is a purely theoretical curve with no data used to plot it.
- * It is not required that the 3 phases, A, B and C be of some equal or related length, that is, the graph does not need to be symmetrical.
- Doubt resolution

**Lorenz curve(3:24:00 PM)**

- Explained with the help of a graph. (x-axis- cumulative share in population & y-axis- cumulative share of income)
- It is a plot of the distribution of incomes/wealth/consumption expenditure in a country's population.
- Lorenz curve plots the cumulative share of income in the cumulative share of the population, from bottom to top.
- In the graph, OA is the distribution of incomes in a society where every person has exactly equal income, and therefore the distribution would be such that any share of the population(example- 1%, 5%, 20%, 50%) will have the exact same shares of income.
- OBA is the line of perfect inequality, representing the Lorenz curve of a country where entire incomes are with just 1 person(100 per cent). The remaining 99.99% population has exactly zero shares.
- In general, a country's Lorenz curve would lie between these lines- a country with greater inequality will have a Lorenz curve closer to the line of inequality.
- **Gini coefficient**
- Explained with the help of a diagram.
- Gini coefficient= a/a+b
- The Gini coefficient is a statistical measure of inequality, derived from the Lorenz curve. It is the ratio of two areas.
- GC= The area between the equality line and Lorenz curve upon the area between the equality line and inequality line.
- *** GC has 2 important properties:**
- 1. Its value varies from **0 to 1.**
- 2. Larger the Gini, the more the inequality.

**Topics for the next class- Inequality situation in the world, Reasons for inequality revisited**
**Economics Class 05**

**Doubt resolution and a brief review of the last class**
**Inequality in modern times(1:21:00PM)**

- **Growth models**
- Growth is fundamentally inequality-causing.

- Growth requires a focus, that is, an economy will be able to grow faster when it is able to utilise its limited resources in a manner that they produce maximum output. For this, the economy will need to choose sectors or regions which have a high potential for growth. This causes the sectors or regions left out to grow at a slower pace, hence causing inequalities.
- **Trickle-down approach to growth**
- Explained through a diagram
- The top i.e. the chosen sector or region- grows fast and benefits are redistributed.
- The bottom- Depends on benefits transferred from the top.
- The trickle-down approach is a pro-poor approach to growth premised on faster growth of a few sectors creating resources for the government to be redistributed to those left out from the growth process.
- **The redistribution, however, depends on the following assumptions:**
- a. Whether the decision to focus on the chosen sector or region was correct or not, that is, does the investment actually produce returns?
- b. Even if the sector grows, is the government able to collect resources from it, that is, what is the tax buoyancy/efficiency?
- c. Even if the government is able to collect more resources, does it spend them on the bottom, or does it decide to invest in some other or the same sector?
- d. What is the efficiency of the government's expenditure?
- As is seen, the redistribution depends on the assumptions coming through, and hence, the bottom which is merely a passive beneficiary, will more often than not be deprived of the fruits of the growth process.
- As such, such an approach to growth not just causes but may also perpetuate inequality.
- **Inclusive growth**
- It is a broad-based growth- a growth process that includes the people who were conventionally left out of the growth process.
- It is premised on making the people at the bottom active contributors to the growth process rather than being passive beneficiaries.
- To make them active contributors **two aspects are essential:**
- a. Capability
- b. Opportunity
- These are achieved through the following(often called as **dimensions of inclusive growth):**
- a. Identification of poor and vulnerable, backward regions
- b. Identifying the vulnerabilities and aspects of backwardness
- c. Addressing vulnerabilities such as by providing quality education, quality health services, etc.
- d. To provide them with adequate skills to make them capable.
- e. To provide opportunities via job creation through industrial development, especially, in the labour-intensive industries.

**Comment on inequality(2:26:00PM)**

- **Equality of outcomes** is neither desirable nor possible.
- When there is forced equality of outcomes, it reduces people's incentive for research, growth, development and innovation. The progress of society crucially depends on these aspects, and hence denying incentives due to forced equality, leads to stagnation and eventual decay of the society.
- **Equality of opportunity** is what is desirable as well as can be made possible without restricting the freedoms of others, at least to a tolerable and non-disincentivising extent.
- A system of governance based on **rule of law** is a key enabler of equality of opportunity.
- **Milton Friedman** said that "A society that aims for equality before freedom will get neither. A society that aims for freedom before equality, will end up with a high degree of both".
- Doubt resolution

**Unemployment(3:41:00PM)**

- Unemployment
- It is a state in which a person willing to work is not able to find work.
- The willingness should be **meaningfully expressed**, and not merely a casual desire.
- Unemployment, therefore, would be in the context of only those people who are **economically active**, that is, in the **labour force.**
- The nature of employment does not matter.
- Dictation to be continued in next class.
- Doubt resolution

**Topic for next class- Unemployment continued**
**Economics Class 06**

**The class started at 1.05 PM**
**A brief overview of the previous class:**

- Inequality,
- Intensity/depth of poverty, etc.

**Unemployment: (at 1.16 PM)**

- **Working age population:**
- Those who are **capable** to contribute to **economic activity.**
- Generally defined as those between 15 to 65 years (Sometimes also as 18 to 60 years).
- **Dependent population**:
- Those who are **not** of working age that is **<15** years and **>65** years.
- **Dependency ratio** (DR) = Dependent population/working age population.
- **DR** = Population (**<15** years and **>65** years)/population(**15-65 years)**.
- Sometimes **DR** is also expressed as a **proportion** of the **total** population.
- **Labour Force**:
- Economically **active** population.
- These are those people who are **willing** to contribute economically that is those who have **expressed** a **meaningful desire** to work.
- Some of them will be **able** to find work and others will **not.**
- **Labour Force Participation Rate (LFPR)**:
- **LFPR** is the **proportion** of the **population** of a **group** which is in the labour force.
- **LFPR** = Labour Force in a cohort/Total Population of the cohort.
- For **example;**
- The **LFPR** of **married women** in the **urban area** = the number of married women in the Labour Force in the urban area/Total Population of married women in the urban area.
- **Unemployment Rate (UR):**
- The people in the **labour force** who are **unable** to find work are called **unemployed**.
- **UR** = Number of people unemployed/Labour Force.
- **UR** = UE/LF.
- **LF** = Employed + Unemployed.
- **UR** = UE/(E+UE).
- **Worker-Population Ratio (WPR):**
- **WPR** = Workers/Total population/1000 = Workers*1000/Total population.
- **NOTE: Kindly refer to the relevant diagram drawn by Aditya sir in the live class.**

**Que: Discuss the reasons for the low LFPR of women, especially in urban areas**. **(10 marks/150 words)**
**Demographic Dividend (at 1.55 PM)**

- It is the **expected benefits** that a country seeks to **reap** its **demographic structure.**
- The **favourable demography** consists of a young, healthy and skilled population.
- When the **working age population** has such characteristics, we **expect** that the country's incomes will grow faster, the standards of living will improve, and new technologies will be adopted relatively easily contributing to the rise in productivity.
- These **benefits** are **not** guaranteed, rather are **only** expected.
- For a country to realize the so-called **Demographic Dividend**, the **young working-age population** must be provided with jobs that satisfy their aspirations.
- In **absence** of **skills** as well as **jobs**, the **demographic structure** may well lead to a **demographic disaster**.
- ***India's Demographic Dividend** has been talked about since a long. Our **median working age** was around **29 years** in **2020** and is expected to remain <**40 years** till **2060.** Therefore we do not just have a large, young working-age population, it is also expected that our **working-age population** will be young for a considerably long period of time.***

**Some Employment-Unemployment related facts in India: (at 2.16 PM)**

- The **Ministry of Statistics and Programme Implementation** (**MoSPI**) is concerned with the coverage and quality aspects of statistics released.
- **NSSO** carries out **surveys** to ascertain the status of people with respect to employment.
- It ascribes **three** statuses:
- **1.** Employed.
- **2.** Unemployed.
- **3.** Neither employed nor looking (that is out of labour force).
- **Measuring entities**:
- **National Statistical Office (NSO)**:

- The **Statistics Wing** called the **National Statistical Office** (NSO) consists of the **Central Statistical Office** (CSO), the Computer centre and the **National Sample Survey Office** (NSSO).
- **NSO** is mandated with the **following responsibilities**:
- Acts as the **nodal agency** for the **planned development** of the **statistical system** in the country.
- **Coordinates** the **statistical work** in respect of the **Ministries/Departments** of the Government of India and **State Statistical Bureaus.**
- Prepares **national accounts** as well as **publishes annual estimates** of national product, government and private consumption expenditure, capital formation, savings, estimates of capital stock and consumption of fixed capital.
- Maintains **liaison** with **international statistical organizations,** such as the **United Nations Statistical Division (UNSD), the Economic and Social Commission for Asia and the Pacific (ESCAP)**, the Statistical Institute for Asia and the Pacific (SIAP), IMF, ADB, FAO, ILO, etc.
- **Compiles** and **releases** the **Index of Industrial Production (IIP)** every month in the form of **'quick estimates';** conducts the **Annual Survey of Industries (ASI).**
- Organizes and conducts **periodic all-India Economic Censuses** and follow-up **enterprise surveys.**
- Conducts **large-scale all-India sample surveys** for creating the **database** needed for studying the **impact** of **specific problems** for the **benefit of different population groups.**
- Examines the **survey reports** from the **technical angle** and evaluates the **sampling design** including survey feasibility studies in respect of surveys conducted by the NSSO and other Central Ministries and Departments.
- Releases **grants-in-aid** to **registered Non-Governmental Organizations** and **research institutions** of repute for u**ndertaking special studies or surveys, the printing of statistical reports, etc.**
- **National Sample Survey Office (NSSO):**
- The **NSSO** was set up in **1950** to conduct **large-scale sample surveys** throughout **India.**
- The **task** of the **National Sample Survey Office** (**NSSO**) is to carry out (including a collection of **data**) the survey.
- The **National Sample Survey** (**NSS**) headed by a **Director-General** is responsible for the conduct of large scale sample surveys in diverse fields on an All Indian basis.
- **Primarily data** are collected through **national household surveys** on various socio-economic subjects, Annual Survey of Industries (ASI), etc.
- Besides these surveys, **NSS** collects **data** on **rural** and **urban prices** and plays a significant role in the **improvement** of **crop statistics** through supervision of the area enumeration and crop estimation surveys of the State agencies.
- It also maintains a **frame** of **urban area units** for use in **sample surveys** in **urban areas.**
- **Central statistical organization (CSO):**
- The **task** of **CSO** is to use those **data** in meaningful matters.
- **CSO** belongs to the **MoSPI.**
- It was set up in **May 1951** in the Cabinet Secretariat with the primary object of providing technical leadership in building up the statistical system in the country.
- The **main functions** of **CSO** are to provide advisory services to other statistical agencies, keep liaison (public relation) with international statistical bodies, prepare and publish national accounts statistics, industrial statistics, conduct an economic census and train statistical personnel in official statistics etc.
- The **CSO** is responsible for the **coordination of statistical activities in the country,** and **evolving** and maintaining **statistical standards.**
- Its activities include **National Income Accounting;** conduct of **Annual Survey of Industries, Economic Censuses** and its **follow up surveys,** a compilation of **Index of Industrial Production,** as well as **Consumer Price Indices** for **Urban Non-Manual Employees, Human Development Statistics, Gender Statistics,** imparting **training** in **Official Statistics, Five Year Plan work** relating to **Development of Statistics** in the States and **Union Territories;** dissemination of **statistical information,** work relating to **trade, energy, construction,** and **environment statistics, revision of National Industrial Classification, etc.**
- **National Statistical Commission (NSC):**
- It is an advisory body to advise both NSSO and CSO.

**Unemployment measurement in India: (at 2.20 PM)**

- **Unemployment** is measured by **NSSO** using the **annual PLFS** (Periodic Labour Force Survey).
- **Earlier** it was measured **EUS** (Employment-Unemployment Status, carried out every **five** years).
- The **broad process** of estimating **unemployment** remains the same and is as **follows:**
- **a.** Construct a diverse and representative sample from the population.
- **b.** Prepare a questionnaire (set of questions) to be given in the sample.

- **c.** Collect the responses and evaluate them.
- **d.** There are various evaluation criteria- The **Usual Status Approach** and the **Current Weekly Status (CWS)** Approach.
- **e.** Based on the criteria chosen, the **respondents** are assigned **one** of the **three** statuses:
- Employed.
- Unemployed
- Neither working nor looking for work (that is not in the labour force).
- **f. Unemployment Rate** (**UR**) would, therefore, be:
- **UR** = Number of people whose status is unemployed/(number of people whose status is unemployed + number of people whose status is employed).
- **Usual Status approach:**
- **Majority time criteria**:
- **a.** A person is judged to be in the labour force if the person was looking for work for a majority of the time of the last one year that was in the labour force for **182** or **more** days in the last 365 days.
- **b.** the person is considered **employed** if the person was able to get work for the **majority** of the **time** that he was in the labour force.
- For **example,** if a person was in Labour Force for 200 days, would be considered as in the Labour force in the entire year; if the person was able to get work for 120 days (that is >101 days) would be employed for the entire year.
- **Principal status (PS)**:
- In the approach described above the majority time criteria is used to ascribe the principal status to the person.
- **Subsidiary status (SS):**
- If a person was able to find work for **more** than **30** days but not for the majority of time for which he was in the labour force, the subsidiary status of that person is considered to be employed even though the principal status will be unemployed.
- **NOTE: Kindly refer to the relevant diagram drawn by Aditya sir in the live class.**
- **Current Weekly Status (CWS) approach:**
- A person is considered to be **employed** if the person was **able** to find **work** for at least **one hour** on any one day of the previous week.
- Even though the criteria for considering someone as employed is quite relaxed, the employment rate is measured using **CWS** is usually **greater** than the **usual status approach**.
- This is because **CWS** is time-sensitive.
- With a **shorter Recall Period,** the **responses** are **more** accurate, also it is able to capture **seasonality** in employment.
- Many **jobs** such as agricultural work, tourism, construction, etc have a high degree of seasonal variation.
- A person may have worked on an aggregate basis for a majority of the time during the last one year but may not have work during the past one week.
- **CWS** will capture **such** unemployment.
- **Current Daily Status (CDS)**:
- In this approach, **unemployment** is measured by taking into account the **intensity** of **engagement**.
- If a person is engaged in **work** for **more** than **one hour** a **day** then he is considered as **employed** for the **full day** that is **100%** intensity.
- Between **1 to 4 hours**, he is considered as only **half-engaged**, that is **50%** intensity and **less** than **one hour** a person is **not** considered engaged at all.
- For the person, **total** engagement is calculated and it is seen as a **proportion** of **maximum** possible engagement to find out the **intensity** of work.
- The **remaining time** for which the population were **not** engaged **despite** being **available** for work is a measure of **unemployment** based on **intensity.**
- In **EUS,** we used the **CDS approach** in measuring **unemployment.**
- The **CDS** approach is the **strictest** way of measuring **unemployment.**
- It seeks to **ascertain** the **activity status** of an individual for **each day** of the **reference week**.
- The **recall period** under the CDS approach is **one week**.
- It reports the **time disposition** of an individual on **each day** of the **reference week.**
- This means that in **addition** to recording the **activity** being pursued, **time intensity** is also recorded in **quantitative terms** for **each** day of the reference week.

**The topics for the next class: (Types of unemployment, etc).**
**Economics Class 07**

**A brief review of the last class**

**Different types(reasons) of unemployment(1:15:00PM)**

- **Structural unemployment**
- The word structure refers to defining characteristics of something.
- Various parts or entities are aligned to the core structure, and when the structure changes, they should either adjust or otherwise they become useless.
- An economy has defining characteristics such as whether it's a manufacturing or services or agricultural or R&D-based economy.
- Further, the industries will themselves have a character such as an automobile industry based on the internal combustion engine.
- Even within the industry, different types of jobs will have their own characteristics such as an accountant's function, whether it is manual or computerised. When the existing characters change, the nature of employment also changes, and those who fail to adapt to the new structure become unemployed.
- Structural unemployment is therefore a case of immobility- the people are immobile from the old to the new structure.
- Most commonly, the immobility is due to changes in skill requirements.
- It can also be due to the change in the character of the industry, or shift of industry to a new place(geographical immobility), or even a complete decline of the industry.
- **Seasonal unemployment**
- Certain jobs/industries/sectors have seasonality, that is, their main time of operation is in a particular season, and otherwise the rest of the year they may not have much work. People employed in such jobs, therefore, experience seasonal unemployment.
- For example, agriculture during the growing season(outside sowing and harvesting season), construction during the monsoon season, tourism during the non-holiday season, home appliances outside the festive/wedding season, etc.
- **Frictional unemployment(to be discussed later)**
- **Voluntary unemployment**
- It is a situation where a person who is willing to work, is offered a job but does not accept it, that is, chooses to remain voluntarily unemployed.
- The reason for such a choice can be any and does not matter.
- For example, the job is deemed to be below one's dignity, it is deemed to be below the skill level that one thinks he/she possesses, job not at a desired location, or not offering adequate compensation, attractive unemployment benefits given by the government, etc.
- **Employment on the basis of Intensity of work**
- **a. Underemployment**
- It is a situation where a person who is willing to work for more time is able to get work for insufficient time only.
- Part-time work is categorised as underemployment.
- * Underemployment can be extended to underutilization as well- a person has skills, but they are not adequately utilised.
- This, although, has subjectivity as every person will have higher aspirations and hence may consider oneself to be underemployed.
- **b. Disguised employment**
- It is a situation where the **marginal output of the workers is zero.**
- The worker may be working but is not said to be contributing.
- * Marginal output= the extra output produced by (n+1)th worker, given the current output by n workers.

**Classical unemployment(2:08:00PM)**

- **The concept of demand and supply**
- **Law of demand:**
- The demand of a good means the quantity of that good demanded given the willingness and capability of people in the economy.
- Willingness means desire, and capability means their ability given the price of the good.
- Demand of a good(Quantity demanded,Qd) depends upon various factors-price of the good, incomes of the population, size of the population, taste and differences, cultural aspects, season, etc.
- * Demand refers to Qd for the entire economy, that is, not just for an individual.
- The law of demand states that the quantity demanded Qd, assuming all other factors except price(P) to be constant, varies inversely with price, that is, assuming other factors determining demand to be constant, Qd increases when price decreases, or vice versa.
- Qd is inversely proportional to P.

- *P is the independent variable
- Since, P1>P2
- Therefore, Q1<q2< li="" style="box-sizing: border-box;"></q2<>
- * When the factors that have been assumed to be constant change, we have to shift the demand curve in accordance with how would the demand change with that factor. For example, if income increases, we generally expect the people to demand more goods at the same price what they were demanding at earlier incomes.
- Therefore, we usually shift the demand schedule (outwards).
- Explained with the help of a graph
- I is income.
- Since I2>I1, therefore, at P1, Q1'>Q1
- at P2, Q2'>Q2.
- **Law of supply**
- Explained with the help of a graph.
- Supply refers to the quantity of a good produced in the economy given the ability and willingness of producers.
- The quantity supplied(Qs) will depend on many factors such as:
- Price of the good in the market(Producers are assumed to be price takers, which they are in a perfectly competitive market)
- Ease of doing business such as labour environment and taxation laws in the country
- Quality and cost of factors of production such as labour
- Infrastructure in the economy
- Availability of raw material, etc
- The law of supply states that given all other factors except price, determining supply to be constant, the quantity supplied(Qs) varies directly with price.
- Qs is directly proportional to P.
- * P is the independent variable- Producers have only a limited pricing power even in an imperfectly competitive market, no one producer or a group of producers, and no one consumer or a group of consumers determine the price, rather it is all the producers and consumers in the markets which together determine it. Price is thus independent.
- Explained with the help of a graph.
- Since P2>P1, therefore Q2>Q1
- * As price increases, more number of producers will be able to produce the goods at a price lesser than or equal to market price. Further, those who are already producing will be able to earn profits, and hence will be more willing.
- * Like the demand curve, the supply curve will also shift when the other factors which were assumed to be constant change.

**Market price and market clearance(3:25:00PM)**

- Explained with the help of a graph
- At P1, Qs>Qd
- Therefore, downward pressure
- At P0, Qs=Qd
- At P2, Qd>Qs
- Therefore upward pressure.
- In the market, there are both producers and consumers with their respective abilities and expectations.
- Through their interaction, the market will eventually arrive at a certain price and quantity exchanged for that good.
- This price is called the **market price or the equilibrium price or the market clearance price.**
- At P=P0, Qs=Qd
- P0, Q0 is the equilibrium point of the market.
- If the market price is P1, then Qs>Qd. Therefore, there would be some producers who would not be able to sell their produce in the market.
- Hence, they would be willing as well as may be able to sell their produce at a price less than P1.
- This puts downward pressure on the price, and the price eventually decreases to P0.
- The reverse happens at P2(P2<p0)< li="" style="box-sizing: border-box;"></p0)<>
- P=P0 is an equilibrium price as there is neither an upward nor downward pressure on the price.
- It is also called market clearance price as at this price, the market clears itself- Nobody who has come to the market goes back unsatisfied. Every consumer's demand has been met and every producer's produce has been sold.

- **Classical unemployment(wage-rate unemployment)**
- Explained with the help of a graph
- Dictation to be given in next class
- Doubt resolution

**Topic for next class- Unemployment continued**
**Economics Class 08**

**Doubt resolution**
**Dictation of classical unemployment(1:26:00PM)**

- Explained with the help of a graph.
- In the labour market, the labour themselves are the suppliers of their labour at a certain wage rate(that is, the price of labour). With an increase in wage rate, the opportunity cost of being out of the labour force will be very high(opportunity cost= benefit forgone). As a result, at higher wages, the labour force will be bigger as compared to its size at lower wages.
- On the other hand, the employers, that is, the producers of goods and services are the demanders of labour. At a higher wage, less labour would be demanded as compared to its demand at a lower wage.
- Therefore, in the labour market, there would be an equilibrium wage at which Ls(labour supply)=Ld(labour demand).
- However, it may happen that due to some reason, the wages are higher than the equilibrium wage(W0). And at this level, the labour supply will be greater than labour demand and therefore there will be unemployment.
- Commonly, there are two reasons because of which the wage rate would be higher than W0:
- a. Minimum wages formulated by the government are greater than W0.
- b. Strong labour unions may have negotiated for higher wages, reducing the employer's capacity to employ.
- Such unemployment is called **wage rate or classical unemployment.**

**Frictional unemployment(1:35:00PM)**

- It is commonly understood as unemployment during the time when switching between jobs.
- More precisely, frictional UE is UE that exists due to inefficiencies in the labour market.
- The most common cause is the availability of information- a person may be eligible for a job, and a job may exist where that person can be employed. However, due to a lack of knowledge on anyone's part, that is, the person or the potential employer, the person may remain unemployed for a time greater than what he should have been.
- Due to the advent of technology such as online job portals, the labour markets have become efficient and the time that a person spends remaining unemployed frictionally has decreased.

**Different types of wages(1:51:00PM)**

- **Minimum wage**
- It is a statutory wage- both centre and states have their respective statutes governing minimum wages.
- It is the least statutory wage given to a person according to the job, and further according to the skill level.
- For example, a security guard will have a different minimum wage from a gardener. Further, a security guard with no experience will have a different minimum wage as compared to one with experience.
- * Floor wage- it is the least of minimum wages.
- **Living wage**
- It is that wage which is considered to be necessary for a person to be able to live a dignified life.
- Different committees or people or experts will have their own opinion about what should the living wage be.
- It is a normative concept.
- **Fair wage**
- Fair wage conceptually lies somewhere between the living wage and the minimum wage.
- The minimum wage may be too low for the worker, whereas, the living wage may be unaffordable for the employer.
- Further, the living wage may reduce the capability of employers to employ more people.
- A fair wage is one which is not too low, and not too high to reduce the employment capability.
- As such conceptually, it is said to lie between minimum and living wage.

**Cyclical unemployment(2:17:00PM)**

- An economy does not grow at a uniform pace all the time, rather there would be an average expected pace of growth and the economy will grow sometimes at a greater pace, sometimes at a lesser pace.

- The economy, therefore, is said to **grow in cycles.**
- **Phases of growth(Explained with a graph-GDP vs Time)**
- High growth
- Slowdown
- Recession
- Recovery
- It is not necessary that these phases will be symmetrical or will last for equal time. An economy may very well skip some of the phases as well.
- The growth rate of the labour force is independent of the growth rate of the economy. The growth of the economy has a high degree of correlation with the generation of employment. When an economy grows fast, it creates more jobs as compared to when it grows slow.
- As a result, during high growth, we expect unemployment to fall and vice versa.
- At the expected pace of growth, an economy will be expected to have a certain rate of unemployment. When the economy grows faster than this expected pace, unemployment would be less as compared to UE at the expected pace of growth.
- **Cyclical unemployment** is the additional unemployment that the economy has over and above the expected rate of unemployment when the actual pace of growth is less than the expected growth rate.
- For example, the average pace of growth=5%
- Unemployment @ average pace of growth= 5%
-

| **The actual pace of growth** | **Actual unemployment** |
|---|---|
| 7% | 3%(<5%) |
| 3% | 8%(>5%)(Additional 3% UE here is cyclical UE) |

- For the economy described above, if it witnesses an unemployment rate greater than 5%, we say there is cyclical UE in the economy.
- If it is less than 5%, there is no cyclical UE.
- Doubt resolution

**Unemployment in India(3:23:00PM)**

-

| **PLFS** | **Period of Survey** | **Unemployment rate** | **LFPR** |
|---|---|---|---|
| 1 | July 2017 June 2018 | 6.2% | Around 36% |
| 2 | July 18 June 19 | 5.6% | Around 38% |
| 3 | July 19 June 20 | 4.8% | 40.1% |
| 4 | July 20 June 21 | 4.2% | 41.6% |
| 5 | July 21 June 22 | - | - |
| 6 | July 22 June 23 | - | - |

- PLFS is carried out every year with a rotational sampling method in urban areas.
- Under this, the households in urban areas are visited once every quarter and the unemployment rate(UR) is calculated(for urban areas only) by summing up these quarterly responses.
- Rural areas are still visited only once.
- Between PLFS 1 to 4, the UR decreased from 6.2 to 4.2%.
- Further, the LFPR has increased from around 36% to around 41%.
- **Critical analysis**
- **a. LFPR**
- Even though India's LFPR is rising, it is still very low according to global standards, especially, when compared to our competitors.
- To reap the demographic dividend, we need more participation in the labour force, especially from the young population.
- Lack of jobs and the difficulty to continue in jobs, force people to drop out of the labour force(especially women).
- A low LFPR reduces the country's ability to utilise its young, energetic population, especially women to achieve faster improvements in standards of living.

**The topic for the next class: Critical analysis continued**
**Economics Class 09**

**General instruction to the class**
**Critical analysis of PLFS dictation (1:21:00PM)**

- **b. Unemployment rate(UR)**
- Even though UR has shown a declining trend from PLFS 1 to 4, the decline is largely attributable to two factors:
- **1. Agricultural jobs**
- **2. Self-employment**
- An increase in agricultural jobs is undesirable as agriculture is already **oversaturated.**
- For the country to reap the so-called demographic dividend, we need to move people into productive jobs rather than into less productive agriculture.
- Per person productivity in agriculture is about **one-ninth** of a person in the services sector.
- As such, an increase in agricultural jobs is undesirable.
- Self-employment is generally more **financially rewarding**. However, it has **risks with respect to social security** which magnifies at the lower end of the skill level.
- An increase in self-employment may be, is financially rewarding but makes the workforce **socially vulnerable.**
- **Comment:**
- It is true that we would not want to move people back to agriculture, as well as, a socially vulnerable workforce. However, such a development can be attributed to the **Covid-induced effects** on the economy.
- It can be argued that if the agricultural sector was not resilient, and the transformation of the economy to **gig-work** had not taken place, unemployment would be very high.
- A rise in self-employment jobs reflects the adjustment of the economy to a new structure.
- Doubt resolution

**Unemployment in India-Jobless growth(1:43:00PM)**

- **Employment elasticity**
- According to some experts, the nature of growth in India can be described as being jobless.
- The argument is supported by the fact that employment elasticity is falling.
- **Employment elasticity(e)= %change in employment/% change in GDP= Growth rate of jobs/growth rate of the economy**
- Employment elasticity indicates the sensitivity of employment generation to the growth of the economy.
- An economy grows due to both an increase in jobs as well as an increase in productivity of the existing workforce.
- Through employment elasticity, we try to separate the contribution of each of these factors to total growth.
- For example, if an economy grows at the rate of 10%, and employment grows at the rate of 5%, the economy has an employment elasticity of 5%/10%=0.5. This can be interpreted as that out of total growth, half of the growth is because of employment, and the remaining half is because of productivity.
- If an economy's employment elasticity decreases, it can be said that it is creating less number of jobs per unit of growth as compared to what was created earlier.
- Employment elasticity in India has declined from around 0.5 in the 1970s to 0.2 in the last three decades.
- During the period, 2004-09, employment elasticity was around 0.01. This low and falling employment elasticity has been used as the argument to categorise India's growth as being jobless.

**Unemployment in India-Dictation(3:18:00PM)**

- A falling employment elasticity points out to jobless growth in the country. As such, it is expected that unemployment should rise due to less number of jobs created per unit of economic growth. However, as long as the number of jobs created is more than the number of people entering the labour force, unemployment should not rise.
- In India, unemployment has remained tightly range bound even though economic growth has gone through cycles, and employment elasticity has continued to fall. This is because, the number of jobs created, even though decreasing has been more than the number of people entering the labour force.
- The counterargument to this would be that if the number of jobs is more, unemployment should fall or at least should cease to be a problem.
- Unemployment, although, continued to be a major issue. We reconciled these observations by explaining the causes of unemployment in India- UE can be explained as being largely due to structural and voluntary reasons.
- Explained with the help of a diagram(skill of workforce and skill required for the job)
- Eligible but unwilling- voluntary UE
- Aspiration but ineligible- structural UE
- **Unemployment can be explained due to the mismatches at two levels:**

- **a.** A mismatch between the aspiration of the worker and quality of the available job- causing voluntary unemployment
- **b.** A mismatch between the skill level of the worker and the skill required for the job-causing structural unemployment
- Therefore, UE in India is not much due to a lack of jobs. Rather it is more because of a lack of quality jobs and a lack of skills in the workforce for existing jobs.
- Doubt resolution

**Different types of Employment(3:49:00PM)**

- Based on the type of relationship between the employer and employee, we have different types of employment.
- There are a number of laws which govern the various aspects of employee-employer relationships, these laws are collectively known as **labour laws.**
- Now, these have been codified into **4 labour codes- The code on wages, Industrial Relations Code, the Code on Social Security and the Occupational Safety, Health and Working Conditions Code.**
- **Formal vs informal**
- In the eyes of the law, there is no distinction between formal and informal, every employee is simply an employee.
- The Formal & informal nature of employment is a character that is **ascertained from the relationship between the employee & employer.**
- A formal employee is formally recognised by the employer. However, informal employees are not formally recognised by the employer.
- Complying with labour laws is cumbersome, draining resources, and costly for employers. Therefore employers, **to reduce their compliance costs try to maintain deniability** wrt the employment status of some employees. This results in informal employment.
- **Contractual Employment:**
- When firms go big their ability to maintain deniability wrt the employment status of some employees reduces these means that their compliance costs will increase.
- To bypass these firms resort to employing people on a contractual basis.
- A contract is a **legally enforceable agreement** between two parties where each of them has to do something for the other.
- When companies enter into contracts it is not a contract to employ that person, rather it is a contract to get a job done for some consideration.
- The person thus is not an employee of the company but rather is fulfilling the contractual obligation(either directly or through a company).
- **Gig Economy:**
- Here the worker **performs his various work/gig at various platforms.**
- For example Ola, uber service providers.
- Here, Ola, and Uber cab drivers are not employees of the Ola or Uber company.
- They are simply using the platforms of Ola and Uber company which enables them to provide the services.
- They **don't enjoy all the rights of the employees** as given in a traditional setup of employment.
- **Fixed-Term Employment (FTE):**
- It is **employment bound by time.**
- Here a person is hired for a particular time which is written in the FTE contract.
- The company has the **right to fire after the expiry** of that period.
- Employee's contract can be renewed also.

**Topics for next class: Basic concepts of economics**
**Economics Class 10**

**Doubt resolution**

**Basics of Economics(1:26:00PM)**

- **Production Possibilities Frontier/Curve(PPF/PPC)**
- The origin of economics as a discipline lies in the basic problem of **limited resources and unlimited wants.**
- This problem is essentially one that of a limiting constraint and what is the maximum which can be achieved with this.
- The limiting constraint is known as the **budget constraint.** For example, it can be a limited amount of time, money, workers, natural resources, etc.
- The maximum that can be produced given the limited constraint is expressed through the idea of **production possibilities.**

- **PPF** refers to the **maximum, sustainable level of output** that can be produced in the **given budget constraint.**
- It is determined on the basis of available resources and the technology to utilise them.
- * PPF is a **normative concept**, that is, every economist will have their own conception of what is the maximum that can be sustainably produced.
- PPF is used by the economist to comment on the current production- that is, whether it is optimal or not.
- Levels of the production below PPF are possible but not desirable, whereas those beyond PPF are desirable but not sustainably possible. Therefore, PPF represents a collection of points of output that are both possible as well as desirable.
- **For a developed country,** the actual level of production would be **closer to the potential level of production**, as it would be expected to utilize its limited resources more efficiently. For such a country, an increase in PPF will be achieved either through **discoveries of new resources or innovation in technology** to utilize current resources.
- **For a developing country,** its actual level of production would usually be **far away from its PPF**, signifying a high potential for growth. For this country, the current resource utilization would usually be suboptimal. As such, growth will be achieved more via improvement in **the utilization of existing resources,** rather than the discovery of new, or innovations in technology.

**Marginal cost(MC)(2:14:00PM)**

- It is the extra cost incurred in producing one more unit of output given the current level of production- the cost of (n+1)th, given the total cost of n units.
- An economist will look at the marginal cost and see whether it is increasing/decreasing or high/low and then make a decision that whether producing an extra unit is feasible and desirable or not.
- **Opportunity cost(OC)**
- Opportunity cost refers to the benefits foregone while making a choice in favor of one and against others.
- When a choice is made the benefits associated with the options not chosen are not realized and hence these become the opportunity cost.
- * OC is sometimes referred to as the benefit associated with the next best alternative.
- * MC is expressed in terms of the limiting resource(for example money or time), whereas OC is expressed usually in terms of the output that could be achieved from the resource.
- Doubt resolution

**Different types of goods(3:35:00PM)**

- **1. On the basis of the slope of the demand curve**
- Explained with the help of graphs
- **a. Necessary goods**
- These are the goods in which the **demand is largely inelastic**, that is, even a large change in price does not cause a significant change in the quantity demanded.
- For example, life-saving drugs, water(if priced), etc.
- **b. Luxury goods**
- These are those goods for which the **quantity is highly elastic** with respect to price, that is, even a small change in price causes a large change in quantity demanded. Therefore, the demand curve is nearly flat.
- For example, decorative items, luxury cars, jewelry, etc.
- **2. Relation of demand with income**
- Explained with the help of graphs
- **a. Normal goods**
- Since I2>I1 at P1, therefore, Q2>Q1
- These are those goods for which the demand increases with an increase in income.
- As such the demand curve shifts outwards.
- **b. Inferior goods**
- Since I2>I1 at P1, therefore, Q2<q1< li="" style="box-sizing: border-box;"></q1<>
- These are those goods for which demand decreases with an increase in income.
- As such the demand curve shifts inwards.
- * There are very few, if any, examples of goods that are universally normal or universally inferior. Normal and inferior will differ from society to society, For example, in a society the demand for ice cream may increase with an increase in income, making it a normal good.
- Further with an increase in income, society may prefer something else, for example, it may become health conscious and no longer prefer ice creams. Thereby, an increase in income may be associated with a falling consumption of ice cream, making it an inferior good.

- Therefore, whether a good is normal or inferior, is determined on the basis of observation- if its demand increases with an increase in income, it is normal otherwise not.

**The topic for the next class: Types of goods continued, National Income Accounting**
**Economics Class 11**

**Revision of the Previous class(01:04 PM)**
**Relation with demands of other goods(01:08 PM)**

- **Substitute goods:**
- These are those goods that can substitute for each other's consumption.
- The demand for any good will depend on many factors including the price of its substitute.
- For example, if tea and coffee are substitutes if the price of tea rises, we expect that the demand for coffee would go up, assuming other factors that determine the demand for coffee remain constant.
- *Chances are that with an increase in demand for coffee, its price will also increase, hence the price will put downward pressure on coffee's demand.
- These are the goods that complement the consumption of the other goods that are they are consumed together with another good.
- Usually, one good is leading, and the other compliments it.
- The demand for complementary goods, apart from many other factors determining their demand, also depends on the demand for the leading good.
- For example, tea and Biscuits.
- If the demand for tea goes up, we expect the demand for biscuits to also rise.

**Goods that seemingly violate the law of demand(01:32 PM)**

- **Veblen:**
- These are ultra luxury goods that have virtually no utility over similar goods which may be priced substantially lower.
- The only utility that these goods have is that they ascribe a social status to the possessor.
- As such these goods would be in demand only as long as they are able to provide the desired social status.
- Therefore, if their price decreases, people would not want to purchase them that is a lack of willingness, even if they are able to purchase them,
- Therefore, with a fall in their price their demand decreases, and vice versa.
- For example, luxury sports cars, designer jewelry, and clothes, rare pieces of art, exclusive items such as rare animals, custom-made vehicles, etc.
- **Giffen goods:**
- These are inferior goods, which in certain specific circumstances seem to violate the **law of demand** that is when their price increases we see that their quantity demanded also increases.
- * Not all inferior goods are Giffen rather some inferior goods, and that too in specific circumstances behave in this manner.
- For example, if households consume two goods- one inferior and one normal, which can be substituted for each other then the inferior can be shown to violate the **law of demand** in the following manner:
- **Income increases**, and hence the demand for **normal goods increases,** and that for inferior decreases.
- An increase in demand for the normal good will cause its price to rise.
- The rise may be such that it is more than the increase in household income.
- This makes the normal goods **unaffordable** as compared to earlier(that is before the rise in its income and increase in its demand).
- When the normal good becomes unaffordable, the household will substitute it with the inferior good, causing a rise in its demand.
- 3. This would then lead to an increase in its price.
- 4. **Giffen stage:**
- An increase in price due to an increase in demand for inferior goods will leave less income to be spent on the normal good which is already expensive.
- Therefore, the household will further reduce the consumption of the normal good and substitute them with the inferior good.
- If we observe only the inferior good, then we see an increase in its price has caused an increase in its demand.
- Hence, a violation of **the law of demand.**
- * It is also assumed that in the above situation, the price of a good(both normal and inferior is not falling or is barely falling with a decline in its demand)

**Goods on the basis of Market operation and failure(02:50 PM)**

- **Private goods:**

- These are those goods in which the market forces, the market forces of demand and supply determine the **equilibrium price and quantity.**
- These are those goods that can be provided for by any producer- government or private at the price available in the market.
- **Public goods(a special case of market failure):**
- The market may fail because of many reasons such as the goods not being allowed to be produced or consumed(legal or moral reasons).
- **Impossibility to attain equilibrium** due to **demand-supply constraints, free rider problem, etc.**
- **Free rider problems** refer to a situation in which the person who makes the payment is unable to exclude others from enjoying the benefit.
- Since the benefit cannot be exclusively enjoyed, the person who is unwilling to pay the producer will be unable to supply.
- Hence, despite there being a desire, there would not be any demand and hence no supply, as such the market fails.
- Not all cases of market failure, nor all cases of the **free rider problem** produce public goods.
- Rather it is only some cases of the free rider problem that the government evaluates to be necessary to be provided to the society for its benefit, which falls in the category of public goods.
- Certain goods such as **clean air, the protection of the environment, maintenance of law and order, administrative and regulatory services, protection of natural and cultural heritage, protection of global commons(**for example, oceans, outer space, Polar regions, peace), etc are examples of public goods.
- For such goods, people have a desire, but since they cannot exclude others from enjoying the benefits, they are unwilling to pay.
- Therefore, it is the government that assumes the responsibility of providing such goods and services in the best interest of society.
- Obviously, its capability depends on the resources it has to provide these goods which is the tax that it collects.
- **Goods on the basis of the effect on society(03:25 PM):**
- Merit goods.
- For example, life-saving drugs, educational and health services, and afforestation.
- Goods that increase productivity such as machines and tools.
- Demerits goods:
- Negative effect on society.
- For example, cigarettes, alcohol, etc.
- These goods/services usually affect the environment, human health, and human behavior negatively.
- For example, they may cause an increase in the **incidence of crime,** reduced productivity of the workforce, etc.

**Goods on the basis of their position in the production process(03:48 PM)**

- **Intermediate goods and final goods:**
- The goods at the final stage of the production process are called **final goods** whereas the goods at any stage before it is called **intermediate goods.**
- **Intermediate goods** are those which are yet to undergo a **process of economic modification through various stages.**
- In these processes, they lose their economic identity.
- *These goods are ingredients in the production of either other intermediate goods or final goods.
- Final goods on the other hand are those which are meant for final utilization that is they do not undergo any further economic modification.
- Thus, their economic identity remains intact.
- *It does not matter whether they are consumed/utilized in the same form or after physical or chemical modification.
- What matters is economic modification.
- For example, salt purchased for household consumption is a final good as the food prepared is not sold.
- A cook may receive payment for his services, but the salt itself is not economically modified.
- On the other hand, salt purchased by the restaurant is an intermediate good, as the consumer pays for the dish- the price consists of all the ingredients/services and other things that the producer may charge for,
- The salt loses its economic identity.

**The topic to be discussed in the next class-** Capital goods, the concept of investment
**Economics Class 12**

**A brief overview of the previous class and the Q&A session on cross elasticity of demand (13:08:00)**
**Goods on the basis of the role they perform (13:37:00)**

- These are basically final goods classified on the basis of their use
- 1). **Consumer goods**- these are goods meant for household consumption, these are further classified into consumer durables and non-durables on the basis of their lifetime
- 2). **Capital goods**- these are **Final goods** that assist in the production process.
- These are machines and tools which help in the production of other goods- final or intermediate (* Since these goods are not ingredients, therefore, they are not intermediate goods, these goods last over many production cycles i.e. they are used in the production of many goods over a long period)
- For example- Blast furnaces in the production of steel from iron ore, robots, machines used for the production of the car, and tools such as screwdrivers or pliers assisting in the production process.

**Investment in an economy (14:15:00)**

- Investment refers to the expenditure incurred by firms in a year to purchase capital goods (* investment is a flow variable i.e. we measure by how much the stock of capital goods changed in a year.
- For example, if the value of the stock of capital goods at the beginning of the year was $1 bn, and at the end of the year is $1.1 bn then the change is $0.1bn, which is the investment in the economy in the given year) [* refer to difference between Gross and Net]
- **Components of investment**
- 1). GFCF
- 2). Change in inventories
- 3). Residential investments
- GFCF refers to gross fixed capital formation, which is the expenditure incurred by firms on capital goods in a given year.
- By convention, the changes in inventory and residential investment in dwelling units are also treated as an investment.
- Changes in inventory can be both planned and unplanned. Since inventory is not being used as an ingredient, or being sold as final consumer good, therefore, it is treated as a capital good (* by definition, it is only the producers who purchase the capital goods as such GFCF is the most important and the largest component of investment)
- Residential investments are investments by households in NEW residential units.

**Depreciation (14:38:00)**

- Capital goods, like any other goods, lose their value with time. their ability to assist in the production process decreases, and hence they deteriorate or depreciate in value. The loss of value over a period of time usually a year is called depreciation.
- In an economy, depreciation pertains to the loss in value of capital goods over a year. it is not some actual loss incurred by the possessor of capital goods, rather it is simply a loss in value.
- Gross investmet = net investment + depreciation, or Net investment = Gross investment - depreciation.
- Gross investment is the actual amount of expenditure incurred by the firms in the economy on capital goods in a year
- Depreciation is the loss in the value of the existing stock of capital goods during the year
- Net investment is, therefore, a depreciation-adjusted change in the stock of capital goods during the year.

**National Income Accounting (15:33:00)**

- In this chapter, we will account for i.e. measure national income.
- Income refers to any payment made in return for factors of production. The word national can be interpreted in two ways-
- a). Within the boundaries of the nation, or
- b). By the nationals of the country.
- Therefore, we measure the total amount of income earned in return for FoPs[factors of production ] provided by either anyone within a country or by the nationals of a country

**Incomes (15:48:00)**

- A firm is not a natural entity, rather it comes into existence because some households decide to contribute certain basic factors of production to set up a firm so that they may earn an income by providing the goods demanded by the households at a certain price.
- The FoP is
- 1). **Entrepreneurship**- an entrepreneur is a person willing to take the responsibilities, and therefore, the risks associated with the production process. The firm owes its existence to the entrepreneur. he earns his income in the form of **PROFIT**

- 2). **Capital** - refers to money, the money needed for carrying out the production process. capital is provided by either the entrepreneurial household or by any other household. In return for capital, the provider households earn an income called **INTEREST**
- 3). **Land/space-** space required to set up the business i.e. the factory, also provided by households, and the income paid is called **RENT.**
- 4). **Labor**- workers in the factory, earn **WAGES**
- The Firm and household interact with each other in the goods market as well as the factors market
- In the goods market, households demand goods that are produced and provided to them by the firms.
- Household incurs an expenditure which is received by the firms as REVENUE. in the factors market household provides the factors of production to the firm. in return for these, the firm pays incomes to the households.

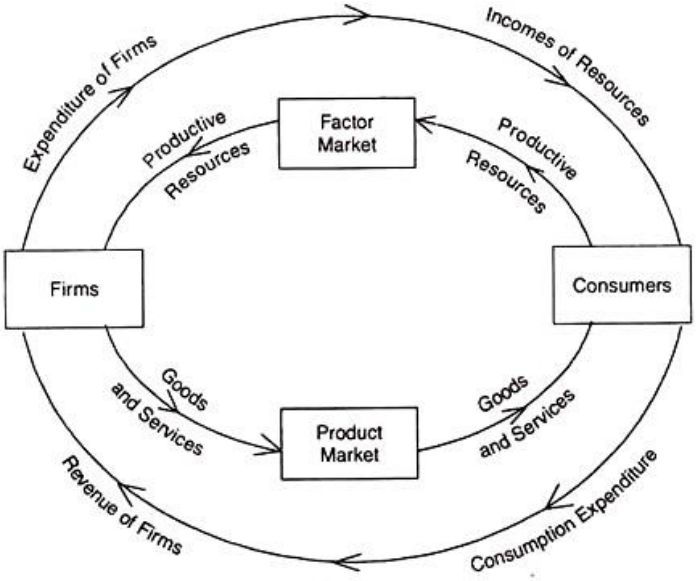


Fig. 10

- The Firm sells goods or a price to the households and receives revenue. This revenue is used to pay the FoPs[factors of production].
- The firm pays Wages, Rent, and Interest. The remaining is the firm's Profit.
- Profit belongs to the firm. The firm decides how much has to be paid to the owner as a dividend. We assume that since the entrepreneur takes the decision for the firm, he will transfer the entire profit of the firm to himself i.e to the household, and therefore, from its revenue, the firm pays to the four FoPs.
- As can be seen, the value of the goods produced, which is equal to the value of the expenditure incurred by households, which is equal to the value of the revenue received by the firm is equal to the value of the factor payments done by the firms i.e. the incomes earned by the households.
- Value of goods produced = B
- Value of expenditure received by the firm= C
- Value of factor payments done by the firms=A
- Therefore A= B=C
- This is the Circular flow of income model

**The Topic for the next class:**- build up on the circular flow and more advanced understanding of the circular flow of income.

**Economics Class 13**

**<u>The circular flow of income continued(1:03:00PM)</u>**

- A brief review of the concept
- **Limitations of the two-sector model**
- The two-sector model has multiple assumptions such as:
- a. Households do not save, that is, incomes and expenditures are equal.
- b. Non-existence of government, which collects taxes reducing the households' ability to spend, and incurs government expenditure which is an addition to total expenditure in the economy.
- c. Non-existence of external sector, that is, imports into and exports from the economy.
- d. Non-existence of financial sector, that is, an avenue for households to save and for firms to borrow.

- e. It assumes that the value of sales of firms is equal to the value of production, that is, firms do not accumulate any inventory.
- To overcome these limitations, we expand the scope of the model to include different entities. This model has variously named **the three, four, or five sectors or a dynamic equilibrium model.**
- In this model, we still observe that the essential conclusion of A=B=C still remains the same, that is, the value of incomes earned is still equal to the value of goods produced as well as the value of expenditure received by the firms.
- * It is just that A, B, and C rather than being in a static equilibrium are in a dynamic equilibrium with each other.
- **Dynamic equilibrium** means that if either of A, B, or C changes, it will set in motion a chain of events to adjust the others towards this change, that is, A, B, and C might not be equal to each other at a given moment in time, rather would be eventually equal over a period of time.
- This can be understood through the concept of **injections and leakages.**
- **Injections**
- Anything that increases the flow, that is, the magnitude of either A, B, or C.
- Investment, government expenditure, and exports are examples.
- **Leakage**
- Anything that reduces the magnitude of either A, B, or C.
- Savings, taxes, or imports are examples.
- For example, if households save part of their incomes, this reduces their expenditure and hence firms are not able to sell the goods that they have produced.
- They receive less expenditure, and therefore, will be able to give less factor payments in the next round of production.
- As such the households will receive a lesser amount in the next cycle, setting up the economy's equilibrium at a lower level.
- Our essential conclusion of A, B, and C being equal still remains, although, over a period of time.
- As such, to measure incomes, we measure them over a period of time, that is, as a **flow variable.**
- **A=B=C**
- **Value of incomes earned over a year(Income approach)=Value of expenditure received by firms over a year(Expenditure approach)= Value of goods produced by firms in a year(Production approach)**

**Measuring national incomes(2:17:00PM)**

- **1. Income Approach**
- Total income(TI)= Total incomes earned by various factors of production
- TI= Rent + wages + Profits + Interests
- **TI= R+W+P+I**
- **2. Expenditure Approach**
- Total expenditure= Expenditure received by the domestic firms from different entities.
- Domestic firms will pay for incomes to domestic factors of production from the money they receive as expenditure(their revenue).
- **Broadly the four entities and their expenditure is as follows:**
- Households- Consumption Expenditure(C)= Cd + Cf
- Government- Government Expenditure(G)= Gd + Gf
- Firms- Investment Expenditure(I)= Id + If
- Foreigners- Exports (X)= X
- Where d denotes domestic and f denotes foreign
- **Total expenditure incured= C+ G+ I+ X**
- **Total expenditure received = Cd + Gd+ Id + X**
- = (C-Cf) + (G-Gf) + (I-If) + X
- = C+ G+ I+ X-(Cf+ Gf+ If)
- = C+ G+ I+ (X-M)
- **Aggregate demand(AD)= C+ G+ I+ X-M**
- The expenditure approach measures the total expenditure received by the firms in an economy. This is called aggregate demand(AD) in an economy.
- AD refers to the total demand for all goods and services in an economy faced by domestic firms.
- **3. Production approach**
- In this method, we calculate the total value of goods and services produced in an economy.
- To do this, we use the concept of GDP and measure it through **2 different methods**- **the usual production method(output method), and the value-added method.**
- Doubt resolution

**Production approach continued(3:13:00PM)**

- **GDP**
- It is equal to the total **value** of **final goods and services produced in an economy** in a given time period, usually a year.
- **Value**
- It refers to an **objectively measurable value** of some good or service.
- It is not a subjective value that different people will assign to something.
- Objectively measurable value is called **price.**
- Price can be taken at different points of time or at different stages of production. However, the price will be an objectively measured number.
- As a corollary, GDP includes only those goods and services which can be valued, that is, those goods and services, which have either not yet been valued, or can not be valued will not be included in GDP.
- For example, the value of a forest, the value of invaluable services such as motherhood, scientific discoveries/inventions not yet valued, etc.
- **Final goods and services**
- While calculating GDP, we include the value of only the final goods produced and not the intermediate goods.
- This is so as the value of **final goods already includes the value of intermediate goods** as such counting the value of intermediate goods would lead to **double counting.**
- Intermediate goods would also need their FOP and therefore would make payments to households. The payments will be included as income in the income approach. The value of goods they produce would be incorporated in the final goods bought by the household.
- The household's payment can be seen as one single point of payment to all the individual producers of that good.
- **Produced**
- Produced- **that is, produced and not sold.**
- GDP includes the value of goods and services produced in an economy and doesn't concern with what was sold or whether it was sold or not.
- This means that if a firm accumulates inventory, or sells from inventory already accumulated it would not matter, only production will be included.
- Similarly, transactions in existing goods will not be included as they are not produced. However, if for their transaction some brokerage service is required, then this service would obviously be included in this year's GDP.
- For example, land transactions or buying/selling existing residential apartments, second-hand cars, etc will not be included in GDP.
- **In an economy**
- In an economy, that is, inside an **economic territory.**
- The economic territory is mostly co-terminus with the geographical-political territory but with some exceptions.
- For example, production in a country's exclusive economic zone will be considered part of countries GDP.
- Similarly, production by Indian flagged vessels in international waters will be in India's GDP.
- Production in embassies of a country is also part of the country's GDP, and not of the country in which it is located.
- Similarly, military bases, aircraft, etc are also part of the country's domestic economic territories.
- **In a given time period**
- In a given time period- GDP is an aggregate measure, measured over a given time period such as a month or a quarter, or a year.
- It is a flow variable.
- Doubt resolution

**Topics for next class- National Income Accounting continued**
**Economics Class 14**

**Doubt resolution and a brief review of the last class**
**GDP Measurement(1:23:00 PM)**

- GDP measures the value of all the final goods produced in an economy in a given time period.
- To measure GDP we, therefore, need to separate intermediate and final goods, however, this is not possible.
- The producer of a good may not really be concerned about the end use of the good, that is, whether it is used as a final or intermediate good.

- Therefore, GDP measurement is difficult if not impossible through this method, instead, we use the value-added method.
- **GDP= Gross value added in the economy(GVA)**
- That is, GDP= Sum of value added by all the producers in the economy(GVA)
- In this method, we do not need to separate intermediate and final goods, rather, we take up the value added by all the producers.
- Value of a good= Value added by the producer(VAi) + Value of inputs (Vi)
- Value of input= Value of output by the intermediate good producer(Vo)
- Again, Vo= Value added(VAi) + Value of input for the intermediate good producer(Vi)
- ... and so on.
- Therefore, gross value added for a good say i = GVAi
- GVAi= ∑(VAi)
- **Therefore, gross value added for all the goods in the economy = GDP= ∑GVAi= GVA**
- Therefore, GDP which is the value of all final goods and services in the economy is equal to the gross value added by all producers in the economy.

**Calculation of GDP at different prices(2:03:00 PM)**

- GDP measures the value of output, therefore, it can be generally expressed as:
- GDP= Prices * Quantity

**Nominal GDP**

- It refers to the value of output calculated using current prices.
- GDP(2022)= Price(2022) * Quantity(2022) or Y(2022)= P*Q
- **GDP can be calculated at various prices:**
- **a. Different prices in time**- Real GDP, GDP at constant prices
- **b. Different prices in production**- Market, basic and factor cost

**Real GDP**

- **Real GDP= GDP of present year calculated using prices of some past year**
- The purpose is to have a fair comparison by eliminating the effect of price in valuing the country's output.
- Real GDP=Y0= Qcy*Ppy
- cy is the current year
- py is previous/past year
- Nominal GDP= Y= Qcy*Pcy
- GDP Deflator= Nominal GDP/Real GDP= Qcy*Pcy/ Qcy*Ppy= Pcy/Ppy
- Real GDP, that is, GDP at constant prices can also be calculated at the prices of a **base year.**
- The base year is that special year in the past whose prices are chosen to calculate the real GDP of subsequent years, such that, a long-term fair comparison can be made.
- **The base year has two important properties:**
- a. It should have stable prices, that is, the prices should not have been volatile. The year is usually a less eventful year such as the production and demand were relatively stable and the year was not interrupted due to events like wars or natural disasters or pandemics, major structural/policy changes in the economy, etc.
- b. It should be as recent as possible so as to reflect a production pattern similar to the current year. The economy's structure should not have changed in some major way, and the nature of goods produced as well as the technology of their production should be relatively similar to the present year.

**Market price and factor cost**

- Explained using a diagram
- The market price is the price of goods and services that exists in the market, that is, what the consumer pays.
- Factor cost refers to the cost attributable to the factors of production.
- It is the price that the producer receives.
- Market Price is different from factor cost because the government intervenes by levying taxes or by giving subsidies.
- The market price is **inclusive** of the effect of taxes and subsidies, whereas factor cost is **exclusive** of the effects of taxes and subsidies.
- The effect of taxes is to increase the market price whereas the effect of subsidies is to lower it.
- Market Price= Factor cost + Indirect taxes - subsidies
- Factor cost= Market Price - Indirect taxes + subsidies
- GDP can be calculated at both MP as well as FC.

- **$GDP_{FC}$= $GDP_{MP}$ - Total indirect taxes collected by government + total subsidies given by the government**

**The concept of basic price(3:26:00 PM)**

- Basic price refers to the price of the good at the factory gate, that is, just before it exits the production process and enters the market.
- On this product(good), the government may give some subsidy, or levy some taxes, to lead to a market price.
- Therefore,
- **Market Price= Basic price + Product Taxes - Product Subsidies**
- During the production process of the good, subsidies may have been given or taxes may have been levied on some intermediate goods and services used in the production process.
- To arrive at the true factor cost, therefore, we need to remove the effect of such production taxes and subsidies as well from the good's basic price.
- Therefore,
- **Factor cost= Basic Price - Production taxes + Production subsidies**
- To summarise,
- FC= MP - IT + subsidies
- IT= Product taxes + Production taxes
- Subsidies= Product subsidies + Production subsidies
- FC= MP - (Product taxes + Production taxes) + (Product subsidies + Production subsidies)
- FC= MP - Product taxes + Product subsidies - Production taxes + Production subsidies
- FC= Basic Price - Production taxes + Production subsidies
- BP= MP - Product taxes + Product subsidies
- GDP can be calculated at any of the prices mentioned above, that is, current year's price, past year's price, market price, basic price, factor cost.
- MP= FC + IT - Subsidies
- $GDP_{MP}$= $GDP_{FC}$ + IT - Subsidies
- The headline measure of GDP is the GDP at market price, whereas the headline measure of GVA is calculated at factor cost.
- Therefore, we commonly come across the following relation:
- **GDP= GVA + IT - Subsidies**
- where GDP= GDP at market price
- and GVA= GDP at factor cost= GVA at factor cost
- * The GDP will increase with the increase in indirect taxes as GDP here means GDP at market prices.

**The topic for the next class- GDP calculation in India**
**Economics Class 15**

**A brief review of the last class**

**Gross National Product(GNP)(1:10:00PM)**

- Doubt resolution
- Gross National Product refers to the value of output produced by nationals of a country, irrespective of where they are.
- GDP= Value of output IN India= By Indians in India(A) + By foreigners in India(B)
- GNP= Value of output produced by Nationals of a country= By Indians in India(A) + By Indians in the Rest of the World(C)
- Therefore,
- GDP= GNP + (B-C)
- GDP= GNP + (Output by Foreigners in India- Output by Indians in foreign countries)
- **GDP= GNP + Net Factor Income from Abroad(NFIA)**
- *** GNI(Gross National Incomes)**
- GNI measures the value of incomes earned by Indians that is, the **income approach.**
- GNI has now replaced the usage of the word GNP almost completely because incomes earned by Indians are easier to measure as compared to the value of output produced by Indians

**Estimation of GDP in India(1:43:00PM)**

- The broad process of GDP estimation is the following:
- 1. Define what is produced, so that only what has been defined is measured. This is what is going to be valued.
- 2. Create a diverse sample of producers producing the items identified in step 1.
- The sample should be such that it reflects the composition of the economy such as sectoral outputs(agriculture, services, and industry), nature of goods and services produced by firms,

farmers' representation by their landholding or the crop cultivated, firms on the basis of the number of employees, etc.

- All these and many more diversities are taken into account while creating the sample representing the economy.
- 3. From this sample, collect the **output** information. This is summed up to calculate the value of output for the sample.
- 4. From this value, estimate the total value of the output of the economy by extrapolating using information from various government departments, as well as assumptions through pre-defined standards.

*** Changes in GDP measurement post-2015**

- Before 2015, the primary sample for measuring GDP was the **Annual Survey of Industries(ASI).** It consisted of around 20,000 firms, from which output information was collected, and GDP was estimated by extrapolating this output to the entire economy.
- Post-2015, the primary sample is the **MCA21 database**. It is a database with the **Ministry of Corporate Affairs** where the firms registered regularly upload information regarding their output and expenses, and therefore the value added by them.
- We now sum up the value added by these firms and then extrapolate using standard assumptions to estimate GDP.
- In order to compare GDP across countries, we need standards that are uniform and desist countries from overestimating or underestimating their GDPs. United Nations along with IMF has come up with these standards in form of **SNA(System of National Accounts), 2008**. India's GDP methodology is now fully compliant with these standards.
- The base year was changed from **2004-05 to 2011-12.**

**Limitation of GDP(2:50:00PM)**

- GDP is a measure of the value of output or income and has a high degree of correlation with well-being. However, high GDP is not a guarantee of better well-being, and thus its application as a measure of well-being is limited.
- For example, GDP is insensitive to the distribution of factors of production and therefore income. it is an aggregate measure, that is, it sums up the entire value of production, and does not differentiate between who is producing, what is being produced, or who is earning how much income.
- It is insensitive to the nature of goods produced- merit or demerit. It is not able to measure the value of those goods and services which are invaluable. For example, ecosystem services can not be valued and thus their destruction or addition is not part of GDP.
- The existence of a large informal sector and similar prevalence of black money makes GDP estimation volatile and inaccurate.
- Since GDP is the value of goods and services, it can increase merely because of inflation or an increase in taxes, or a reduction in subsidies.
- Doubt resolution

**Alternatives to GDP (3:43:00PM)**

- GDP measures the value of output and not well-being. However, since income is closely related to well-being, GDP is used as a measure of well-being as well.
- Various alternatives have been proposed. The institutes which publish them along with their dimensions are as follows:(refer to the following from Vision IAS material)
- 1. HDI
- 2. IHDI
- 3. GDI
- 4. GII
- 5. Green GDP
- 6. GNH

**Despite its limitations, GDP continues to be used due to the following:**

- 1. It is most objectively measured as its definition is consistent across countries, and it has a high degree of correlation with standards of living.
- 2. Most countries have adopted SNA 2008, and hence its measurement is standardized and hence comparable.
- 3. GDP data is available most frequently and in a timely manner. Also, its accuracy is enhanced because of regular revisions in GDP.

**Next class- National income accounting contd; Inflation**

**Economics Class 16**

**A brief review of the last class and doubt resolution**

**Green GDP(1:36:00PM)**

- It involves adjusting total output(GDP) with the environmental consequences of growth.

**Measures of National Income(1:44:00PM)**

- NI can be measured using the income, expenditure, or production approach.
- The values are the following:
- **1. Income Approach**
- National Income= Profit +Rent + Wages+ Interest
- NI= P+ R + W + Int
- **2. Expenditure Approach**
- NI= AD= C+ I +G + (X-M)
- **3. Production Approach**
- NI= GDP= ∑GVAi

There are **other measures of National Incomes as well:**

- **1. Per capital income (PCI)**
- PCI= GDP upon mid-year population
- **2. GNI per capita**
- = GNI upon population
- **3. National income as defined specifically by the government**
- NI= NNP at factor cost
- NNP at factor cost= GNP at MP - Indirect taxes + Subsidies - Depreciation

**Personal Income(PI)(2:00:00PM)**

- It refers to the income of the households.
- By definition, it is the households that provide factors of production and therefore, they are the ones who earn incomes.
- However, it may happen that the government or businesses may not pay entire incomes to the households and at the same time may transfer some of the incomes earned by them to the households as transfer payments.
- We calculate the incomes of households by adjusting for these.
- PI = Income of households
- PI= NI - Incomes earned and retained by government and businesses with themselves
- PI= NI - Incomes not transferred + those that are transferred
- PI = NI-(Undistributed profits+ Net interest paid BY households + Corporate taxes) + (Transfers from government and businesses to households)
- **Personal Disposable Income(PDI)**
- PDI= PI- Personal Taxes
- **** Transfers/Transfer payments**
- A transfer is not an income rather it is merely a right to spend money earned by someone else as their income.
- Since transfers are not incomes, therefore, they are not added or accounted for separately in National Income, that is, they are not explicitly counted in GDP.
- Transfers may increase the money spent that is expenditure on the economy. As such, they will be accounted for as expenditures when spent, and not as incomes.
- When they are spent, goods are produced and somebody earns an income, and therefore, they may eventually increase the GDP. They do not increase GDP/GNP by themselves.

**Inflation(3:09:00PM)**

- Inflation refers to a **general rise** in the prices of goods and services in an economy.
- It is not the rise in the price of some specific good, but rather a general rise in prices of all goods and services. A specific good may become expensive or cheap, and it will have its own effect on the general prices.
- Prices are measured through a price level or a price index. It is a combined measure of prices of several goods and services.
- Normally, a price index is a **weighted average of prices** of a **basket of goods and services.**
- **GDP Deflator** is a price level representing all goods and services in an economy.
- For a household, their total consumption expenditure can be thought of as their price level.
- **Price of a good**
- A good's price refers to the **market value** of that good.
- Market value refers to the number of goods that can be exchanged for a quantity of some other item in the market. The quantity of the item which is being used to purchase the item demanded becomes the price.
- In an economy, normally it is the country's currency that is used as a facilitator of this exchange. Thus, the goods are priced, most commonly, in the country's currency.
- The value of the good therefore has two parts-
- 1. the measuring unit, the county's currency or gold

- 2. The number of units of the measuring unit
- The price of an item can therefore vary either because:
- 1. Its intrinsic value changes, that is, what is based on its own demand and supply.
- 2. When the value of measuring units such as the country's currency or gold changes.
- * In this chapter, we will assume the price to change only because of the first factor.
- **Causes of inflation**
- Explained with the help of a graph.
- The price of a good is determined through its demand and supply.
- When its demand increases, its demand curve shifts outwards and therefore there is a rise in its price.
- Similarly, if there is a change in factors determining supply, the supply curve also shifts. If it shifts inwards due to general supply constraints or an increase in costs, then also the price rises.
- Generally, we can extend these arguments of an increase in the price of one good to an increase in price generally in the economy.
- We, therefore, summarise, the factors causing inflation into demand-pull and cost-push factors.
- **Demand-pull factors**
- Rise in incomes
- Changing consumption patterns such as consumption of eggs in place of cheaper sources, increased consumption of milk and pulses, etc.
- The rising population causes a general increase in demand.
- ** Increased availability of money such as through higher government spending or an expansionary monetary policy.
- **Cost-push factors**
- The increasing cost of raw materials/commodity prices
- The rising cost of factors of production such as labor and capital
- The increasing cost of doing business such as through deterioration of the business environment
- A generally poor infrastructure.
- Rise in taxes
- International supply constraints such as due to geopolitical reasons, etc.
- Hoarding
- **Other factors**
- Cartelisation- It is a situation in which businesses collude with each other rather than compete. Hence, they rig the market by manipulating prices.
- Black economy- Black money creates a situation where the prices paid in white money increase, hence inflationary.
- Administered prices- When government sets the prices at a higher rate than what should have been according to the market factors such as setting higher minimum wages, MSP higher than the market price, etc.
- Doubt resolution

**Topics for the next class- Inflation continued**
**Economics Class 17**

**A brief overview of the last class**
**Measurement of inflation(1:18:00PM)**

- The broad process is the following:
- 1. Identify the target group for which inflation has to be measured.
- 2. For this target group, construct a basket of goods and services which are relevant to it.
- 3. Choose the base year, that is a year in which the prices were relatively stable. Seasonal adjustments can be made in the basket of goods and services for different months.
- 4. Collect the price information regarding goods and services in the basket from the relevant market. For example, if the target group is urban consumers, then the basket of goods and services would consist of the goods and services relevant to them and the price will be collected from urban markets.
- 5. The price for each month is collected and is indexed to a common value, usually a hundred. This is the index value in the base year.
- 6. Collect the price information in the present month for the subsequent year, and compare it to the price of the corresponding month of the base year. Inflation is calculated as the %change in the price of the basket in the present year over the previous year, that is, inflation is a year-over-year (YoY) comparison.
- 7. The index for a month is also calculated and inflation is commonly conveyed not as the price of the basket, but rather through this index.

- * Indices CPI, CPI-C, and CPI-R measure price changes at the consumer level, and are released by CSO.
- * The index WPI measures changes in prices of goods at the wholesale market level. The basket consists only of goods and not services. WPI is released by the Office of Economic Advisor in DIPP.
- PPI(Producer Price Index) has been proposed, but as yet not calculated.
- * In 2017, changes were introduced in inflation measurement, under which the WPI was adjusted to bring it closer to producers' prices. This was done by removing taxes levied at the wholesale market on goods.
- Some goods were added, and some were removed(Refer to the material).

**Important terms related to inflation(1:59:00PM)**

- **Hyperinflation**
- A very high or an intolerable increase in prices.
- There is no standard to define what is very high. It differs from economy to economy.
- Based on its rate and certain characteristics, we also use the terms **galloping inflation, creeping inflation, and trotting inflation.**
- **Inflation spiral**
- Inflation in which there is a positive feedback of prices into inflation, that is, a rise in inflation itself becomes a cause of inflation. For example, the price wage spiral- an increase in prices leads to workers demanding higher wages, which again leads to an increase in prices.
- **Structural inflation**
- Inflation because of those reasons which are difficult to be addressed in the near term.
- For example, poor infrastructure, a general difficulty in doing business, slow policy-making, etc.
- **Imported inflation**
- Inflation because of the increasing price of imports.
- **Headline inflation**
- The rate of inflation is used by the policymakers as an input to certain policies and therefore is most commonly reported.
- Earlier, inflation measured via WPI was the headline measure.
- After the inflation targeting framework of 2015, between the government and RBI, it is CPI-Combined.
- **Skewflation**
- When the rate of inflation is skewed because of rising prices of only a small group of items.
- This means that in the overall basket only a few items demonstrate a higher rise in price causing the rise in the price of the entire basket.
- **Core inflation**
- From the headline basket, we remove those components whose prices are volatile, and the authority responsible for controlling prices(RBI primarily), can not do much about it.
- From the headline basket, we remove the food and fuel components to arrive at core inflation.
- It is also called **non-food non-fuel inflation.**
- **** Deflation vs disinflation**
- **Deflation**
- When prices fall, that is, when inflation is negative.
- **Disinflation**
- It is a fall in the rate of inflation, that is, the prices still continue to rise, albeit at a lesser pace.
- **Reflation**
- It is an attempt by the government to inflate the economy if prices fall(refer to stagflation, monetary policy-growth inflation trade-off).
- **Shrinkflation**
- When the size of the packet shrinks but it is still available at the same price, that is, the quantity we get reduces.

**Stagflation(3:17:00PM)**

- **Relationship between inflation and unemployment- Philips curve**
- Philips plotted the relationship between unemployment and wages(and therefore prices).
- For various economies, using data from the past several years, the modern-day Philips curve plots inflation and unemployment.
- Explained with the help of a graph
- We observed that inflation and unemployment generally have an inverse relation, that is, during periods of high unemployment, inflation is generally low, and vice-versa.

- The explanation based on the observation is that when the economy does well, that is, produce more, unemployment would be low and wages would be high. As a result, there is a greater demand, as such, the prices will increase as the supply lags the demand.
- The opposite happens when the economy is in a downward cycle, that is, high unemployment, low wages, less demand, and therefore lesser prices.
- As such, we generally expect an inverse relationship between inflation and unemployment. This can also be translated into a generally positive relationship between growth and inflation, that is, when the growth is high, inflation is also high. As such, in terms of the desirability, of macroeconomic objectives, there is a **growth inflation tradeoff.**
- **Stagflation**
- In certain years, we observe that both unemployment and inflation are simultaneously high, that is, the growth is low and inflation is high. Such a situation is called stagflation.
- Stagflation is a stagnation in the economy's output accompanied by high prices, something not normally expected.
- Merely a high rate of inflation or a recession in the economy is not stagflation. Both must be there together.
- A falling rate of growth and a rising rate of inflation may eventually become stagflation- if the growth falls to a level that unemployment starts to rise rapidly and inflation reaches a level that is no longer tolerable.
- * Stagflation is a period of policy uncertainty, that is, there is no clear direction in which the policy maker may decide regarding the path to achieving desired objectives of decent growth and stable prices. If the decision is to curtail prices, this will further worsen the situation of unemployment and vice versa.

**Topics for the next class- Effects of inflation**
**Economics Class 18**

**A brief review of the previous class and Q/A [01:07 PM]**
**Effects of Inflation [01:30 PM]**

- **Consumers and Producers -**
- A low and stable rate of inflation is considered desirable in an economy.
- Inflation makes consumers worse off i.e. poorer in the real sense as the money in their pockets now buys goods of a lesser value.
- Producers in general are benefitted from inflation. (Law of Supply - Higher Prices, More profits, and More willingness to produce)
- In the market, producers have certain pricing power i.e. they are able to pass on the increased cost to the consumers without adversely affecting the quantity sold to the consumers.
- *Pricing power is greater for necessary goods as there isn't a significant drop in demand even with an increase in price.
- Inflation affects Consumers in a negative manner, their real income reduces as the value of money decreases.
- **Engle's Law:** It states that the poor spend more proportion of their income on necessary i.e. food items, and when their incomes increase, less of it is spent on such necessary items.
- As a corollary of this law, the poor households' large part of the expenditure is non-discretionary in nature.
- Therefore if there is Inflation, they suffer far more than any other group.
- Producers' pricing power is not unlimited but would be exercisable only if the rate of inflation is low i.e tolerable by the consumer.
- A low rate of inflation is incentivizing the producers and therefore there is an expectation of more production, employment, and wages in the economy.
- **Therefore a low rate is desirable.**
- Further, stability in prices is also desirable as volatile prices lead to uncertainty, and therefore an inability to plan.
- Both producers and consumers are unable to plan their expenses.

**Borrowers and Lenders (as well as Savers and Depositors) - [02:02 PM]**

- **Time Value of Money -**
- The value of money in our pockets is not the number printed on that currency note, but rather the real goods or services that it can purchase.
- Due to inflation, the ability of money to buy these real goods and services decreases, and hence money losses its value with time at the rate of inflation.
- A person having Rs100 in one year will need Rs105 next year to be equally worthy if the rate of inflation is 5%.
- *Refer to the diagram provided in the lecture.*

- A gets Rs(1000+100) after one year. The present value of Rs 1000 which he had last year should be Rs1050 given a 5% rate of inflation.
- Therefore even though, he is getting Rs100 of the nominal amount as interest, his real return is only Rs50 i.e Rs 100-50 or 5%.
- **Real Interest Rate = Nominal Interest Rate - Rate of Inflation**
- A gets interest on the past value i.e. the original principle amount lent.
- This amount has lost value due to inflation, and therefore its equivalent value today would be Rs 1050.
- B, on the other hand, pays interest on this past value.
- Therefore, A, the lender is at a loss, and B, the borrower gains.
- Inflation favors the borrower and harms the lender.
- To protect oneself from the negative effects of inflation, the lender has two options -
- (i). Charge a high NIR
- (ii). Charge a fixed RIR, anchoring the NIR to the rate of inflation.
- **Effect on Depositors -**
- Depositors essentially lend money to the banks and earn interest in return.
- As such they are harmed due to inflation. Especially those savers, and depositors are harmed which do not have any other source of income apart from interest on their savings such as the senior citizens.

**Savings and Investments - [02:38 PM]**

- Dictation [03:22 PM]
- Savings refers to the proportion of incomes that are saved.
- In the economy Savings rate refers to the proportion of GDP which is saved.
- It can be saved in both physical as well as financial assets, by the government, the private sector, and obviously by households.
- Inflation, as discussed above leads to a general rise in interest rates, and hence and it may incentivize savings.
- ** Savings usually move from financial to physical assets during periods of high inflation - *refer to Economic Survey ch 1 (State of Economy)*
- Investments' dependence on inflation is understood in two parts -
- (i). factors that determine investment
- (ii). Effect of inflation on those factors

**Factors determining investment -**

- Investment decisions are of the firms, and there would be several factors that would influence their decision to invest. **These include -**
- Demand for their goods
- An expected demand in future
- Cost and ease of investment
- There are several rational and irrational elements influencing this decision.
- We boil them down to 2 essential components:
- (i). the cost of investment, r i.e. the rate of interest
- (ii). the expected return on investment (XR)
- An investment decision would be taken when (XR-r) is positive
- Expectations cannot be quantified, and hence we assume them to be constant.
- Therefore, we say that investments in an economy would be inversely proportional to the rate of interest, given constant expectations.
- **I∝1/r || Constant expectations**
- **Effect of Inflation on Interest Rate -**
- It is expected that rising inflation would lead to an increase in the interest rate of borrowing.
- Therefore, given constant expectations and assuming that businesses are dependent on borrowings for their investments and we can say that with a rise in inflation, interest rates would rise, and hence investments would be disincentivized.
- *** *An argument can be made even for an increase in investment - rising inflation, means more prices, therefore a business may be tempted to invest.*
- *However, such investment may be confined to only a few businesses and may not lead to increasing overall investments in the economy.*

**Effect on Government and Tax Payer - [03:45 PM]**

- **The concept of Fiscal drag - [04:06 PM]**
- During Inflation, workers negotiate for higher wages, and their employers usually index their wages to inflation.

- It may happen that the taxpayers i.e. the earners of income may then move to a higher tax bracket.
- In a system of progressive taxation, the rate of tax that the citizens pay on their incomes increases with an increase in their income.
- As such, even if the workers receive an increase equivalent to the rate of inflation on their nominal income, this increment may not be sufficient i.e their Disposable Income may not rise by the expected amount.
- This is because even though they receive an increment equivalent to inflation, more proportion of this increment is paid as taxes, and less is available for spending.
- As such, in real terms, citizens/workers are still worse off as compared to themselves before inflation.
- As a result, there is a decline in consumption expenditure, causing a fall in Aggregate Demand.
- This fall in demand eventually leads to cooling down the heated economy and brings the prices down.
- This entire phenomenon is called **Fiscal Drag -**
- Under this, the tax collected by the government rises without either increasing the taxes or levying any taxes.
- Fiscal Drag is also called an automatic stabilizer as it breaks the price wage spiral and brings the prices down.

**Topics to be discussed in the next class: Monetary Policy**
**Economics Class 19**

**Doubt resolution**
**Incremental Capital Output Ratio(1:14:00PM)**

- ICOR= Incremental capital required to increase the output by 1 unit
- ICOR= Incremental capital/Output
- It refers to the investment required to increase the economy's output by 1 unit
- The lower it is the better

**Controlling inflation(1:23:00PM)**

- To control the price rise, we need to identify what factors are causing this price rise. However, it is difficult to precisely identify a factor responsible for causing inflation. This is because different factors will be influencing the price in different ways.
- Further, even if we are able to identify the factor/factors, it may not be possible or desirable to address them with the objective of controlling prices. For example, if demand outweighs the supply due to rising incomes, it would not be feasible to impose taxes during periods of high inflation.
- As such, the steps available for curtailing prices are limited. Essentially, they involve making money more expensive(dearer) so that people do not spend it, and hence the demand for goods and services reduces, bringing down the prices.
- The monetary authority of the country is responsible for the supply of money. It reduces the money supply to increase the cost of money and hence discourages people to spend the money they have or at least not borrow to spend it.

**Money, money supply and Monetary policy(1:45:00PM)**

- **Money**
- Commonly acceptable facilitator of exchanges.
- Money is something which is used in the economy by the people to facilitate the exchange of goods and services.
- People will accept something being offered to part with real goods and services that they have only when they demand the item being offered.
- They may consume it at a later date, but at present, they still demand it.
- Therefore, for anything to be used as a general facilitator of exchanges, it must always be demanded.

**For this, it should have the following properties:**

- 1. It should be **something of value.** Historically, money was something that had **intrinsic value,** modern money mostly has **fiat value**(fiat refers to value by order of authority, capable to enforce its orders).
- 2. The value must have **some sort of guarantee.** If it is intrinsic value, then an assurance of the quality of the item, it is fiat value then a guarantee by the authority giving the order that the medium of exchange possesses the value equivalent to what it promises. People would accept anything being offered only when they are assured of its value and authenticity. As such, it should be non-replicable or not easily counterfeitable.
- 3. It must be able to **denominate a large array of values,** that is, it should be able to value almost all the goods and services which are exchanged in the economy. For this, it must be easily decomposable as well as an additive in smaller or bigger portions.

- 4. It should be **usable as a unit of account**, that is, it must be able to add up the aggregate values in a common unit. For example, the total value of sales or the total value of a country's GDP.
- 5. It should be **easily storable.** This means that the cost of storing it should be less such that its value does not diminish with time. It may not be immediately used and therefore, may require to be stored for a longer period.

**Creation/Evolution of modern money(2:27:00PM)**

- Modern money is in the form of currency notes issued by central banks independent of the government.
- Earlier, money used to be issued by either an authority(that is, the king/government ) or develop in an organic manner bottom up.
- Modern currency notes are in the form of liabilities issued by the central banks of a value printed on the face of the currency note. For example, a 100Rs currency note is a liability of 100Rs issued by RBI(I promise to the bearer...).
- The ability of the central bank to issue this liability, that is, its capability to fulfil the promise depends on the assets that it has. The value of the assets as well as their quality determines whether the central bank can issue these promises or not.
- The modern currency note is a designated **legal tender.** A legal tender is something which has been designated by law as a means of repayment of debt that can not be refused. This means if a debt incurred is supposed to be extinguished through repayment by a legal tender, that is, currency issued by the Central Bank, then this legal tender can not be refused as a means of repayment.
- The Central Banks issue currency notes to the extent they have the required assets which makes them capable to issue those promises. Only when the central bank has these assets will it be capable to enforce its authority to designate the currency as legal tender.
- With the growth of the economy, the requirement for money increases and the Central Banks' assets may not be sufficient for it to issue new currency. To overcome this limitation, the Central Bank needs new assets. The government created these new assets in form of **government bonds.**

**Government Bond**

- It is a debt instrument which signifies that a debt has been incurred by the government.
- When the government borrows, it agrees to repay the borrowed amount with interest within a specified period of time.
- The government bond, that is, the proof of the government's promise to repay is considered an **inviolable promise.**
- Whether it is actually violated or not will depend on the government's ability to return the money.
- It is assumed that the government would be careful in its borrowing, and keep it to a sustainable level so that it is always able to repay the debt that it incurs.
- ****Refer to debt sustainability in fiscal policy**
- RBI/Central Bank of the country will therefore purchase these new assets, that is, government bonds and thus be able to print more promises, that is, the currency-the modern generally acceptable medium of exchange.
- Modern currency is, therefore, a promise against a promise.
- It serves the purpose of an acceptable medium of exchange as long as people trust the central bank to fulfil its promise. (I promise to pay the bearer...). People's trust in the central bank's promise will depend on the quality of its assets, which now comprise mostly government bonds- therefore, the people's trust is ultimately based on the government's ability to fulfil its promise.
- If the government borrows beyond what it can repay, the people lose trust in the currency and it becomes a worthless piece of paper.

**Bitcoin(4:17:00PM)**

- A brief discussion on bitcoin

**Topics for next class- Money continued, RBI Balance sheet**

**Economics Class 20**

**A brief review of the last class**

**RBI's balance sheet(1:17:00PM)**

| **Assets(What you own)** | **Liabilities(What you owe)** |
|---|---|
| Gold(Appreciating) | Currency in circulation(CIC)(Zero cost) |
| Foreign Currency Assets such as dollars or euros.(Appreciating) | Loans are taken by RBI(Very low cost) |
| Lending by RBI:(Interest Bearing)<br>a. To the government via government bonds<br>b. To foreign governments<br>c. To banks | Deposits with RBI(Very low cost) |
| | **M0(High Powered Money or Monetary Base)** |

- RBI issues currency by the acquisition of assets. A currency note is a representation of RBI's liability(I promise to pay the bearer...).
- * In modern times, the central banks do not have gold as a major asset, rather it is the government bond. As such, if somebody presents the currency note to RBI and demands the face value, RBI can not and would not pay an equivalent amount of Gold. Rather, it would enforce the value by emphasizing the legal tender nature of the currency, that is, it would enforce the value by telling that this note would be acceptable by anyone from whom the person wants to purchase something. At best, RBI would exchange the note with notes of a lower denomination.
- The assets of RBI are either appreciating in value or bear an interest whereas the liabilities are either low cost or zero cost.
- *** Zero cost**
- RBI acquires assets by issuing currency. On this currency note, RBI promises to pay some amount. It does not promise any interest or even a date of fulfillment. As such, RBI has acquired an asset by issuing a promise for eternity that does not even pay any interest. For example, A currency note of 100rs issued in 1980 would still make RBI liable(in 2022) for exactly 100rs.
- Therefore, on its assets, RBI either earns a profit or appreciates, and on its liabilities, RBI incurs 0 or low costs. As a result, RBI earns profits.
- RBI's profits are not intentional, rather they are incidental to its operations. It earns them to perform their duty as the monetary authority. To maintain the value of currency so that people continue to use it as the facilitator of exchanges.
- The economy allows RBI to incur zero-cost liabilities so that it can acquire those assets which enhance the trust of people in the currency(that is, RBI's ability to fulfill its promise).
- RBI is required to meet all its expenses from these profits- such as the cost of printing and storing currency, maintenance and operational costs of RBI such as the salary of all RBI's officials, etc.
- The net profit which it earns after all the expenses is called **seigniorage**.
- In 2017, under the recommendations of the **Bimal Jalan Committee- an Economic Capital Framework(ECF)** was adopted by RBI to determine how much money it may need during a certain year- such as to rebalance the balance sheet on account of the depreciation of assets or risk associated with interest-bearing assets. After accounting for these, whatever money is left is transferred by RBI to the government. This has made RBI's transfers objective rather than discretionary.
- Doubt resolution

**The demand of money(2:51:00PM)**

- **Cost of money**
- Monetary policy is about increasing or decreasing the cost of money to meet the objectives of growth and inflation.
- To control the cost of money we need to determine the factors which influence money's demand and supply.
- From amongst these factors, we will separate the quantity of money demanded and its cost, that is the interest rate, and then see its variation and therefore control it.
- **Demand of money**
- **Money is broadly demanded for two purposes:**
- a. Transaction purpose, including the precautionary purpose
- b. Speculative purpose
- **Transaction demand of money-$M_D^T$**
- The purpose of money coming into existence is to facilitate transactions. The amount of money needed for this purpose is the transaction demand of money $M_D^T$
- **$M_D^T$ depends on two factors:**
- a. the value of transactions
- b. Velocity of money
- **The value of transactions that the economy needs to carry out depends on:**
- a. The volume or the number of transactions
- b. The average value of each transaction.
- $M_D^T$ is proportional to the value of the transaction
- $M_D^T$ is inversely proportional to the velocity of money(v)
- The value of transactions is proportional to the volume of transaction
- Also, the value of the transaction is the proportional average value of each transaction
- (i) Volume of transactions is proportional to real GDP i.e. output(Y0)
- (ii) Average value of each transaction is proportional to prices in the economy(P)
- $M_D^T \propto P.Y0$
- $M_D^T \propto 1/v$

- $M_D^T \propto P.Y0/v$
- $M_D^T = k.P.Y0/v$
- Because v is a behavioral parameter and therefore assumed to be constant.
- **$M_D^T = k.PY0$**
- The velocity of money refers to the speed at which money changes hands. It is the number of times a currency note is used in transactions in a given period of time.
- If an economy has higher velocity, then it would need less amount of money to carry out transactions of the same value in a month as compared to an economy with less velocity.
- Velocity depends on factors such as people's habit to spend, payment infrastructure that is whether payments are easier or difficult to make, season of the year, etc.
- It is not something that is controlled by the government or the monetary authority, and not something that can be easily influenced. therefore, it is assumed to be constant and hence transaction demand is said to be directly proportional to the level of nominal GDP(P.Y0)

**Topics for next class- Speculative demand of money(read from NCERT)**
**Economics Class 21**

**Last class revision(1.05 PM).**
**Precautionary demand(1.15 PM):**

- Precautionary demand is the money for emergency purposes.
- Since this money's demand would also vary directly with the level l of income in the society, its purpose would be ultimately used in a transaction we include precautionary demand as a sub-set of transaction demand.
- Precasutranry demand like transactional demand is also directly proportional to the level of income ( nominal GDP) in the society.

**Speculative demand of money(MDS)(1.28 PM):**

- Speculative demand refers to the money in access of the transaction demand which has not been converted into assets.
- People have a certain amount of money from which they meet their transaction demand and are then left with an access amount.
- The decision of what to do with this access amount depends on various factors, the most important being their need for liquidity, their expectation of inflation, and the avenues available for investing this money to at least preserve its value over time, and preferably earn some return on it.
- If they convert this access amount into some asset, then they lose out on liquidity but accept to generate some returns.
- On the other hand, the opportunity cost of keeping the money in form of money(cash) is the returns not realized if it was converted into an asset.
- People's decision regarding this access amount will therefore depend on their preference for liquidity and returns on the assets.
- If the asset promises higher returns, the opportunity cost of not investing in it would be high.
- Ultimately people would convert this access money into assets if they expect asset prices to rise as a result of a person's accepted asset price to rise, he will convert this access amount to assets and therefore the money left in access would be zero.
- This is the speculative component which is zero or less in this case.
- On the other hand, if a person accepts the asset price to fall, then he would retain all of this access amount in form of money only, waiting for asset prices to reach a stage from which he accepts them to appreciate.
- Therefore the money with the person is said to be speculative and the speculative demand at this stage is said to be high.
- No money in access of transaction demand is been converted into assets.
- ***Expectations about asset prices:***
- Asset prices vary with an interest rate with the market.
- Illustration:
- Suppose an asset such as the government offers a promised Rate of interest(R), which is greater than the interest available in the market(r).
- In such a case everyone will be willing to buy this asset as it is differentially better than what is offered in the market.
- Since the assets are available in only a limited quantity, not everyone would be able to buy them and therefore the price in the market will increase as people bid against each other for this asset.
- The asset therefore will command a premium.
- The amount of premium would raise to a point such that the return on this asset is effectively equal to the return on the same amount in the market.

- The premium would result in the effective earning from this asset, being less than the promised returns.
- The effective return is known as the yield.
- The yield would be inversely proportional to the asset's price.
- The yield would fall to a level that the price asset would rise to the level that the effective return becomes equal to the market return on the same value.
- Hence at equilibrium, the yield will be equal to the market rate of interest.
- At any given point in time, the returns that any asset promises would not be any different from the returns on any other asset or the market returns(that is the market rate of interest).
- Since asset prices depend on market interest rates, the expectation of asset prices will depend on the expectation of interest rates in the future.
- The current asset price refers to the differential(R-r)
- R is fixed but r would carry during the lifetime of the asset.
- If r increases the assets become relative unattractive and therefore would lose their value.
- Hence people accept r to rise, they would anticipate capital losses on their assets.
- Hence they would decide to either sell off their assets or not buy them if they do not possess them.

**Speculative demand in the economy(3.40 PM):**

- At the economy-wide level, speculative demand varies inversely with the interest rates or MDS directly proportional to -r.
- If the interest rates in the economy are high, many people would expect them to fall and hence anticipate capital gains on their assets.
- As such the speculative component would have been converted into assets.
- Therefore speculative demand would be low.
- The opposite is the case when the interest rates are less.
- We didine r.min and r.max as the maximum or minimum possible rates of interest in the economy, that is the interest rate at which no one expects them to rise or fall respectively further.
- When r approaches r.max speculative components would decrease, when it approaches r.min it will keep on increasing.
- At r=r.min the speculative demand is infinitely elastic, this is a situation of a liquidity trap.
- At this stage, a fall in interest rate is not possible and hence asset prices would be at their maximum.
- No one expects them to rise and thus any additional money would not be invested, but only satiate people's craving for cash.

**The topic for the next class: Supply of Money.**

**Economics Class 22**

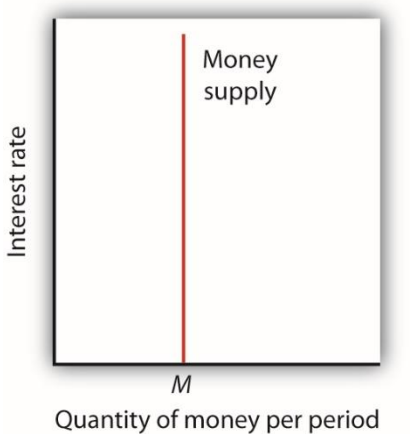
**Money demand(1.05 PM):**

- ***Total demand for money:***
- Md= MdT(Directly proportional to y) +MdS(inversely proportional to r).
- Therefore total money demand can be expressed as Md= a0 + b0y +(c0/r ) or a0 + b0y -c0r.
- Since the money denad function constinet of 3 varaibe, 2 indeopendt(y,r) and 1 dependent(Md).
- It is difficult to express it in a 2-dimensional space, therefore we assume a certain level of GDP, such as y0,y1, or y2, and then express money demand at this level.
- Example Md(y0)= a0 +b0y0 -c0r, Md(y1) = a0 +b0y1 -c0r, hence we can plot it as follows.

**Supply of money(Ms)(1.35 PM):**

- Money supply refers to the amount of money present or circulating in the economy.
- The money in the economy has two sources of creation, RBI(that creates the initial high powered Money, M0) and the Banking system.
- The money created by the banking system is also largely controlled by RBI.
- Therefore the total amount of money supply in the economy is essentially RBI-determined.
- The money supply decision of RBI is not based on the cost of money, that is the interest rates.
- RBI, unlike other producers, does not intend to earn profits from the production of its goods, that is money.
- Rather the objective of RBI is to facilitate growth and control prices through the conduct of monetary policy.
- Profits due to higher costs of money are incidental and not intentional.
- Therefore RBI creates money to set its price, that is interest rates as the price influences inflation and growth.
- The price of money(interest rate) is the effect of the money supply and not its cause.
- The money supply is therefore largely independent of interest rates.
- It is a determined/fixed number and not a derived value.
- Largely RBI's component of the money supply is completely independent of interest rates.

- That is the money supply decision determines interest rates, rather than being influenced by it.
- The bank's components of the money supply may vary positively with an interest rate as they are a profit-making entity.
- However, since the RBI control's even their ability to create money, this component is also assumed to be independent of interest rates.
- Therefore the money supply graph is a vertical line, denoting the independence of the money supply from interest rates.
- Further, it represents the demand-supply curve, the dependence of interest rates on the money supply.
- The decision of Ms has been driven by the objective of growth and inflation.
- ***Graphical representation:***




- An increase in the money supply leads to decreases in interest rates hence facility spending, therefore growth.
- A decrease in the money supply causes an increase in interest rate from R0 to R1, making money expensive and thus reducing, people's ability to spend, ultimately reducing inflationary pressure in the economy.
- RBI's decision regarding Ms is thus to achieve sustainable growth at stable prices.
- Therefore a monetary policy decision involves a growth-inflation trade-off, to achieve one the other may have to be compromised.

**Measuring money supply(2.19 PM):**

- There are 2 sources of money supply, RBI and the banking system.
- Total money, Ms is equal to M(RBI)(M0)+ M(banking system)(Multiple of M0).
- Ms= mM0.
- The purpose of money is to facilitate transition primarily, as such it should be easily exchangeable liquid.
- Depending on the liquidity of available money We have the following measures of the money supply.
- M0= high powered money.
- M1= CC +DD with banks.
- M2= M1 + PO-DD.
- M3= M1 + Time depoits.
- M4= M3+ PO-DD +other deposits with PO.
- M1 and M2 are narrow money and M3 and M4 are broad money.
- Where CC = Currency in circulation(cash+coins).
- DD is the Net demand deposit with the banking system, Net means that only public deposits are counted and not inter-bank deposits.
- TD is money that is available at particular points in time, but that is not always, therefore it is not as liquid as demand deposits, this is included in M3 and M4.
- With the conversion of the Post office into IPPB, the relevance of M2 and M4 has decreased.

**The topic for the next class: Money creation by the banking system**

**Economics Class 23**

**Money creation by the banking system:(1:05:21 PM):**

- The banking system of a country also creates money as a result of its operations of taking deposits and lending them out.
- It is able to create money due to the trust that people have in the banking system operations.
- The trust is in the system's ability to fulfill the demand when required.

- RBI creates high-powered money(M0), and the banking system takes it and creates a money supply that is some multiple of this number.
- **Ms=m multiplied by M0.**
- m is the money multiplier which is because of the banking system's operation.
- Specifically, **the process is as follows**:
- 1)RBI buys assets from the market and pays the creditor by issuing a cheque drawn upon itself.
- 2)This cheque is presented by the seller of the asset to his bank, and then by the bank to RBI, which then credits the said amount to the person's bank account.
- RBI does not normally deal with everybody, but only with certain designated entities, called primary dealers. (PD).
- These include banks and other financial institutions such as mutual funds, asset management companies, etc.
- 3)The person who receives this money, depending on his preference, will withdraw some part as cash, and keep the remaining as deposits.
- The preference of the person is observed through the concept of CDR(currency deposit ratio).
- **CDR is equal to Currency upon deposits.**
- It reflects the preference of people to keep money in form of cash as compared to keeping it in form of deposits.
- It is a behavioral aspect influenced by factors such as banking infrastructure, returns on deposits, need for cash, trust in the banking system, the season of the year, etc.
- It is not controlled by some entity and is hence assumed to be a feature of society rather than a number set by an institution.
- Therefore we assume it to be constant.
- 4)From the deposits the banks receive, it sets aside some reserves and lends some remaining portions.
- Reserves are set aside in anticipation of demand to withdraw money.
- Banks must have adequate reserves to fulfill the demand of depositors if they have to retain their trust.
- **RDR is equal to reserves upon deposits.**
- The proportion of deposits that banks set aside as reserves is RDR.
- Setting aside reserves would be costly for the banks as they would incur costs on these reserves, but won't be able to lend them in anticipation of demand.
- If it was only up to the banks, they may in the extreme case, not even bother to set them aside.
- Therefore there is a minimum requirement that the banking regulator decides for the banks.(CRR and SLR).
- This minimum requirement is laid down to prevent the loss of trust of people in the banking system.
- When people do not trust the banks' ability to fulfill their demands, they would rush to the bank to withdraw their money.
- As the bank has already landed, it will not be able to fulfill the demand for withdrawal, causing panic and thus a loss of trust in the financial system.
- This situation is called a bank run.
- RbI sets a min RDR.
- therefore RDR is a determined number, unlike CDR.
- 5)banks lend, the borrower spends and the receiver sells some real goods and services in return for this money.
- He receives it as his own money.
- the money supply in the system, therefore, goes up.
- Till now, Ms =CC(currency with P1) plus DD(deposits of P1).
- After P2 borrows and buys goods from P3:
- Ms=CC(currency with P1 plus P3) plus DD(deposits of P1).
- 6)Depending upon CDR, P3 will keep some money in currency form and deposit the remaining amount.
- Depending on RDR, the bank will set aside some reserves, and lend the remaining amount.
- Somebody borrows, and spends, somebody else receives, and thus money supply goes up again.
- However, This time the magnitude of the increment is less as the entire money was not received back by the bank.
- And from what was received not all was lent due to RDR.
- 7)The money supply increases albeit by a lesser amount in each cycle.
- It eventually reduces to an insignificant amount, when the money-creation process is said to come to halt.

- The total amount of money supply at this final stage is the economy's money supply.
- Ms=m M0.
- Where m would be inversely proportional to RDR and CDR.

**Tools of monetary policy(1:56:18 PM):**

- RBI's decision regarding the supply of money is influenced by the objectives of growth and inflation.
- **To facilitate growth, it increases the money supply, to control it reduces the money supply.**
- To increase or decrease Ms, RBI has different tools, which are broadly categorized as :
- 1)Quantitative tools-The effect on Ms can be reasonably accurately determined.
- 2)Qualitative tools- The direction of the effect is easy to understand, but is difficult to accurately quantify.
- It includes tools such as selective credit controls, margin requirements, moral suasion, etc.

**Qualitative tools:**

- **Read from the material.**
- **Quantitative tools:**
- **Ms=mM0.**
- 1)Tools that affect M0-OMOs(**Open market operations**):
- Under this indulges in buying or selling of assets directly from the open market.
- Normally it transacts only with the primary dealers.
- Off late it has also been encouraging retail participation.
- Buying of assets increases M0 and hence Ms.
- Selling off assets reduces M0 and hence Ms as RBI withdraws money from the market when it sells assets.
- **Retail direct scheme.**
- **GSAP.**
- **write these on your own.**
- **Tools that affect money multiplier reserve ratios**:
- 1)CRR-It is the proportion of banks NDTL.(net time and deposits )
- Net refers to liabilities excluding interbank deposits.
- Banks have to keep with RBI in form of cash.
- It has properties like:
- -It is set by RBI.
- **-**Proportion of banks NDTL.
- -Is kept with RBI, and not with the bank.
- -Kept in form of cash.
- It is a regulatory requirement and not some discretionary deposit of banks with RBI.
- Therefore doesn't earn any interest on CRR.

**Statutory Liquidity Ratio:**

- Banks are required to maintain a certain proportion of their NDTL in the form of designated liquid assets.
- These assets/ instruments are designated as such by law.
- They fulfill 2 criteria-Liquidity and safety.
- Banks earn a certain return on buying these assets, and can easily sell them in the market if required during the time of distress.
- The depositors have this security that their money is being invested in safe assets and that these assets can be easily liquidated.
- The banks earn a low but positive return and are able to maintain their trustworthiness.
- Examples of such designated assets are government bonds, designated foreign government or corporate bonds, foreign currency, gold, cash, etc.

**Liquidity Adjustment facility:**

- Banks' main function is to take deposits and lend them to the economy.
- During this function, the banks may face mismatches in their liquidity conditions.
- Banks may at times face an excess demand for loans as compared to the deposits with them, and hence experience a deficiency of liquidity.
- At other times, banks may have excess deposits with them but not enough demand for loans and thus have surplus liquidity.
- Banks have several options to reconcile this liquidity mismatch.
- For eg- They can run campaigns to attract deposits, borrow from the market by issuing bonds, and borrow from other banks (interbank call market)etc.
- As a banker of banks, RBI also provides the facility to the banks to adjust their liquidity position.

- It lends to banks when they are facing a deficiency and borrows from them if they have surplus liquidity.
- This **facility is called LAF**, and borrowing and lending involve a fee.
- -**The repo rate**- The interest rate the RBI charges to lend money to banks for a short term.
- -**Reverse Reop rate**-the interest rate RBI gives to the bank when it borrows from them for the short term.
- Operations under LAF are only for a short-term basis and are fully secure.
- This means that any transaction is taken upon only when an equivalent amount of assets has been exchanged for a promise to repurchase this security within a short term.
- For eg- If banks need to purchase from RBI, they will sell G sec to RBI and RBI will create equivalent money against these assets.
- Further, it will ask the banks to repurchase these securities and return the money within a maximum period of 15 days.
- Usually done on an overnight basis.
- the bank repurchases the securities and the money that was temporarily created gets back to the RBI.
- During this whole operation, RBI will charge a fee called the repo rate.
- If RR increases, it becomes costly for the banks to borrow money.
- As such the demand for money to borrow reduces and thus the money supply decreases.
- **If the reverse repo rate increases,**
- **Write it on your own.**

**Long-term repo operations:**

- **SDF(Standing deposit facility):**
- **MSF(Marginal Standing Facility):**
- **Write down these points from the material.**

**Next Class-Continuation from MSF, the conduct of monetary policy, etc.**
**Economics Class 24**

**A brief overview of the previous class & explanation of RDS, LTRO, SDF**
**Marginal standing facility rate [13:27:00]**

- The operations under LAF are fully secure i.e. when banks or RBI borrow from each other, this is made possible only when the other party provides an equivalent amount of government securities.
- Banks may invest some part of their money or their deposits in buying G-Sec. They use these securities to borrow from RBI under LAF. However, it may happen that the banks face an excess demand for loans from the economy but no may have government securities against which they can borrow from RBI under LAF
- In this condition, RBI allows banks to use the government securities which they have as part of SLR commitments to borrow from RBI.
- RBI allows banks to use G-Sec up to 1% of their NDTL under the SLR commitment to borrow from RBI. This borrowing is done in the same manner as the borrowing done under LAF, although RBI charges a higher rate of interest in form of a penalty for violating the SLR commitments.
- This **penal rate** is called the MSF rate and is 0.5 to 1% points higher than the REPO rate [* The difference between REPO and Reverse REPO, and REPO and MSF is usually called a **policy corridor.**
- REPO rate is the key Interest rate, and while announcing monetary policy decisions RBI only announces the REPO rate. The other rates change according to REPO and policy corridor ]
- [** **Bank Rate**- it **was** the rate of interest that RBI charged from the banks when it lent to them for a longer duration. Since it no longer lends for the long term, the bank rate is now dormant. It is aligned in value to the Penal rate i.e. MSF]
- [*** **Call rate**-The rate of interest that banks charge from each other in the inter-bank market. There are some benchmark call rates internationally such as LIBOR and MIBOR - London/Mumbai interbank offered rate]

**Market sterilisation/stabilisation scheme [14:00:00]**

- When there is an excessive inflow of foreign investment/money into the economy, this inadvertently leads to more money being created in the economy- the foreigner exchanges dollars for rupees from its bank, and the bank exchanges these dollars for rupees from its bank that is RBI, therefore, M0 goes up.
- This money supply was not intentional and may cause inflation. Hence in order to re-absorb this excess money, RBI in consultation with the government issues special bonds called MSS bonds in order to absorb this money
- [* It is a rare tool, and does not resort to every time foreign investors bring money]

**Conduct of Monetary Policy [14:11:00]**

| Growth | Inflation | Conduct/Monetary policy decision | Consequence |
|---|---|---|---|
| High | Low | Maintain status quo (neutral monetary policy) | ------ |
| High | High | Decrease money supply- a contractionary monetary policy- Tight Monetary policy- Example- Through increase, CRR/SLR/REPO/Reverse REPO, a decrease of M0[ sell assets]<br>[* RBI may have a **hawkish** stance i.e. a willingness to follow a tight Monetary Policy but not yet reduce Money supply] | Expect prices to cool down, but also anticipate growth to suffer, therefore, a tight Monetary policy will be conducted only to the extent that the decline in growth/ rise in unemployment doesn't become intolerable |
| Low | Low | Increase the money supply- an expansionary/loose monetary policy by reducing CRR/SLR/REPO<br>[* RBI may have a **dovish** stance] | Expect growth to improve, but also anticipate the rise in prices. Follow an expansionary Monetruy policy till the time inflation is in the tolerance Range |
| Low | High<br>[Low growth and high inflation is the condition of **Stagflation]** | Monetary policies conduct is uncertain i.e. there is no clear direction of its increase or decrease<br>Monetary policy is closely coordinated with Fiscal policy | An expansionary Monetary policy will worsen inflation whereas a contractionary monetary policy will worsen unemployment |

**Stagflation [15:39:00]**

- The decision of monetary policy is based on two broad factors
- 1). Identifying the cause of low growth and high inflation &,
- 2). Evaluate the effectiveness of monetary policy decisions to address either low-growth or high inflation
- There are no set policy decisions, but rather a case-by-case assessment of the causes and effectiveness of the monetary policy decisions
- RBI assesses whether inflation is due to excess money supply or due to any other factor and then decides whether it should follow contractionary or expansionary monetary policy, and what would be the extent of contraction and expansion.
- Monetary policy may have an expansionary bias i.e. an accommodative stance if the cause of inflation is a factor other than excess money supply. In any case, there is close coordination between monetary and fiscal policy to address the negative consequences of the other
- [***Quantitative easing**- It is open market operations carried out at a very large scale by the central bank to expand its balance sheet i.e. create high-powered money. It is simply OMOs [open market operations] at a very large scale [* **In QE, money is created in electronic form rather than cash form**]
- [** **Inflation Targeting framework** - Since monetary policy affects both growth and inflation in opposite directions with respect to their desirability, it becomes difficult to choose which objective to pursue.
- This becomes evident not just in the extreme situation of stagflation, but also in the normal situations of low growth or high inflation. When to pause expansion or contraction depends on the subjective

assessment of the decision maker. As such RBI may not be able to take Monetary Policy decisions independently and effectively ]

- In order to make RBI independent and accountable in matters of monetary policy, the government and RBI signed an inflation-targeting framework agreement in 2015.
- **Under this,**
- 1). Monetary policy decisions are taken with the primary objective of keeping inflation within 2 to 6% of CPI. Within this target, the objective of growth is maximized
- 2). Monetary Policy decisions are taken up by a six-member monetary policy committee by majority vote, with the governor having the casting vote.

**Transmission of Monetary Policy [15:54:00]**

- Prime lending rate
- Base rate
- MCLR [Marginal cost of funds based lending rate]
- [* Also external benchmarking]

**The Topic for the next class is-** External sector.

**Economics Class 25**

***A brief overview of the previous class & queries resolved:(01:05:00 PM)***

***External Sector:(01:26:00 PM)***

- ***Balance of Payments(BoP):***
- BoP is a record of a country's transactions with the rest of the world.
- Residents and nonresidents transact with each other for several purposes.
- These transactions are classified into two broad types:
- ***1. Current account:*** These transactions are settled in nature.
- They do not create any future interests or obligations.
- ***2. Capital Account:*** These transactions are unsettled.
- That is they create future interests or obligations.
-

| *Current Account* | *Capital Account* |
|---|---|
| 1. Merchandise Trade:<br>a. Imports<br>b. Exports | 1. Borrowings:<br>A. Concessions.<br>B. Market: By<br>a. Government<br>b. Govt entities<br>c. Private sectors- External Commercial Borrowings. |
| 2. Invisibles:<br>a. Trade in Services<br>b. Remmitances & Trasfer Payements.<br>c. Incomes & Earnings. | Borrowings Via:<br>a. Bonds- Foreign currency or domestic currency.<br>b. Other investments. |

2. Investments:
a. By Indians in the rest of the world.
b. By Foreigners- FDI, FPI, and others.

- The current Account is divided into:
- 1. Merchandise goods: Trade in Goods(tangibles)
- 2. Invisibles: it consists of three subparts:
- a. Trade in services.
- b. Remittances/Transfers: These are current transfers that a country receives from the rest of the world on a net basis.
- c. Earnings and incomes: earned by providing fop on a cross-border basis. Most commonly it is visualized as earnings on foreign capital.
- That is as interest paid on foreign borrowings, or profits earned and transferred on foreign investments.
- ***Capital Account:***
- It consists of transactions that involve futuristic interests or obligations.
- these are transactions that create/add or destroy/reduce assets or liabilities.
- It consists of:
- 1. Borrowings: Various ways of classifications:
- a. Based on interest rates- Concessional or Market/commercial.
- b. Based on the source of borrowings: Banks, Govt(s), Multilateral institutions, Individuals, and funds having individual or institutional money.
- c. Based on instruments used to borrow: For example, Bonds.
- Bonds can be classified based on the currency of their denominations- Foreign or domestic currency.
- Note: India's external debt(debt owed by all Indian entities) to the rest of the world is mostly denominated in USD, the second largest denomination is in Indian Rupees.
- Investments: Foreign investments in India(also Indian investments abroad) are made in anticipation of returns.
- Foreign investments are classified into FDI & FPI.

***Shown India's BoP through a Document:(02:38:00 PM)***

- Merchandise trade is always negative as we import more goods.
- Overall Invisible we have +ve.
- The Net Current account of India is mostly -ve.
- We had a +ve Current Account during Covid-19.
- Generally, we have a +ve capital account as we have more Investments (FDI & FPI) coming also loans are +ve as we receive more loans from external markets.
- Net BoP = Net Current Account- Net Capital Account.
- ***Errors and Ommissions(E&O):***
- *System of Reserves:* Transactions under current and capital accounts are independent decisions of different entities, and hence independent of each other.
- They are linked to each other via the system of reserves.
- A country can have either a deficit or surplus on either the current or the capital or both accounts.
- This deficit or surplus on a net basis gets reflected in a country's forex reserves, maintained with a designated entity, normally the central bank.
- The change in reserves can be accurately seen as they are maintained with the country's central bank.
- The cause of change would be a country's BoP transactions.
- It may happen that some transactions between residents and non-residents have not been recorded for any reason and hence the expected change in the reserves due to BoP transactions may be different from the measured change in the reserves. To balance them, a balancing term called E & O is added.

***Foreign Investments:(03:36:00 PM)***

- Foreign Investments in India are broadly classified into FDI and FPI.
- Earlier the classification was based on observed characteristics. This was easy to understand but difficult to objectively classify into FDI and FII.
- After 2013, with the enactment of the new Companies Act, and in pursuit of FDI policy, the Govt came up with the rules for objective classification of FDI and FPI.
- FDI is now classified as Foreign investment in an Indian company where the foreigner holds more than 10% ownership through various instruments.
- This follows a classification based on substantive control.
- More than 10% ownership signifies that the foreigner is interested in:
- a. Exercising substantive control in order to efficiently do business and earn profits from the Indian market.
- b. Remain invested for a long period.
- c. Willing to tolerate downturns in the business or the economy. That is, they are ready to take up losses for a relatively long time.
- d. Expected to bring new technology, expertise, and professional management.
- FDI enjoys greater power /greater control and hence is subject to sectoral regulations apart from any financial regulations.
- FII on the other hand is subject to financial regulations only such as that of RBI and SEBI.

***Topics for the next class:*** Continuation of Foreign investments and other aspects of the external sector.

**Economics Class 26**

***A Brief Overview of the Previous Class & Resolved Queries:(01:07:00 PM)***

***FDI Vs FPI:(01:20:00 PM)***

- ***(Discussed with PPTs.)***
- Recent FDI reforms:
- FDI is subject to multiple sectoral approvals/regulations.
- In the last few years, the govt has taken up FDI reforms under which the permissions required by foreigners because they are foreigners have substantially reduced.
- The regulation is the same as an Indian firm.
- The Foreign Investment Promotion Board(FIPB) which was required for approval of foreign investments has now been abolished.
- Even CCEA's role has significantly reduced in granting permissions for foreign investments.
- The limits have been revised upwards(limit of foreign ownership in the Indian firm) and the sectors open for foreign investments have increased.
- These are part of ongoing reforms in FDI.

***Exchange Rates:(02:05:00 PM)***

- ***(Explained by charts)***
- The exchange rate refers to the value of one currency in units of another currency.
- It is simply the price of one currency denominated in a different currency.
- Since it is simply the price, it depends on demand and supply.
- The demand for dollars/foreign currency depends on or comes from entities such as:
- a. Importers needing dollars for payments.
- b. Indians investing abroad.
- c. Indians send money for various purposes outside the country.
- d. Foreigners withdrawing money from India.
- e. NRIs withdrawing their deposits.
- f. Indian tourists going abroad.
- g. Repayments of interest of incomes on foreign borrowings/investments.
- **Supply of Dollars depends on:**
- a. Exporters.
- b. Foreigner Investing In India.
- c. Indians & Foreigners sending money to India.
- d. NRIs depositing money.
- e. Foreign tourists coming to India.
- f. Borrowings and Investments from outsides.
- Depending on demand and supply there would be some price of the Dollar in the market.

***Exchange Rate Systems:(02:25:00 PM)***

- Quoting of Exchange Rates: Exchange rates are quoted in two different ways:
- 1. Direct Quote: 1 Dollar= Rupees 80.
- One unit of foreign currency in equivalent units of the domestic currency.

- 2. Indirect Quote: 1 Rupees= 1/80 Dollars.
- One unit of domestic currency in equivalent units of foreign currency.

***Types of Exchange Rates Systems:***

- ***a. Floating EXRs:***
- The exchange rates are market determined. That is, the demand & supply are fully market-based.
- based on market demand and supply, the exchange rates continue to fluctuate.
- ***b. Fixed EXRs:***
- The demand and supply are sought to be controlled at a certain pre-determined level.
- The Govt may have certain objectives to keep EXRs at a particular level.
- At this level, there would be some demand and supply which would change with time, and hence EXR should also change.
- However to keep it fixed the government would either control the demand or manage the supply or both.
- If at a particular EXR demand of Dollar > Supply of Dollars, the EXR should appreciate(that is the foreign currency should become expensive).
- To keep EXR at the same level the govt will control demand such as restricting it for certain sectors or products.
- **Note:** Controlling demand is a preferred tool for having fixed EXRs.
- Fixing EXRs by augmenting supply in times of excess demand and absorbing supply in case of excess inflow would depend on the capability of the govt or the entity responsible for managing the EXRs.
- (The case of China: Read and write yourself)
- ***c. Mixed EXRs or Dirty Float or Managed Float EXRs:***
- In this system, the EXR is usually market determine, however, there could be certain conditions in which the authority responsible for managing EXR may intervene.
- Authorities can intervene in the forex market based on objectives such as:
- a. Keeping the EXR in a particular band or the target range.
- b. Targeting volatility in exchange rates. In India, the EXRs follow the managed float system in which RBI does not target any particular level or range, it only targets volatility.
- Precisely RBI's objective is to prevent sharp appreciation or depreciation due to speculative attacks on the Rupee.
- ***d. Pegged EXRs:***
- For currencies where forex markets are not fully developed or mature, the countries peg their exchange rates, that is, they tie them to another currency. and then tier their own currency varies with other currencies as the currency to which they have tied themselves.
- Pegging or tying is not necessarily done on a unitary basis.

***Appreciation & Depreciations:(03:48:00 PM)***

- These are the movement in the exchange rates in a Floating Exchange Rates System.
- Devaluation and Revaluations: These are the movements in Exchange rates in the fixed Exchange Rate System.
- Appreciation and Revaluation are both upward movements in the value of a currency. It is just that appreciation happens because of market reasons and revaluation is the decision of the government.
- Similarly, Depreciation & Devaluation are both a loss in the value of a currency. Just that It is just that depreciation happens because of market reasons and devaluation is the decision of the government.
- When a currency becomes expensive to others it should be clearly seen whether the exchange rates are directly or indirectly quoted.
- Appreciation of EXR in direct quote means the foreign currency appreciates.
- Appreciation of EXR in indirect quote means the domestic currency appreciates.
- Conventionally when we use the term appreciation or depreciation it is in the context of the domestic currency.

***Convertibility of Rupee:(03:59:00 PM)***

- Convertibility means the easiness with which one currency can be converted to other currencies.
- Easiness here relates to whether there are government restrictions on converting one currency to another. That is whether the purposes for which conversion is required are allowed or not.
- *The rupee is fully convertible for the purposes of the Current Account.*
- *But the Rupee is partially convertibly for the purposes of Capital Account.*
- There are restrictions on FDI, FPI, and External Commercial Borrowings by Indian entities from abroad.
- *Tarapore Committee* recommended that we should gradually move towards full Capital Account convertibility provided we fulfill some conditions.

- They suggest strengthening Banking and financial markets(well-capitalized Banks), Sustainable Government finances(controlled fiscal deficit), and RBI should have adequate Forex reserves, etc, which will build resilience to sustain volatility caused because of it.

***Topics for the next class:*** Continuation of the external sector.

**Economics Class 27**

**Doubt resolution and a brief review of the last class**

**Real and effective exchange rates(1:20:00PM)**

- **Real exchange rate(RER)**
- **Nominal exchange rates(NER)** are the exchange rates between two currencies that exist at any moment in the market.
- A currency is exchanged for another currency at NER only.
- However, due to the inflation rate being different in the two economies, the relative competitiveness of the economies with respect to different goods keeps on changing.
- **Real exchange rates** are exchange rates(XRs) that incorporate the differences in the rate of inflation in the two economies.
- The XRs adjusted to this difference in inflation in called **RER**. For example, if inflation in the US and inflation in India are exactly the same, then NER would not need to adjust and would be equal to **RER.**
- Commonly, RER is represented as :
- **RER= NER. (P/P*)**
- where P and P* are Price levels/indices of inflation in the two countries.
- If inflation in India is more than inflation in the US, then the rupee's value should depreciate, and vice versa, in real terms.
- **Effective Exchange Rates(EER)**
- EER refers to the exchange rates that a country would effectively have with the rest of the world.
- EER is considered a gauge for assessing the value of a currency, that is, its competitiveness with respect to other currencies which will have an effect on the trade competitiveness of the country.
- The general manner of calculating EER is:
- $EER= \sum(ER_i).\ Weight_i$
- where $ER_i$ is the exchange rate of domestic currency with a currency i
- $Weight_i$ is equal to the proportion of the country's trade carried out in currency i.
- OR $Weight_i$ is equal to the proportion of country's trade with the country having the currency i.
- For example: If a country trades with 2 countries X and Y, having currencies with an exchange rate P and Q, with trade proportion with country X 70%, and with country Y 30%,
- Then EER is equal to P.(70%) + Q.(30%)

**NEER and REER**

- **NEER**
- When the exchange rate used to calculate EER is the NER.
- **REER**
- When the exchange rate used to calculate EER is the real exchange rate, that is, NER is weighted with the price.
- The standard IMF formula is the following:
- $NEER = \prod(e/e_i)^{wi}$
- $REER = \prod((e/e_i.\ p/pi)^{wi}$
- where e is the exchange rate of domestic currency in units of SDRs and
- $e_i$= the exchange rate of a trading partner country in units of SDRs.
- p is price level and w is trade weight.
- RBI calculates 6 and 40 currency baskets NEER and REER and equates it to an index value, which is equal to 100 in the base year.
- ** an increase in magnitude means an appreciation in NEER/REER, that is, the domestic currency appreciates and becomes more valuable as compared to earlier.

**Current Account Deficit(2:37:00PM)**

- CAD refers to a country having an access outflow of money on the current account as compared to what it earns on it.
- A country's current account is in deficit ultimately because it imports more as compared to exports.
- **Causes of high imports**
- High domestic demand, that is high incomes at home.
- Lack of ability of the domestic producers to fulfill the domestic demand
- Dependency of the country on the import of certain commodities such as Crude oil
- Strong exchange rate making imports cheaper.

- Domestic tariff policies encouraging imports as compared to manufacturing at home, etc
- **Reasons for low exports**
- Poor infrastructure and a generally poor business environment make it difficult to produce domestically.
- Export tariffs and taxation structures make exports uncompetitive in foreign markets.
- Poor quality of the domestic products, for reasons including an inadequately skilled workforce
- Recession abroad, especially in trading partner countries
- High domestic inflation
- Strong exchange rates
- Depletion of natural resources which the country exported earlier
- Geopolitical reasons such as sanctions, etc
- **Addressing CAD**
- To address the CAD of a country we identify the reasons behind high imports/fewer exports, take possible steps to address them but also recognize the consequences which may occur because of the steps taken.
- **1.** Reason- High domestic incomes
- Steps- Contractionary monetary or fiscal policy, that is, reducing money supply or expenditure by the government/imposing taxes, etc.
- Consequence- Contraction in growth, and increase in unemployment, may not be economically and politically feasible.
- **2.** Reason- Cheaper imports or difficulty in exporting due to higher taxes
- Steps- Impose higher tariffs on imports, reduce taxes/ give subsidies on exports, impose quotas on imports, etc
- Consequence- Imposing tariffs on imports may attract retaliation from trading partners, making exports difficult. Further, it may be in violation of WTO commitments, including commitments regarding subsidies on exports. A country importing goods for the purpose of value addition and then re-exporting them will suffer even more as the cost of imports may rise due to tariffs, and the ability to export falls due to retaliatory tariffs. Increasing tariffs will cause imported inflation.
- **3.** Reason- Lack of competitiveness due to poor investment/infra
- Steps- Increase investment by undertaking capital expenditure, improving ICOR, and investment in skill development of the workforce.
- Challenges- Investment is costly but necessary, and every country competes with each other to attract it. However, there are three challenges-
- a. It bears fruit in the long term. It takes time to materialize, and then to improve the attractiveness of the economy with respect to Ease of doing business. The long term is uncertain- there would be many unknowns, and other countries may perform better and hence become a more attractive destinations for investment.
- b. Investment may become obsolete such as in a particular sector.
- c. Investment at present requires resources. Therefore, there would be a trade-off with respect to the priority of expenditure in the immediate term. Further, the government may give certain tax breaks to make the country attractive for business, foregoing tax revenue in the process. This reduces the government's capability to meet necessary expenses without resorting to borrowing, which may be unsustainable.

**Exchange rate and Dutch disease(3:56:00PM)**

- Dictation to be provided in next class

**Topics for next class- Exchange rates continued**
**Economics Class 28**

**A brief review of the last class**
**<u>Exchange rates and CAD(1:14:00PM)</u>**

- **Cause**- Strong exchange rate making exports costlier and hence uncompetitive and making imports cheaper.
- **Steps-** Devaluing the currency
- **Consequence-**
- **1. Countries indulging in currency wars**, that is, competitive devaluation of their currencies. A devaluation may result in further worsening of CAD(refer J curve effect). A country therefore will have to bear pain due to this competitive devaluation. Every country will have only a limited capacity to bear this pain.
- **2. J curve effect- Elasticity of imports and exports to their price**
- The quantity of imports(Qi) and exports(Qe) depends on their price, amongst other things, which itself depends on, amongst other things on the exchange rate.
- A change in the exchange rate(XR) leads to a change in price, leading to a change in Qe and Qi.

- If Qe and Qi are inelastic or less elastic, that is, the change in price is greater than the change in quantity, then the value of imports and exports will change in the following way:
- Depreciation of currency reduces the price of exports in the international market, and hence Qe should increase but since ΔPe > ΔQe, that is, Qe is inelastic then the export revenue, that is, Pe.Qe will decrease. The export revenue decreases despite an increase in the quantity of exports.
- Depreciation of currency increases the price of imports in the domestic market, and hence Qi should decrease but since ΔPi> ΔQi, that is, Qi is inelastic thus the import revenue, that is, Pi.Qi will increase. The import outgo increases despite a decrease in the quantity of imports.
- Therefore, a reduction in export revenue and an increase in import bills leads to a worsening of CAD.
- **CAD= Value of imports- Value of exports**
- **= Pi.Qi- Pe.Qe**
- XR depreciates, therefore, Pi increases and Qi decreases AND Pe decreases and Qe increases
- Because Qe and Qi are inelastic, that is, ΔP> ΔQ,
- Therefore, Pi.Qi increases and Pe.Qe decreases
- and therefore CAD increases(worsens).
- J curve graph(Current Account Balance vs Time)
- Initial worsening due to inelastic imports and exports
- Eventual improvement
- *** Dutch disease**
- When a country exports a commodity on which the rest of the world is dependent, it will experience a huge inflow of dollars, strengthening its currency.
- A strong ER would make its exports uncompetitive. The commodity on which the rest of the world is dependent, will continue to be exported even at a high price(since it is inelastic), however, other sectors will not be able to develop as for them the XR would make their products uncompetitive.
- As such, other industries are unable to flourish. This is called **Dutch disease.**

**Capital account- external debt(2:27:00PM)**

- A country's external debt includes the debt of **all** residents towards non-residents, that is, the debt of the government as well as non-government entities to external sources.
- There are various ways to incur this debt:
- **1. Via bonds-** can be issued in both **domestic** as well as **offshore markets** as well as in **domestic and foreign currency.**
- **FIIs** purchase bonds from the domestic market and hence they lend money in Indian rupees as the bond is denominated in INR.
- **FII debt** is therefore **rupee-denominated debt.**
- **Sovereign bonds**
- These are Indian government bonds issued in the offshore markets and denominated in foreign currency.
- As yet, we have not issued these bonds because the exchange rate risk would be borne by the borrower(the government in this case)
- **Masala bonds or offshore rupee-denominated bonds**
- The exchange rate risk, therefore is, transferred to the lender.
- Anybody that is government, government-backed entity, or private entity can issue these bonds.
- Several Indian entities have issued them in past with the help of IFC (International Finance Corporation).
- **2. External Commercial Borrowing**
- Borrowings from abroad on a commercial basis, that is, at a market rate of interest, through financial institutions such as banks.
- Anybody can borrow, although there are limits of the total ECB.
- * Most of India's external debt is denominated in dollars
- * Most of the external debt is of long-term maturity
- * The forex reserves are adequate for debt servicing for a long time. Debt servicing is the payment of interest on borrowings.
- *** Adequacy of forex reserves**
- To assess whether forex reserves are adequate or not, there are several parameters, such as:
- a. Its ability to service debt.
- b. Months of import cover- how many months of imports can the forex reserves pay for
- c. Currency of denomination of external debt and its maturity profile. (REFER SUSTAINABILITY of DEBT)
- Data discussion with help of slides and doubt resolution

**International Institutions(3:20:00PM)**

- Dictation to be provided in the next class

**Topics for next class- International institutions continued**
**Economics Class 29**

**Doubt resolution**
**International Institutions(1:14:00PM)**

- International financial institutions have been set up to promote the orderly development of financial relations among countries.
- They seek to promote cooperation along with fair competition so that the countries can benefit overall.
- In 1944, when World War II was about to come to an end, economists from various countries gathered at Bretton Woods in New Hampshire, the USA to deliberate upon the new global economic and financial order.
- Till now, most countries were following the **gold standard system,** and the trade between them was carried out by exchanging:
- i. foreign currency for promised units of gold from the foreign treasury, and then,
- ii. Gold for domestic currency from the domestic treasury/ market
- Even though it worked pretty well most times, it led to several issues at other times:
- 1. A country's ability to trade would depend on the gold that it had. If a country was unable to fulfill its obligations then the resulting BoP crisis usually compromised the country's sovereignty.
- 2. This was one of the major causes of colonization and wars among colonizers. Further, during times of war, countries would withdraw themselves from the gold standard as the gold standard(a promise to exchange currency for fixed units of gold) would lead to countries' unable to issue currencies for carrying out exchanges(buying goods) during the times of war.
- This resulted in the destabilization of currencies, and hence, the worsening of the balance of payment problems.
- In a gold standard-based fixed XR, a country's trade competitiveness would not increase with a widening CAD as the currency would not adjust to reflect this worsened position.
- As such, during a 1944 conference, the countries deliberated upon three key issues necessary to develop financial stability, and hence prevent a repeat of war/war-like situations in the future. These issues were:
- **1. A stable global financial system**, that is, stability in the flow of money amongst various countries. This would require monitoring of exchange rates along with advice about the fair value of a currency, that is, does it need to be devalued or not. Further, continuous monitoring of countries' balance of payment situation so that any potential default can be prevented or if it becomes inevitable it is contained. The answer was **IMF.**
- **2. To have a rules-based trading order**, that is, the terms of trade between two countries should be fair and non-arbitrary. The trade should be based on principles of free trade and fair trade. The answer was **Internation Trade Organisation(ITO)** - which could not be set up. **WTO** is its modern form(WTO is not a Bretton Woods institution).
- **3. A financial institution to give loans for rebuilding the economies destroyed by war - World Bank.**

**World Bank(1:38:00PM)**

- It consists of the following:
- **1. IBRD- International Bank for Reconstruction and Development**
- Originally set up to give loans to countries devastated by the world war.
- Presently, its task is to give concessional loans to developing countries.
- **2. IDA- International Development Agency**
- It gives loans on a highly concessional basis to the least developed/poor countries.
- India is the largest recipient of IDA loans.
- Over time, **three new institutions** were added which together, along with the first two are known as the **World Bank Group.**
- **3. MIGA- Multilateral Investment Guarantee Agency**
- To protect foreign investment against arbitrary government action. This is required to attract foreign investments into a developing country.
- **4. International Finance Corporation**
- It is a corporate financing arm of the world bank group.
- Its main purpose is to facilitate borrowings by private sector entities of developing countries from foreign markets at a reasonable cost.
- *** Masala bonds** are issued by Indian entities with the backing of the IFC.
- **5. ICSID(International Centre for Settlement of Investment Dispute)**
- India is not a member

**IMF(1:54:00PM)**

- The main task of the IMF is to maintain stability in the global financial system. Specifically, it does the following:
- 1. Monitor exchange rates, the country's BoP position, and the adequacy of its forex reserves
- 2. To flag any concerns related to financial stability in case the BoP position of a country deteriorates.
- 3. To take steps to contain a BoP crisis that has occurred. In pursuit of this, IMF takes measures such as lending to countries in crisis.
- IMF publishes various reports such as the **Global Financial Stability Report** and the **World Economic Outlook** to comment upon BoP's position, potential points of crisis, and learnings from good performers in these reports.
- **Monitoring of exchange rates**
- Post world war II, most of the gold reserves were with the US, therefore, no country was in a position to promise the exchange of their currency with fixed units of gold- the gold standard was no longer possible, even though it was the only way to carry out trade amongst countries.
- Instead, a dollar-gold standard was invented in which the value of the dollar was fixed against units of gold, and the value of other currencies was fixed against dollars(and not gold). The counties would therefore carry out trade with each other via dollars(rupee to dollar and dollar to renminbi).
- The American government gave a guarantee to provide dollars at a fixed exchange rate. Gold can not be artificially created, but the dollar can be. As such, the promise of exchanging currency for dollars could be upheld.
- IMF's task was to monitor these exchange rates.

**Structure of IMF(2:37:00PM)**

- Any fund would have the following properties:
- **1. An owner-** the member countries(presently 190)
- **2. Objective** with which IMF was set up as defined above.
- * To be a member of the World Bank, a country first needs to be a member of the IMF.
- **3. Corpus**- It is the money available with IMF that it uses to meet its objectives.
- The contribution to this corpus is on the basis of a **member's quota**
- **4. Fund manager-** the decisions with respect to meeting the objectives and the use of funds is taken by the executive board of IMF consisting of 24 members, who appoint an executive chairman(managing director).
- **Quota system**
- IMF is a quota-based institution where each country has a pre-determined quota.
- The quota of a country depends on factors such as:
- a. Relative size of the economy(most important factor)
- b. Openness to trade
- c. Forex reserves, etc
- **The quota determines three important things:**
- **a. Subscription amount-** the joining fee or the initial contribution that the country has to pay to IMF.
- * The joining fee has to be paid in two parts- a. 75% in the country's domestic currency and b. 25% in a basket of designated foreign currencies.
- Presently there are five: **Dollar, Euro, Yen, Renminbi, Pound Sterling**
- The country's contribution in foreign currency is the amount of money that is unconditionally available at all times to the country to be utilized.
- It is therefore counted as a part of the country's forex reserves and is called **reserve tranche position(gold tranche).**
- **b. Quota determines voting power**
- Every country is given total votes which consist of a fixed and variable portion. The fixed portion is the same for all the countries and the variable depends on the quota.
- The decision by the IMF's executive board is taken on the basis of the majority of the voting power. Certain decisions such as the revision of quotas or help to countries beyond a certain level require an 85% majority.
- **c. Eligibility for maximum assistance**
- The quota also determines the maximum amount of help that a country can get from the IMF. Normally, it can get assistance up to 145% of its quota. If it needs further assistance, it requires a special resolution by the IMF's board.
- * Quota revision is scheduled to take place every five years, however, the implementation is normally delayed due to geopolitical reasons.

**Fall of dollar-gold standard(3:34:00PM)**

- Dictation in the next class

**Topics for next class- SDRs**
**Economics Class 30**

***A Brief Overview of the Previous Class:*****(01:07:00 PM)**
***Working of IMF:*****(01:15:00 PM)**

- Under the Bretton-Woods(BW) System, the Dollar-Gold standard was created and IMF was tasked to oversee this standard.
- In a fixed XR system adjustment of CAD does not happen automatically as compared to floating XRs.
- In a Floating XRs if a country has a widening CAD its currency would automatically depreciate(D$>S$) and hence its exports will become competitive and import costlier.
- Eventually(J Curve effect) the country's CAD is expected to improve- A BoP crisis would be automatically, but in some time, be resolved.
- In 1944, there were no floating XRs and therefore the IMF was set up to monitor the fixed XRs and advice the countries about the possible steps they could take to tide over the BoP crisis- The most important of which was a fair and competitive currency devaluation, without being unfair to other countries.
- Under the BW, the Dollars value was fixed against the Gold and currencies were convertible into each other via the Dollars, and not via Gold.
- For example, Pound Sterling to Dollars and then Dollar to Deutsche Mark(the then German Currency).
- The exchange rate was guaranteed by the American govt and the Dollar's value was also fixed in the units of Gold.
- As economies grew and expanded the demand for Dollars to carry out trade in the international market increased which ultimately was a fiat currency in itself, was created against the assets of the federal reserves- Gold and American Govt bonds.
- With an increasing demand for Dollars and limited availability of Gold, American Govt was required to print more govt bonds ( borrow more) as a result people's trust in the fiat currency(Dollars) was reduced as it was losing its intrinsic value as more and more of it was created against Govt bonds.
- The loss of value of the Dollar caused inflation as well as increased the price of Gold in the American market.
- The US Fed had promised a Gold Standard rate whereas the market has its own rate.
- As such many foreign central banks asked the US Fed to convert their Dollar for Gold( Gold Standard) and Convert gold into currency such as gold at a higher price in the open market.
- American govt in the early 1970s, therefore, abandoned the Gold standard( Withdrew the guaranteed exchange of Dollars for Gold) as there was no longer a guarantee of Dollars for Gold, Dollar no longer possessed any derived value( that is value from Gold).
- The value of the Dollar was now based on its own utility( Now it started to have intrinsic values)- There was a demand for Dollars in the international market to carry out trade not because it was exchangeable against gold but because it was needed by the countries.
- As a result, we moved towards demand and supply-based XRs- Floating XRs.
- IMF, which was set up for maintaining Global Financial stability created a reserve asset called SDR(aka Paper Gold) to supplement countries' forex reserves.
- SDRs could be exchanged by countries at an IMF-determined value against freely usable currencies to settle their transactions.

***Working of the SDR System*****:(01:45:00 PM)**

- SDR isn't a currency, neither it is a claim on the IMF. Rather it is a potential claim on freely usable currencies on the other members of the IMF.
- It is an international reserve asset.
- When a country joins the IMF two equivalent positions are opened against the country- Its SDR Holdings and SDR allocations.
- SDR holdings denote the amount of money or the equivalent SDRs that a country has given to IMF.
- On this, the country earns an interest.
- SDR allocations denote the amount of SDRs lent by the IMF to the country, in which a pays interest.
- Since at the time of joining a country's holdings and allocations are equal, the net interest paid and earned canceled out and there is no obligation of one to the other.
- Only a few designated entities can hold SDRs- IMF, member countries' central banks, and certain financial institutions such as the World Bank, Asian Development Bank, etc.
- If a country faces a BoP crisis IMF helps in the following manner.
- (explained with the diagram)
- Potential Claims against freely usable currencies of other members:
- A country facing a BoP crisis can use its SDR holding to exchange them against a currency of requirement from a country with a strong BoP position.

- This is done through Voluntary Trading Arrangements(VTAs)
- For example, Sri Lanka(SL)can use its holdings to exchange them for Dollars from Germany.
- SL's holding goes down and hence now pays a net interest whereas Germany's holdings increases and thus it earns interest.
- The interest is paid to and paid by the IMF.
- This gives a guarantee to Germany that the money that it is giving against SDRs will earn it interest. As such a BoP surplus country which otherwise would not be willing, would, due to the guarantee of interest paid by the IMF, be willing to give Dollars to a BoP deficit country.
- If a deficit country is not able to enter into VTAs then IMF can also direct a surplus country to lend to this country.
- If a country exhausts its holdings, then the IMF can facilitate direct borrowings(without SDRs) by requesting BoP surplus countries to lend.
- If it is not able to find any willing lender then as a measure of the last resort it lends from its own resources(the Fund).
- This lending is done through a resolution of the executive board by a special majority.
- This lending is accompanied, usually, by conditions known as " Aid Conditionalities".
- A general set of conditions is referred to as the "Washington Consensus"
- The borrowing countries have opposed/resisted these conditions on the grounds of breach of sovereignty.
- This, therefore, along with the quota reforms, is a major set of IMF reforms demanded by the countries.
- *SDR is not a Claim on the IMF:*
- In times of Crisis such as the Global Financial Crisis of 2007 or recently during COVID-19, the IMF augments countries' holdings of SDRs through more creation and allocation of SDRs.
- The Countries' holdings and allocations both go up and there is no net change in interest.
- At the same time those countries that are facing the BoP crisis, now have more holdings, which can be exchanged as explained above.
- As such liquidity is easily available to those who needed.
- IMF will be able to augment SDRs through their creation only if it can create them without a guarantee of their redemption by countries from the IMF.
- As such it is not a claim upon IMF.
- Allowing IMF to create and distribute SDRs to countries in their quota proportions.

***Fiscal Policy:(03:43:00 PM)***

- *Topics to be covered:*
- Government Budgeting.
- Objectives of Budgeting.
- Techniques of Budgeting.
- Accounting of Budgeting.
- Analysis/Components of Budgeting.

***Topics for the next class:*** Government budgeting.

**Economics Class 31**

***A Brief Overview of the Previous Class:(01:05:00 PM)***
***Government Budegting:(01:10:00 PM)***

- Budgeting is an exercise of planning(estimating) the government's receipts and expenses in the times to come.
- Article 112 requires that the President's cause be laid down before the Parliament and the Annual Financial Statement, presenting the estimates of receipts and expenses such that the expenses are classified into revenue and capital account.
- The budget is not merely an accounting exercise rather it is the most important document for fulfilling trust between the public and the government.
- It is constitutionally mandated upon the govt that it presents the AFS every year so that the public knows how much money they contribute, and how the govt utilizes it.
- ***Functions & Objectives:***
- 1. Taxation Function: It has a redistributive objective- Collect taxes in a manner that is fair and equitable.
- 2. Expenditure/Allocation Function: Maximise the public welfare by providing as many public goods to as many people with as much efficiency as possible.
- 3. Stabilization Function: To meet the macroeconomic objectives of maximizing growth and minimizing inflation.
- A pursuit of any one of the two objectives may lead to a compromise on the other objective or make it difficult to achieve a desirable state of the economy.

- For example, if the budget tries to maximize tax collection it may create disincentives for work, and lead to tax evasion.
- The government therefore through the budgetary process tries to meet several objectives simultaneously which at times may be even contradictory to each other.
- The balance between them is the unique aspect of the budget and this is the stabilization function.
- For example, the government tries to incentivize certain sectors which have a high potential for growth, employment, etc, by going them tax incentives or subsidizing them through government expenditure.

***Budgeting Techniques/Methods*:(01:48:00 PM)**

- Budegtingnbhas evolved from merely a preparation of expected expense/receipts to a more advanced analysis-based allocation of limited resources to maximize several objectives.
- **The evolution is as follows:**
- *1. Line Item Budgeting:*
- It is simply a line-by-line presentation of expenses on different items.
- It is simply a list of various items on which the government expects to incur expenses.
- it is the simplest and the oldest technique of budgeting.
- *2. Program budgeting:*
- It involves the better organization of expenses based on their objectives or programs such that meaningful information can be easily ascertained and adjustments if required be easily recognized.
- It organizes expenses usually based on the broader schemes and then lists individual expenses within that scheme.
- *3. Performance Budgeting:*
- It introduces the analytical approach.
- Expenses are analyzed for their efficiency before they are budgeted.
- The objective is to attain maximum output from the minimum resources.
- That is it maximizes efficiency.
- For example, to procure and store maximum vaccines with minimum expenses.
- *4. Outcome Budgeting:*
- It takes the analysis further by analyzing expenses not just for their efficiency but also their ability to meet their intended outcomes(their effectiveness).
- The outcome is the ultimate objective.
- For example, whether the infant mortality rate comes down through the procurement and administration of vaccines or not.
- For this mere vaccines don't have to be procured at the minimum cost. But they must be properly stored, trained staff must administer them, they must be available at the time of administration, and people should be aware and willing to get their kids vaccinated.
- **Outcome budgeting is implemented in the following ways in India:**
- *a. Zero Based Budgeting(ZBB):*
- It refers to analyzing the demands made by any ministry for expenditure allocation to the finance ministry from its base.
- A scheme does not get any allocation simply because it got money in the earlier years.
- It must justify the continuation of expenses by demonstrating the effectiveness of past expenses.
- *b. Gender Budgeting(GB):*
- It is not a gender-specific allocation in the budget! Rather it is an analysis of the differential impact that any scheme would have on various genders, specifically women.
- For example, how will the modernization of the Police force differentially benefit women or increase allocation for the textile sector?
- Gender budgeting is performed by the GB Cell(GBC) in the Ministry of Women and Child Development.

***Accounting in Budgeting*:(03:18:00 PM)**

- Article 112... estimates in parliament of receipts and expenses...on revenue and other accounts.
- Estimates- Expected numbers for the time for which actuals are not available.
- *1. Budget Estimates:*
- Estimate for the year for which the budget is being presented.
- The budget is generally presented on the first working day of February(the ongoing financial year) or the coming financial year(1st April to 31st March).
- *2. Advanced Estimates:*
- At the time of the presentation of the budget, the ongoing financial year has completed almost 10 months.
- Therefore there would be a reasonably accurate idea(estimates) about how much money would be received or spent by the government.

- Hence for this year, the government presents advanced estimates(AE).
- Similarly, even for a previous year for which the accounting exercise is not yet over even though the year may have been over, the government may also present advanced estimates.
- *3. Actuals:*
- These are the actual receipts of expenses for which the accounting exercise is completed.
- Usually, the government presents the actuals for the last year for which the accounting has been completed.
- *4. Revised Estimates(RE):*
- During the year, due to some reasons, the government may amend the budgeted expenses on certain items.
- While presenting the next year's budget it presents the amended budget estimates for the ongoing financial year.
- These are called revised estimates.

***Revenue Vs Other Accounts(Capital Account):(04:04:00 PM)***

- Core aspects come under revenue expenditure.
- Non-Core activities come under other or Capital expenditures.
- Expenditures that are recurring are part of revenue expenditure.
- Non-recurring Expenditures are part of other(capital) expenditures.
- (Dictation will be provided in the next class.)

***Topics for the next class:*** Continuation of budgeting.

**Economics Class 32**

***A Brief Overview of the Previous Class:(01:010:00 PM)***
***Revenue & Other(Capital) Accounts of Budgeting:(01:18:00 PM)***

- Under Article 112, it is required that the government classifies its expenses and receipts into revenue and an "Other Account."
- The Other Account has come to be understood as Capital Account.
- ***1. Revenue Account:***
- It consists of those expenses and receipts which originate in pursuit of sovereign functions of the government and are recurring in nature.
- ***Revenue Receipts:***
- It is the money that the Govt collects as a matter of right.
- That is the money collected by the govt because it is the 'Government'(an entity set up by the will of the people to perform certain defined functions for them).
- This money is the government's money, it can not be claimed from it.
- For example, money is collected in the form of taxes, fees, fines, profits received from PSUs, interest received on loans advanced, etc.
- ***Revenue Expenditure:***
- It is the expenditure incurred by the government in the performance of its sovereign duties.
- These are the necessary/essential functions of the government required to be performed for its continuation and maintenance.
- As such revenue expense(RE) is also synonymous with maintenance expenditures.
- For example, payment of salaries and pensions to the staff, expenditure necessary for providing public goods such as administrative services, regulatory services, maintenance of law and order, protection of national boundaries, interest payment on the national debt, etc.
- ***2. Capital Account:***
- Any money received or spent which affects the Assets or liabilities of the government
- ***Capital Receipts:***
- Money received by the Govt due to a reduction in its assets or by incurring liabilities.
- For example, disinvestment receipts(when govt sells some government company), incurring of debt from the market or any other source, etc.
- ***Capital Expenditure:***
- Money spent by the government results in the creation of assets or a reduction in its liabilities.
- For example, the government lends money to any domestic or foreign entity, which creates a financial asset for the government, when govt buys a company or creates a new one, or increases its holding in an existing one.
- The government repays debt(the principal amount), it reduces its liability.
- (Payment of interest on debt does not reduce any liability and hence it is a revenue expenditure)

***Components of Budget:(01:54:00 PM)***

- ***Revenue Account:***
-

| *Revenue Receipts* | *Revenue Expenditure* |
| --- | --- |
| | Salaries and pensions of the staff.<br>Interest paid on loans, |
| 1. Tax receipts:<br>GST, Excise duty, etc. | Maintenance expenditure,<br>Core Government functions( Administration activities, regulato<br>activities, etc.) |
| 2. Non-Tax Receipts:<br>Fees, Fines, Dividends(profits)<br>Interests received on loans advanced.<br>Grants, etc. | Grants or transfers to states or any other entities(including forei<br>countries) |

- ***Capital Account:***
-

| *Capital Receipts* | *Capital Expenditure* |
| --- | --- |
| 1. Debt Capital Receipts:<br>Borrowings by the government on the market or concessional basis. | Repayment of the principal amount of loans.<br>Buying or increasing the stake in a company or creating new<br>assets such as PSUs(Govt Companies) |
| 2. Non-Debt Capital Receipts:<br>Disinvestment receipts. | Expenditure on defined assets such as roads, ports, bridges, a<br>defense assets (aircraft, submarines, ships, etc).<br>Loans that are given by the government. |

***Budgetary Reforms:(02:44:00 PM)***

- In 2017, three reforms were undertaken:
- 1. Preponement of presentation of Budget to the 1st working day of February.
- This was done to have a more informed discussion on various items of the Budget in the Parliament.
- 2. The merger of the Railway and General Budget:
- It was separated in 1924 on the recommendation of the Ackworth Committee for professional management of Railways.
- However, this objective was not realized.
- Railways were supposed to generate revenue through efficient handling of their finances and were expected to contribute to the General budget.
- However, it continued to remain dependent on the general budget, and a separate budget led to its politicization.
- 3. Abolition of Plan and Non-Plan classification:
- Anything that was part of the ongoing 5-year plan was categorized as the Plan expense(PE) and the remaining was the non-plan expense.
- The Plan expense became synonymous with the developmental expense and hence the governments had the tendency to inflate planned expenses by categorizing those expenses as "planned" which should otherwise not have been.
- For example, a school constructed as part of ongoing FYP is a planned expense but the salaries paid to the teachers are a recurring, nondiscretionary expenditure, and hence these should not be part of the PE.
- As a result of such creative accounting to classify the non-plan expense as the pan expense, this classification lost objectivity and became vague.
- The Rangarajan Committee in 2012 recommended its abolition and it was finally implemented in 2017.

***Deficits:(03:55:00 PM)***

- It refers to a deficiency, that is whenever there is an excess requirement over what is available.
- The government spends money based on its requirements, whereas it earns money based on the economy's performance, and its ability to tax.
- The requirements may be more and hence the government's finances may be in a deficit.
- ***1. Budget Deficit(BD):***
- Total Expenditure(TE)= RE + CE.

- Total Receipts(TR)= RR+ CR= RR+ Debt CR(Borrowings)+ Non-Debt CR.
- Ideally TE=TR.
- Sometimes, the government may present a budget in which TE > TR. Such a budget is said to be a budget-in-deficit.
- BD= Total Expenditure - Total Receipts.
- ***2. Monetized Deficit:***
- That part of the BD which is monetized by printing money by the RBI is called Monetised deficit.
- Government asks and the RBI prints.

***Topics for the next Class:*** Continuation of government budgeting.

**Economics Class 33**

***A Brief Overview of the Previous Class & Answered Queries:(01:06:00 PM)***

***Critical Analysis of Deficits:(01:15:00 PM)***

- Total expenditure reflects the government's intention, whereas total receipts (TR) reflect its capacity.
- If the govt habitually presents a budget in deficit then its intentions lose their sanctity, the budget, therefore, becomes a political tool for announcing grand schemes with an explicit recognition that the government does not have the ability to implement them.
- The budget, rather than being a tool of financial accountability becomes a tool to achieve political ambitions.
- Issues in Monetization: The government would need some way to fulfill this deficit if required. This way was(before 1997) to force the RBI to print money by forcing them to buy government bonds.
- This led to the following critical issues:
- a. Loss of credibility and independence of the monetary authority to conduct monetary policy.
- The conduct of the monetary policy is based on the factors of growth and inflation, however, if the government monetizes the deficit the RBI no longer remains in control of monetary policy.
- b. Deterioration of RBI's balance sheet- Any entity, including the government, would have a limited capacity to borrow.
- If the govt prints the govt bonds that lead to excess borrowing its capacity to repay then such a bond would not be acceptable to anyone, irrespective of the interest it promises- It would be a junk bond.
- If RBI buys such junk assets, then people's trust in RBI's promise(currency) will deteriorate.
- A loss of trust is a loss of value in the currency.
- c. More money would certainly cause higher inflation, and coupled with the loss of trust may lead to runaway inflation.

***Ways & Means Advance Agreement(WMA):(01:30:00 PM)***

- Recognizing the problem of a budget deficit(BD) and monetized deficit (MD)the government and RBI entered into a set of agreements to restore the credibility and independence of the RBI.
- Under this, the Govt promised that it would no longer present a budget in deficit and hence there was no need for monetization.
- The practice of BD since then has been abolished.
- RBI on its part promised to provide WMA to the government to tide over its temporary mismatch in its liquidity.
- The government's receipts are periodic whereas its expenses are continuous and hence it faces a deficit of liquidity at certain points.
- Under WMA the RBI provides the govt with short-term loans. The quantum of loans is determined every year through mutual agreement between the government and the RBI.

***Types of advances:***

- 1. Normal WMA: It is unsecured lending. Like an overdraft facility. It is extended to both centers and states.
- The amount depends on the minimum balance requirements.
- 2. Special WMA: These are secured lendings against government securities.
- The central government can issue both G-Sec and T-Bills(Treasury bills) whereas States can issue only the State government's securities.
- T Bills are unsecured instruments issued for a very short duration(less than one year) and do not carry any coupon rates(Nominal interest rates), as such they are issued at a discount and redeemed at face values(at par value).

***Fiscal Responsibility and Budget Management Act(FRBMA), 2003:(02:14:00 PM)***

- Post-1997 agreements, the government's source of easy money dried up.
- The natural consequence was that the government would have to be disciplined in its finances.
- Money from the RBI was no longer available, and therefore borrowings would have to be incurred via markets. (Refer to debt sustainability)
- FRBM Act imposes discipline upon the govt with respect to its finances.
- Under it, there are limits wrt borrowings and hence ultimately on expenditure.

- These are:
- a. To bring down fiscal deficit to within 3% of the GDP in the next five years.
- b. To eliminate Revenue deficit (RD)within the next five years.
- To ensure accountability for meeting these targets the government is also required to present before the Parliament certain statements, that include:
- a. Medium-Term Expenditure Strategy Statement.
- b. Medium-term Fiscal Policy Statement.
- These both are collectively called "The Fiscal Consolidation Roadmap"- It is a blueprint of the government's strategic goals along the way to achieve the said targets.

***Debt Sustainability Part One*:(02:40:00 PM)**

- Any entity has a limited capacity to borrow and any borrowing beyond this is unsustainable.
- Precisely it is unsustainable because it causes:
- *a. Inter-generational Inequity:*
- Repayment of God would be a burden on future generations who will be taxed higher for repaying past debts.
- Further, greater borrowing at present reduces the capacity of future generations to borrow.
- *b. Intra-generational Inequity:*
- Government borrowing is inflationary in nature and therefore it affects the poor adversely.
- Further government borrowing crowds out the private sector as the money available to be borrowed is limited and if the government borrows more from it, less is left, pushing the interest rates higher.
- Note: It is not necessary that government borrowing always cause crowds out, rather sometimes, it may crowd in also. We see what the government does to its borrowings, if it spends on building infrastructure, then it may actually incentivize the private sector to borrow and invest.
- ***Fiscal Deficit(FD): Total Borrowing in a year.***
- After WMA BD=0, therefore TE= TR.
- TE= RE+CE, & TR= RR+ CR.
- TR= RR+ Debt CR+ Non-Debt CR.
- Since TE= TR, so TE= RR+ Debt CR+ Non-Debt CR.
- Debt CR= TE-[RR+ Non-Debt CR]= Fiscal Deficit.
- FD= Debt Capital Receipts. FD= Total Borrowing in a year.
- Gross FD = The total borrowing by the Government(Its total debt capital recipes).
- Net FD= Gross FD- total Lending by the government.
- Lending by the government creates a financial asset as such it is a part of capital expenditure.
- Net FD is a way of visualizing the government's borrowings as how much would the government have borrowed had it not lent money to anyone such as state governments, PSUs, Foreign governments, etc.

***Primary Deficit(PD):(03:23:00 PM)***

- ***Primary Deficit(PD):***
- A way of visualizing the government's borrowings is by recognizing the interest which it pays on the accumulated borrowings of the past.
- PD= Total Borrowings(For the present year)- Interest Payments.
- Interest is paid on the debt which is the unpaid accumulated borrowings of the past. It is a committed expenditure of the government. therefore the present government is burdened by the debts of the past.
- Gross PD= Gross FD- Interest payments.
- Net PD= Net FD - Interest payments.
- ***Revenue Deficit(RD):***
- RD= RE-RR.
- RD reflects the excess of the government's maintenance expenditure over its revenue.
- RE is the money that govt needs to perform its sovereign functions, whereas RR is the money that it collects without either selling its assets or incurring any liability.
- RD, therefore, reflects whether the Govt falls short of money even in performing its sovereign duties.
- ***Effective Revenue Deficit(ERD):***
- Till 2007 we were largely on track to meet the targets under FRBM, but due to the increased expenditure the government borrowing increased and it could not meet the FRBM targets.
- As such it amended the FRBM Act and pushed the target by some years.
- This started the process of amending the FRBM Act almost every year.
- In 2011-12 the govt amended FRBM and instead of targeting to eliminate RD it now targeted to eliminate ERD- The government's transfers to the states are categorized as revenue expenditure, except when the govt lends to the states, a part of this transfer to states for the creation of capital

assets, such as under various schemes, therefore even though the accounting classification of this transfer would be under revenue account the use-based classification would be that of the capital expenditure.

- Hence such expenses are reduced from the revenue expense to arrive at the ERD.
- Revenu Expenses= Other Revenue expense+ Expenditure to States for capital Assets(A).
- RD= RE-RR = (Other RE+ A)- RR.
- (RD-A)= Other RE- RR.
- ERD= RD- Transfer to states for the creation of capital assets.
- Gave a brief overview of the NK Singh committees.

***Topics for the Next Class:*** Continaution of Government Budgeting.

**Economics Class 34**

***A Brief overview of the Previous Class:(01:05:00 PM)***

***N. K. Singh Committee on the Review of FRBM Act:(01:11:00 PM)***

- The continuous amendment of the FRBM Act led to the Act losing its sanctity.
- In 2015, the GoI constituted NK Singh led the FRBM Act Review committee.
- **It gave the following recommendations:**
- 1. To target a sustainable level of overall govt debt apart from the yearly fiscal deficit.
- It said that the total public debt of the country should be not more than 60% of the GDP(20% of GSDP for states, and 40% of GDP for the center)
- This debt was considered sustainable as the interest costs and the cost of incurring fresh borrowing could be maintained at a reasonable level up to this level.
- The fiscal deficit target of 3% was to be met within this broader debt target(Refer to debt sustainability part1 & 2).
- 2. To have a counter-cyclical fiscal policy instead of a pro-cyclical policy:
- A counter-cyclical expenditure policy in which the government spends less during the economic growth cycle enables the government to save for the times when it needs to spend more (during the recession cycle)
- Further, a demonstration of discipline to spend less during the high growth phase enables the govt to borrow at less cost( at favorable terms & conditions) during the times when it needs to borrow and spend more( recession cycle)
- 3. Restriction of the discretionary power to amend FRBM: It recommended that FRBM Act should be amendable only in pre-defined circumstances such as situations of war, recession, continuously falling growth rate, natural disasters, and pandemics(refer to the material).
- 4. It also recommended the setting up of an Autonomous Fiscal Council consisting of experts to implement these recommendations.

***Debt Sustainability Part II:(01:48:00 PM)***

- ***Principles of Debt Management:***
- 1. Debt to be incurred at least cost.
- 2. Preferably it should be incurred from domestic sources.
- 3. The external debt of the government should be preferably denominated in the domestic currency.
- 4. The maturity profile of the debt should preferably be on the longer side(more proportion of debt should be such that it matures in long term).
- 5. Management of debt should be by a professional entity.
- 6. The cost of debt(rate of interest) should not be more than the expected growth rate of the economy.
- The growth rate represents the expected growth in taxes(the government's income).
- (Refer debt sustainability chapter in the Economic Survey 2021.)
- Growth in taxes is the government's revenue and the fresh debt that the government incurs would be an increase in its expenditure due to interest outgo.
- The Principle says that the increase in expenditure should not be more than the increase in income.

***Public Debt Management Agency(PDMA):(02:20:00 PM)***

- ***Debt Management Function:***
- RBI is the debt manager of the government and as a result, it is responsible to ensure that the principles of debt management are upheld.
- In 2008, the government proposed setting up PDMA(Public Debt Management Agency) as an independent and professional body to manage the government's debt.
- The reason to take away the powers of RBI was that there was an apparent conflict of interest in its function as a government debt manager and a monetary authority.
- As a monetary authority, it is expected to set interest rates by looking at the growth and inflation objectives.
- If inflation is high it should increase interest rates such as by reducing the money supply.

- However, increasing interest rates would lead to an increased cost of borrowing for the government, and hence it would be compromising on arranging for the debt at the least cost. Hence there is an apparent conflict of interest.
- At first, a middle office was set up under the finance ministry to prepare for this function of debt management.
- A PDMC(PDM cell) was set up to manage only the internal debt of the government.
- It was supposed to graduate into a full-fledged PDMA.
- PDMA has now been set up but is yet to begin its operation.

***Analysis of Centre's Expenditure:(02:50:00 PM)***

- The Centre's expenses are met from its tax and nontax receipts including the debt and nondebt capital receipts.
- These are broadly categorized into:
- 1. Centre's establishment expenditure- Maintenance of the central government offices such as various departments, foreign embassies, etc.
- 2. Interest Payments on the central government's debt.
- 3. Central sector schemes- these are the schemes formulated and financed by the central government.
- Their implementation is the responsibility of the center even though the states' machinery can be used for their implementation.
- For example, Khelo India Scheme, FAME India, PM Kisan, Aayushman Bharat scheme, etc.
- 4. transfers to the states:
- This consists of:
- a. Finance Commission(FC) Transfers or grants- Consists of grants to states recommended by the FC apart from the net proceeds of the taxes to be divided between the center and the states.
- FC can also recommend some sector-specific grants(15th FC has.)
- b. Centrally Sponsored Schemes(CSS): These are the schemes prepared by the central government in consultation with the states.
- Technically these are the state government schemes, partly financed by the central government.
- Practically these schemes were formulated by the planning commission for all states and the states were asked to accept them as their own.
- The center would finance them only if the states accepted them with the terms of implementation aid down by the center.
- Over a period of time, the number of CSS increased and there were multiple schemes for similar things leading to duplication of efforts and wastage of resources.
- In 2010, GoI formed BK Chaturvedi Commission to rationalize the CSS.
- Brough down CSS from 200 to 120.
- With the abolition of the Planning Commission the need to rationalize CSS and formulate CSS more cooperatively emerged.
- The 14th FC increased the state's share in the net proceeds from 32 to 42%, reducing the center's ability to finance CSS.
- CSS represented the center's dominant approach over States- "Either take it as it is or leave it.'
- Further, since the task of formulating CSS was of the planning commission, the center's exercise of dominance was carried out by a nonelected body, this was resisted by the democratically elected state governments.
- In pursuit of cooperative federalism and necessitated by the recommendations of the 14th FC, the central government set up a CSS review committee comprising all the Chief ministers under the leadership of Shri Shivraj Sigh Chauhan in 2015.
- The Committee recommended bringing down CSS into 30 schemes categorized into two groups:
- a. Core of the Core schemes such as MGNREGA, National Social Assistance Program, etc. (Total 6 C-o-C C schemes)
- b. Core schemes- Such as Jal Jeevan Mission, PM Awas Yojana, Swachha Bharat Mission, Krishi Sinchai Yojana, Smart Cities, etc. (Total 24 Core Schemes)
- Each Scheme has a financing pattern wherein some part is contributed by the center and the remaining by the states.
- Usually, it is 60:40(Centre: State), and It can be 50:50 and also 80:20.
- For some states(11 hilly states) the central government contributes even more, including financing the state government's share.

***Taxation:(03:57:00 PM)***

- 1. Taxes based on the distributive feature:
- *a. Progressive Tax:*
- A progressive tax is a kind of tax in which the tax rate rises as income rises.

- It means the greater the income, the higher the tax rate.
- *b. Regressive Tax:*
- It is a tax that is imposed similarly to all situations, regardless of who is paying it.
- People with low incomes are disproportionately affected by regressive taxes compared to those with higher incomes.
- *c. Proportional Tax:*
- A proportional tax is a type of income tax in which everyone pays the same percentage of tax, regardless of their income.
- 2. Based on the burden of bearing tax:
- *a. Direct tax.*
- *b. Indirect Tax.*
- 3. Based on how taxes are levied:
- *a. Specific Tax:* Tax levied on the specific feature or characteristics other than the value of the goods or services.
- *b. Ad-Valorem Tax:* A tax levied according to the value of a good or service.
- (Dictation will be provided in the next class)

***Topics for the Next class:*** Continuation of taxation and other topics.

**Economics Class 35**

***A Brief Overview of the Previous Class:(01:05:00 PM)***
***Dictation of Taxation:(01:14:00 PM)***

- These are the non-redeemable receipts of the government.
- They are classified as revenue receipts and are general-purpose payments that the government charges from its citizens so that it can provide them with public goods.
- Cess: It is a tax levied for a specific predefined purpose.
- Surcharge: It is a tax levied upon the tax.
- ***On Manners of classification:***
- ***1. Based on Distributive Features:***
- *A. Progressive Tax:*
- When the rate of tax increases with an increase in income.
- That is the tax paid on marginal income gets higher when the incomes rise.
- A person with a higher income doesn't just pay more tax but also a greater proportion of his income as tax.
- *B. Regressive Tax:*
- When the rate of tax decreases with an increase in income.
- That is the tax paid on marginal income decreases with a rise in income.
- A person with a higher income still pays more amount tax although the proportion of his income paid as tax is lesser than as compared a person with a lesser income.
- *C. Proportional Tax:*
- The rate of Tax is the same for all.
- ***2. Based on Bearer of Burden:***
- All taxes except if there is a specified exception, are to be paid by the entity on whom the tax is levied.
- *a. Direct Tax:* The entity on whom tax is levied is the same as the entity which pays the tax and bears the burden.
- *b. Indirect tax:* The entity on whim tax is levied can charge this tax from somebody else, and therefore the payer of tax and the bearer of burden are different entities.
- ***3. Based on the Manner of Levying:***
- *a. Ad-Valorem Tax(*According to Value): When tax is levied according to the value of the item which is being taxed.
- The basis of the tax is the value.
- *b. Specific Tax:* The basis of tax is some other features apart from the value, such as the length/weight of the item, its effects on society(merit/demerit), engine capacity of automobiles, etc.

***Based on the Event of Taxation:(01:29:00 PM)***

- ***1. Direct Taxes:***
- *A. Income Tax(Under Income Tax Act, 1961)-*
- By center, on individual income from various sources such as salaries or wages, rental income, business or professional income, dividends, and capital gains,(Agriculture income is not taxed by the center)
- *B. Corporate Tax:*
- By center, on corporate profits, also levied under the IT Act, 1961.

- *C. Minimum Alternate Tax(MAT):*
- Under the IT Act, both individuals and companies are allowed various exemptions, these are the expenses that can be claimed as legitimate deductions from incomes or profits.
- Income tax or Corporate Tax is paid after claiming these deductions.
- Sometimes companies can claim deductions up to such an extent that they drastically reduce their tax burdens and deprive the government of its legitimate share of taxes.
- To plug this, the government introduced the MAT- The minimum amount of corporate tax that the companies would have to pay on their profits.
- *D. Capital Gains Tax:*
- It is levied on the capital gains(when they appreciate in value, and their disposal leads to a profit)
- Taxed alongside income, although at a different rate, which further varies according to the asset and period of its holdings.
- *E. Wealth Tax:*
- It was used to be levied on the wealth(the value of the asset possessed) - Discountinued now.
- *F. Professional Tax:*
- This a rare example of direct tax levied by the states.
- Levied on the professions that are notified by the states along with the profession mentioned in the IT Act.
- It is a tax on a profession and not the professional Income.
- For example, Tax on a lawyer or CA at some fixed value. (Capped at RS. 2500 per year).

***Indirect Taxes*:(02:39:00 PM)**

- *(Explained with the charts and PPTs.)*
- Taxes are levied on events.
- In some cases, though, the person can rightfully collect the tax from someone else.
- In such cases, the tax is levied on A, and it will be A who will pay this to the government, but A can collect this tax from B, who bears the burden.
- Such taxes are indirect taxes.
- Centre, State, and local bodies levy such indirect taxes, some of which are given below.
- For example, Excise duty, Customs duty, etc.
- Multiple indirect taxes created a lot of burden on the producers, and consumers and also a loss of revenue to the government.

***Functioning of the Taxation System*:(03:28:00 PM)**

- *(Explained with the charts and PPTs.)*
- Every producer pays excise duty to the Centre on production.
- On every sale, a sales tax is levied by the state government (it was later changed to VAT).
- The wholesaler adds his margin (profit) and sells to the retailer, who in turn adds his own margin before selling it to the consumer.
- Again, a sales tax is levied at every sale instance.
- Also, if the sale is an inter-state sale, the State government cannot levy a sales tax, rather it is the Centre that levies a Central Sales Tax (CST).
- Since all these are indirect taxes, they are ultimately borne by the consumer.
- ***The problem with the old system:***
- If we observe, we will notice that the consumer is paying a very high price as compared to the cost of production.
- The total value added at different stages of production is Rs. 366 (100/- by cloth producer, 100/- by thread producer, 58/- by shirt producer, 48/- by Wholesaler, and 60/- by retailer).
- Whereas, the final value paid by the consumer is Rs. 550/-, which amounts to an effective tax of 33.5% (184/550).
- No wonder no one would be ready to pay taxes by asking for bills from the seller.
- The problem is the compounding of taxes – double taxation of the same value and a tax on tax.
- This is also referred to as cascading of tax.
- ***Correcting the old system:***
- *Introduction of VAT (2005):*
- Since 2005, sales tax in the states is levied on the Value-added and not the entire value of sales transactions.
- This new way of levying sales tax was itself called VAT (Value added tax).
- In the case of Excise duty (Central Tax), the VATting system (levying a tax on value-added and not on entire value) was
  already implemented in the 1980s.
- That tax was called CENVAT/MODVAT.

- ***The VATting system:***
- Under the VAT system, only the value added at any stage is taxed, rather than the total value.
- The objective is to decrease the tax burden by making the taxation system fair and thus increase compliance.
- In the above example, it would be a tax of Rs. 58/- only (=Rs. 5.8/-) during the sale from producer to wholesaler.
- *Two very important points to keep in mind are:*
- 1. Tax is always charged on the entire value of the transaction, not on the value added.
- How will the government know what is your value-added?
- Taxing the value added is the objective.
- It is achieved through the system of ITC.
- We will levy it in such a manner that effectively only the value added is taxed.
- 2. The system of ITC and offsetting is available only for a tax against the same tax, not any other tax.
- ITC can be offset for VAT only against VAT, and not any other tax neither Excise duty, which is a central tax, nor taxes like entertainment, luxury, octroi, etc. which are state taxes.
- The government would always and always collect tax on the entire value of the transaction.
- Only if the seller has ITC in his account with the government, would he be able to use it to offset.
- To achieve this, the seller would prepare a bill in which the value of the transaction would be that of his inputs and value-added only, and charge the customer according to that.
- ***The VAT system resulted into:***
- The tax burden is substantially reduced as the taxable value is now much less than before.
- The entire cascading effect (tax on tax) is not eliminated because a VAT is being levied on Excise duty as well.
- GST addresses this problem of cascading completely. It does so by removing all other events of taxation other than sales so that they can be offset against each other.

***Topics for the next class:*** GST System and other remaining topics.

**Economics Class 36**

***A Brief Overview of the Previous Class:(01:10:00 PM)***

***Goods & Services Tax(GST):(01:10:00 PM)***

- (Explained with Charts & PPTs)
- The VATting system of 2005 was merely a start. GST is the culmination of that process of integration of taxes to develop a fair, compliance-incentivizing taxation system.
- The VAT of one state is not the same as another state and more importantly, is not offset- able against the VAT paid in another state.
- Even VAT paid is not offset-able against other indirect taxes in the same state. Of course, a central indirect tax (such as excise) is not offset-able against a state tax or vice-versa.
- GST reduces the cost of compliance drastically and at the same time increases the cost of non-compliance.
- Hence there is an expectation that there will be an increase in compliance under GST.

***Revenue Neutral Rate(RNR):(02:27:00 PM)***

- (Explained with Charts & Diagrams)
- With GST we expect that there will be an increase in compliance with GDP and will be able to tax more proportion of GDP.
- The government wants to keep the tax collection at least the same as earlier.
- It is the rate of tax collection that ensures there is no loss of revenue to the government as compared to the earlier tax collection.
- It helps us to explain tax buoyancy and tax elasticity.
- ***Laffer Curve:***
- It is the relationship between the tax rate and total tax collection.
- It shows that if tax is too high or too low then there will be no taxable gain to the government.
- There is some optimum rate of tax at which tax revenue is maximized.
- It is unique for each economy.
- ***Tax Buoyancy and Tax Elasticity:***
- Tax Buoyancy: It is the growth of the tax collection rate with respect to GDP growth.
- Tax Buoyancy = Growth rates of taxes/ Growth rate of the economy.
- Tax Elacitiy: It is a simple general term. It means the growth rate of taxes on change in the taxation regime.
- Tax Elasticity: Growth rates of taxes/ Change in the tax regime.

***Dictation:(03:11:00 PM)***

- ***Indirect Taxes:***
- *A. Event- Production,*
- Tax- Excise Duty, Levied by Centre.
- Sometimes as a specific tax, as well ad-valorem tax, and sometimes as both.
- *B. Event- Change of Boundary,*
- Taxes:
- a. Customs duty on change of international Boundary, levied by the center.
- Entry Tax- Change of domestic administrative territories like state to state, district to district, etc.
- *C. Event -Sales*
- Taxes -
- a. Sale of goods within the states- Sales tax.
- b. Interstates Sales- Central Sales Tax(CST), Levied by the center and given entirely to the state from where the sale originates.
- c. Sale of Services- Service Tax, levied by the center.
- ***Changes in the methods of levying:***
- Tax is always levied(if it is an ad Valorem tax) on the value of transactions, such as the sales value or the production value.
- However, taxing the entire value at subsequent stages leads to:
- a. Tax on the value that has already been taxed.
- b. A tax on tax.
- This double taxation and cascading of taxes increase the tax burden, and hence the willingness to comply reduces.
- As such the objective is to tax only the value added. This is achieved through the system of an input tax credit(ITC).
- In this system, a person pays the tax on the value of truncations, and the seller is therefore liable to pay a tax collected, however, the seller will offset the tax supposed to be paid(the tax he has collected) against the tax that he has paid while buying the goods that he sold.
- For example, if a doctor pays Rs. % lac on the purchase of his inputs and collects Rs.10 lac as a tax on the services he sells he is liable to pay the entire Rs. 10 lac which he has collected but will offset it with the Rs.5 lac he has paid to his suppliers. Hence additionally he is required to pay only the difference.
- That is 10-5= Rs 5 Lacs only.
- This system was first introduced in Excise duty-CENVAT and MODVAT.
- In 2005, it was introduced in sales tax where the states were now asked to charge a tax on value-added and not the entire value repetitively.
- This was VAT,
- Despite CENVAT and VAT
- The cascading could not be eliminated as one tax could only be offset against the same tax and that too only if levied by the same authority.
- Therefore only the same event of tax when taxed by the same authority could be claimed as ITC.
- Therefore to eliminate cascading we needed to reduce the event of tax to just one and reduce the authority of taxation to just one.
- ***GST*** does this- All other events of indirect tax by all other authorities(Centre, State, local) except customs duty, have now been subsumed to just one common event- Sales.
- Authority of taxation- Center & state combined.
- GST has two components:
- CGST & SGST.
- The CGST part entirely belongs center and the SGST is of the states in which the sale takes place- GST is a destination-based tax.
- In the case of Inter-state sales, rather than separate CGST and SGSTS, a combined IGST is levied(Integrated GST).
- Half of IGST is of the center and the other half is given to the state where the sale is destined for.
- ***Compliance:***
- (For the Structure of GST refer to the notes)
- In the GST system, the cost of compliance as compared to the previous system is significantly less.
- Whereas the cost of noncompliance is significantly higher.
- A non-compliant entity is now detected by the system because the taxation event is one and the taxing authority is common.
- As such due to the systematized cooperation, there is greater coordination
- In the old system, we were able to tax hardly 40% of our GDP.

- This was because those who paid taxes(indirect tax only) were effectively bearing a burden of around 33% of the total tax on the good's value.
- A good of Rs 75 in value, would be taxed at 33% and hence a tax of Rs.25 would have to be paid, that is the market value of Rs. 100.
- Therefore, out of Rs. 100 of the market value, 25% was tax.
- If we could tax the entire market value of the goods and services produced, that is GDP, then we would collect 25% as indirect taxes.
- Since our tax-to-GDP ratio of indirect taxes was only around 10%, it meant that we were taxing only 40% of our GDP and hence collecting 25% of 40%+ 10% of GDP as indirect tax.
- Under the GST system, we expect greater compliance, which is more proportion of GDP to be now taxed.
- In 2015, the Arvind Subramanian committee was set up to recommend a Revenue Neutral Rate(RNR) of GST- The task was to estimate the compliance in the new system- That is by how much we expect the yet untaxed economy to be within the tax's ambit after the implementation of the GST.
- For example, if we estimate 50%, then RNR would be 20%.
- ***Laffer Curve:***
- It is a curve that conveys the idea that governments' tax revenue will not always increase with an increase in the tax rate.
- That is the tax revenues are maximized between 0% and 100% tax rates.
- It is not a curve that is known as apriori, therefore nobody knows what is the optimal rate of tax at which the revenue can be maximized. Therefore countries experiment with their taxation system to find out their optimal rates.
- ***Tax Buoyancy and Tax Elasticity:***
- These are the concepts that we use to ascertain the responsiveness of tax revenue to factors that affect it.
- *Tax Elasticity(TE):*
- TE= Change in Tax revenue/ Change in factors affecting Taxes,
- These factors include changes in taxation systems, changes in tax rates, compliance with the economy, etc.
- *Tax Buoyancy:*
- *TB= Change in Tax Revenue(%)/ Change in GDP(%)*
- It is the responsiveness of taxes to GDP, that is by how much taxes grow by when the GDP grows by a certain amount(%).

***Some Related Concepts*:(04:04:00 PM)**

- ***Composition Scheme:***
- The composition Scheme is a simple and easy scheme under GST for taxpayers. Small taxpayers can get rid of tedious GST formalities and pay GST at a fixed rate of turnover.
- This scheme can be opted for by any taxpayer whose turnover is less than a certain amount that changes from time to time.
- ***Tax Planning:*** It is legal.
- It is reducing one's taxable income by legal means, it is also known as tax planning.
- ***Tax Evasion:***
- It is illegal.
- It is hiding, concealing, or manipulating information about one's income from the tax authorities.

***Topics for the Next Class:*** Continuation of Tax and remaining topics.

**Economics Class 37**

**BRIEF REVIEW OF THE PREVIOUS CLASS (01:15 PM)**
**TAX EVASION**

- **Tax Planning:** legally allowed ways to reduce the tax burden
- **Tax Avoidance:** illegitimate interpretation of tax laws, not yet illegal.
- **Tax Evasion**: Avoidance which has been deemed to be illegal-explicitly against the tax laws (legislated or interpreted by relevant authorities)
- Companies use various practices to evade paying taxes-For example, **BEPS**
- One of the ways through which BEPS is achieved Is Related Party Transactions.
- Buying goods from related parties at highly inflated prices to reduce or erode one profit.
- Another way is by setting up shell companies abroad.
- These companies merely exist on paper but the business is practically managed from the domestic territories. This is done so as to avoid paying higher taxes in the home country.

- In order to improve tax compliance and reduce BEPS government came up with **GAAR rules (General Anti-Avoidance rules)**.
- These, amongst others, consist of the following:
- 1. **APA-Advance Pricing Agreement-T**hese are 2 party/Multi-party/multi-lateral agreements signed to ensure that the pricing strategy is fair.
- APAs are based on ALP (Arm's length principle).
- ALP is a principle that says that transactions in the market even with related parties should be carried out in an unbiased manner i.e. an Arm's length basis.
- 2. **POEM- The place of Effective Management**-Residential status of a firm is to be determined on the basis of the place where management is effectively carried out from, and not where the HQ may be.
- **OECD and G20 countries have tried to cooperate to develop mechanisms to reduce BEPS:**
- These include **MLF/AEI (Multi-lateral framework or Automatic exchange of information)** between countries regarding tax filings by MNCs.
- **Global Minimum Corporate Tax-** Under this, countries can levy a corporate tax equal to the difference between GMCT and the rate of tax paid by the company in a tax haven.
- The DTAA Between the two countries would not, therefore, stop the home country from levying a tax on profits already taxed but at a lesser rate.
- **Equalisation Levy-** Also called a Facebook tax or Google Tax. Tax is to be levied on services that are virtual, and hence transboundary in nature. For example, advertisements on youtube videos watched in India pay a fee to You tube USA, and hence the revenue forms part of income taxed in America whereas, the source of that income is in India. The levy is meant to tax such revenue.

**Test Started (2:51 PM)**
**Test Discussion: (03:44 PM)**
**Economics Syllabus By Aditya sir Completed**
**Economics Class 38**

***Banking & Capital Markets:(03:27:00 PM)***

- *(Explained with charts & diagrams)*
- Banks and other financial institutions are essentially intermediaries which bring together those with money and those who want money.
- Their presence allows these two entities to interact efficiently.
- To facilitate the interaction between those who want and those who have, these intermediaries also charge some commissions.
- Banks promote the formalization of the economy.
- They promote the savings of households and that can help in promoting investments in an economy.

***Banks:(03:50:00 PM)***

- *(Explained with charts & diagrams)*
- Banks are the intermediaries which cater to the less risky population.
- They take deposits(secured money) from willing depositors and lend this out to reasonably secure borrowers.
- The risk-bearing capacity of both the depositors as well as bank is less, and thus they lend out money only to the less risky borrowers.
- Earlier, there was no way to ensure that banks were careful with the depositor's money. The only thing that restricted banks from not lending the depositors money to risky entities were the trust.
- With the enactment of the RBI Act, of 1934, and the Banking Regulation Act, the banking system sought to be more objectively regulated.
- Regulation of banks takes the form of:
- a. Protection of deposits- Giving a guarantee that deposits, at least up to some reasonable amount are protected in every way.
- b. Maintenance of trust- By ensuring that depositors' money is always available to them if they want to withdraw. This is ensured via minimum reserve requirements.
- c. Assessment of the risk profile of the Borrower, and not lending to a risky borrower, even if at the cost of forgoing high returns.
- d. Regulation wrt to lending- Maintenance of minimum capital requirements(Own money) before the bank can lend.
- e. The BR Act lays down the broad functions that a bank can perform and authorizes the RBI to regulate these functions in the best interest of the economy- To continue to maintain the trust of the people in the financial system.
- In this regard, RBI grants licenses to the banks to carry out banking activities.
- Broadly two types of licenses there:

- a. Universal license ( Univeral Bank)- A bank that can perform all the functions mentioned in the BR Act.
- b. Differentiated Banks.

***Types of Banks:(04:25:00 PM)***

- *(Explained with charts & diagrams)*
- In 2014, the Nachiket Mor Committee mooted the idea of these differentiated banks as a means to further inclusion.
- Differentiated banks are of two types:
- 1. Small Finance Banks- They cater to small consumers.
- At least 75% of their total loans are of less than Rs. 1 lakh.
- 2. Payment Banks- Their objective is to facilitate payments.
- They can not lend money & they can not issue credit cards.
- Commercial Banks- The objective is to make profits.
- Scheduled banks- These are the banks that are part of Schedule II of the RBI Act, of 1934.
- Cooperative Banks- The objective is to promote cooperation.
- Merchant Banks/Investment Banks- banks that cater exclusively to business needs or needs of high net worth individuals.
- Regional Rural Banks- Banks set up to further financial inclusion.
- There are three partis to RRB-Centre(50%), State(15%), and Sponsor banks(35%)
- These were set up to ensure banking services reach rural areas.
- By themselves, the commercial banks would be unwilling to expand their presence in rural areas.

***Fiancial Inclusion:(05:06:00 PM)***

- *(Explained with charts & diagrams)*
- It is the process of making people a part of and beneficiary of the formal financial system
- *It has four parts:*
- a. Being part of a formal financial system.
- For example, having a bank account.
- b. Availability of multiple services and products, not just a single option to avail benefits when needed.
- For example, different types of deposit accounts, and loans are available for different tenures according to payment capacity.
- c. The set of options available is such that they are affordable and available when needed.
- For example, one should not have to travel a long distance to deposit or withdraw money or one should not have to wait unnecessarily to get a loan.
- d. Being able to exercise a choice from the available choices, that is, being financially educated to decide for oneself which product or service is suitable.

***Various Steps for Financial Inclusion:(05:35:00 PM)***

- *(Explained with charts & diagrams)*
- Lead bank Scheme:
- It is an area-based scheme in which a bank is designated as a leading bank in an area, and has a responsibility to chalk out a plan of financial inclusion in that area along with other banks.
- The leading bank has no authority to direct, but only a responsibility.
- Financial Inclusion in the post-independence period:
- At the time of independence, less than 1% of the population and hardly 2-3% of households had a bank account.
- The government realized the importance of channelizing household savings and wanted to include as many households as possible in the formal financial system.
- Towards this, the government nationalized the banks, first SBI was formed in 1955, then 14 banks were nationalized in 1969, 9 banks in 1980, and a few more banks til the 1990s.
- Further, the government set up RRBs in the 1970s, in 2005 it introduced 'Zero balance Accounts', which gave a push by focussing on unbanked areas such as via the lead bank scheme and other area focussed schemes.
- Even then by 2015, the country had less than 20% of Households with bank accounts and 6 to 7% of the population in banking.

***PM Jan Dhan Yojana:(06:00:00 PM)***

- *(Explained with charts & diagrams)*
- Through this scheme, the account opening targeted unbanked Households and individuals rather than unbanked areas.
- As a result, the percentage of the population having bank accounts has increased to more than 70%, with almost 99% of Houshlods having a bank account.
- (Refer to '50 years of Bank Nationalization' from VisionIAS resources.)

***Topics for the next class:*** Continuation of Banking.
**Economics Class 39**

***A Brief Overview of the Previous Class:(01:07:00 PM)***
***Priority Sector Lending(PSL):(01:20:00 PM)***

- *(Explained with charts and diagrams)*
- *(Dictation for 01:59 PM)*
- In pursuit of financial inclusion, RBI in consultation with the government of India has mandated that the banks lend 40% of their ANBC( Aggregate Net-Bank Credit) to certain sectors designated as priority sectors. These include agriculture (with a sub-target for small and marginal farmers), MSMEs, Small Scale Industries, Education Loans, Affordable Housing Loans, Renewable Energy, etc.
- These sectors are deemed either too risky or not rewarding enough for the banks to lend to, therefore ordinarily the banks may not lend money to them, and thus these sectors would remain deprived of affordable finance.
- Through PSL, it is ensured that these small but critical sectors receive bank loans.
- The only condition is lending 40% of ANBC.
- The loans are given at the market rate of interest. If the government wants to give at some concessional rates, it can partially bear the burden by subsidizing the interest cost.
- *The shortfall in PSL:*
- Schedule Commercial Banks(SCBs) have a target of 40%, RRBs have a target of 75%, and even foreign banks have a target of 40%, many times banks may not be able to meet these targets.
- There are two options to make up for the shortfall:
- a. Invest in the shortfall in RIF(Rural Infrastructure Development Fund) of NABARD and earn a fixed return of around 8%.
- b. Purchase PSL Certificates(PLCs) from banks that have exceeded their PSL targets.
- Some banks may lend more than what was required to PSL and then can sell Certificates of Lending at a market price(usually at a premium) to those banks which have a shortfall.
- The PSLC seller is merely selling the certificate and not transferring the loan to the PSLC buyer.
- The risk of the loan and the interest from the loan are still within themselves.

***NABARD:(01:41:00 PM)***

- *(Explained with PSL topic itself)*
- *(Dictation from 02:14:00 PM)*
- National Bank for Agriculture and rural development (NABARD) was set up in 1982 as a specialized institution for performing agricultural credit and refinancing functions of RBI in rural areas.
- It is primarily a refinancing institution, that is, it does not lend itself, rather it lends to other institutions that lend.
- There is very limited direct lending that NABARD does.
- It has been entrusted to perform supervisory functions for Cooperative Banks and RRBs and help them develop sound banking practices.
- Regulation of all banks is ultimate with the RBI just that under the BR Act, 1949, NABARD, District and Cooperative banks, and RRBs.
- Through RIDF, it lends money for the development of rural infrastructure.
- *(Refer to handouts for more details)*

***Non-Banking Finance Companies:NBFCs:(02:21:00 PM)***

- *(Dictation)*
- Banks have limited risk-bearing capacity and hence they lend only to a limited set of people.
- In order to more return on money, lending)providing money) would have to be done to more risky entities.
- NBFCs are the intermediaries which take money without any guarantee of securing(that is do not take deposits) and lend money with the expectation of generating more returns. As such:
- a. NBFC is primarily a financing company- A company primarily engaged in the business of loans, acquisition of shares, bonds, and other such securities.
- b. It is not a company whose primary business (principal business) is an agricultural activity, industrial activity, purchase and sale of goods, or provision of services, except those mentioned in the first point.
- c. It is prohibited to accept a demand deposit of any kind, even though some NBFCs which have been permitted can do so, can accept only time deposits(that is lump sum money that will be made available to the depositor at a particular time).
- The term principal activity is not defined, it is observed on a case-by-case basis.
- d. NBFCs, unlike banks, do not form a part of payments and settlement systems and can not issue cheques.

- e. Since they do not accept deposits, the insurance on deposits given by DICGC *(*Deposit Insurance and Credit Guarantee Corporation under RBI), is not available.
- *Regulation of NBFCs.*
- NBFCs whose principal business is of the nature of banking/finance activities are regulated by RBI.
- Those also involved in the acquisition of shares/securities/bonds are additionally regulated by SEBI.
- **Small NBFCs(those with a business of less than Rs. 200 cores) are regulated by the State Governments.
- *(Explanation of NBFCs from 02:36:00 PM)*

***Regulation of Banking System*:(03:12:00 PM)**

- *(Explained with diagrams and charts)*
- *(Dictation 04:04 PM)*
- The banks lend depositors money and earn profits in form of the spread(Lending rate - Rate on deposits).
- Essentially it is the depositor's money and hence the risk is that of the depositors.
- Therefore, the banks may not want to be careful in their lending activities as the profit belongs to the banks whereas the risk is to the depositors.
- To make banks careful in their operations, thus, the task is to make the banks share the risk borne by the depositors.
- The regulation of the banks has, therefore, two key elements:
- a. Explicit directions regarding the nature of the risk that they can assume.
- b. Making sure that whatever risk they assume, they are themselves a part bearer of that risk, and not that the depositors bear the entire burden.
- Due to the interconnected nature of the financial system across the world, the regulations are now such that they are meant for facing such interconnected risks.
- RBI regulates the bank's activities, and with time regulation is evolving such that the norms are more universal in nature, rather than only India-specific.
- In this regard, BSBS(the Basel Committee on Banking Supervision) suggests a regulatory architecture via Basel Norms, and respective Central Banks enforce them in their jurisdiction.

***Basel Norms III*:(03:40:00 PM)**

- *(Explained with the above topic)*
- *(Dictation form 04:13 PM)*
- *Basel III recognizes the following risks:*
- Operational Risk
- Financial Risk.
- Market Risk.
- It intends to minims them and makes the banks stronger through capital requirements in the form of Provisioning and Capital Adequacy.
- The purpose of Basel Norms is to make sure that banks have their own enough money to share risks.
- It ensured that banks should have some capital requirements- Some parts of their own money must be kept aside to ensure the safety of the banks.
- This process of setting aside some capital amount is called Provisioning.
- Provisioning reduces the lending ability of the banks.
- The amount of capital kept aside will decide the amount of loan that can be given.
- Banks are restricted by these provisioning activities.
- There are two types of provisioning:
- a. Having a minimum capital.
- b. Provisioning against individual loans.

***Topics for the next class:*** Continuation of Basel Norms III.

**Economics Class 40**

***A Brief Overview of the Previous Class*:(01:25:00 PM)**

***Regulation by RBI*:(01:30:00 PM)**

- *(Explained with diagrams & charts)*
- *(Dictation form 02:34:00PM)*
- RBI restrains banks from lending for risky purposes through provisioning and minimum capital norms set out under Basel II norms.
- *Provisioning:*
- It refers to the amount of money provisioned(set aside) from the bank's capital when the bank lends it to someone.
- *Minimum Capital Requirements- CRAR(Capital to Risk weighted Asset Raio):*

- It is also called Capital Adequacy Ratio- Banks are required to maintain a minimum amount of capital with them at all times so that they have the ability to face the risks which materialized.
- Provisiong's Purpose is specific to a loan, that is if a loan becomes a bad loan, then the bank should have an adequate amount of its own money(capital) to ensure that it can meet the depositor's demand.
- In the course of the bank's operations, certain risks are unavoidable and despite being prepared for them, some or the other will materialised.
- Thus a bank should be strong enough to bear these risks.
- This strength comes by maintaining a minimum CRAR- If the banks have some minimum amount of their own money with them at all times, then they would be capable enough to face the risks that are natural in course of their business.

***Provisioning and Capital Requirements:(01:56:00 PM)***

- *(Explained with diagrams & chart along with the above topic)*
- *(Dictation from 02:50:00 PM)*

| ***Person*** | ***Sector*** | ***Amount*** | ***Risk*** | ***Provisioning*** | ***Provisioning Amount*** | ***Risk Weighted Asset(RWA)*** |
|---|---|---|---|---|---|---|
| P1 | Agriculture | 1000 | 50% | 5% | 50 | 500 |
| P2 | MSME | 1000 | 30% | 5% | 50 | 300 |
| P3 | Home Loan Secured Loan | 1000 | 10% | 2% | 20 | 100 |
| | | | | | | Total RWA= 900 |

- The bank has to provision(set aside) the provisioning amount against each loan from its capital. As such the available capital keeps on decreasing whenever the bank lends money.
- Further, the bank also needs to maintain a minimum amount of capital with its, CRAR.
- CRAR= CApital/ Risk Wighter Assets.
- CAR or CRAR= Capital/RWA= Should be at least 9%.
- Basel II recommends a CRAR of 8%, RBI has mandated it to be at 9%, and apart from this banks also have to maintain an additional 2.5 % CCD(Capital Conservation Buffer.
- Therefore effectively banks maintain a minimum capital of 11.5%.
- In the above case, the bank needs to have a capital of 81.
- The provisioned amount against the loans given to P1 P2 and P3 is 50+50+20=120.
- Therefore the total  Captial with the banks should be 120 provisionings +81 CRAR= total of 200.
- If the bank has a total capital of Rs. 300, it is still left with excess capital of 99.
- If it lends to P4 in such that the provisioning required is 50 and the additional CRAR requirement(9% of additional RWA pertaining to P4) is 60, therefore the bank will need the capital of 50+60=110 in order to lend to P4 which is greater than the capital it has.
- Thus, in order to lend to P4 must arrange for additional capital or lend to someone who puts a lesser additional capital requirement upon the banks- A person with lesser risk and provision.
- ***Capital:***
- Capital refers to a business's own money.
- A business is not a natural entity having its own money. It is provided money by several interested parties with or without their own terms and conditions.
- Primarily it is the owners who give money to the business.
- Investors give money, usually at a later stage, and also become part owners, even though their interests may be short-lived.
- Lenders would lend money with their own terms and conditions and this money and this money is allowed to be used as the business's money.
- In course of its operations, a business earns profits and these can also be used by the business to do more business.
- Deposits with the banks, even though used for lending are not the bank's capital. They are purely bank liabilities- they are used for lending, as loans they are assets, but as deposits, they are strictly banks' liabilities.

***Non-Performing Assets(NPAs):(03:35:00 PM)***

- *(Explained with diagrams & charts)*
- An asset becomes non-performing when it ceases to generate income for the bank.
- A "non-performing asset" (NPA) is defined as credit in respect of which interest and/or installment of principal has remained due for a period of 90 days.

- Whatever loans are provided by any financial intermediary can be considered an asset for the given financial intermediary.
- On the basis of repayment disciplines, these assets can be classified in the following ways-
- *1. Standard Asset* - where the asset of the bank is performing well and it can be further subdivided into the following two categories -
- a) Regular assets - when the repayments are on due dates
- b) Stressed assets - when the delay is from 0 to 90 days.
- *2. Non-Performing Asset (NPA)* - refers to those assets which are not responding/performing in terms of repayment for more than 90 days and can be further subdivided into:
- a) Sub-standard assets - when it is from 3 months to 1 year
- b) Doubtful loans - 1 year to 2 years
- c) Lost asset - 2 years to 3 years
- The write-off is removing the lost assets from the balance sheets of the banks.
- The write-off is very sensitive and political in nature.
- *(Dictations will be given in the next class)*

***Topics for the next class:*** Continuation of NPAs and banking.

**Economics Class 41**

**A brief overview of the previous class:(1:13 pm)**

- Discussed capital conservation buffer, in a response to a query by a student

**Reasons for NPA(1:24PM)**

- Discussed the reasons for NPA.
- Why do public sector banks have more NPA than private sector banks?
- A bank's assets are its loans which are expected to generate income via interest.
- However, if a borrower fails to repay, then this asset is said to have become non-performing.
- Technically the classification is as follows:
- 1. Special mention accounts-if a borrower fails to pay either the interest or principal or shows some signs of stress through delaying the payments by more than 30 days, then such a loan is classified as SMA.
- 2. NPA-If for a loan, either the interest or principle or both are not received for a continuous period of 90 days, then such a loan gets classified as an NPA.
- **Subtype NPA:**
- 1. Substandard asset(NPA1)-Interest/principle/both not received for 90 days
- 2. NPA2-when a loan remains NPA1 for 12 months
- 3. Loss asset(NPA3)-A loan can be classified as a loss asset at any time after it has been classified as NPA.
- 4. Generally, a loan is classified as such 2 years after it has remained NPA type 2.
- Provisioning against any loan is done at the time of advancing that loan, and is continuously updated based on the remaining amount of the loan, and developing risk assessment.
- If a loan becomes SMA, provisioning increases.
- when it becomes NPA, It increases further.
- Different categories of loans especially based on whether they are secured or unsecured will have different extents of provisioning. For example, an unsecured loan is provisioned to 100 percent of the remaining amount.
- Gross NPA of bank = NET NPA + PROVISIONING
- NET NPA= GROSS NPA - PROVISIONING (Actual amount of loan categorized as NPA)
- STRESSED ASSET=SMAS +NPA.
- NPA write-off: When loans become NPAS, the banks incur losses as the money they had lent is now not expected to be returned to them.
- Obviously, they try to recover this money through various ways (recovery of NPAS) at the same time when loans become NPAS, banks have to provision against them.
- As such the available capital reduces.
- Since banks have to maintain minimum CRAR, The amount of capital with the banks thus acts as a constraint on how much the RWA is, loans they can give as such provisioning due to NPAS reduces the bank's ability to do the business, i.e to lend money.
- This is a regulatory requirement meant to ensure that the banks have adequate capital to make up for the depositor's losses.
- However, if the banks have tried to recover the money, but have not yet been able to do that, then continuing to maintain provisioning is simply acting as a limitation on their ability to do business.
- Thus the natural consequence should be to write off these loans from the balance sheet.
- Writing off means merely removing them from the assets sides of the balance sheet.

- It does not mean that the bank extinguishes its right to recover its money from the borrower.
- It is merely an accounting exercise meant to release the provisioned banking capital, and let the banks do business again

**REASONS FOR NPA's(2:22 pm)**

- 1. Willful default-defined as a situation when an entity does not repay despite having the capability to repay.
- RBI lays down the criteria which include:
- a . Diversion of money for a purpose other than for which it was lent
- b. Diversion to another entity
- c. Disposing of off securities fraudulent without informing the banks, against which the loan was given.
- 2. Economic/other reasons
- These reasons ultimately boil down to poor risk analysis at the time the loan was given generally these reasons are:-
- a. High expectations from the business at the time of borrowing
- b. Economic slow down leading to less than expected revenue. Both domestic or foreign economies may slow down leading to a lesser capability to repay.
- c. Higher expectations lead businesses to borrow at a higher cost, than what was sustainable.
- 3. Uncertainties in policies:-such as changes in tax laws environmental laws, withdrawal of benefits to the sector, granting of subsidies to a substitute sector, etc.
- 4. Geopolitical reasons:-making raw materials are expensive and unavailable.
- 5. The slowdown in a connected sectors:-microchip industry affecting the automobile industry
- 6. Natural calamities.

**Effects of NPA's (2:30 PM)**

- An NPA leads to higher capital requirements and thus reduces banks' ability to do business.
- Broadly consequences are:-
- 1. Double financial repression
- 2. Twin balance sheet problem
- 3. Deterioration of credit culture
- 4. Loss of trust in the banking system.
- Double financial repression concerns the repression of the bank's balance sheet from both assets and liabilities side.
- The bank's liabilities (deposits)require a continuous cost in form of interest.
- The bank will be able to pay for its liabilities only if it earns an income.
- Due to NPA's, its assets stop generating income.
- Further due to provisioning it can no longer lend the deposited amount despite having them, and thus its ability to earn income from assets reduces.
- Thus the liabilities are unpromising and assets do not yield any income.

**TWIN BALANCE SHEET PROBLEMS (2:37 PM)**

- It involves the balance sheet of the bank and the defaulting borrower.
- Both balance sheets are linked, and the deterioration of one leads to the deterioration of other
- The bank will pressurize the borrower for the repayment of the loan.
- The company which is already not earning an income will have to bear the burden of returning the bank's money alongside the burden of losses.
- Hence its ability to do business/turn it around will be dented because the bank demands its money.

**Resolution of NPA's(2:40 pm)**

- S4A
- Scheme for Sustainable Structuring of Stressed Assets also known as the S4A Scheme was launched in 2016 by the Reserve Bank of India as an initiative to address and resolve the debt issues of the corporate sector along with strengthening the ability of the lender to deal with stressed assets.
- As per the S4A scheme, the debt of a company is bifurcated into two parts namely sustainable and unsustainable debt based on the cash flows of the company’s project.
- The sustainable debt of a company should not be less than 50% of the existing debt and the unsustainable debt can be converted into optionally convertible debentures.

**SARFAESI ACT (03:50PM)**

- The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002:- Commonly known by its shorter name SARFAESI Act, is a legislation that allows banks and other financial organizations to recover bad loans effectively.
- The act can be utilized to tackle the problem of Non-Performing Assets (NPAs) through different procedures.

- However, this is possible only for secured loans. For unsecured loans, banks should move the court to file a civil case of default.
- *(Dictation will be given in the next class)*

**Topics for the next class:** Continuation of Resolution of NPA.
**Economics Class 42**

***A Brief Overview of the Previous Class:*(01:12:00 PM)**
***Health of Banks:*(01:20:00 PM)**

- *(Explained with charts and diagrams)*
- *(Dictation from 02:19 PM)*
- To improve the health of the banks due to rising NPAs, a four R framework was proposed- Recognise, Resolve and recover, recapitalize, and Reform.
- ***Recognize:***
- *Asset Quality Review (AQR):*
- Even though the stressed asset of banks including the restructured assets was rising, the NPAs were not getting recognized.
- The banks would not recognize NPAs as this would put them under tremendous pressure of capital requirements.
- In 2013, RBI started the AQR to correctly recognize the extent of NPAs.
- This led to increasing NPAs and the peak was reached in 2017.
- ***Resolve & Recover:***
- Several steps have been taken to improve banks' capability to recover their dues in time.
- Banks have a right to recover their dues as part of the breach of contract under the Indian Contracts Act.
- However, enforcing a contract in this manner is time taking.
- in 1993, the RDDB Act (Recovery of Debt Due to Banks Act) was enacted, and special courts, DRT(Debt Recovery Tribunal) and DRAT(Debt Recovery Appellate Tribunal) were set up to expedite the cases of Debt recovery.
- Still, the pace of recovery was quite slow due to frequent interruptions because of the jurisdiction of multiple courts.
- *In 2002, the SARFAESI Act:*
- Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 recognized the bank's rights to use the securities they had for the secured loans.
- This included selling off the securities, using them to borrow themselves, converting them into equity, etc.
- In times of stress(if a loan is not repaid) then the banks could dispose of these securities such as they could take possession of the securities themselves (for example, taking ownership of a company, land, house, etc), appointing someone else to manage the company, directly recover money from the borrowers of the defaulting borrowers, etc.
- After SARFAESI the recovery rate(proportion of the due money that was recovered by the banks) increased from less than 2% to around 10%.
- This was still very low, especially if compared to Western countries where the recovery rate is more than 70%.
- The key to improving the recovery rate is the ability to proceed faster for securitization(using the securities in a desired manner).
- A delay leads to the deterioration of the value of assets and hence the possibility of recovery reduces.

***The Insolvency and Bankruptcy Code(IBC), 2016:***

- To improve this the Insolvency and Bankruptcy Code(IBC), 2016, was enacted with the objective of time-bound and interruption-free recovery of dues by the creditors.
- *The broad process is:*
- An aggrieved creditor approaches NCLT(National Companies Laws Tribunal)/DRT(NCLT set up under Companies Act, 2013.
- The definition of creditor is wide and covers operational and financial creditors such as material suppliers, labor, employees, home buyers, banks, etc.
- NCLT, before admitting the application gives a 14 days period to settle the dues, if not the case is admitted to the NCLT.
- Once the case is admitted, the old management is replaced by the new management of Insolvency professionals.
- Resolution professionals are appointed to propose a resolution plan to settle the dues.
- Also, a Committee of Creditors(CoC) is set up comprising representatives of lenders.

- The resolution plan is presented to the CoC, which decides by a majority based on the voting powers.
- CoC has to either accept the plan within a maximum of 180 days and then another 90 days for the debt resolution.
- If no conclusion has arrived then ultimately the assets of the borrower are liquidated to the extent to which the debt has to be settled.
- (Refer to handouts and Printed Material for details)

***Recapitalization:(02:48:00 PM)***

- *(Explained with charts and diagrams)*
- *(Dictation form 03:14 PM)*
- Recapitalization means making an available adequate amount of capital to the banks so that they can continue their business of lending.
- Recap is done in the following ways:
- ***1. Budgetary support:***
- The government provides capital to PSBs via a separate expenditure in the budget.
- This was done to provide capital on a priority basis to those banks which could continue their operations with minimum support.
- As such the banks were prioritized, however, the Availablity of the budgetary expenses is very limited, hence it is not a major source of recapitalization.
- ***2. By Selling off Equity:***
- The government dis-invests and collects money for the market to be infused in the banks as capital.
- However, to recapitalize weak banks, they would have to sell ownership in strong banks.
- Realizable value by selling a weak bank would be very less, hence inadequate, unless the government divests majority shareholding in that bank (gives up the control).
- * When the government dis-invests in a PSU such that post disinvestment share of the government is less than 50%- this is called Strategic dis-investment.
- ***3. Via-Debt:***
- A bank's ability to borrow when it is already struggling with NPAs is quite less.
- Nobody would be willing to lend or at least the lending conditions will be unfavorable.
- The government borrows and gives this money to the bank as capital.
- In 2018, the government borrowed via Recapitalization Bonds.
- These bonds were sold to the banks which lent their deposits to the government.
- Borrowing by the government would not create any additional capital requirement, and hence, banks could lend to the government, despite being under-capitalized.
- This borrowed money was then given back to the banks to be used as capital.
- Recap bonds, therefore converting a bank's liability into its capital via the government.
- * Borrowing through these bonds is not accounted for while calculating total government borrowing for the purpose of compliance with the FRBM Act.

***Reforms: (03:30:00 PM)***

- *(Explained with charts and diagrams)*
- *(Dictations from 03:52 PM)*
- Banking reforms are done in two areas:
- ***1. Reforms in Banking Structure:***
- The current structure of banking is such that it leads to:
- a. Less financial inclusion.
- b. Excessive competition- Thus less profitability.
- c. Inefficient Regulation of the small banks.
- India should have a few very large international banks and many smaller and local banks for local needs.
- The current banking structure is such that the nationally present banks bear the burden of banking services in the country- They cater to the needs of big industries, MSMEs, and retail participants.
- As such their energies are diverted and unfocussed resulting in poor risk analysis, depriving many customers of banking services, and high costs for even those who should have been able to get loans at a much lesser cost.
- (Refer to Narasimhan Commiteee 1992 from materis)
- Nationalization of banks.
- Regional Rural banks, etc.
- Domestic Systemically Important Banks (D-SIBs)
- State Bank Of India and the private lenders ICICI Bank and HDFC Bank as systemically important banks, which are perceived as banks, ‘too big to fail’.

- ***2. Reforms in Banking Operations:***-( to be covered in the next class.)

***Topics for the next class:*** Continuation of Banking reforms.

**Economics Class 43**

***A Brief Overview of the Previous Class:(01:10:00 PM)***

***Reforms in Banking Operations:(01:13:00 PM)***

- By these reforms we mean reform in the manner of conduct of the bank's functions, that is generally how are decisions taken in the banks.
- For example, what factors does a bank consider while lending? In PSBs there is an excess burden upon the branch manager and this results in poor risk analysis.
- On the other hand, there are strict measures of accountability necessary to ensure that the depositor's money will ultimately become the government's liability(as PSBs are owned by the government), is kept safe, and is not lent without proper diligence.
- Strict accountability along with the low ability to assess risk results in lending being done on basis of factors other than the risk analysis such as influence and recommendations from above.
- This culture percolates from the top as the senior management is appointed by the officials in the government. As such they are beholden first to their interests and not to the interests of the depositors/public.
- Therefore, to reform the bank's operations and make them more professional, a restructuring was proposed in form of a Bank Holding Company (BHC).
- The government would transfer its holding to BHC and then BHC becomes the direct owner of the PSBs, and the government now becomes an indirect owner of PSBS via BHC.
- Hence the appointments in senior positions in banks would be decided by the BHC and not the government directly.
- Thus, more professionalism and less direct intervention by the government are expected.
- Till the time a BHC is not set up, a BBB(Bank Board Bureau) was set up for the appointment to senior positions in PSBs.
- *Delhi High court rules that BBB is not a competent entity for appointments, and therefore the government has now proposed to establish FSIB(Financial Services Institutional Burea) in place of BBB for this purpose.

***NBFCs Regulations:(02:04:00 PM)***

- A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, of 1956 and is engaged in various financial services like loans and advances, acquisition of shares/stocks/bonds/debentures/securities, leases, chit business, etc.
- NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on themselves.
- The deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs.
- There are huge problems of corruption and a lack of adequate regulatory control over the NBFCs.
- Their regulations are needed to be improved to safeguard the depositors and ensure economic stability in the country and promote growth.

***Monetary Trasmission:(02:28:00 PM)***

- *(Dictation from 02:50:00 PM)*
- RBI conducts monetary policy(increases or decreases MS) with the intent of controlling inflation or facilitating growth.
- The tool is essentially the interest rate.
- However, an increase or decrease in MS is achieved via the banking system.
- RBI does not deal with the economy in general, rather, it deals with only designated entities, mostly with the banks.
- Thus, the effectiveness of monetary policy/ increase or decrease MS will be effective only if it is transmitted correspondingly by the banks to the economy.
- To improve transmission, RBI has come up with the MCLR System.
- *Interest rates by the banks:*
- Before 1991, RBI used to regulate interest rates, both on lending as well as deposits.
- After that, it slowly began de-regulation, and by the 2000s the interest rates became completely deregulated.
- Today RBI does not set any interest rates offered to or charged to their customers. Interest rates are now fully market determined.
- The deregulation took place as follows:
- *a. Prime Lending rate(PLR):*
- This was the least interest rate that banks charged their borrowers.
- The prime customers used to get loans at low/least cost.

- However, since PLR was not declared, it often resulted in cross-subsidizing- Prime customers were given loans at a lower-than-fair cost, and the non-prime customers were charged a higher-than-fair cost because of this.
- Hence this led to inequity.
- *b. Base Rate(BR):*
- It was a declared minimum rate that would be charged by the banks.
- RBI mandated that the banks declare their PLR- The least interest that they would charge- This was the base rate.
- With BR, RBI expected that banks would transmit the monetary policy effectively, that is, if the money supply increases(market rate of interest decreases), this should reflect in a decline in the Base rate as well, and vice-versa.
- The banks would not adjust their BR, especially, and would not reduce it when the RBI increased the money supply.
- *c. MCLR(Marginal Cost of Funds Based Lending Rate):*
- MCLR is simply a transparently declared formula of Base rate, in a prescribed format by the RBI.
- RBI requires that banks set their BR(now called MCLR) in a manner that clearly distinguishes their variable costs from their fixed costs, and desired profits.
- A bank incurs costs such as interest on deposits, salary to staff, operational and maintenance expenses, and expects to earn some profits, all these are non-discretionary to a large extent, and hence can be considered as fixed, or at least, set by the bank.
- Apart from this, the bank has to arrange for additional funds(beyond what it already has) if it wants to lend more.
- These funds will be arranged at the prevailing market costs, for example, at the prevailing Repo rate, if arranged from the RBI.
- This interest rate keeps on changing based on the existing demand and supply of the money in the market and hence is variable.
- This variable cost is what is required to be separately reflected in the base rate formula.
- For example, MCLR= 6%+ variable cost.
- Therefore if we see changes in the variable cost, MCLR would also change accordingly, thus improving monetary transmission.
- *External Benchmarking:*
- In 2019, RBI directed the banks to use some external(external to the banks) interest rates as benchmarks for their variable costs.
- These included repo rate, MIBOR, Yield on G-Sec, etc.
- MIBOR- Mumbai Interbank Offered Rate- It is the standard call rate prevailing in the Mumbai Interbank market.
- Call Rate- It is a rate of interest that banks charge from each other in the interbank market.

***Capital Markets:(03:33:00 PM)***

- The market for money consists of entities demanding money(those that need money and are willing to pay some price for it), and those entities which have money and are expecting to generate some return on it.
- These entities interact and transact the money based on their needs/abilities.
- To make the interaction more efficient, several intermediaries are present. For example, Banks, NBFCs, Stock Market Brokers, private fund managers, etc.
- These intermediaries have certain expertise/specialization and cater to people based on their needs and expectations.
- In general, we call these markets Capital Markets and Banking is amongst the biggest sub-portion of this market.
- Banks are those entities whose customer base is least risky(Least risk-taking as well as risky).
- Capital markets are made up of Primary Markets and Secondary markets.
- The primary market is the market in which the company issues the shares for the first time to the public.
- IPO is when an unlisted company makes either a fresh issue of securities or an offer for the sale of its existing securities or both for the first time to the public.
- An underwriter guarantees to buy the unsubscribed shares in case a company is not able to attract enough interest in its IPO.
- *(Dictations will be given in the next class)*

***Topics for the next class:*** Continuation of capital markets.

**Economics Class 44**

**CAPITAL MARKET:**

- These markets provide an opportunity for interaction between people who have money and people who want money more directly, with the limited role of an intermediary in decision-making.
- The intermediaries are there, but mostly facilitators of these transactions, unlike banks or NBFCs, where these are the major decision-makers.
- Since the decision is of the individual entity, the risk that each entity assumes is significantly higher as compared to when the decisions are of others, like banks or NBFCs.

**Capital Market Versus Money Market: (01:26 PM)**

- **Money market** is a term commonly used for markets where the transactions between the participants are generally for less than 1 year(short term).
- Short-term exchange of money is usually less risky, as the risk factors may not materialize in the short term.
- Hence, usually the instruments (legal contracts) which facilitate transactions in the money market are unsecured, i.e, do not have any security(mortgage) backing them.
- The cost of the transaction (i.e the cost of the money) is also usually less.
- **The common instruments are:**
- commercial papers(CP), short-term debentures, and specifically curated instruments such as credit notes, futures and options contracts, Treasury bills for government borrowing, etc.
- The participants in the money market are normally large institutions as the short-term requirements usually are not met by individuals (retail participants).
- **Capital market** is a term that usually refers to transactions for a longer duration, including transactions that do not specify any relation (theoretically unlimited duration).
- The instruments used for capital market transactions can be redeemed or exchanged or settled in a short term as well, but they are not usually meant for such a short-term settlement.
- **The common instruments are:**
- Bonds (government and corporate having a maturity of more than 1 year, and usually backed by some security, for example, government bonds are backed by the Consolidated Fund of India).
- Equity- Ownership certificates, commonly called shares of a company.
- These give a right to the holder to be part of the owner of the company to the extent he holds the shares.
- For publically traded companies, there is no restriction regarding transfers of these shares.

**Capital Market Intermediaries: (01: 40 PM)**

**Brokers:**

- These are the designated participant on behalf of the clients in the market.
- * People can directly indulge in buying or selling of shares amongst themselves, but this is not a market transaction.
- Rather this is a one-to-one exchange to participate in an organized market, though a broker is necessary.
- A broker places the client's request in the market w.r.t buying or selling of the instrument directed by the client.
- Presence of brokers makes transactions smooth and efficient.

**Depository:**

- It is an account where the securities are stored (deposited).
- Each person willing to transact in an organized market (in a standard manner) needs to have a depository account where the securities are stored in a dematerialized form (digital form)
- * There are only 2 depositories- NSDL and CDSL.
- * Till the 1990s the stocks (shares of the companies) were issued in a physical form.
- This leads to a lot of transaction costs, apart from fear of loss of misappropriation.
- As such a dematerializing exercise was taken.

**Depository Participant (DP):**

- The authorized entity to credit or debit securities in the account holder's Demat account.
- Usually the brokers are the DPs.

**Primary market: (03:11 PM)**

- Where the private shares of the company are sold to the public for the first time.
- This is done via an IPO if it is the first time the company is offering shares to the general public, or via an FPO( Follow On Public Offer)(if it is done after an IPO).

**Secondary Market:**

- Once the shares have been offered to the public they are free to sell them to willing buyers at an expected price.
- * There is no involvement of the company in the secondary market.
- Reliance does not get 1 rupee on trades taking place in RIN shares in the secondary markets.

- It does, though benefit if its share price goes up in form of an increased market value of the company.
- Also it has to issue shares in the name of a new buyer and destroy shares of the old holder.

**Stock Exchanges: (03:17 PM)**

- An stock market is an organized market, i.e where the transactions between buyers and sellers take place through standard contracts and the risk of default (such as fraud) by any party is minimized through the guarantee of this stock market.
- Stock markets provide facilities for both primary as well as secondary markets.
- Stock market= Stock Exchange.

**Clearing House:**

- Since the stock exchange gives the guarantee of trade settlement (i.e the buyer of the share will receive the shares, and the seller will receive the money), it assumes a lot of risks.
- Even if a fraction of transactions were to fail, the stock exchange would go burst.
- Therefore to minimize this stock exchanges have set up clearing houses.
- These ensure that the money is received from the buyer before crediting of shares, and shares are received from the seller before crediting of the money.
- This eliminates the risk associated with default or fraud.

**Settlement Cycle:**

- It is the period in which transaction (trade) is completely settled i.e both parties receives what they desired and are paid for.
- Since there are several intermediaries, the process, and checks and balances involved, settlement is not immediate.
- At present for most stocks it is T+ 2 days (T= transaction).
- A T+1 Settlement cycle has been introduced for some stocks, and then eventually for T+0 Days.

**Index: (03:28 PM)**

- An index is a way to gauge broader movement in a basket of stocks.
- For example one can construct an IT (Information technology) index having IT stocks, and the general direction of the movement of the index can be considered as a general change in expectations w.r.t IT stocks.
- The Index going up means that generally, IT stocks are becoming expansive, i.e there is increasing demand.
- **NIFTY 50** and **BSE-SENSEX**, are the 2 broad market indices of NSE and BSE respectively, consisting of the largest 50 and the largest 30 stocks on NSE, and BSE respectively.
- * Indices statistically reflect the change in the price of the constituents.
- They are considered a barometer of people's sentiments (expectations) regarding the companies part of the basket.
- Some times they may also be used as a reflection of a country's economy but these are not usually strongly correlated and hence:
- 1. Index performance should not be used to judge the health of the economy.
- 2. If used, a broader index representing the diversity in the economy should be used, and that too with a lot of care.

**Mutual Funds, Derivatives, and ETFs: (03:45 PM)**

**Mutual Funds (MF):**

- A MF is a corpus of money managed by a fund manager on the basis of the objective of the fund and the reasonable discretion of the fund manager.
- A fund manager continuously makes adjustments to the portfolio of stocks- debts purchased from the fund.
- The buyer purchases the units of the funds whose value depends upon the AUM (Assets Under Management) of the fund.
- The units are purchased/ sold from the fund house( owner), and not on the market.
- Buying and selling units in MF is done only after the market has closed, it is then when the AUM is calculated

**Exchange Traded Fund (ETF):**

- An ETF is like a mutual fund but it is passively managed, i.e the portfolio allocation decisions are mostly automated (pre-set), and therefore it can be actively traded.
- An ETF's AUM also constantly fluctuates and hence the value of its units.
- Still, they are also tradeable in real time like stocks on Stock exchanges.

**Derivatives: (04:12 PM)**

- They derive their value from some underlying that is they themselves do not have value but derive their value from either another derivative or something which was some intrinsic value.
- Derivatives are instruments built with the purpose of hedging, i.e minimizing risk.

- For example if a person expects a share price to rise in the future, he will purchase the shares of the company today.
- However the price can also decline in the future.
- He will hedge this risk via some derivative instrument such as purchasing a right at some price in the future from a willing seller of such a right
- **P-Notes:**
- Offshore derivative instruments with the shares of the company as an underlying security.
- Band by SEBI in India but offered by offshore FIIs to clients not willing to undertake adequate KYC.
- *** Please refer to Handout for the role of SEBI.**

**The Syllabus of Economics is completed.**