Toppersnotes®
Unleash the topper in you

MP - PSC

State Civil Services

Madhya Pradesh Public Service Commission

Volume - 7

Economy of India

SIERRA INNOVATIONS

Economy of India

1 CHAPTER National Income

- **National income:** The total value of **final goods and services** produced **by** the normal **residents** during an accounting **year, after adjusting depreciation.**
    - It is Net National Product (NNP) at Factor Cost (FC)
    - It does not include taxes, depreciation and non-factor inputs (raw materials)
- Also **useful in determining the country's progress.**
- It Includes: **Wages, interest, rent, and profit received** by components of production such as: **labour, capital, land, and entrepreneurship**
- **Domestic Income:** Total value of final **goods and services produced within a domestic territory** during an accounting year, **after adjusting depreciation.**
    - **It is NDP at Factor Cost.**
- Both **NNP and NDP** can be **measured** at **constant prices** (real income) or **market prices** (nominal income**)**
- **National income:** Domestic Income + NFIA

Some Important Terms	
Factor Cost	• **total cost of all the factors of production** consumed or used in producing a good or service.
Basic Price	• **amount a producer receives from a purchaser** for a unit of a good or service provided **as output, minus any tax due and any subsidy due** on that unit as a result of its production or sale.
Market Price	• price at which **a thing is sold in the market**. • **covers wages, rent, interest, input prices, profit, & other costs of production**. • also **covers government-imposed taxes** & government-provided producer **subsidies**.
Depreciation	• The **wear and tear of capital assets** • **Capital consumption allowance** - another term for depreciation.
Transfer Payments	• A **monetary payment** for which **no goods or services are exchanged.** • **Efforts by local, state, and federal governments to redistribute money to individuals in need** are usually referred to as transfer payments. • **Transfer payments** such as Social Security and unemployment insurance are popular in the United States. • **Transfer payments are not typically used to describe corporate bailouts and subsidies.**

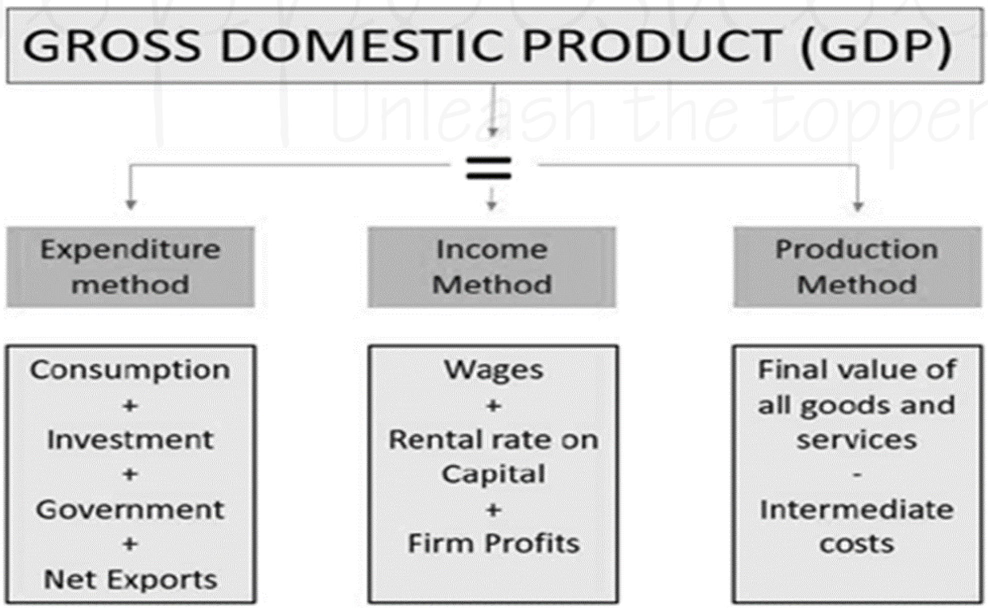
Aspects of National Income

Gross Domestic Product (GDP)

- Total value of **goods and services produced in a country.**
- Economic indicator used to **gauge a country's economic growth**.
- Estimated **at regular periods** (such as quarterly, yearly).
  - For India it is from **1st April to 31st March.**
- **Production area for calculation of GDP** includes
  - A **country's geographical borders** including its **Exclusive Economic Zones (EEZ)** (up to 200 nautical miles or 360 kms)
  - A **country's embassy** in different nations
  - **Production in moving vehicles** like ships, aircraft, etc.
- **Goods included:** all final goods and services **produced by the normal residents and non-residents in the domestic territory** of the country
  - does **not include Net Factor Income from Abroad** (NFIA)
- **Calculated by Central Statistics Organization,** Ministry of Statistics and Programme.
- **'Quantitative concept'** and indicates **internal strength of the economy**.
- **used by the IMF & World Bank** in **comparative analyses** of member economies.

GDP = consumption + investment + government spending + exports - imports

Methods for Calculating GDP:



Nominal GDP	Real GDP
• total financial business value **produced inside the country.** • **Without Inflation** adjusted.	• GDP metric adjusted: With changes in the general price level. • **Inflation-adjusted**

• At **Current year prices.** • **High Worth** • Compares quarters of a year.	• At **regular prices** • **Low Worth** • Compares two or more FYs
Nominal GDP = Current Year Production ✖ Current Year Price	Real GDP = Current Year Production ✖ Base Year Price
• does **not truly indicate the real performance** of economy	• only **change in real production of goods and services** is captured.

Gross Value Added (GVA)

- **economic productivity metric** that measures contribution of a corporate subsidiary, company, or municipality to an economy, producer, sector, or region.
- **used to adjust GDP** and measure how much money a product or service has contributed toward meeting a company's fixed costs.

GVA = GDP + Subsidies - Taxes

Net Domestic Product (NDP)

- **Net worth** of all goods and services **generated inside a country's geographic borders.**
- **Value of depreciation** of national capital assets such as **machinery, houses, and cars is subtracted** from the GDP to calculate NDP
- **Other considerations:** such as asset **obsolescence and complete destruction**, also taken into account by the NDP.

Net Domestic Product(NDP) = Gross Domestic Product(GDP) – Depreciation.

- **Significance**
  - To understand the historical **situation of the loss** due to depreciation to the economy.
  - To **understand and analyze the sectoral situation** of depreciation in industry and trade in comparative periods.
  - **Showcase the achievements of the economy** in the area of R&D, which have tried curing the levels of depreciation in a historical time period.

Gross National Product (GNP)

- **Total value of all goods and services** produced by citizens and enterprises in a country, regardless of **where they are produced**
- It is the **GDP of a country added with its income from abroad.**
- **' Income from Abroad' includes:**
  - **Trade Balance:** net outcome at year end of the total exports and imports of a country
  - **Interest on External Loans:** balance of **interest on the money lent by the country and the interest on the money it has borrowed** from other countries.

        - **India** has always been a **'net borrower'** from the world economies.
    - **Private Remittances:** account of the **'private transfers' by Indians working abroad** (to India) and **foreign nationals working in India** (to their home countries).

GNP(Y) = Consumption expenditure (c) + Investment (I) + Government expenditure (G) + Net exports (X) + Net income from Abroad(Z).

- **Y = C + I + G + X + Z**

- **Factors to GNP: Manufacturing** of items such as **equipment, machinery, agricultural products, and cars** & some services such as **consulting, education, and health care.**
- **The cost of delivering services** is **not calculated.**
- When **a citizen holds dual citizenship**: **GNP per capita** is utilized to calculate GNP on a **country-by-country basis**.
- In that situation, their **earnings are counted twice**, as each country's GNP.

Net National Product (NNP)

- **Value generated by removing depreciation** from the gross national product.
- **Determines how much a country can consume** in a specific time span.

NNP = GNP – Depreciation

or

NNP = GDP + Income from Abroad – Depreciation

- When a country's net national product **(NNP) dips or falls**,
    - Businesses **contemplate shifting to industries** that are **considered recession-proof.**

Personal Income	• Amount of **money earned collectively by the citizens of a country**. • **Ex.: Money** obtained from **employment, dividends and distributions paid by investments, rents derived from property ownership, and profit sharing** from enterprises. • Taxation is imposed on personal income in most cases. **PI = National Income – Undistributed Profits – Net interest paid by households – Corporate tax + Transfer payments to the households from the government and firms**
Personal Disposable Income	• **Income available to the households** that they can spent as they wish • Income available after payment of taxes and other non-tax payments **PDI = PI – Personal tax payments – non-tax payments**

National Disposable Income	• **sum of the gross (or net) disposable incomes** of the institutional sectors. **Gross (or net) NDI = gross (or net) national income (at market prices) - current transfers payable to non-resident units.**

Methods of computing National Income

Income Method	• Estimated **by adding all production factors** (rent, salary, interest, profit) & **mixed-income by self-employed.** • We add all net income payments received by all citizens of a country in a given year using this procedure. • **Net incomes from all factors of production** are added. ○ **Eg: net rents, wages, interest, and profits**. • **Income received** in the form of **transfer payments** is **not included.** **Net National Income = Compensation of Employees + Operating surplus mixed (W +R +P +I) + Net income + Net factor income from abroad.** Where, ▪ W = Wages and salaries ▪ R = Rental Income ▪ P = Profit ▪ I = Mixed Income
Product/Value Added Method	• **aggregate value of final goods and services** produced in a country **throughout a financial year** at market prices. • **To calculate GNP**, ○ data from all productive activities are gathered and analysed, including: ▪ **agricultural goods,** ▪ **minerals, and** ▪ **industrial products** ▪ contributions to production **made by transportation, insurance, communication, attorneys, doctors, and teachers, etc.** **National Income = GNP – Cost of Capital – Depreciation – Indirect Taxes**
Expenditure Method	• National Income is **measured as the flow of expenditure.** • **Total expenditure** by the society summed up includes: ○ **Personal consumption expenditure,** ○ **Net domestic investment,** ○ **Government expenditure on goods and services, and**

	○ **Net foreign investment.** **National Income = National Product = National Expenditure**

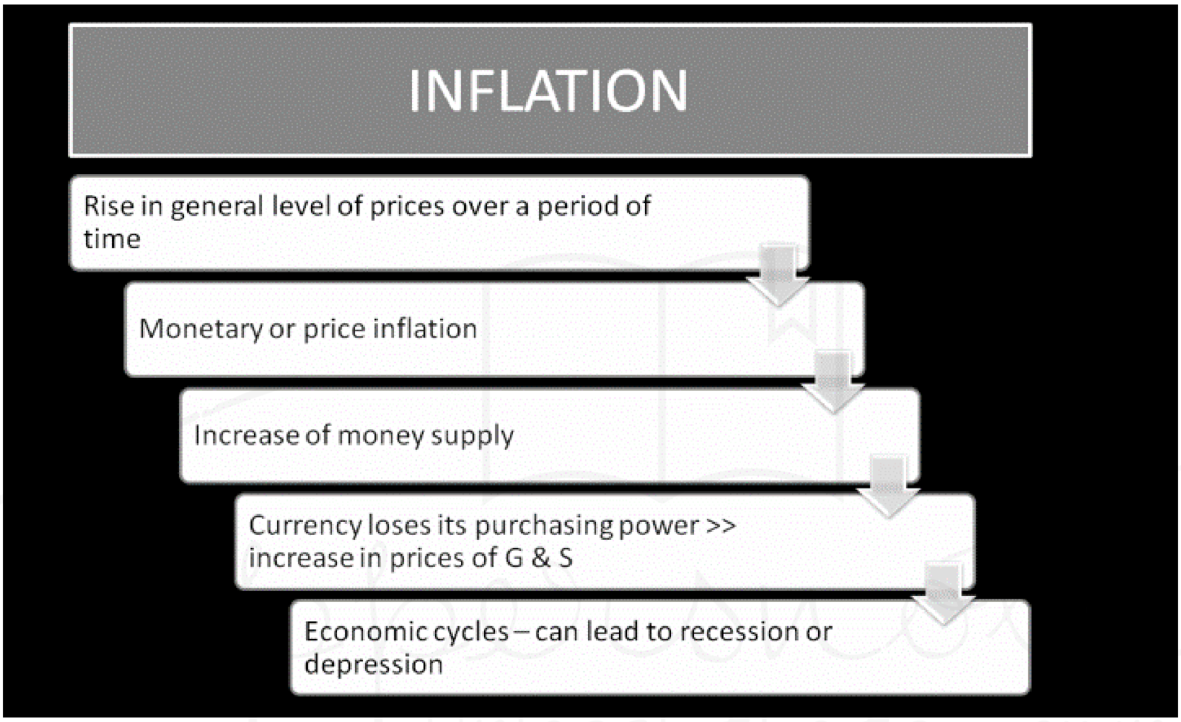
Standing Committee On Economic Statistics

- **Constituted by:** Ministry of Statistics and Programme Implementation (MOSPI)
- **Chairman:** former **Chief Statistician**
- **Functions**
  - **Analyse and Develop:** country's surveys on employment, industry, and services.
  - **look at the current framework** of data sources, indicators, and definitions.
    - for **index of industrial production, periodic labour force surveys, time use surveys, economic censuses, and unorganised sector statistics**.
  - **4 standing committee**s on: labour force statistics, industrial statistics, services sector, and unincorporated sector firms will be absorbed into the SCES.
  - **108 economists and social scientists** expressed worry over **"political involvement"** in influencing statistical data in India.
    appealed for the statistical organisations' "institutional independence" and integrity to be restored.

Toppersnotes Unleash the topper in you

2 CHAPTER Inflation and Business Cycle

- **Inflation: Increase in the general price level** that is unregulated and accompanied by a decrease in the purchasing power of money.
- Price increases can be due to Increased **demand and decreased supply.**



Causes of Inflation

Demand Pull Factors	Cost Push Factors
• **Rise in population.** • **Black money.** • **Rise in income.** • **Excessive government expenditure.**	• **Infrastructure bottlenecks cause production and distribution costs to rise.** • **Rise in Minimum Support Price (MSP).** • **Rise in international prices.** • **Hoarding and black m**arketing. • Rise in indirect taxes.

Other Factors

Excess printing of money	• when the government prints an excess of money **to deal with a crisis.** • Results in an **increase in price level** to an extent that matches the currency surplus. • This type of inflation is **called demand-pull inflation.**

Rise in production costs	● **Rise in production costs** - common and most often reason for inflation ● Leads to an increase in the price of the final product. ● Ex. If the price of raw materials increases, the cost of production also increases, which leads to the company increasing prices to maintain their profits. ● **Rising labour costs** : lead to inflation because when companies accept the workers demand of increased wages.(companies usually chose to pass on those costs to their customers)
International lending and national debts	● **International lending and national debts** can also lead to inflation. ● When **nations borrow money** with interests, which **in the end cause a rise in prices to keep up with their debts.**
Rise in tax and duties	● Inflation can be caused by government taxes (on **consumer products, especially non-elastic products fue**l) due to the rise in taxes, suppliers often pass on the burden to the consumer.
Wars and conflicts	● cause inflation as governments need to recoup the money spent and repay the funds borrowed from the central bank. ● affects **international trading to labor costs to product demand**

Types of Inflation

Based on Causation	**Based on Speed**	**Others**
● Demand Pull Inflation ● Cost Push Inflation ● Monetary Inflation ● Built-In Inflation ● Headline/Core Inflation ● Profit Induced Inflation ● Structural Inflation	● Creeping Inflation ● Walking Inflation ● Running Inflation ● Galloping or Hyper-Inflation	● Skewflation ● Stagflation

Demand Pull Inflation	● Aggregate demand rises primarily as a **result of increased government spending (Expansionary Fiscal Policy)** or **increased spending by households and businesses.** ● **Aggregate demand > aggregate supply** is the root source of demand pull inflation. ● The **economy's enterprises are unable to produce the goods and services** that households require at the present time. ● Inflation is **fueled by shortages of goods and services** owing to increased demand.

Cost Push Inflation	● **Increases** in **cost of labour, raw materials**, and **other inputs** ● The price of the **factors of production rises,** resulting in a d**ecline in supply** of these commodities. ● **Cost-push inflation:** While **demand remains constant, commodity prices grow**, resulting in an increase in the overall price level.
Structural Inflation **(Bottleneck Inflation)**	● Inflation **lasts longer due to structural flaws** in the economy such as l**ow agricultural production.** ● **inadequate distribution and storage systems result in** Food shortages and inflation.
Creeping Inflation **(1-4%)**	● Over time, a country's inflation rate rises gradually but steadily. ● When looking **at the long term**, the comparatively minor **effect of creeping inflation** adds up to a large **increase in the cost of living.**
Walking Inflation **(2-10%)**	● **Trolling inflation** is another name for it. ● Occurs **when the rate of price rises exceeds creeping inflation**, which ranges from 2% to 10%.
Running Inflation **(10-20%)**	● When there is a **large increase in inflation with a typical rate of b/w 10% and 20% a year.**
Monetary Inflation	● Inflation caused by **RBI issuing more money (deficit financing).** ● **A continuous growth in a country's money supply** is referred to as monetary inflation (or currency area).
Galloping or Hyper-Inflation **(20%- 1000%)**	● **'Extremely high inflation'** measured in the **double digits or triple digits** (i.e., 20%, 100% or 200% in a year) ● Described as **"large and accelerating"** with annual rates in the millions or perhaps trillions of dollars. ● **The range of rise is huge** in such inflation.(growth also occurs in a relatively short period of time, with prices rising overnight)
Stagflation	● A situation in which **inflation is rising, economic growth is slowing, and unemployment is persistently high.** ● **Creates a conundrum for policymakers**, because efforts aimed at lowering inflation may aggravate unemployment. ● Happens when there is both Stagnation (no economic growth) and Inflation at the same time. ● Economy **slowing down, with high prices** and unemployment. ● **Unemployment is high, and demand is sluggish.** ● Happens when an economy's **production of goods and services slows or even stops growing.**
Skewflation	● Occurs **when some commodities experience inflation while others experience deflation.**

	● **Eg:** a rise in the cost of living (inflation) combined with dropping asset prices, such as property, is an Example (deflation)

Core Inflation Vs Headline Inflation

Core Inflation	Headline Inflation
● The **change in the cost of goods and services excluding the food and energy sectors.** ● These **items** are **not included** in our **estimate of inflation** as their prices are significantly more unpredictable. ● The consumer price index **(CPI): most commonly used to calculate it**. ● measure of **long-term inflationary trend.**	● Food and energy prices (e.g., oil and gas), **which are far more volatile and prone to inflationary surges** - included in this estimate of total inflation. ● **Sector-specific inflationary** surges are **unlikely to endure.** ● Headline inflation **may not accurately reflect an economy's inflationary trend.** ● Figure of **RAW Inflation.**

Measures to check Inflation

- **Tools: The WPI** (Wholesale Price Index) and **CPI (**Consumer Price Index)
  - used **to assess wholesale and retail price fluctuations**.
- CPI **estimates the difference in price of commodities and services** that Indian consumers buy for use.
- **Eg: food, medical care, education, gadgets.**
- **WPI:** captures the goods or services offered by enterprises to smaller businesses for resale.
- **WPI and CPI :** both used **to calculate inflation in India.**

WPI Vs CPI

Wholesale Price Index (WPI)	● **Base Year: 2011-12** ● The **average change in the price of commodities for bulk** sale before they reach the retail level is measured. ● Inflation indicator that is most often used. ● **Covers only goods.** ● **Manufactured products (64%) > Primary Articles (23%) > Fuel and Power (13%).** ● Published **by Office of Economic Adviser (OEA), Ministry of Commerce and Industry.**

Consumer Price Index (CPI)	● **Base Year: 2011-12** ● Calculates the **change in the retail price of goods and services** with reference to a base year**.** ● The CPI (**Combined: Rural + Urban**) is the **RBI's key inflation indicator.** ● **Includes both goods and services** ○ Food and Beverage 45.86 ○ Miscellaneous 28.32 ○ Housing 10.07. ○ Fuel and light 6.84. ○ Clothing and Footwear 6.53. ○ Pan, tobacco and intoxicants 2.38. ● **CPI for Industrial Workers (IW)**: The Ministry of Labour and Employment has revised the base year for the CPI (IW) from 2001 to 2016. ● **Agricultural Labourer (AL):** The Ministry of Labour and Employment's CPI for Rural Laborer (RL). ● 1986-87: base year for the Consumer Price Index for Agricultural Workers (CPI-AL) and Rural Workers (CPI-RL). ● **CPI (Rural/Urban/Combined) :** National Statistics Office (NSO), Ministry of Statistics and Programme Implementation.

Producer Price Index

- Determines the **change in average prices a producer obtains** by measuring the average change in prices of both goods and services.
  - Either as they leave the place of production (Output PPI) or as they enter the input production process (Input PPI).
- While the **WPI does not cover services, the PPI does** (giving it a more inclusive index)
- The **Multiple Counting Bias** in the Wholesale Price Index is **eliminated by the PPI.**
- The **weights of the items** in PPI are **calculated using Supply Use Tables.**
- **Price change** at the primary and intermediate stages **can be tracked before it is created** in the finished good stage, the PPI is **regarded as a superior measure of inflation.**
- S**everal nations have moved to the PPI.**

Housing Price Index

- **On a quarterly basis:** tracks the **change in the price of residential buildings** across India's cities.
- **NHB Residex:** India's **first official housing price index** - created in Mumbai in July 2007 as a National Housing Bank. (Ministry of Finance)
- **developed with the help of a Technical Advisory Committee** that **included -**
  - **housing market stakeholders,**
  - **Government representatives** (Ministry of Housing and Urban Poverty Alleviation, Ministry of Finance, Ministry of Statistics and Programme Implementation),

- **RBI**
- **National Housing Bank**
- strives **to increase openness and build confidence** in India's real estate market.

Service Price Index (SPPI)

- **Business-cycle indicator** that **measures gross change in trading price of services.**
- Such as:
  - **Freight and passenger transportation,**
  - **Postal services,**
  - **lodging and food services,**
  - **information and communication services,**
  - **computer programming,**
  - **consultancy services,**
  - **legal and accounting services,**
  - **architecture and engineering,**
  - **advertising,**
  - **office support,**
  - **security services, etc.**
- **Public services are not included:** Those **services (such as health and education**) that are provided by the government.

Inflation Targeting

Meaning	● A central banking policy **focuses on managing monetary policy** to attain a set yearly inflation rate. ● Inflation targeting is **known to bring more stability, predictability, and transparency in deciding monetary policy.**
Strict inflation targeting	● When the **central bank's sole priority is to keep inflation targets checked** with close proximity.
Flexible inflation targeting	● Used when the central **bank is worried about** a variety of other factors. ● **Eg: Interest rate, exchange rate, output, employment stability etc.**

Inflation Targeting Framework

- **Established:** After RBI Act, 1934 was amended in 2016,
- India now has a **flexible inflation targeting framework.**
- The **modified RBI Act mandates** that the **government of India, in collaboration with the Reserve Bank, determine the inflation target** once every five years.

GDP Deflator

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

- **GDP Deflator:** a measure of general price inflation.
- **Ratio of nominal GDP to real GDP**
- **Encompasses all commodities and services produced**
- If the GDP deflator is **1**: **No change** in general price levels is expected.
- If the GDP deflator is **more than 1:** it **indicates that general price levels are rising.**
- It is **more comprehensive** than the CPI and the WPI, and it is **calculated using a number of primary price indices.**
- It is **used to derive volume estimates** by deflating various components of GDP evaluated at current prices. (either from the production or demand side estimations)

Base Effect

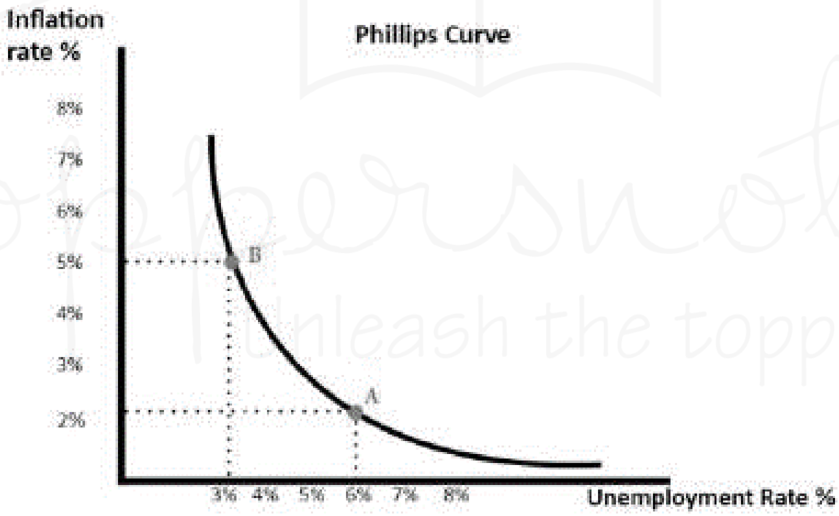
- The **impact of the previous year's rise in price levels (i.e. last year's inflation) on the current year's.**
- Comparable rise in price levels. (i.e. current inflation)
- **If the price index rose at a high pace** in the previous year's corresponding period, **resulting a high inflation rate,**
    - Some of the **potential rise has already been factored in.**
    - A **similar absolute increase** in the current year's price index - result in relatively lower inflation rates.
    - **Ex:** i**f inflation in June 2016 was 8%** and the **absolute increase** in the price index **in June 2017 was 9%**, **inflation in June 2017 will be low, i.e. 1%.**
- **On the other hand -**
    - If the **inflation rate too low in the previous year's** corresponding **period**,
        - Even a **slight increase in the Price Inde**x will arithmetically **result in a high current inflation rate.**
    - Ex: **if inflation in June 2016 was 1%** and **absolute increase** in the **price index in June 2017 was 4%,** then **inflation in June 2017 at 3%.**

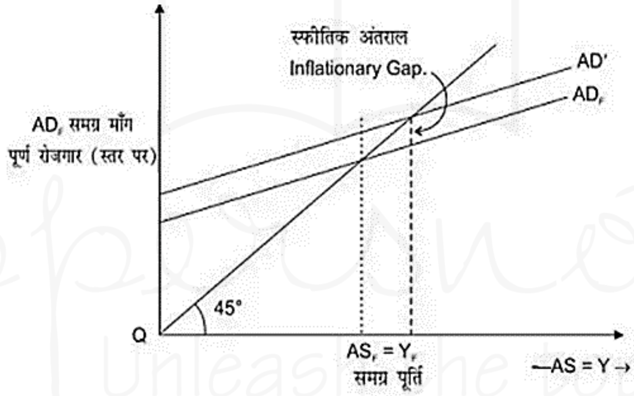
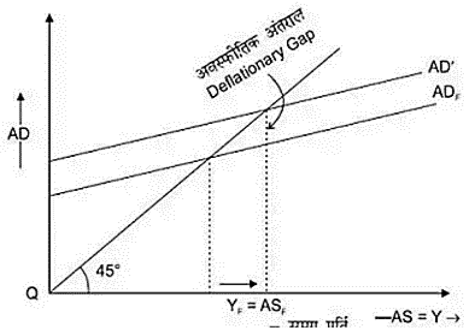
Effects of inflation

Merits	Demerits
● **Currency depreciates** ● The weakening of the currency benefits exports the most. ● **Lowers the interest rate.** ● Debtors benefit.	● The **purchasing power of the rupee decreases.** ● **Imports suffer** as a result of currency depreciation, as they become more expensive. ● **People with fixed incomes**, such as p**ensioners and paid employees,** suffer.

● **Business people gain profits.** ● In the short run, savings, investment, and employment all rise. ● **Nominal wage increases.**	○ Due to **economic uncertainty,** there is **less investment.** ● **Real wages decrease.** ● Fall in real value of savings. ● **Decline in competitiveness.**

Other important terms

Deflation	● It is the **general decrease in the price level over time.**
Disinflation	● It refers to a **decrease in the rate of inflation** or slower inflation. ● For instance, suppose the inflation rate drops from 8% to 6%.
Reflation	● Reflation is the **act of stimulating the economy by raising the money supply or lowering taxes.** (Following a dip in the business cycle) ● **To bring the economy back up to the long-term trend.** ● It is **contrary to deflation.**
Phillips Curve	● Inverse relationship b/w unemployment and inflation. 
Producer Price Index	● **Monitors the average change** in the price of goods and services as they ○ **leave the manufacturing facility** (output PPI) they **enter the manufacturing process** (input PPI). ● It **calculates the change in average prices** received by a producer.
Aggregate Demand (AD)	● **Total value of planned purchases** of all final goods and services by all sectors of an economy at **a given level and over a given time period**. ● Measured as **total expenditure**. AD = C + I + G + (X - M) Where, C = Consumption Expenditure

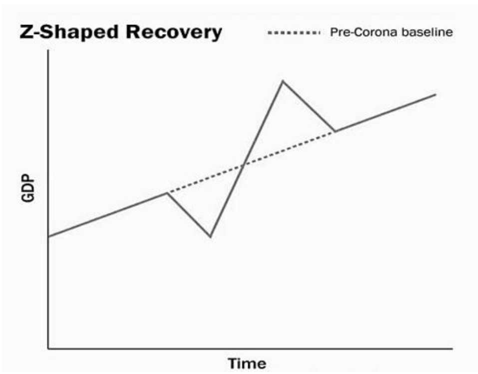
	I = Investment Expenses G = Government Expenditure (X-M) = Net Exports
Aggregate Supply	• **Total value of the planned output** of all final goods and services in an economy over **a given period of time by all the productive units**. • Monetary value of aggregate supply = **national income**. AS = National Income • When **AD>AS at full employment** level = **Excess demand**. • When **AD<AS at full employment** level = **Deficit demand.**
Inflationary Gap	• When **aggregate demand exceeds aggregate suppl**y at full employment, an inflationary gap occurs. • In such a scenario, **inflation will be fueled by excessive demand.** 
Deflationary Gap	• The **amount by which actual aggregate demand falls short of aggregate supply** at full employment. • A **measure of the magnitude of aggregate demand deficit**. • **Results in a drop in output, income, and employment**, as well as a **long-term drop in prices.** 
Inflation Tax	• **SEIGNIORAGE** is another name for it. • Inflation is always **the amount at which** the government can **finance a deficit.**

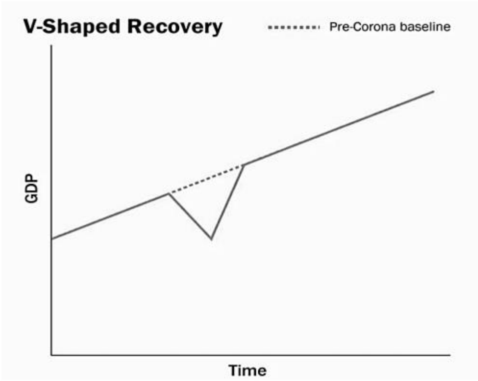
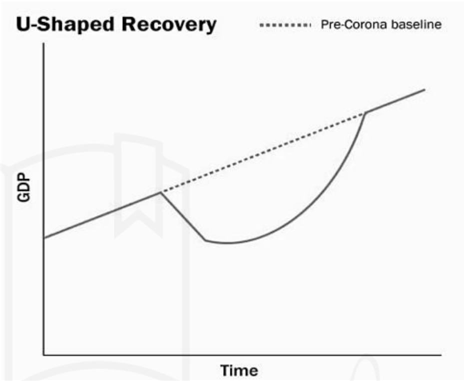
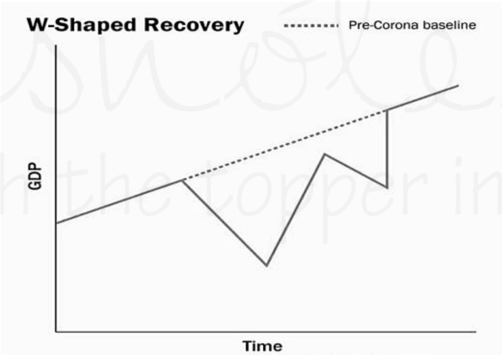
	● Inflation has a **direct relationship with the level of deficit finance.** ● It refers to the **financial loss of value experienced by cash and fixed-rate bond holders**, as well as fixed-income investors.
Inflation Spiral	● When **wages push prices higher and prices push wages higher.** ● **Wage-price spiral** is another name for it.
Inflation Accounting	● **Firm profits are eclipsed by inflation,** therefore when they calculate after accounting for inflation, it is k/a IA. ● **Premium for Inflation:** ○ Inflation premium refers to the benefit that inflation provides to borrowers. ○ Banks lose money because the interest rate they charge is nominal.

Economic Recovery

- **After a recession**, economic recovery entails, **reallocating resources and personnel** from **failed enterprises** and investments **to new jobs and uses.**
- After the recession: the **economy recovers and enters a new expansionary business** cycle phase **leading indicators frequently rise ahead of a rebound.**
- **such as:**
  - **Stock market,**
  - **Retail sales**
  - **New business start-ups etc.**
- Government measures can either aid or hinder the process of economic recovery.
- **Central banks may use monetary policies** to boost the money supply and encourage lending during an economic recovery.

Shape of Economic Recovery

Z-shaped recovery	● **Most optimistic scenario** ● The **economy recovers fast following a downturn.** ● Before settling back to the regular trend-line, it makes up for lost territory, making a Z-shaped chart. ● This economic disturbance **lasts for a short time**, and it **limits people's capacity to spend** more than their salaries.	
V-shaped recovery	● **Economy quickly regains lost ground** and returns to its regular growth trend-	

	line. ● **Incomes and employment are not permanently** lost as a result of this, and **economic growth quickly recovers and returns to the path it was** on before the disturbance.	
U-shaped recovery	● A scenario in which the economy, **after plunging, fights for a while at a low growth rate** before eventually recovering to normal levels. ● **Several employments are lost** in this scenario, and people must rely on their savings. ● If the procedure is drawn out longer, the result is a "elongated U" form.	
W-shaped recovery	● A recovery in the shape of a W is **Volatile.** ● **Growth dips and rises, then falls and climbs again** before recovering, generating a W-shaped graph. ● The second wave of the pandemic may be responsible for the double-dip shown by a W-shaped recovery.	
L-shaped recovery	● **indicates that the economy's ability to create is permanently harmed**. ● **the economy fails to regain its GDP level**.