Notes Inflation-Part 1

1.0 Introduction

- Inflation is the **overall increase** in **prices of goods and services** in an economy.
- It leads to a **decrease in the purchasing power of money**, meaning each unit of currency buys fewer goods and services.
- The rate of purchasing power decline is measured by tracking the average price increase of a basket of selected goods and services over time.
- Inflation is typically **expressed as a percentage**, indicating how much less a unit of currency buys compared to previous periods.
- It contrasts with **deflation**, where **prices decrease**, and **purchasing power increases**.
- Inflation affects the cost of living, savings, investments, and overall economic stability. It's important for policymakers to manage inflation to maintain a balance between economic growth and price stability.

2.0 Causes of Inflation

- **Increase in Money Supply:**
  - Excess currency supply in an economy reduces the value of the currency, leading to inflation.
  - It occurs when the money supply grows faster than economic growth.
- **Deficit Financing:**
  - Deficit financing involves funding expenditure through borrowings or printing new currency.
  - Printing new currency increases money flow, causing inflationary pressures and price rises.
- **Increase in Government Expenditure:**
  - Government spending, especially on public goods like infrastructure, increases money supply.

- This boosts employment and purchasing power, contributing to inflation.

- **Rise in Administered Prices:**
  - Government-controlled prices for essential goods are periodically raised to cover losses.
  - Increases in administered prices signal other prices to rise, leading to inflation.
- **Rising Import Prices:**
  - Global inflation affects countries through higher import costs for essential goods.
  - Disruptions in the global supply chain, like conflicts, can cause inflationary pressures domestically.
- **Implication:**
  - Understanding the causes of inflation is crucial for policymakers to implement effective monetary and fiscal policies to manage inflation and maintain economic stability.

3.0 Types of Inflation

Cost-Push Inflation:

- Prices increase due to **higher costs of wages and raw materials**, reducing aggregate supply.
- Occurs from unexpected events like natural disasters, resource depletion, or government regulation.
- **Price increases from production costs** are passed on to consumers, leading to cost-push inflation.

Demand-Pull Inflation:

- Prices rise due to **excessive demand** compared to supply, creating upward pressure on prices.
- Triggered by increased aggregate demand from government or household spending.
- Example: After the initial shutdowns during the COVID-19 pandemic, demand surged for goods and services that were scarce, leading to inflation.

- Example: Inflation during the COVID-19 pandemic due to rising oil prices and disruptions in the supply chain.

4.0 Deflation vs Disinflation

Deflation

- Deflation is characterized by a **general decline in price levels** across an economy.
- This can be caused by various factors such as a reduction in the money supply, decreased government spending, lower consumer spending, or reduced corporate investment.
- Deflation persists until the **rate of inflation** becomes **positive or reaches zero**.

Disinflation

- Disinflation, on the other hand, refers to a **temporary slowdown** in the **rate of inflation**.
- It typically occurs during a recession or when a central bank implements tighter monetary policy.
- Disinflation continues until the **rate of inflation reaches zero**.

5.0 Headline Inflation vs Core Inflation

Headline Inflation

- Headline inflation measures the **total inflation** of an economy over a specific period.
- It primarily gauges the **short-term impact of inflation** on the economy and reflects its effect on retail consumers.
- The **Consumer Price Index (CPI)** is a common measure of headline

Core Inflation

- Core inflation is calculated by **subtracting** the inflation contributed by **volatile commodities like food and energy from headline inflation**.
- It is primarily utilized to **assess the long-term impact of inflation** on the economy, focusing on the production of goods and services.

inflation.

- Core inflation is valuable for formulating **medium-to-long-term** monetary policies.

6.0 Imported Inflation

Meaning

- Imported inflation refers to a situation where the **general price level in a country rises** due to **increased prices of imported goods and services**.
- It occurs when the costs of imported commodities, such as Crude Oil and Gold in the case of India, escalate, leading to a higher import bill for the country.
- Additionally, inflation may also rise due to the depreciation of the domestic currency, which increases the rupee cost of imported items. This means that more money is required to purchase the same quantity of goods and services from outside the country.

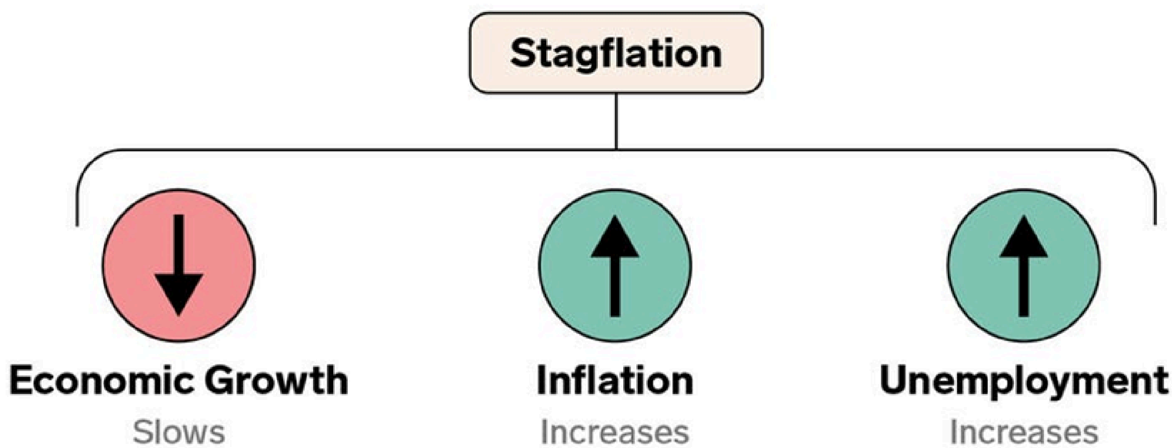
Causes

- The primary cause of imported inflation is a decline in the value of a country's currency, leading to higher import prices.
- When a currency depreciates on the foreign exchange market, the cost of imports increases, as more domestic currency is needed to purchase the same quantity of foreign goods and services.
- As a result, production costs rise for companies, which often pass on these increased costs to consumers through higher selling prices of goods and services. Consequently, prices within the country rise due to imported inflation.

Implications

- **Reduced purchasing power of consumers:** Higher prices of imported goods and services lead to a decrease in the purchasing power of consumers, as they need to spend more on essential items.
- **Impact on inflation rate:** Imported inflation contributes to an increase in the overall inflation rate in the country, affecting the cost of living for households and the competitiveness of businesses.
- **Effect on trade balance:** A rise in import prices due to imported inflation can widen the trade deficit, as the country spends more on imports while exports may not increase proportionally.
- **Monetary policy challenges:** Central banks may face challenges in managing inflationary pressures caused by imported inflation, requiring them to implement appropriate monetary policies to stabilize prices and support economic growth.

7.0 Stagflation



- Stagflation, or recession-inflation, is characterized by high or **increasing inflation rates**, sluggish economic growth, and persistently **high levels of unemployment**.
- It poses a dilemma for governments, as measures to reduce inflation may worsen unemployment, and efforts to decrease unemployment may exacerbate inflation.

Causes of Stagflation:

- **Supply Shock Theory:** Stagflation can occur due to a sudden disruption in the supply of a commodity or service, such as a sharp increase in oil prices.

This leads to a **surge in prices**, making production more costly and less profitable, thereby slowing economic growth.

- **Poor Economic Policies:** Stagflation can also result from poorly crafted economic policies.

For example, government policies that harm industries while expanding the money supply too rapidly can lead to slower economic growth and higher inflation.

Current Situation of Stagflation in India

- The risk of stagflation in India is significantly low, according to RBI. Stagflation, characterized by high inflation, slow economic growth, and high unemployment, poses a concern for the economy.
- However, recent improvements in financial conditions, currency stability, and oil prices have reduced this risk for India.
- The RBI plans to closely monitor the situation and implement monetary policies to maintain price stability and support economic growth, ensuring macroeconomic stability.

8.0 Inflation Indices

8.1 Consumer Price Index (CPI)

- The Consumer Price Index (CPI) evaluates fluctuations in the costs of goods and services from the consumer's viewpoint.
- CPI inflation signifies alterations in this index over time, which is a critical metric for the Central Bank in its price stability role.
- The **National Statistical Office** (NSO), under the Ministry of Statistics and Program Implementation (MoSPI), began compiling CPI data separately for

rural, urban, and combined sectors monthly since January 2011.

- The base year for CPI was revised from 2010=100 to **2012=100** starting January 2015.
- The calculation formula for CPI utilizes the Laspeyres Index:

> ***Total cost of a fixed basket of goods and services in the current period divided by Total cost of the same basket in the base period * 100***

Components of CPI with their Weights:

Components	Rural	Urban	Combined
Food & Beverages	54.18	36.29	45.86
Pan, Tobacco & Intoxicants	3.26	1.36	2.38
Clothing & Footwear	7.36	5.57	6.53
Housing	0.00	21.67	10.07
Fuel and Light	7.94	5.58	6.84
Miscellaneous	27.26	29.53	28.32

Types of CPI

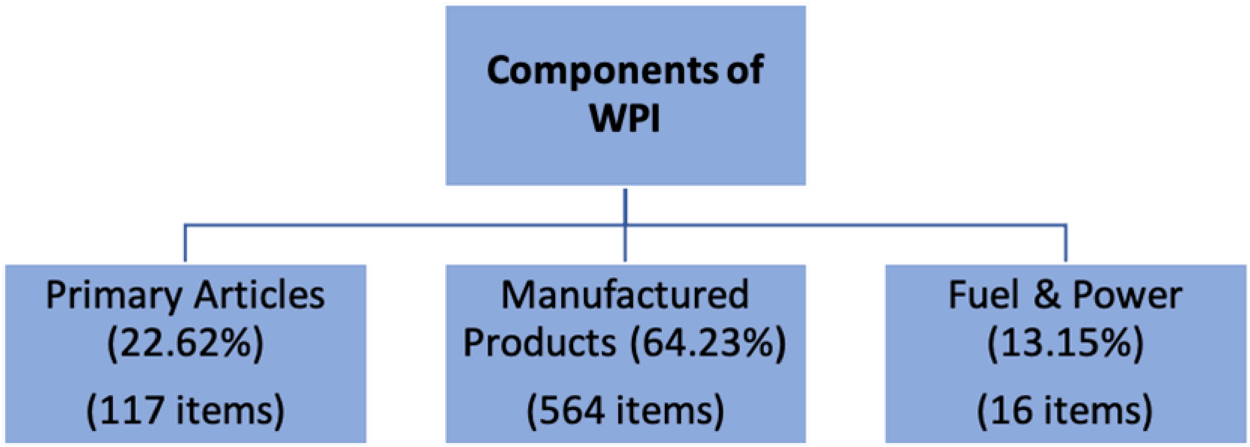
- **CPI for Industrial Workers (CPI-IW):**
    - Compiled by the Labor Bureau to track changes in the pricing of a fixed basket of products and services used by Industrial Workers.
    - Target demographic includes working-class families from industries, mines, plantations, motor transport, port, railways, and energy generation and distribution sectors.
    - Utilized for wage indexation and dearness allowance fixation for government employees.
    - Present base: 2016=100.
- **CPI for Agricultural Laborers (CPI-AL):**

    - Compiled by the Labor Bureau to assist in setting and revising minimum wages for agricultural laborers across different States.
    - Present base: 1986-87=100.
- **CPI for Rural Laborer (CPI-RL):**
    - Compiled by the Labor Bureau to assist in setting and revising minimum wages for rural and unskilled laborers across different States.
    - Present base: 1986-87=100
- **CPI Combined (Rural + Urban):**
    - National Statistical Office (NSO), Ministry of Statistics and Program Implementation releases the All India Consumer Price Index (CPI).
    - Present Base: 2012=100
    - When we talk about Headline Inflation in India, we are talking about CPI Combined figure which is the

8.2 Wholesale Price Index (WPI)

- WPI measures price changes of goods sold and traded in bulk by wholesale businesses to other businesses.
- It is released by the **Office of the Economic Adviser, Ministry of Commerce & Industry**.
- The new series of WPI, with Base year **2011-12=100**, was implemented from April 2017, replacing the earlier base year of 2004-05.
- Tracked prices include ex-factory price for manufactured products, agri-market (mandi) price for agricultural commodities, and ex-mines prices for minerals.
- Weights assigned to each commodity in the WPI basket are based on production value adjusted for net imports.
- WPI covers prices of products/commodities in agriculture, mining, manufacturing, and electricity sectors only; it does not include services.

Components of WPI



Primary Articles	Manufactured Products	Fuel & Power
Food articles Non-food articles Minerals Crude Petroleum Natural gas	Textiles Chemicals & chemical products Food products Paper & paper products Rubber and plastic products Basic metals Machinery & machine tools, etc.	Coal Mineral oils (petrol, diesel) Electricity etc.

8.2.1 WPI Food Index

- The WPI Food Index monitors price **fluctuations of all food-related goods** before reaching the retail level.
- It is compiled by aggregating the WPI for "Food Products" under "Manufactured Products" and "Food Articles" under "Primary Articles" using a weighted arithmetic mean.

8.3 Producer Price Index (PPI)

- The Producer Price Index (PPI) gauges the **average price fluctuation** of goods and services.

- It can be computed either as goods leave the **production site (Output PPI)** or as they enter the **production process (Input PPI)**.
- Output PPI pertains to goods leaving the production place, while Input PPI refers to goods entering the production process.
- The PPI evaluates price shifts from the seller's perspective.
- Although not currently utilized in India, Niti Aayog has developed a roadmap for its future implementation.

8.4 Misery Index

- The misery index, created by **economist Arthur Okun**, is an economic indicator used to assess the economic well-being of the average citizen.
- It is calculated by adding the unemployment rate to the inflation rate.
- Also known as the **"Economic Discomfort Index (EDI)".**
- The index reflects the extent to which people without work struggle to afford necessary or desired items.
- A healthy economy typically yields a misery index between 6% and 7%, representing a Goldilocks Economy with an ideal growth rate of 2%-3%

9.0 Measure of Inflation in India

- In 2014, the RBI adopted the new CPI (Combined) as the primary measure of headline inflation, following recommendations from the **Urjit Patel Committee**.
- Previously, the RBI assigned greater importance to the Wholesale Price Index (WPI) than CPI for all policy purposes.

10.0 RBI’s Role in Controlling Inflation

10.1 Interest Rates

- **Repo Rate:**

    - The rate at which RBI purchases government securities from commercial banks with an agreement of repossession.
    - Used for short-term borrowing by banks from the central bank to inject money into the market to bridge the gap between loan demand and deposits.
- **Reverse Repo Rate:**
    - Rate at which RBI borrows money from commercial banks.
    - Banks deposit funds in RBI when there are no profitable investment options for short-term excess liquidity or during market uncertainty.
- **Bank Rate:**
    - Rate at which RBI extends finance to domestic banks.
    - Unlike the repo rate, no securities are required against the finance.
    - Bank rates are rarely revised in inflation control policies.
- Increase in these rates signifies RBI's efforts to make borrowing expensive for commercial banks (or attractive for keeping deposits in RBI through reverse repo rate), thus curbing the injection of money into the market to reduce liquidity.

10.2 Reserve Ratios

- **Cash Reserve Ratio (CRR):**
    - Banks must maintain a portion of their deposit liabilities in the form of liquid cash with the RBI to ensure deposit safety and liquidity.
- **Statutory Liquidity Ratio (SLR):**
    - Banks in India are required to maintain a minimum proportion of their net demand and time deposits as liquid assets such as cash, gold, and precious stones.
- When reserve ratios are increased, the total available deposits that banks can lend as commercial loans decrease, reducing their loan granting capacity. The RBI employs this tool for credit control in the market.

10.3 Open Market Operations

- The RBI has the authority to **buy or sell government securities to or from the public**.
- To manage inflation, the RBI sells securities in the money market to withdraw excess liquidity, reducing demand.
- Decreased liquid cash leads to a decrease in demand.
- This aspect of monetary policy is known as open market operations.

10.4 Selective Credit Control

- The **Banking Regulation Act** grants the RBI the authority to selectively regulate the level and distribution of bank loans.
- The RBI employs selective credit control to manage inflation, particularly for goods in short supply or essential items like food grains, vegetables, pulses, oilseeds, cotton, sugar, etc., which are widely consumed.
- The objective of this policy is to discourage banks from extending loans against these essential commodities.

10.5 Flexible Inflation Targeting Framework (FITF)

Previous Content :

- Introduced in India following the amendment of the **Reserve Bank of India (RBI) Act, 1934** in 2016.
- Under this framework, the Government of India sets the **inflation target every 5 years** after consulting with the RBI.
- The RBI sets the inflation target using **CPI**, aiming for **4% with a tolerance band of +/- 2** percentage points.
- The inflation target for the period from August 5, 2016, to March 31, 2021, was set at 4% of the Consumer Price Index (CPI), with an upper tolerance limit of 6% and a lower tolerance limit of 2%.
- **Inflation Targeting** is a **central banking policy** focused on adjusting monetary policy to achieve a predetermined annual inflation rate.

- It is based on the premise that maintaining price stability through inflation management is crucial for long-term economic growth.
- New Zealand pioneered inflation targeting, and many countries, including India, have since adopted it as their primary monetary policy approach.

Updated content

1. Legal & Institutional Foundation

- Formally introduced in **2016** through an amendment to the **Reserve Bank of India (RBI) Act, 1934**.
- Shifted India's monetary policy from a "Multiple Indicator Approach" to a singular approach (Inflation) to target price stability.
- Before FITF, The RBI Governor had the final, unilateral say on interest rates. But now Monetary Policy Committee makes the decision through a vote.
- **Global Context:** India followed the "inflation targeting" model pioneered by **New Zealand** (1990), based on the premise that stable prices are the bedrock of long-term economic growth.

2. The Numerical Target & Tolerance Band

Under this framework, the Government of India sets the **inflation target every 5 years** after consulting with the RBI. The inflation target for the period from August 5, 2016, to March 31, 2021, was set at 4% of the Consumer Price Index (CPI), with an upper tolerance limit of 6% and a lower tolerance limit of 2%.

- **Primary Target: 4%** Headline Inflation.
- **Tolerance Band: +/- 2%** (giving a functional range of **2% to 6%**).
- **Metric used: Consumer Price Index (CPI) - Combined**, commonly known as **Headline Inflation**.
- **Note:** Headline inflation is used (rather than Core) because food and fuel represent a massive portion of the Indian consumption basket, making it the most representative measure for the public.
- The same target was extended to the next cycle (**April 2021- March 2026)**

- **Current Mandate:** The 2021-2026 cycle is valid until **March 31, 2026**.
- **New Measuring Stick:** As of February 2026, the **Base Year** for CPI has been updated to **2024**. This new series has a lower weightage for food, potentially making the 4% target more stable.

3. Accountability

- If average Headline Inflation stays **above 6%** or **below 2%** for **three consecutive quarters, then** RBI must submit a formal report to the Central Government detailing:

1. **Reasons** for the failure (e.g., supply-side shocks).
2. **Proposed actions** to bring inflation back to target.
3. **Estimated timeline** for achieving the 4% target.