EduTap

SUMMARY SHEET

Inflation

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1 What is inflation?

- **Inflation is the rate at which the general level of prices for goods and services is rising** and, consequently, the purchasing power of currency is falling.
- In other words, inflation is the **GENERAL RISE in the prices of goods and services in an economy OVER A PERIOD OF TIME.**

Rate of Inflation is calculated as = (Prices in current year/ Prices in the base year) x 100.

2 Causes of Inflation

Let us look at the different concepts relating to causes of Inflation.

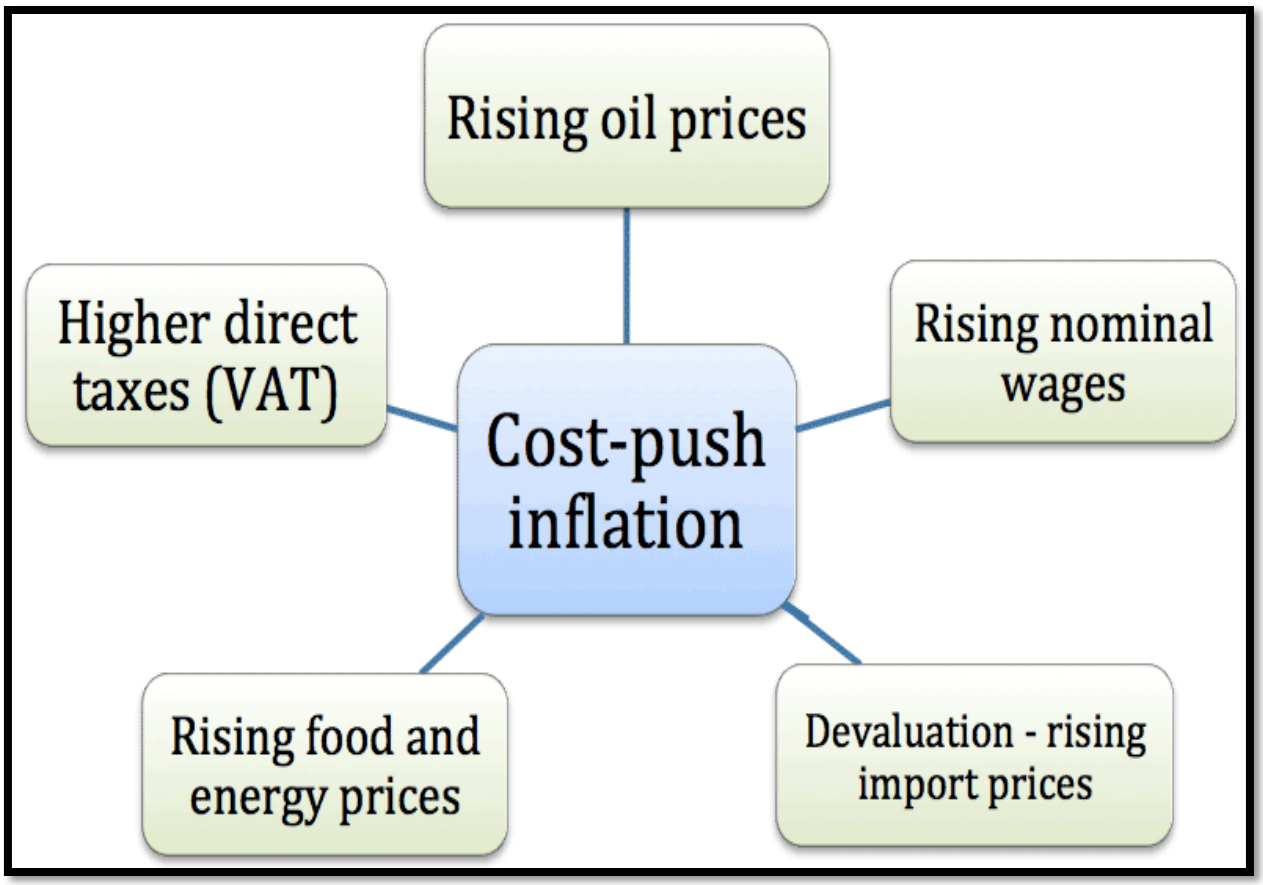
2.1 Demand Pull Inflation

- Demand pull inflation is **caused by the overall increase in demand for goods and services**, which bids up their prices.
- This theory can be summarized as "**too much money chasing too few goods**".
- In other words, if demand is growing faster than supply, prices will increase. This usually occurs in rapidly growing economies. This theory is often promoted by the Keynesian school of economics.

It is **generally good for the economy (in manageable figures) a**s it stimulates expansion in the long run.

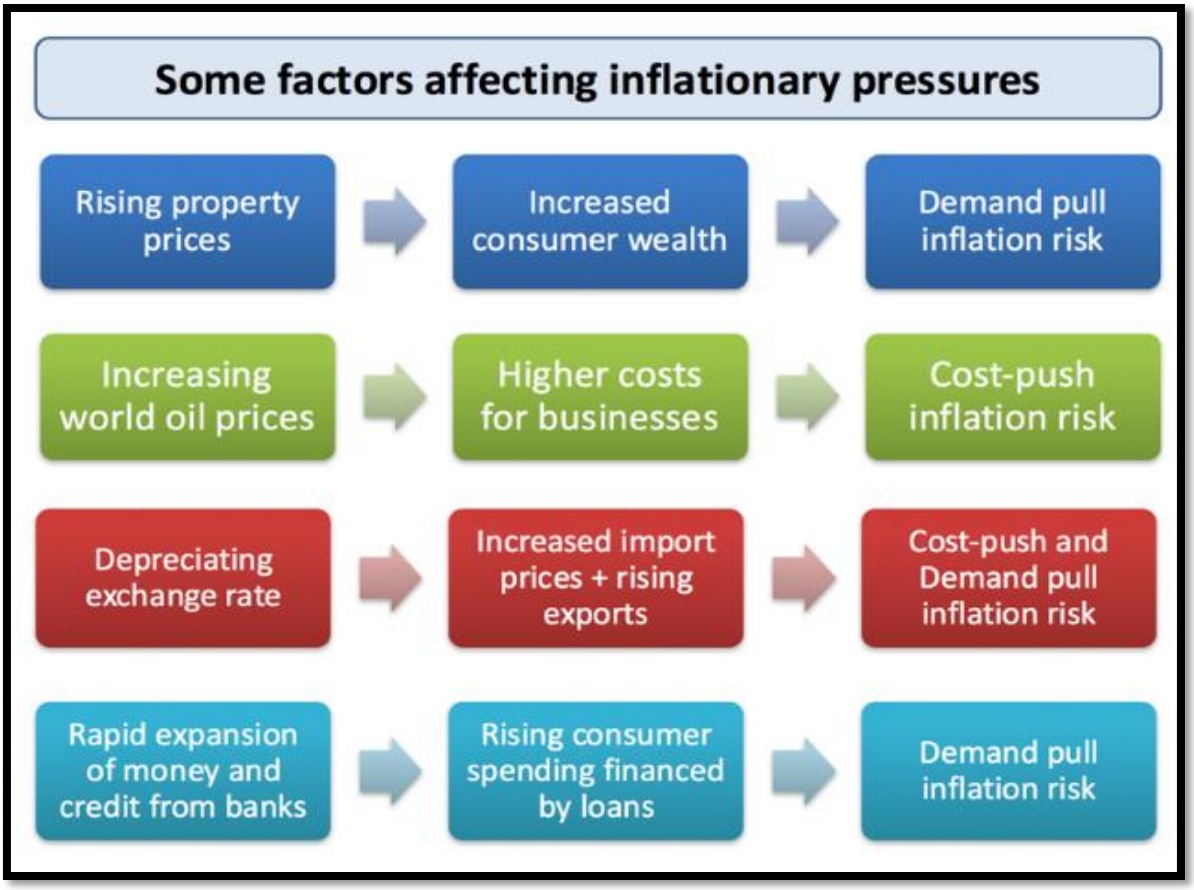
2.2 Cost Push Inflation

- **Cost-push inflation** occurs when firms respond to **rising costs** by increasing prices in order to **protect their profit margins**.



There are many reasons why costs might rise:

- Component costs:
  For example, an increase in the prices of raw materials and other components.
- Rising labor costs:
  Caused by wage increases, which are greater than improvements in productivity.
- Expectations of inflation are important in shaping what actually happens to inflation:
  When people see prices are rising for everyday items they get concerned about the effects of inflation on their real standard of living. One of the dangers of a pick-up in inflation is what the Bank of England calls “second-round effects" i.e. an initial rise in prices triggers a burst of higher pay claims as workers look to protect their way of life. This is also known as a “wage-price effect"
- Higher indirect taxes:
  For example a rise in the duty on alcohol, fuels and cigarettes, or a rise in Value Added Tax.
- A fall in the exchange rate
  This can cause cost push inflation because it leads to an increase in the prices of imported products such as essential raw materials, components and finished products

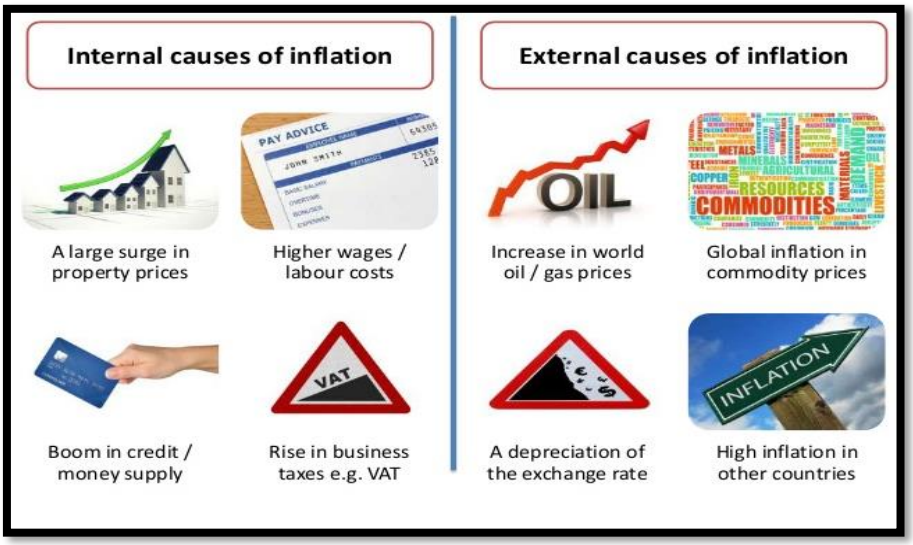


2.3 Monetary Inflation

- Inflation can also be caused by an **oversupply of money in the economy**. Just like any other commodity, the prices of things are determined by their supply and demand.
- If there is too much supply, the price of that thing goes down. If that thing is money, and too much supply of money makes its value go down, the result is that the prices of everything else priced in dollars must go up! This theory is often promoted by the **"Monetarist" school of economics**.

3 Internal and External Causes of Inflation

Several internal and external factors, such as the printing of more money by the government, a rise in production and labor costs, high lending levels, a drop in the exchange rate, increased taxes or wars, can cause inflation.



4 Effects of Inflation

1. On Creditors and Debtors

Inflation redistributes wealth from creditors to debtors, i.e., **lenders suffer, and borrowers benefit** out of inflation. The opposite effect takes place when inflation falls (i.e., deflation).

2. On Aggregate Demand

Rising inflation indicates rising aggregate demand and indicates **comparatively lower supply and higher purchasing capacity** among the consumers. Usually, higher inflation **suggests the producers to increase their production** level as it is generally considered as an indication of higher demand in the economy.

3. On Investment

Investment in the economy is boosted by the inflation (in the short run) because of two reasons: (i) **Higher inflation indicates higher demand** and suggests entrepreneurs to expand their production level, and (ii) **Higher the inflation, lower the cost of loan**

4. On Income

Inflation affects the income of individual and firms alike. **An increase in inflation, increases the 'nominal' value of income**, while the **'real' value of income remains the same**. Increased price levels erode the purchasing power of the money in the short-run, but in the long-run the income levels also increase (making the nominal value of income going upward). It means, **in a given period of time income may go up due to two reasons, viz., inflationary situation and increased earning**. The concept 'GDP Deflator' (GDP at current prices divided by GDP at constant prices) gives the idea of 'inflation effect' on income over a given period.

5. On Saving

Holding money does not remain an intelligent economic decision (because money loses value with every increase in inflation) that is why **people** visit banks more frequently and **try to hold least money with themselves** and put **maximum with the banks in their saving accounts** (to minimize the loss in value of money with interest earned on it, provided bank is paying positive interest on saving account). This is also known as the **shoe leather cost of inflation** (as it consumes the precious time of the people visiting the bank frequently tagging their shoe). It means that **saving rate increases**. But this happens as a short-term effect of inflation. **In the long-run, higher inflation depletes the saving rate in an economy**. Just the opposite situation arises when inflation falls or shows falling traits with decreasing saving, in the short-run and increasing saving in the long-run, respectively.

6. On Expenditure

Inflation affects both the forms of expenditures —consumption as well as investment. **Increased prices make our consumption levels fall as goods and services we buy get costlier.** We see a tendency among the people to cut their consumption levels aimed at neutralizing the impact of price rise— making consumption expenditure fall. Exact opposite happens once prices head downward. On the other hand, **inflations makes 'investment' expenditure increase as a result of decreased cost of money/finance** (inflation brings benefit to borrower—known as 'inflation premium'). In times of price fall just opposite happens.

7. On Tax

On tax structure of the economy, inflation creates two distortions:

(i) **Taxpayers suffer while paying their direct and indirect taxes**. As **indirect taxes** are imposed ad valorem (on value), **increased prices of goods** make **taxpayers to pay increased indirect taxes** (like cenvat, vat, etc., in India). Similarly, **due to inflation, direct tax** (income tax, interest tax, etc.) **burden** of the taxpayers also increases as **tax-payer's gross income moves to the upward slabs** of official tax brackets (but the real value of money does not increase due to inflation; in fact, it falls). This problem is **also known as bracket creep**—i.e., **inflation-induced tax increases**. Some economies (as in the US and many European countries) have indexed their tax provisions to neutralise this distortion on the direct taxpayers.

(ii) The extent to which tax collections of the government are concerned, inflation increases the nominal value of the gross tax revenue, while real value of the tax collection does not compare with the current pace of inflation as there is a lag (delay) in the tax collection in all economies.

But governments get an advantage on their interest burden, on their borrowings as inflation benefits borrowers. This benefit, however, depends upon the contemporary levels of fiscal deficit and the total national debt.

In the case of a government incurring high fiscal deficit (increased borrowing, printing currency), in flation functions as a tax, i.e., inflation tax via which the government fulfils its expenditure by cutting down the expenditure and consumption of the people.

8. On Exchange Rate

With every inflation the currency of the economy depreciates (loses its exchange value in front of a foreign currency) provided it follows the flexible currency regime. Though **it is a comparative matter**, there might be inflationary pressure on the foreign currency against which the exchange rate is compared.

9. On Export

High rate of inflation will hit hard the export industry in the economy. The cost of production will rise, and the exports will become less competitive in the international market. Thus, inflation has an adverse effect on the balance of payments.

10. On Import

High inflation in India means that goods and services in India will be more expensive than other countries because the companies will have to pay more to buy raw material, labour and other elements. Since goods and services will be expensive in India, hence people will prefer to import them from outside India which will result in higher imports.

11. On Trade Balance

In the case of a **developed economy, inflation makes trade balance favourable**, while for the **developing economies inflation is unfavorable for their balance of trade**. This is because of composition of their foreign trade. The **benefit to export** which inflation brings into a developing economy is **usually lower than the loss it incurs due to its compulsory imports** which become costlier due to inflation.

12. On Employment

Inflation increases employment in the short-run but becomes neutral or even negative in the long run (see the Phillips Curve and the NAIRU in the earlier sections).

13. On Wages

Inflation increases the nominal (face) value of wages, while their real value falls. That is why there is a negative impact of inflation on the purchasing power and living standard of wage employees. To neutralise this negative impact the Indian government provides dearness allowance to its employees twice a year.

14. On the Self-employed

Inflation has a neutralizing impact on the self-employed people in the long-run. But in the short-run they also get affected as the economy as a whole gets affected.

15. On the Economy

All the segments discussed above belong to an economy, but we must know the overall short-term and long-term impacts of inflation on an economy.

5 Important terms associated with concept of Inflation

Disinflation	**Disinflation is a condition where inflation is still positive, but the *rate* of inflation is decreasing – for example from +3% to +2%.**
Deflation	Deflation is when the general level of prices are falling. It is the opposite effect of inflation.
Galloping Inflation	This is a **'very high inflation'** running in the range of **double-digit or triple digit** (i.e., 20 per cent, 100 per cent or 200 per cent in a year). Contemporary journalism has given some other names to this inflation—**hopping inflation, jumping inflation and running or runaway inflation.**
Hyperinflation	This form of inflation is **'large and accelerating'** which might have the **annual rates in million** or even **trillion**. In such inflation not only the **range of increase is very large**, but the increase **takes place in a very short span of time**, prices shoot up overnight.
Stagflation	Stagflation is a situation in an economy when **inflation and unemployment both are at higher levels**, contrary to conventional belief. Conventional thinking that a **trade-off existed between inflation and unemployment (i.e., Phillips Curve)** was **falsified** and several economies switched over to alternative ways of economic policies, such as monetaristic and supply-side economics.
Bottleneck Inflation	This inflation takes place when the **supply falls drastically,** and the **demand remains at the same level**. Such situations arise due to **supply-side hurdles, hazards or mismanagement** which is also known as **'structural inflation'**. This could be put in the **'demand-pull inflation' category**.

Skewflation	**'Inflation'** refers to a sustained, **across-the-board price increase**, whereas 'a relative price increase' is a reference to an episodic price rise pertaining to one or a small group of commodities. This leaves a third phenomenon, namely one in which there is a **price rise of one or a small group of commodities over a sustained period of time**, without a traditional designation. '**Skewflation'** is a relatively new term to describe this third category of price rise.
Reflation	Reflation can also be understood from a different angle—when the **economy is crossing through the cycle of recession** (low inflation, high unemployment, low demand, etc.) and **government takes some economic policy decisions** to revive the economy from recession, **certain goods see sudden and temporary increase in their prices**, such price rise is also known as reflation.
Headline Inflation	▪ In general, headline inflation **reflects the rate of change in prices of all goods and services** in an economy over a period of time. Every country has its own set of commodity basket to track inflation. While **some countries use Wholesale Price Index** (WPI) as their **official measure of inflation**, **most** others use the **Consumer Price Index** (CPI). ▪ **Since April 2014**, RBI has adopted the new **Consumer Price Index (CPI) (combined)** as the **key measure of inflation**. This was done in accordance with the recommendations of Urjit Patel Committee. ▪ Therefore **CPI-combined is the measure of headline inflation** in India now.
Core Inflation	▪ Core Inflation is **also known as underlying inflation**, is a measure of inflation which **excludes items that face volatile price movement**, notably **food and energy**. In other words, Core Inflation is nothing but **Headline Inflation minus inflation** that is contributed by **food and energy commodities**.

Additional Concepts related to Inflation

Inflationary Gap

The **excess of total government spending above the national income** (i.e., fiscal deficit) is known as inflationary gap. This is **intended to increase the production** level, which ultimately **pushes the prices up** due to extra-creation of money during the process.

Deflationary Gap

The **shortfall in total spending of the government (i.e., fiscal surplus) over the national income** creates deflationary gaps in the economy. This is a situation of producing more than the demand and the economy usually heads for a **general slowdown in the level of demand**. This is also known as the **output gap**.

Inflation Tax

Inflation erodes the value of money and the people who hold currency suffer in this process. As the **governments have authority of printing currency** and circulating it into the economy (as they do in the case of deficit financing), this act **functions as an income to the governments**. This is a situation of **sustaining government expenditure at the cost of people's income**. This looks as if **inflation is working as a tax**. That is how the term **inflation tax is also known as seigniorage**. It means, inflation is always the level to which the government may go for deficit financing—level of deficit financing is directly reflected

by the rate of inflation. It could also be used by the governments in the form of prices and incomes policy under which the companies pay inflation tax on the salary increases above the set level prescribed by the government.

Inflation Spiral

An **inflationary situation** in an economy which **results out of a process of wage and price interaction** - **'when wages press prices up and prices pull wages up'** is known as the inflationary spiral. It is also known as the **wage-price spiral**.

Inflation Accounting

A term popular in the area of corporate profit accounting. Basically, **due to inflation the profit of firms/companies gets overstated**. When a **firm calculates its profits after adjusting the effects of current level of inflation**, this process is known as **inflation accounting**. **Such profits are the real profit** of the firm which could be compared to a historic rate of inflation (inflation of the base year), too.

Inflation Premium

The **bonus brought by inflation to the borrowers is known as the inflation premium**. The interest banks charge on their lending is known as the nominal interest rate, which might not be the real cost of borrowing paid by the borrower to the banks. To calculate the **real cost a borrower is paying on its loan**, the **nominal rate of interest is adjusted with the effect of inflation** and thus the interest rate we get is known as the real interest rate. **Real interest is always lower than the nominal interest rate, if the inflation is taking place**—the difference is the inflation premium. **Rising inflation premium** shows **depleting profits of the lending institutions**. At times, to neutralise the effects of inflation premium, the lender takes the recourse to increase the nominal rate of interest.

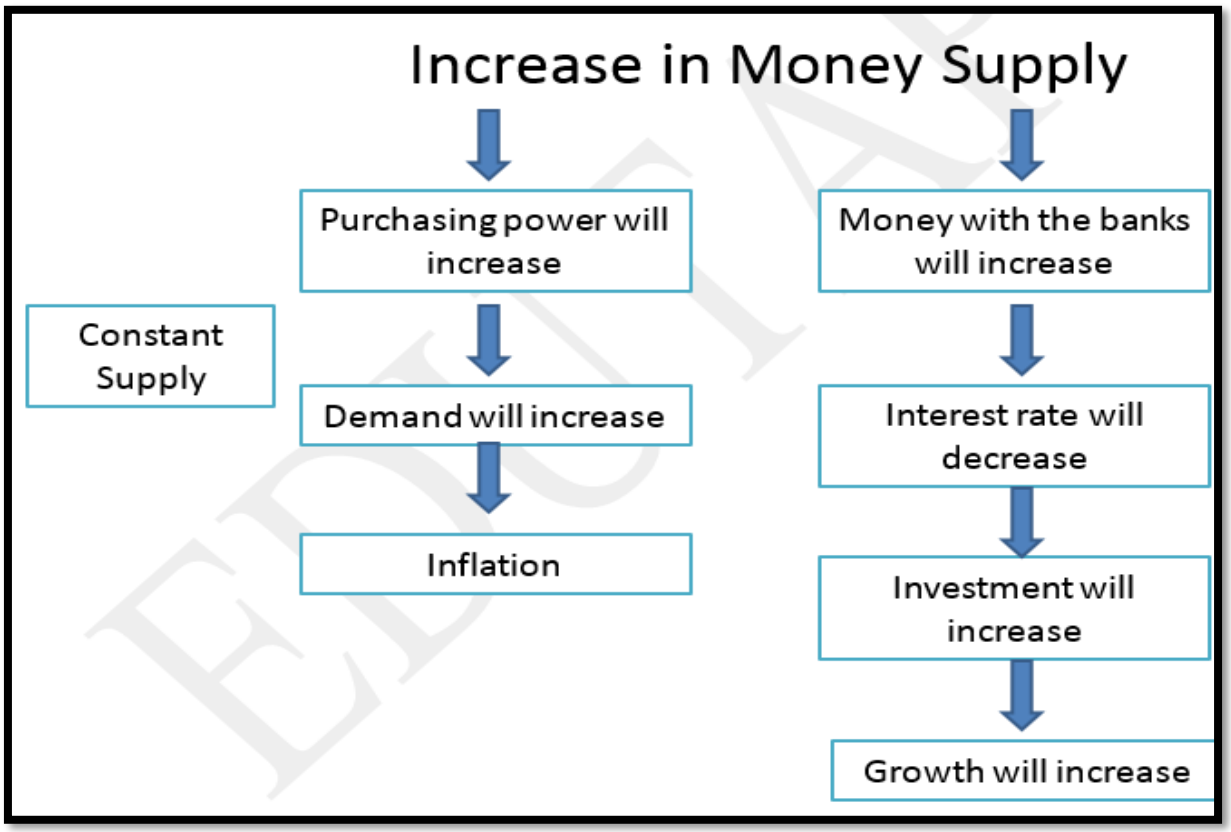
Phillips Curve

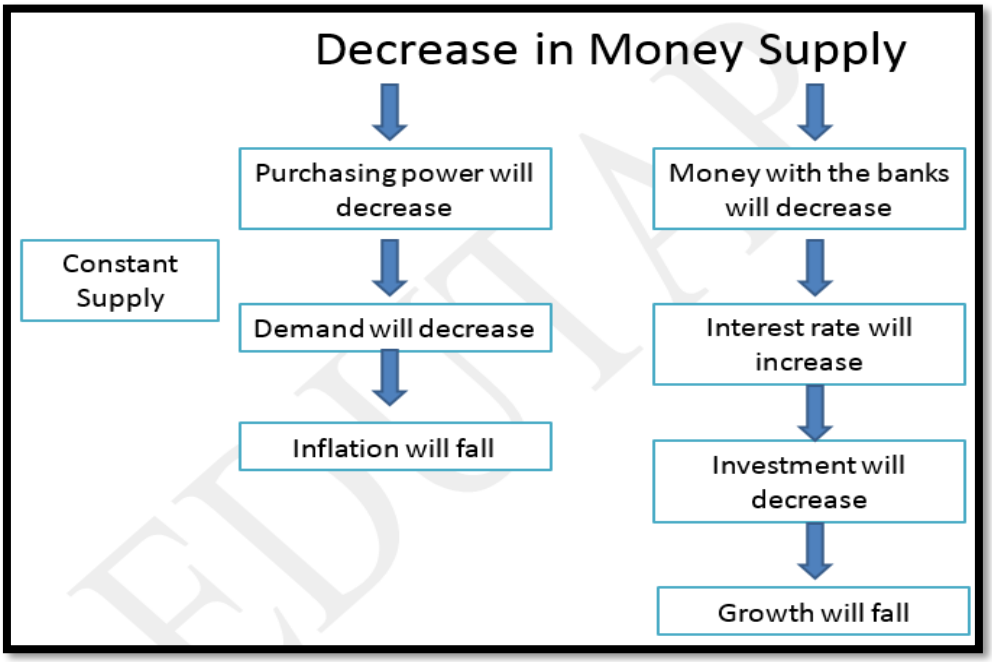
During the 1960s, this idea was among the most important theories of the modern economists. This concept is known after the economists who developed it—**Alban William Housego Phillips (1914–75).** It is a **graphic curve which advocates a relationship between inflation and unemployment** in an economy. As per the curve there is a **'trade off' between inflation and unemployment**, i.e., an **inverse relationship** between them. The curve suggests that **lower the inflation, higher the unemployment** and **higher the inflation, lower the unemployment.**

6 Measures to control inflation

In the earlier section, we learned that high levels of inflation can be disastrous for any econo my. Hence, it is vital that we strive contain inflation to reasonable levels. There are different measures through which we can control inflation.

6.1 Monetary Measures:





In nutshell,

- To ARREST INFLATION/ REDUCE INFLATION, we have to REDUCE THE MONEY SUPPLY
- To INDUCE INFLATION / REDUCE DISINFLATION/ REDUCE DEFLATION, we have to INCREASE THE MONEY SUPPLY

Different monetary measures for controlling inflation are summarized below:

TOOL	TO COMBAT INFLATION	TO INDUCE INFLATION/ COMBAT DISINFLATION/ COMBAT DEFLATION
CRR	INCREASE	DECREASE
SLR	INCREASE	DECREASE
REPO RATE	INCREASE	DECREASE
REVERSE REPO	INCREASE	DECREASE
MSF	INCREASE	DECREASE
OPEN MARKET OPERATIONS	RBI SELLS G SECS	RBI BUYS G SECS

Policy	Effect	Liquidity in Market	Inflation	Type of Policy
CRR/SLR/REPO/REVERSE REPO/ BANK RATE	↑	↓	↓	contractionary
	↓	↑	↑	expansionary

6.2 Fiscal Measures to control inflation

- Apart from monetary policy, the government also uses fiscal measures to control inflation.
- **The two main components of fiscal policy are government revenue and government expenditure**.
- In fiscal policy, the government controls inflation either by reducing private spending or by decreasing government expenditure, or by using both. It reduces private spending by increasing taxes on private businesses. When private spending is more, the government reduces its expenditure to control inflation.

However, in present scenario, **reducing government expenditure is not possible** because there may be certain on-going projects for social welfare that cannot be postponed. Besides this, the government expenditures are essential for other areas, such as defense, health, education, and law and order. In such a case, reducing private spending is more preferable rather than decreasing government expenditure. When the government reduces private spending by increasing taxes, individuals decrease their total expenditure.

6.3 Price Control

- Another method for ceasing inflation is preventing any further rise in the prices of goods and services.
- In this method, **inflation is suppressed by price control**, but cannot be controlled for the long term.
- In such a case, the basic inflationary pressure in the economy is not exhibited in the form of rise in prices for a short time. Such inflation is termed as suppressed inflation.

7 Measuring Inflation

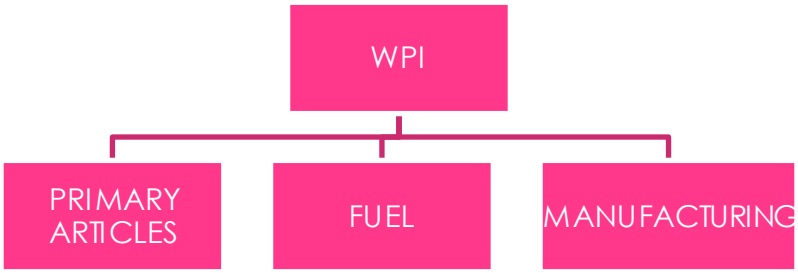
7.1 WPI

The Wholesale Price Index (WPI) is the price of a representative basket of wholesale goods.

- It consists of **3 categories**: (IN DECREASING ORDER OF WEIGHT)

1. **Manufacturing**
2. **Primary articles**
3. **Fuel and power**

Note that **WPI contains NO SERVICES**



- **The basket of WPI has 697 items (earlier 676)**
- The **BASE YEAR is 2011-12 (earlier 2004-05)**

The **data for WPI is released by the OFFICE OF ECONOMIC ADVISOR, Dept of Industrial Policy and Promotion, Ministry of Commerce and Industry.**

NOTE ON RECENT REVISION IN BASE YEAR OF WPI

- The base year of All-India WPI has been revised from **2004-05 to 2011-12** to align it with the base year of other macroeconomic indicators like the Gross Domestic Product (GDP) and Index of Industrial Production (IIP).
- The current series is the **seventh revision.**
- The revision entails shifting the base year to 2011-12 from 2004-05, changing the basket of commodities and assigning new weights to the commodities.

For the new series with base 2011-12=100, a Working Group was constituted on 19th March 2012 **chaired by Late Dr. Saumitra Chaudhuri**, Member, erstwhile Planning Commission and comprised most stakeholders.

Highlights of the changes introduced in the new series are summarized below:

Major Group	Weights		No. of Items		No. of Quotations	
	2004-05	2011-12	2004-05	2011-12	2004-05	2011-12
ALL COMMODITIES	100.00	100.00	676	697	5482	8331
PRIMARY ARTICLES	20.12	22.62	102	117	579	983
FUEL & POWER	14.91	13.15	19	16	72	442
MANUFACTURED PRODUCTS	64.97	64.23	555	564	4831	6906

New Features

- In the new series of WPI, prices used for compilation do not include indirect taxes in order to remove impact of fiscal policy.
- A new **"WPI Food Index"** will be compiled to capture the rate of inflation in food items.
- Seasonality of fruits and vegetables has been updated to account for more months as these are now available for longer duration.
- Item level aggregates for new WPI are compiled using Geometric Mean (GM) following international best practice and as is currently used for compilation of All India CPI.
- A high-level Technical Review Committee has been set up for the first time to carry out dynamic review process in order to keep pace with the changing structure of the economy.

Primary Articles

In the Primary Articles, new vegetables and fruits such as Radish, Carrot, Cucumber, Bitter Gourd, Mosambi, Pomegranate, Jack Fruit, Pear etc have been added.

In the mineral group items like Copper Concentrate, Lead Concentrate and Garnet have been added whereas Copper Ore, Gypsum, Kaolin, Dolomite, Magnesite have been deleted. Natural Gas has been added as a new item.

Fuel and Power

In the Fuel and Power Major Group, the index for non-coking coal will also be available at a disaggregated level based on Gross Calorific Value (GCV) to cater to the requirements of diverse user groups:

- Non-Coking Coal G1 to G6 [GCV > 5500 Kcal/kg.]
- Non-Coking Coal G7 to G14 [GCV 3100 Kcal/kg to 5500 Kcal/kg]
- Non-Coking Coal G15 to G17 [GCV < 3100 Kcal/kg.] The item coke has been dropped.

The index for electricity in the new series will be compiled as a single item in comparison to the separate indices according to usage in agriculture, industry, domestic, commercial, and railways in 2004-05 series. In the new series, monthly average rate of sale of power of 49 selected generating stations covering Hydro and Thermal sectors is being used to compile the index for electricity.

In the Mineral oil sub-group, Light Diesel Oil has been deleted in view of its decreasing importance while Petroleum coke has been added as a new item owing to its growing importance. There have been some changes in weights of the retained mineral fuels. The number of quotations has been increased significantly to give wider geographical coverage.

Manufactured Products

A major review of manufactured products has been carried out. Accordingly, the number of 2-digit groups has been increased from 12 to 22 in the new series in keeping with National Industrial Classification (NIC) 2008. Around 173 new items like Conveyer Belt, Rubber Tread, Steel Cables, Tissue Paper, Wooden Splint, XLPE Compound have been added while 135 items like Khandsari, Papad, Video CD-Players, etc., have been dropped.

Most Recent updates regarding WPI restructuring

In the year 2019, The Government of India has decided to constitute a Working Group for the revision of the current series of Wholesale Price Index (Base 2011-12). The 18-member working group was chaired by Prof. Ramesh Chand

The Office of Economic Adviser, Department for Promotion of Industry & Internal Trade will be the nodal office for the Working Group and will process the report / recommendation of the Group for further necessary action.

The Terms of Reference of the Working Group are:

- To select the most appropriate Base Year for the **preparation of a new official series of Index Numbers of Wholesale Price (WPI) and Producer Price Index (PPI) in India.**
- To review commodity basket of the current series of WPI and suggest additions / deletions of commodities in the light of structural **changes in the economy witnessed since 2011-12**
- To review the existing system of price collection in particular for manufacturing sector and suggest changes for improvement.
- To decide on the **computational methodology to be adopted for monthly WPI/PPI**.
- To examine the existing methodology of compilation of PPI approved by Technical Advisory Committee on **Series of Prices and Cost of Living and suggest further improvement in compilation and presentation**. The Working Group may recommend roadmap for switch over from WPI to PPI.
- To **examine the method of computing linking factor adopted so far and suggest appropriate change in method of computing linking factor, if necessary.**
- To suggest any other improvements as may be necessary for enhancing the reliability of the official series of WPI / PPI

7.2 CPI

Consumer Price Indices (CPI) released at national level are:

o CPI for Industrial Workers (IW)
o CPI for Agricultural Labourers (AL)/ Rural Labourers (RL)
o CPI (Rural/Urban/Combined)

- CPI for Industrial Workers (IW)
  - The Ministry of Labour and Employment releases the new series of Consumer Price Index for Industrial Worker (CPI-IW) with base year 2016.
  - The CPI-IW is mainly used for determining dearness allowance (DA) paid to central/state government employees and workers in the industrial sectors besides measuring inflation in retail prices, fixation and revision of minimum wages in scheduled employments.
- CPI for Agricultural Labourers
  - The Consumer Price Index for Agricultural Labourers (CPI-AL) has **1986–87 as its base year** with 260 commodities in its basket. The data is collected in 600 villages with a monthly frequency and has three weeks' time lag.
  - This index is used for **revising minimum wages for agricultural labourers in different states**. As the consumption pattern of agricultural labourers has changed since 1986–87 (its base year), the **Labour Bureau proposes to revise the existing base year of this index**. For the revision, the consumer expenditure data collected by the NSSO during its 61st NSS Round (2004–05) is proposed to be used.
- **CPI (Urban) and CPI (Rural)** are new indices in the group of CPI and has a wider coverage of population. This index compiled by **National Statistical Office, Ministry of Statistics and Programme Implementation**, tries to encompass the entire population and is likely to replace all the other indices presently compiled.

  In India, **RBI uses CPI (combined) released by NSO for inflation purpose.**

  CPI measures changes in the price level of a basket of consumer goods and services purchased by households.

  The number of items in CPI (Combined) basket are 908 (448 for Rural and 460 for Urban)

- **Items covered under CPI-combined are as follows:** The basket of items and their weighing diagrams have been prepared using the **Modified Mixed Reference Period (MMRP)** data of Consumer Expenditure Survey (CES), 2011–12, of the 68th Round of National Sample Survey (NSS). This has been done to make it consistent with the international practice of shorter reference period for most of the food items and longer reference period for the items of infrequent consumption.
  - Food and beverages
  - Pan, tobacco and intoxicants
  - Clothing and footwear
  - Housing
  - Fuel and light
  - Miscellaneous
- The **BASE YEAR is 2011-12** (has been **recently changed from 2009-10**)
- **The data for CPI is released by National Statistics Office (NSO) under MOSPI (Ministry of Statistics and Programme Implementation)**

- The Reserve Bank of India (RBI) has started using CPI-combined as the sole inflation measure for the purpose of monetary policy.
- As per the agreement on Monetary Policy Framework between the Government and the RBI dated February 20, 2015, the sole of objective of RBI is price stability and a target is set for inflation as measured by the Consumer Price Index-Combined.

8 Other measures of Inflation

8.1 Consumer Food Price Index

- Consumer Food Price Index (CFPI) is a **measure of change in retail prices of food products** consumed by a defined population group in a given area with reference to a base year.
- The National Statistics Office **(NSO)**, Ministry of Statistics and Programme Implementation **(MOSPI)** started releasing **CFPI for three categories - rural, urban and combined** - separately on an all India basis with effect from **May, 2014**.
- Like CPI, the CFPI is also **calculated on a monthly basis** and methodology remains the same as CPI. The **base year presently used is 2012**. The NSO revised the **Base Year of the CPI and CFPI from 2010=100 to 2012=100** with effect from the release of indices for the month of January 2015.
- **Globally, food price index** is being released by **Food and Agriculture Organization of the United Nations.** The **FAO Food Price Index** is a measure of the **monthly change in international prices** of a basket of food commodities. It consists of the average of **five commodity group price indices (Cereal, Vegetable Oil, Dairy, Meat and Sugar)** weighted with the average export shares of each of the groups.

8.2 WPI Food Index

- After the revision of WPI with the new base year 2011-12, a **new "WPI Food Index"** is being compiled by combining the **"Food Articles" under "Primary Articles"** in WPI and **"Food Products" under "Manufactured Products"** in WPI.
- WPI food index is a new Food price Index **launched on 12 May 2017** as part of revised WPI series with **base year 2011-12**.
- WPI food index **measures the changes in prices of food items** at the **level of producers.**
- Together with the Consumer Food Price Index released by Central Statistics Office, this would help monitor the price situation of food items better.

8.3 Producer Price Index:

- Producer Price Index (PPI) measures the average change in the price of goods and services either as they leave the place of production, called output PPI or as they enter the production process, called input PPI.
- PPI estimates the change in average prices that a producer receives. In PPI, only basic prices are used, while taxes, trade margins and transport costs are excluded. The government is working on a proposal for shifting towards PPI from WPI.

8.4 Housing Price Index:

- A House Price Index (HPI) measures the price changes of residential housing. In India, National Housing Bank computes an index termed NHB **RESIDEX.**

8.5 Service Price Index:

- The idea of Service Price Index is under consideration of the government to measure price changes in service sector.
- The need for this index in India is warranted by growing dominance of service sector in the economy.

9 Appropriate inflation rate

- Experiences of the world economies have shown that a particular level of inflation is considered for an economy to grow.
- Even in the case of India, there is comfort level or select range of inflation which is tried to be maintained. The present range is 2% to 6%.

10 Inflation targeting in India

- The Government amended the Reserve Bank of India Act, 1934 recently.
- The amended Act provides for inflation target to be set by the Government, in consultation with the Reserve Bank, once in every five years and further provides for a statutory basis for the constitution of an empowered Monetary Policy Committee (MPC).

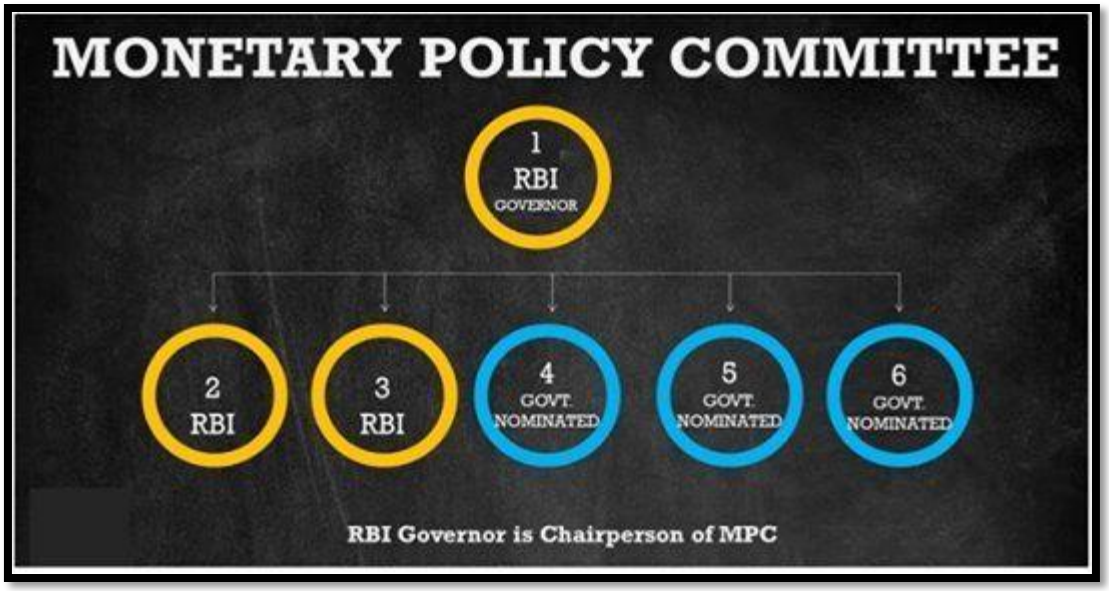
As per the revised monetary policy framework, the Government has fixed the inflation target of 4 per cent with tolerance level of +/- 2 per cent for the period beginning from 5th August 2016 to March 31, 2021.

Update –

The inflation target of the monetary policy framework has been kept unchanged at 4%, plus/minus 2 per cent for the coming five-year period till March 31, 2026.

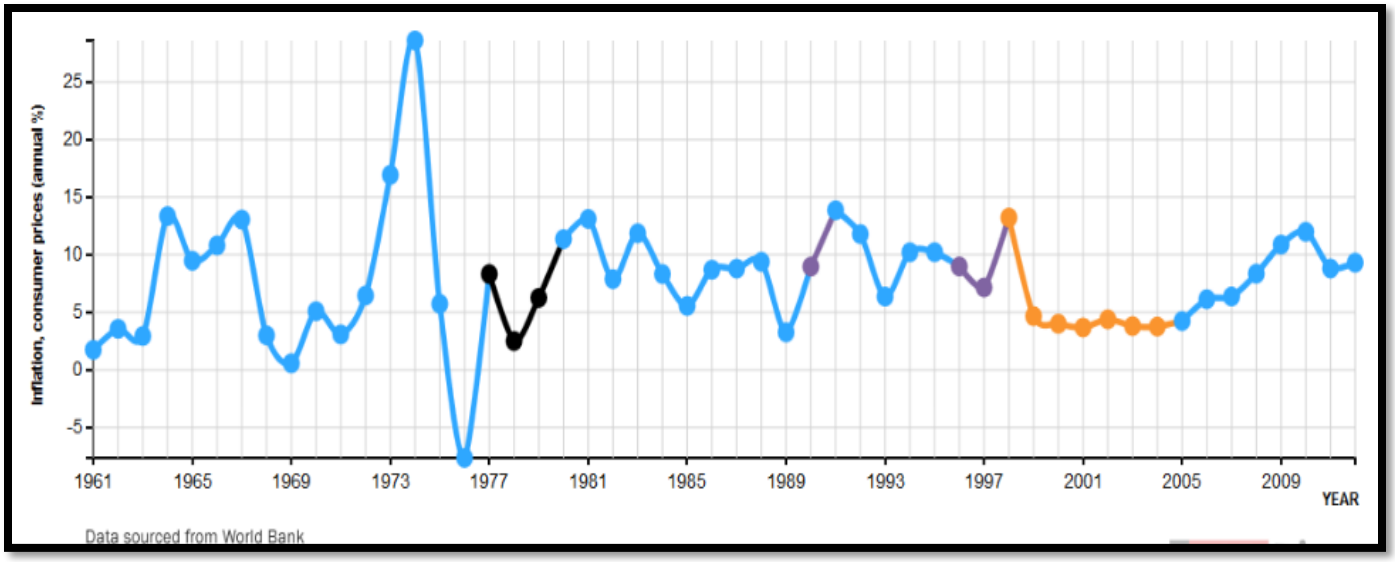
10.1 Composition of MPC:

- Governor of RBI (ex officio Chairperson), Deputy Governor of RBI, in charge of Monetary Policy (Member), One officer of RBI (Member) and three members appointed by Central Government as members.
- Each member will have one vote and the governor gets a casting vote in case of tie.
- While the **majority voice of the committee will be final in deciding the interest rates.**
- The government members to MPC will be appointed by the Central Government on recommendations of a **search-cum-selection committee headed by the Cabinet Secretary,** with RBI governor; Secretary, Economic Affairs; and three experts as members.



11 Trends in Inflation in India

- **In the early days of the Indian republic**, other than 1956, inflation stayed at a controlled level below 10%. No one could even set their own prices, since everything was government controlled. At some level integration issues would have given rise to price validity problems as well.
- **In the 60s, we faced spiky inflation** as wars hit our economy – the Chinese war in 62, and then the war with Pakistan in 65. Prices of wholesale goods spiked and after India devalued it's currency, things got slightly better, with inflation going below the zero level in 1969.
- **The 70s saw the great oil spike which led to extremes in inflation** but later the Emergency calmed things down because.
- **After '77, when the emergency was lifted, prices spiked again**, and spiked to over 18% in 1981-82. The rest of the 80s were about benign inflation as rules were eased, slowly, over supply and prices. But government control flourished, with manufacturers being told how much of any commodity they could produce, how much they could increase capacity by, every year.
- **Inflation spiked again in the 90s** as India devalued and went through a payment's crisis. The liberalization of the early 90s helped keep inflation low as supply pressures eased, and productivity increased. But even through the Russian crisis, the Asian currency crisis and the downturn after the 2000 dot-com bust, Indian inflation remained above zero and didn't spike into double digits.
- **The 2008 oil price rise** saw inflation temporarily go into double digits (not reflected in annual numbers) and interest rates went all the way to 9%.



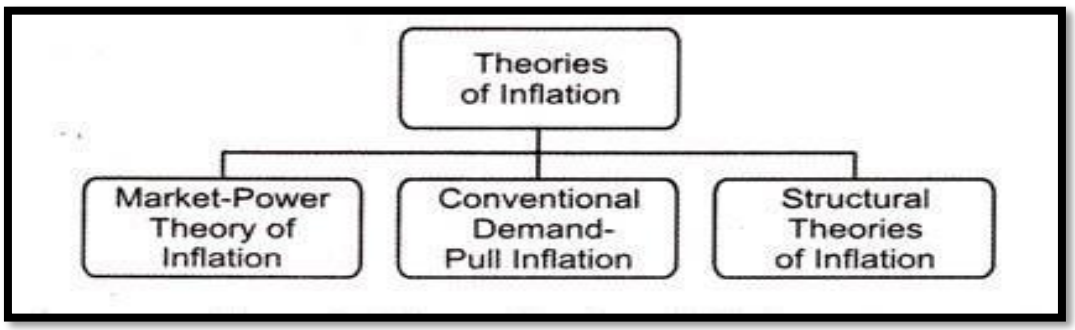
India's inflation rate has been on the rise over the last decade. However, it has been decreasing slightly since 2010. India's economy, however, has been doing quite well, with its GDP increasing steadily for years, and its national debt decreasing.!

Note: Please refer the latest updated data of recent inflation trends from the current affair magazine.

12 Additional Notes

12.1 Theories of Inflation

There are three main theories of inflation, which are shown in below:



1. **Market-Power Theory of Inflation:**

In an economy, when a single or a group of sellers together decide a new price that is different from the competitive price, then the price is termed as market-power price. Such groups keep prices at the level at which they can earn maximum profit without any concern for the purchasing power of consumers.

According to the advanced version of market power theory of inflation, oligopolists can increase the price to any level even if the demand does not rise. This hike in price levels occurs due to increase in wages (because of trade unions) in the oligopolistic industry.

The increase in wages is compensated with the hike in prices of products. With increase in the income of individuals, their purchasing power also increases, which further results in inflation.

Apart from this, some economists concluded that fiscal and monetary policies are not applicable in oligopoly situations as these policies are not able to control rise in prices levels. These policies would work only when prices rise due to an increase in demand.

2. Conventional Demand-Pull Inflation:

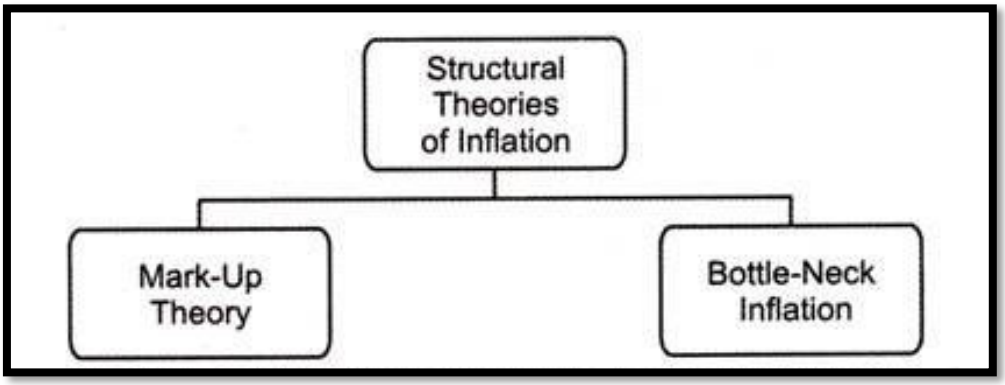
The market power theory of inflation represents one extreme end of inflation. On the other end, the conventional demand-pull theorists believed that the only cause of inflation is the excess of aggregate demand over aggregate supply.

In full employment equilibrium condition, when demand increases, inflation becomes unavoidable. In addition, in full employment condition, the economy reaches to its maximum production capacity. At this point, the supply of goods and services cannot be increased further while the demand of products and services increases rapidly. Due to this imbalance between demand and supply, inflation takes place in the economy.

3. Structural Theories of Inflation:

Apart from the two extreme ends mentioned in the above, there is a middle group of economists called structural economists. According to structural theory of inflation, market power is one of the factors that cause inflation, but it is not the only factor. The supporters of structural theories believed that the inflation arises due to structural maladjustments in the county or some of the institutional features of business environment.

They have provided two types of theories to explain the causes of inflation, which are shown below:



a. Mark-up Theory:

Mark-up theory of inflation was proposed by Prof Gardner Ackley. According to him, inflation cannot occur alone by demand and cost factors, but it is the cumulative effect of demand-pull and cost-push activities. Demand-pull inflation refers to the inflation that occurs due to excess of aggregate demand, which further results in the increases in price level. The increase in prices levels stimulates production but increases demand for factors of production. Consequently, the cost and price both increases.

In some cases, wages also increase without rise in the excess demand of products. This results in fall in supply at increased level of prices as to compensate the increase in wages with the prices of products. The shortage of products in the market would result in the further increase of prices.

Therefore, Prof. Gardner has provided a model of mark-up inflation in which both the factors, demand - cost, are determined. Increase in demand results in the increase of prices of products as the customers spend more on products.

On the other, the goods are sold to businesses instead of customers, then the cost of production increases. As a result, the prices of products also increase. Similarly, a rise in wages results in increase in cost of production, which would further increase the prices of products.

So according to Prof Gardner, inflation occurs due to excess of demand or increases in wage rates; therefore, **both monetary and fiscal policies should be used to control inflation**. Though, these two policies are not adequate to control inflation.

b. **Bottle-Neck Inflation:**

Bottle-neck inflation was introduced by Prof Otto Eckstein. According to him, the direct relationship between wages and prices of products is the main cause of inflation. In other words, inflation takes place when there is a simultaneous increase in wages and prices of products. However, he believed that wage push or market-power theories alone are not able to provide a clear explanation of inflation.

After analysis of inflationary situation, Prof Eckstein says that the inflation occurs due to the boom in capital goods and wage-price spiral. In addition, he also advocated that during inflation prices in every industry is higher, but few industries show a very high price hike than rest of the industries.

These industries are termed as bottle-neck industries, which are responsible for increase in prices of goods and services. In addition, Prof. Eckstein advocated that concentration of demand for products of bottle industries results in inflation.