



## An Analytic study of Inflation in India

### KEYWORDS

Inflation rates, Trends, WPI and CPI in India.

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**ABSTRACT** *This article briefly explains different types of inflation in economics. Inflation's effects on an economy are various and can be simultaneously positive and negative. Negative effects of inflation include an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and savings, and if inflation is rapid enough, shortages of goods as consumers begin hoarding out of concern that prices will increase in the future. Positive effects include ensuring that central banks can adjust real interest rates (to mitigate recessions), and encouraging investment in non-monetary capital projects.*

### Introduction:

In economics, inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation reflects a reduction in the purchasing power per unit of money – a loss of real value in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index (normally the consumer price index) over time.

Some economists maintain that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply, while others take the view that under the conditions of a liquidity trap, large injections are “pushing on a string” and cannot cause significantly higher inflation. Views on which factors determine low to moderate rates of inflation are more varied. Low or moderate inflation may be attributed to fluctuations in real demand for goods and services, or changes in available supplies such as during scarcities, as well as to changes in the velocity of money supply measures; in particular the MZM (“Money Zero Maturity”) supply velocity. However, the consensus view is that a long sustained period of inflation is caused by money supply growing faster than the rate of economic growth.

Today, most economists favor a low and steady rate of inflation. Low (as opposed to zero or negative) inflation reduces the severity of economic recessions by enabling the labor market to adjust more quickly in a downturn, and reduces the risk that a liquidity trap prevents monetary policy from stabilizing the economy. The task of keeping the rate of inflation low and stable is usually given to monetary authorities. Generally, these monetary authorities are the central banks that control monetary policy through the setting of interest rates, through open market operations, and through the setting of banking reserve requirements.

### Objectives:

1. To study the Meaning and Definition of Inflation.
  2. To study the features of Inflation.
  3. To study the types of Inflation and Inflation rates in India.
  4. To study the WPI and CPI of India.
- Secondary Data have used for this Article

### What is Inflation? Meaning

**Inflation** refers to a continuous rise in general price level which reduces the value of money or purchasing power over a period of time. Statistically speaking, inflation is measured in terms of a percentage rise in the price index (i.e. percent-

age rate per unit time) usually for an annum (a year) or for 30-31 days (a month).

### Definition of Inflation:

According to **Crowther**,

“Inflation is a state in which the value of money is falling i.e. the prices are rising”

According to **Coulbourn**,

“Inflation is too much of money chasing too few goods”

### Features of Inflation

**The characteristics or features of inflation are as follows :-**

1. Inflation involves a process of the persistent rise in prices. It involves rising trend in price level.
2. Inflation is a state of disequilibrium.
3. Inflation is scarcity oriented.
4. Inflation is dynamic in nature.
5. Inflationary price rise is persistent and irreversible.
6. Inflation is caused by excess demand in relation to supply of all types of goods and services.
7. Inflation is a purely monetary phenomenon.
8. Inflation is a post full employment phenomenon.
9. Inflation is a long-term process.

### Types of Inflation in Economics

#### 1. Types of Inflation on Coverage

Types of inflation on the basis of coverage and scope point of view:-

- 1) Comprehensive Inflation
- 2) Sporadic Inflation.

#### 2. Types of Inflation on Time of Occurrence

Types of inflation on the basis of time (period) of occurrence:-

1. **War-Time Inflation** **Post-War Inflation**
- 2) **Peace-Time Inflation**
- 3) Types of Inflation on Government Reaction

#### 3. Types of inflation on basis of Government's reaction or its degree of control:-

1. **Open Inflation** 2) **Suppressed Inflation.**

#### 4. Types of Inflation on Rising Prices

Types of inflation on the basis of rising prices or rate of inflation:-

1. Creeping Inflation
  - 2) Chronic Inflation
  - 3) Walking Inflation
  - 4) Moderate Inflation.
  - 5) Running Inflation
  - 6) Galloping Inflation
  - 7) Hyperinflation.
5. Types of Inflation on Causes

**Types of inflation on the basis of different causes:-**

Deficit Inflation, Credit Inflation, Scarcity Inflation, Profit Inflation, Pricing Power Tax Inflation, Wage Inflation, Build-In Inflation, Development Inflation, Fiscal Inflation, Population Inflation, Foreign Trade Induced Inflation, Export-Boom Inflation, Import Price-Hike Inflation.

**6. Sectoral Inflation.**

Demand-Pull Inflation, Cost-Push Inflation.

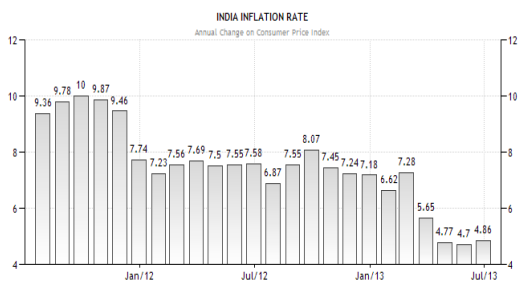
**7. Types of Inflation on Expectation**

Types of inflation on the basis of expectation or predictability:-

**Anticipated Inflation, Unanticipated Inflation.**

The following table shows the inflation rates of India in the last few months:

Month	Inflation Rate
July 2011	8.43%
August 2011	8.99%
September 2011	10.06%
October 2011	9.39%
November 2011	9.34%
December 2011	6.49%
January 2012	5.32%
February 2012	7.57%
March 2012	8.65%
April 2012	10.22%
May 2012	10.16%
June 2012	10.05%



The above table shows that the Annual change on consumer price index between the two year i.e. Jan to July 2012. And Jan to July 2013. It means that the consumer price index has been decreasing from 9.36 to 4.86.

**India Interest Rate**

The benchmark interest rate in India was last recorded at 7.25 percent. Interest Rate in India is reported by the Reserve Bank of India. India Interest Rate averaged 6.57 Percent from 2000 until 2013, reaching an all time high of 14.50 Percent in August of 2000 and a record low of 4.25 Percent in April of 2009. In India, interest rate decisions are taken by the Reserve Bank of India's Central Board of Directors. The official interest rate is the benchmark repurchase rate. This page contains - India Interest Rate - actual values, historical

data, forecast, chart, statistics, economic calendar and news. (2013-08-02)

**How Inflation is Measured in India:**

Inflation is usually measured based on certain indices. Broadly, there are two categories of indices for measuring inflation i.e. Wholesale Prices and Consumer Prices. There are certain sub-categories for these indices.

**What is an Index Number :**

An Index number is a single figure that shows how the whole set of related variables has changed over time or from one place to another. In particular, a price index reflects the overall change in a set of prices paid by a consumer or a producer, and is conventionally known as a Cost-of-Living index or Producer's Price Index as the case may be.

**Price Indexes / Indices used in India :**

In India we use five major national indices for measuring inflation or price levels.

- (A) The Wholesale Price Index (base 1993-94) is usually considered as the headline inflation indicator in India.
  - (B) In addition to Whole Price Index ( WPI ), there are four different consumer price indices which are used to assess the inflation for different sections of the labour force. These are discussed in more details later on.
  - (C) In addition to above five indices, the GDP deflator as an indicator of inflation is available for the economy as a whole and its different sectors, on a quarterly basis
- Now let us discuss the above indices used in India to measure inflation in detail to understand these better.

**Wholesale Price Index (WPI):**

This index is the most widely used inflation indicator in India. This is published by the Office of Economic Adviser, Ministry of Commerce and Industry. WPI captures price movements in a most comprehensive way. It is widely used by Government, banks, industry and business circles. Important monetary and fiscal policy changes are linked to WPI movements. It is in use since 1939 and is being published since 1947 regularly. We are well aware that with the changing times, the economies too undergo structural changes. Thus, there is a need for revisiting such indices from time to time and new set of articles / commodities are required to be included based on current economic scenarios. Thus, since 1939, the base year of WPI has been revised on number of occasions. The current series of Wholesale Price Index has 2004-05 as the base year. Latest revision of WPI has been done by shifting base year from 1993-94 to 2004-05 on the recommendations of the Working Group set up with Prof Abhijit Sen., Member, Planning Commission as Chairman for revision of WPI series. This new series with base year 2004-05 has been launched on 14th September, 2010.

A brief on the historical development of this WPI is given below :-

Base Year	Year of Introduction	No of Items in Index	No of Price Quotations
Week ended 19th August 1939	1942	23	23
End August 1939	1947	78	215
1952-53 (1948-49 as weight base)	1952	112	555
1961-62	July 1969	139	774
1970-71	January 1977	350	1295
1981-82	July 1989	447	2371
1993-94	April 2000	435	1918
2004-05	September 2010	676	5482

Earlier, the concept of wholesale price covered the general idea of capturing all transactions carried out in the domestic market. The weights of the WPI did not correspond to contribution of the goods concerned either to value - added or final use. In order to give this idea a more precise definition, it was decided to define the universe of the wholesale price index as comprising as far as possible all transactions at first

point of bulk sale in the domestic market. Thus the latest WPI has a basket of 676 items with 5482 quotations. The major criticism for this index is that 'the general public does not buy at the wholesale level', thus WPI does not give the actual feeling of the amount of pressure borne by the general public. However, the increase in wholesale prices does affect the retail prices and as such give some feel of the consumer prices.

**Consumer Price Index (CPI) :**

The CPI measures price change from the perspective of the retail buyer. It is the real index for the common people. It reflects the actual inflation that is borne by the individual.

	WPI(All commodities)			WPI - Inflation Rate	CPI (IW)	CPI - AL - Point to Point	CPI - Rural Labourers	CPI - RL - Point to Point
Base Period			2001=100	Point Inflation	1986-87=100	Inflation	1986-87=100	Inflation
Period								
Jan-12	158.70	7.23	198.00	5.32	618.00	4.92	619.00	5.27
Feb-12	159.30	7.56	199.00	7.57	621.00	6.34	623.00	6.68
Mar-12	161.00	7.69	201.00	8.65	625.00	6.84	626.00	7.19
Apr-12	163.50	7.50	205.00	10.22	633.00	7.84	634.00	8.01
May-12	163.90	7.55	206.00	10.16	638.00	7.77	640.00	8.11
Jun-12	164.20	7.25	208.00	10.05	646.00	8.03	648.00	8.54
Jul-12	164.80	6.87	212.00	9.84	656.00	8.61	658.00	8.94

**New Series of CPI Started in 2012**

Therefore, there was a strong feeling that there is a need for compiling CPI for entire urban and rural population of the country to measure the inflation in Indian economy based on CPI. Thus, now Central Statistics Office (CSO) of the Ministry of Statistics and Programme Implementation has started compiling a new series of CPI for the

- (a) CPI for the entire urban population viz CPI (Urban);
- (b) CPI for the entire rural population viz CPI (Rural)
- (c) Consolidated CPI for Urban + Rural will also be compiled based on above two CPIs.

These would reflect the changes in the price level of various goods and services consumed by the Urban and rural population. These new indices are now compiled at State / UT and all India levels. The CPI inflation series is wider in scope than the one based on the wholesale price index (WPI), as it has both rural and urban figures, besides state-wise data. The new series, with 2010 as the base year, also includes services, which is not the case with the WPI series. However, this new series will become comparable only in 2013 when the data for 2012 will also be available for comparison.

**A comparison of this new series with WPI is given below :-**

	WPI	CPI - New Series wef Feb 2012
Base Year	2004-05	2010
Elementary Items	676	200 (Weighted items)
Weightage of Food products (%)	243	49.71
Weightage of Energy products (%)	14.91	9.49
Weightage of Miscellaneous Items (%)	Services not included	26.31

Source- <http://business.mapsofindia.com/inflation/>

CPI is designed to measure changes over time in the level of retail prices of selected goods and services on which consumers of a defined group spend their incomes. Till January 2012, in India there were only following four CPIs compiled and released on national level. (In some countries like UK, Malaysia, Poland it is also known as Retail Price Index).

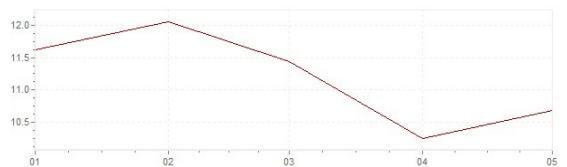
- (1) Industrial Workers (IW) (base 2001),
- (2) Agricultural Labourer (AL) (base 1986-87) and
- (3) Rural Labourer (RL) (base 1986-87)
- (4) Urban Non-Manual Employees (UNME) (base 1984-85),

The first three are compiled by the Labour Bureau in the Ministry of Labour and Employment, and the fourth is compiled by Central Statistical Organisation (CSO) in the Ministry of Statistics and Programme Implementation. These four CPIs reflect the effect of price fluctuations of various goods and services consumed by specific segments of population in the country. These indices did not encompass all the segments of the population and thus, did not reflect the true picture of the price behaviour in the country as a whole.

**Inflation India 2013 (CPI) –**

The inflation chart and table below feature an overview of the Indian inflation in 2013: CPI India 2013. The inflation rate is based upon the consumer price index (CPI). The CPI inflation rates in the table are presented both on a monthly basis (compared to the month before) as well as on a yearly basis (compared to the same month the year before).

Chart - CPI inflation India 2013 (yearly basis)



The average inflation of India in 2013: 11.21 %

Table - 2013 inflation India (CPI)

inflation (monthly basis)	inflation	inflation (yearly basis)	inflation
january 2013 - december 2012	0.91 %	january 2013 - january 2012	11.62 %
february 2013 - january 2013	0.90 %	february 2013 - february 2012	12.06 %
march 2013 - february 2013	0.45 %	march 2013 - march 2012	11.44 %
april 2013 - march 2013	0.89 %	april 2013 - april 2012	10.24 %
may 2013 - april 2013	0.88 %	may 2013 - may 2012	10.68 %
june 2013 - may 2013	-	june 2013 - june 2012	-
july 2013 - june 2013	-	july 2013 - july 2012	-
august 2013 - july 2013	-	august 2013 - august 2012	-

september 2013 - august 2013	-	september 2013 - september 2012	-
october 2013 - september 2013	-	october 2013 - october 2012	-
november 2013 - october 2013	-	november 2013 - november 2012	-
december 2013 - november 2013	-	december 2013 - december 2012	-

<http://www.inflation.eu/inflation-rates/india/historic-inflation/cpi-inflation-india-2013.aspx#sthash.DWXkBwT.dpuf>

#### Conclusions:

1. Inflation's effects on an economy are various and can be simultaneously positive and negative
2. In economics, inflation is a rise in the general level of prices of goods and services in an economy over a period of time
3. Some economists maintain that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply.
- 1) According to Crowther, "Inflation is a state in which the value of money is falling i.e. the prices is rising."

- 2) Inflation is a purely monetary phenomenon is one of the feature of inflation.
- 3) The consumer price index has been decreasing from 9.36 to 4.86 in the year 2012 to 2013.
- 4) There are various types of Inflation and each have various sub types of Inflation.
- 5) India Interest Rate averaged 6.57 Percent from 2000 until 2013, reaching an all time high of 14.50 Percent in August of 2000 and a record low of 4.25 Percent in April of 2009.
- 6) Broadly, there are two categories of indices for measuring inflation i.e. Wholesale Prices and Consumer Prices
- 7) Latest revision of WPI has been done by shifting base year from 1993-94 to 2004-05 on the recommendations of the Working Group set up with Prof Abhijit Sen,, Member, Planning Commission as Chairman for revision of WPI series.
- 8) New series with base year 2004-05 has been launched on 14th September, 2010.
- 9) The Inflation rate trend as on 30/06/2013 are: Last year 4.86, Previous 4.70 and its Average is 7.72.
- 10) Inflation increased from 10.68 to 11.62 according to CPI 2013 (yearly basis)

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