

## **ANALYSIS OF WPI AND CPI FOR PHARMA SECTOR**

The wholesale price Index (WPI) and the Consumer Price Index (CPI) are both important inflation indicators that can help with economic decision-making. The **reserve bank of India (RBI)** uses both indexes to formulate monetary policy and determine interest rates.

### **Inflation:**

Inflation refers to rise in the Prices of goods and services that we use on our daily basis such as food, cloth, house, entertainment, transportation etc., when there is change in the average Price of the basket over a period of time. That's how we measure Inflation.

In India, inflation is primarily measured by two main Indices:

1. Wholesale price index
2. Consumer price index

### **Wholesale Price Index**

The wholesale Price Index (WPI) is a measure of the average change in the prices of the commodities for bulk sale. It measures the change in the overall price of goods before they are sold a retail.

- It measures change in price of goods charged by whole seller.
- WPI releases on a weekly Basis.
- WPI includes only goods.
- It includes primary articles, fuel and power and manufactured goods.
- Base year here is financial year.
- WPI is of importance to those who keep track of wholesale prices.

### **Consumer price Index:**

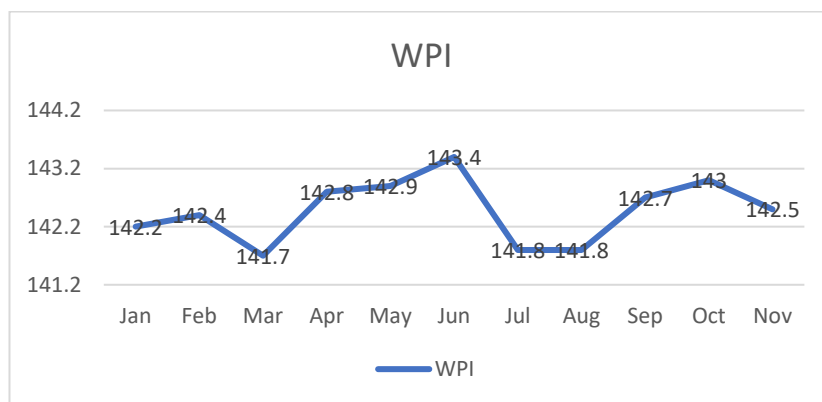
The Consumer Price Index (CPI) measures the average change in price over time of a market basket of consumer goods and services. It measures changes in the purchasing power of a country's currency.

- It measures the change in the retail prices of goods and services.
- CPI releases on a monthly basis.
- CPI includes both goods and services.
- It includes about eight categories of products and services.
- Base year is calendar year.
- CPI is of importance to the general public.

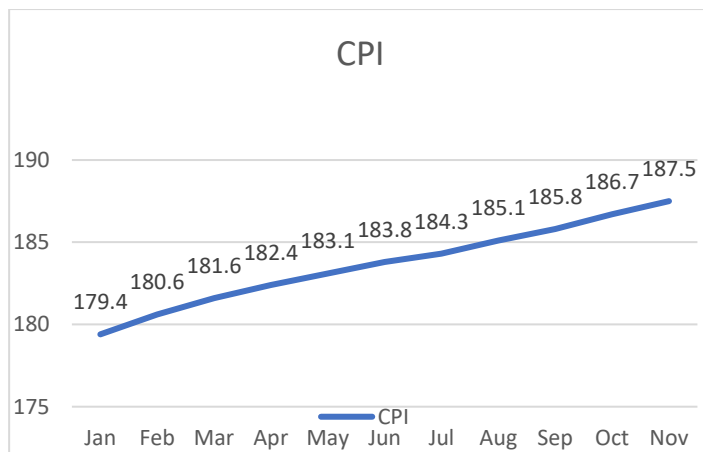
**Data and Source of data:** <https://eaindustry.nic.in/>, <https://mospi.gov.in/>

Month/2023	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
<b>WPI</b>	142.2	142.4	141.7	142.8	142.9	143.4	141.8	142	142.7	143	142.5
<b>CPI</b>	179.4	180.6	181.6	182.4	183.1	183.8	184.3	185	185.8	186.7	187.5

### WPI and CPI in Pharma sector:



We are assessing the wholesale price index points in this based on the data mentioned above. We see from this that the WPI's monthly data fluctuates on a regular basis. We measure the monthly changes in the WPI index values in the Pharma sector using the given data. In this section, we examine how inflation fluctuates, sometimes rising and sometimes falling.

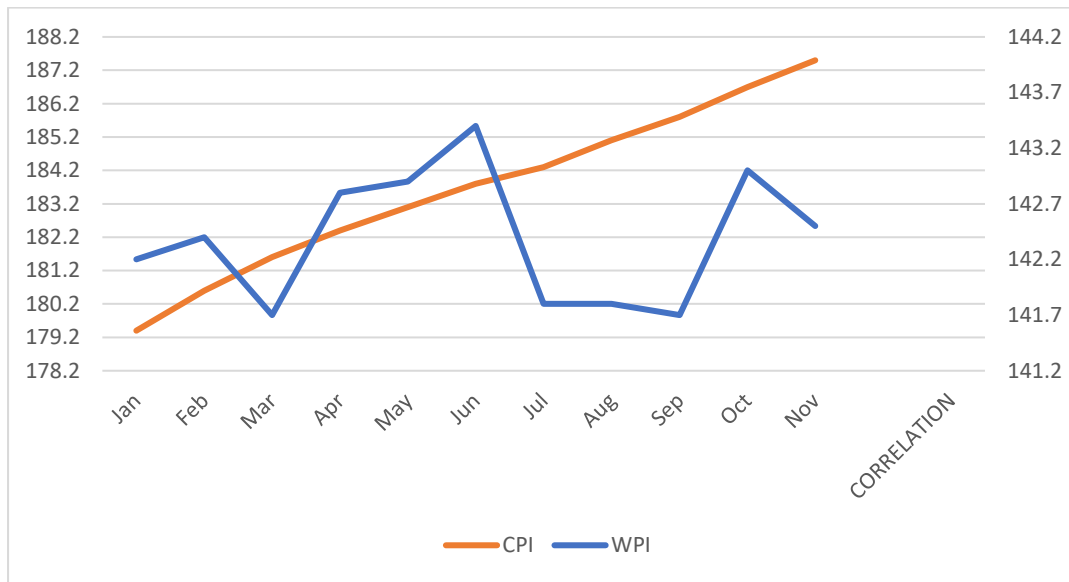


We calculate the CPI index values in the medical industry based on the aforementioned data. It's not the same as WPI. It demonstrates the obvious distinction between WPI and CPI. The monthly fluctuations in the WPI index values are contrasted with the progressive increase in the CPI index values.

## Correlation coefficient test:

Month	WPI	CPI
Jan	142.2	179.4
Feb	142.4	180.6
Mar	141.7	181.6
Apr	142.8	182.4
May	142.9	183.1
Jun	143.4	183.8
Jul	141.8	184.3
Aug	141.8	185.1
Sep	141.7	185.8
Oct	143	186.7
Nov	142.5	187.5
<b>CORRELATION</b>	<b>0.073757</b>	

Based on the correlation test mentioned above, we may infer that there is a positive relationship between WPI and CPI. Furthermore, the correlation's range is -1 to +1. There is a positive relation between WPI and CPI in Pharma sector



## CONCLUSION:

The pharmaceutical industry's WPI and CPI may vary and exhibit different correlations. Variations may arise due to alterations in supply and demand, governmental directives, and consumer preferences. However, in the pharmaceutical industry, there is a positive association between WPI and CPI in 2023.

Here we can conclude that there exists only a positive relation between the WPI and CPI of the index values for the Pharma sector in the year 2023