Indicators for Inflation Targeting

In my last article I had discussed the different measures of inflation and closed by pointing out that the divergent behaviour of CPI and WPI creates a challenge for monetary authorities. In order to understand this issue, it is worth taking a step back to understand the recent developments in monetary policy in India.

India adopted an inflation targeting regime in 2015, initially as an agreement with the RBI and subsequently through an amendment to the RBI Act. This decision was based on a recommendation of the Urjit Patel Committee to the RBI in 2014. This committee also recommended using CPI produced by the Central Statistics Office as the indicator for this purpose. Till then, the RBI had used WPI as the main indicator in monetary policy discussions. The reasons for choosing CPI over WPI were that WPI did not capture price movements in services, and that CPI better captured the inflation experience of consumers. Another factor in favour of the CPI was that it showed similar inflation momentum to CPI-IW (a CPI for industrial workers which is widely used for Dearness Allowance adjustment for both government and public sector employees), but was released much faster, and also had a robust price reporting mechanism.

One of the elements behind the choice of CPI as an indicator for inflation targeting was the feeling that it would be better able to reduce households' inflation expectations. In this connection the Committee made the following curious observation: "an examination of the quantitative inflation expectations of households shows that inflation expectations tended to follow WPI inflation during 2008-09. Post-2011, however, they seem to be following CPI inflation" (para II.33)

This striking observation however has so far not been adequately analysed. As the Committee had noted, CPI-IW has a similar inflation momentum to CPI but has a much longer time series available. This allows us to do a long term comparison of CPI-IW and WPI. The following graph tracks CPI-IW and WPI from April 1983 to till the present date. From the graph it may be observed that till about 2011, CPI-IW and WPI track each other quite closely, except for 2 significant periods. The first occurs around October- November 1998, when CPI-IW inflation had a value of almost 20%, compared to a WPI inflation of 7%. The second deviation occurs in June 2009 when the WPI index has a value of -0.39% as against a CPI-IW inflation of 9.29%. Other than

these 2 striking differences, there is a large coherence between the inflation rates of the CPI-IW and the WPI.

Both these episodes have specific reasons attributed to them. In the first instance, the explanation of the very large consumer price inflation was attributed to the unusual behaviour in vegetables as reflected in the onion price behaviour at the time. The second episode occurs during the Global Financial Crisis.

This long coherence between WPI and CPI-IW does explain in part the Committee's observation that inflation expectations closely track WPI till 2011. Post 2011 however, we find that WPI exhibits a markedly different behaviour from the past, and also diverges from CPI-IW on many occasions. The striking elements which may be noted are the following:

First, inflation as measured by WPI was consistently negative between November 2014 and June 2016; between October 2019 and July 2020; and once again from April 2023 onwards. These long periods of negative WPI inflation are striking because the WPI has never been negative in the previous 30 years, except for the short period during the Global Financial Crisis.

And secondly, after 2011, the WPI shows much higher volatility compared to CPI-IW.

This changed behaviour of WPI occurs around the same time as when India adopted the inflation targeting regime. In fact the first period of sustained negative WPI inflation occurred after the Urjit Patel Committee submitted its recommendations.

Why does this matter?

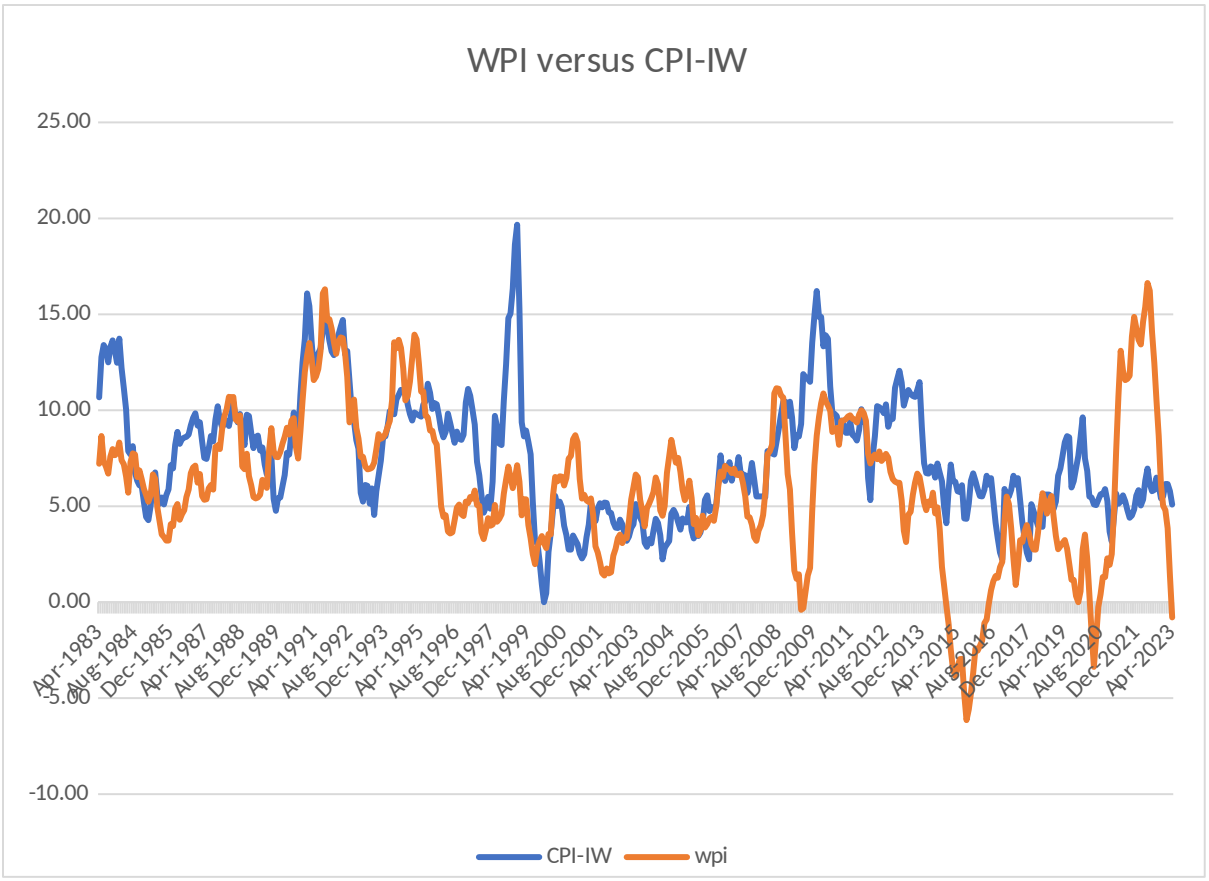
In order to appreciate the implications of negative WPI inflation it is necessary to examine disaggregated commodity-wise WPI data.

Negative WPI inflation in agricultural goods, particularly in horticulture is not unusual and is often a seasonal phenomenon linked to cycles in agricultural production and inadequate storage and processing capacity. However its presence in the manufactured segments is more disturbing. The disaggregated data reveals that negative inflation is not limited to a few

commodities but is quite broad-based. During 2015-16, as many as half of the commodities for which price data was collected exhibited long periods of negative inflation. Similar patterns emerge in later episodes as well.

Negative inflation in manufacturing is important because of the disincentives created. Negative inflation implies that the prices the manufacturer receives at the time of sale are typically less than what was prevailing when production began. It may not be a coincidence to note that this period when we see repeated references to manufacturing distress and the NPA crisis.

It should be pointed out that this phenomenon is not limited to India. A recent NBER working paper ('The Wedge of the Century: Understanding a Divergence Between CPI and PPI Inflation Measures') highlights that "the two inflation gauges did co-move strongly in the last century but the correlation has fallen substantially since the start of this century." This disconnect between CPI and WPI/PPI that has emerged in recent decades poses a special challenge for Central Banks in that too strong a focus on inflation targeting focussed on the CPI risks driving the economy into a recession and adds to the problems of the manufacturing sector. The paper goes on to suggest that "this divergence [is] based on a lengthening of world production chains since 2000." The article goes onto point out that PPI may be a better indicator for Inflation targeting. This view is finding increasing resonance amongst many analysts. It is to the credit of India's Reserve Bank that in the last few years it has been sensitive to this risk and been willing to tolerate CPI inflation at the upper band of the mandate. It worth asking whether the government should relook at the legislative mandate created in 2016 and modify the inflation mandate to cover both WPI and CPI. It would be even better if The Office of the Economic Advisor expedites implementation of the recommendations of the Working Group on PPI to launch an experimental PPI as the first step in moving to a regular index. This would facilitate the RBI shifting to a inflation target based on the PPI.


WPI versus CPI-IW
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
Apr-1983
Aug-1984
Dec-1985
Apr-1987
Aug-1988
Dec-1989
Apr-1991
Aug-1992
Dec-1993
Apr-1995
Aug-1996
Dec-1997
Apr-1999
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Apr-2023
CPI-IW
wpi