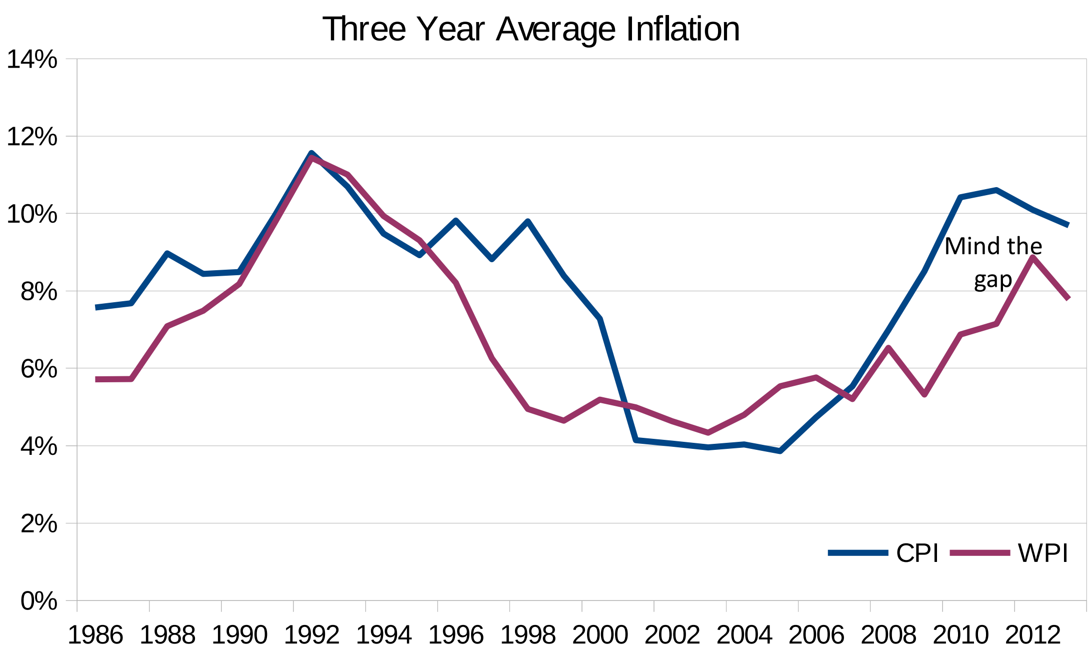
Life of CPI

Monetary policy in India has shifted decisively to using the Consumer Price Index (CPI) based inflation rather than Wholesale Price inflation since September 2013. We look at the history of CPI inflation, its trend and the outlook for inflation over the coming year. This will help us understand the policy stance of the RBI in the months to come.

In the past the RBI has looked at WPI as the primary policy inflation benchmark. Among the reasons have been the fact that the data was more frequently available (until the new series with base 2004-05, WPI used to be released weekly) and the component data was more completely available. Wholesale price index data are available for nearly 800 commodities, groups and sub-groups, while CPI data are available only for 27 groups and sub-groups. The main reason though was the fact that CPI and WPI have been highly correlated historically meaning that targeting WPI automatically meant that CPI inflation would come under control. The chart below shows the 3-year average inflation as measured by CPI and WPI. For this chart we use the CPI for Industrial Workers as the new combined all-India CPI has a very short history.



As may be seen from the chart, CPI and WPI have broadly tracked each other. Low WPI usually meant low CPI (even if it came with a lag). In the recent past – since 2008 – two clear breaks are visible. First, the ten year trend of WPI inflation below 6% was broken. Second, while both CPI and WPI inflation have risen, CPI inflation has been substantially above WPI inflation.

Recognizing this, the new RBI governor, Dr Raghuram G Rajan, has shifted the focus of RBI on containing CPI rather than WPI inflation. A target to bring CPI inflation down to 6% over two years has been set. If the historic relationship re-emerges, this would imply WPI inflation too staying below 6%.

Components of CPI

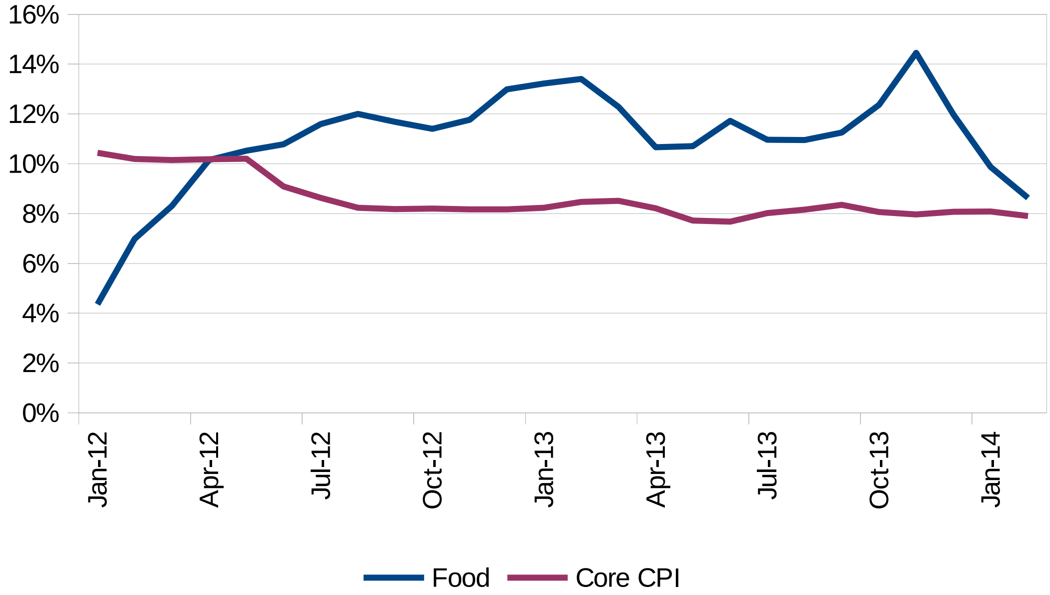
The new combined CPI that we use today is split roughly equally between food and non-food items. The broad break-up of the inflation basket and the rate of price increase is given in the table below (data as on Feb 2014):

Component	Weight (%)	Year-on-year increase (%)
A. Food	49.7	8.6
B. Fuel	9.5	6.1
C. Core	40.8	7.9
Housing	9.8	9.9
Others	31	7.2
Total CPI	100	8.1

Firstly it is apparent that both food and core inflation are close to the 8% mark, bringing the overall inflation rate to 8.1%. Secondly, the two components having the highest rates of inflation – food and housing – have relatively high weights as well. That is, their contribution drives inflation substantially.

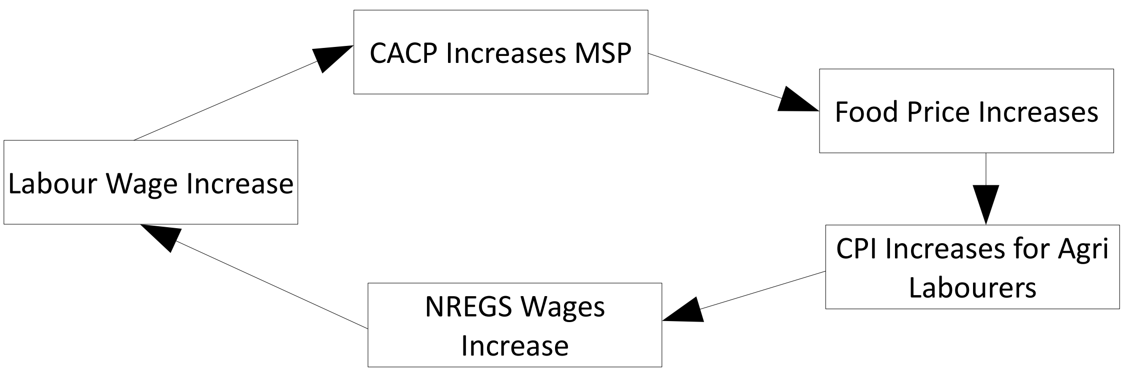
Food inflation

The substantial increase in price of food articles has been a key driver of inflation in recent years. Food inflation also partly explains why there has been a large difference in WPI and CPI inflation. Food accounts for nearly half of the CPI basket while being only about 14% by weight of the WPI (24.3% if we include manufactured food products). As food inflation has been higher than non-food inflation over the past several years, this has led to a wedge between CPI and WPI inflation. Since mid-2012 core inflation has remained about 8% while food inflation has ranged between 10 and 14%.

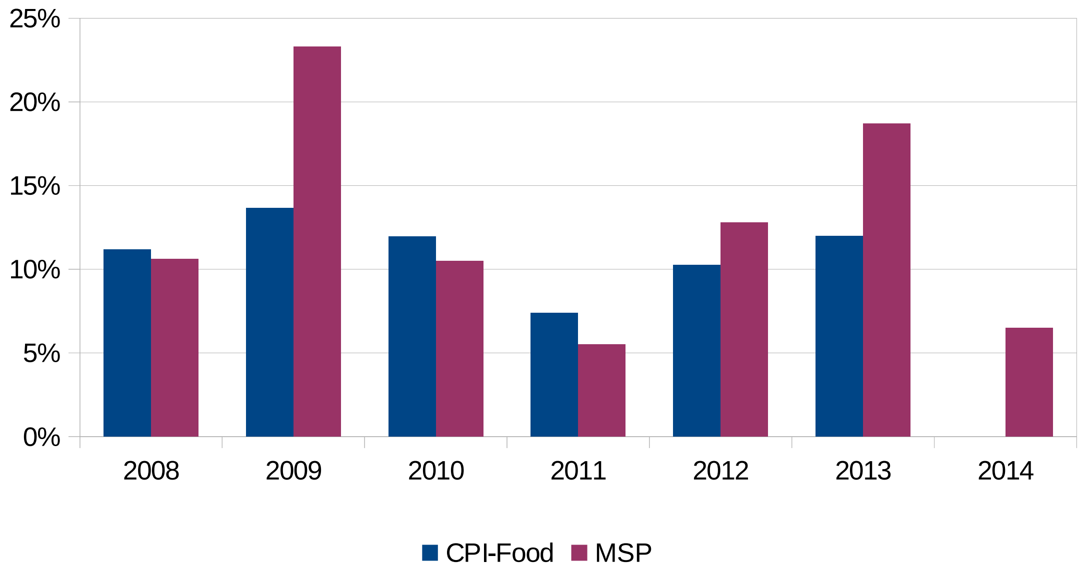


Food inflation has been traditionally ignored as it is perceived to be a volatile component that is subject to unpredictable weather patterns. However when it is half of the consumption basket and persists over time irrespective of good and bad monsoons, we must look at the key driver of food inflation and try to anticipate its trend.

Major crops in India are subject to a regime of Minimum Support Prices (MSP) that is designed to provide farmers with a remunerative price in case of a sharp fall in open market price of their produce. Over the past several years we have seen a substantial increase in MSP of major crops that have fuelled food inflation. In turn food inflation affects CPI for agricultural labourers and pushes up costs – leading to a vicious cycle of cost-price inflation. Some analysts have attributed the increased cost to the National Rural Employment Guarantee Scheme (NREGS) whose wages are linked to CPI inflation. MSP is set based on an analysis of costs by the Commission on Agricultural Costs and Prices (CACP).



The impact of MSP increase on food inflation can be seen in the following chart. MSP increases are announced for a crop year that starts with the Kharif crop (rain-fed, sown around the time of the monsoon) and ends with the Rabi crop (irrigated, winter crop). Given the cycle of crop harvesting and reaching the market, changes in MSP in one year reflect in food prices in the following year as the harvest of the Kharif crop starts in the fourth quarter of the calendar year.



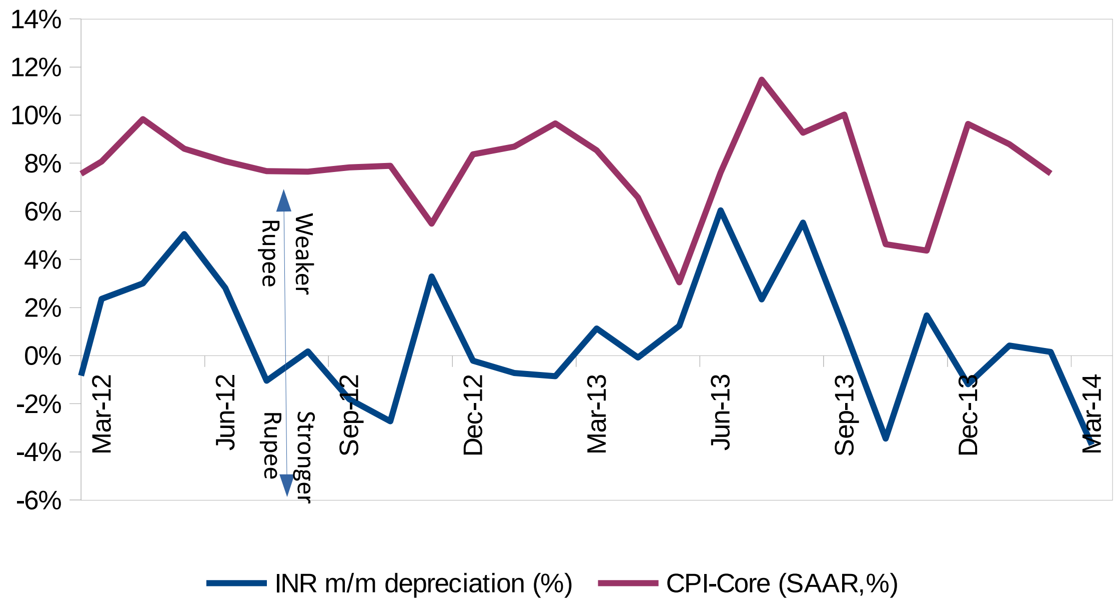
The chart shows the average annual increase in MSP of major crops with increases in CPI-Food in the following year. For this calculation we have taken the food component of CPI under the new series since 2012 and for Industrial Workers for older periods. Weighted average MSP increases are calculated using the individual crop weight assigned in the WPI. Individual crop weights are not available for CPI.

As may be seen there is a strong correlation between CPI-Food and MSP increases. It is instructive to note that following the bad monsoon of 2009, food inflation actually decreased as the MSP increases were lower that year. This shows that the dominant factor for food inflation is not the pattern of monsoon, rather it is the cost-push of MSP increases.

For 2014 this portends good news. Last year saw weighted average MSP increase of only 6.5%, the lowest since crop year 2010-11. This compares to an 18.7% increase in the previous year. Thus we may expect that food inflation in 2014 would be much lower than in 2013. Indeed the start of the year has been good as food inflation has declined to 8.6% from a peak of over 14% last year.

Core Inflation

Unlike food inflation which has been high and volatile, core inflation has persisted close to the 8% mark for a while. The year-on-year stability masks monthly movements which have been correlated with the currency. Weak currency has been associated with rising core inflation while strong currency periods have seen core inflation subside. In this analysis we have used a process of seasonal adjustment to arrive at the monthly annualized rate of inflation (SAAR – seasonally adjusted annual rate).



Especially in the summer of 2013 (May to August) we saw a sustained a sharp fall of the Rupee. The following period from June to September saw core CPI accelerate sharply. During these four months annualized core CPI rose to 9.6% compared to an average of 7% in the five months since, when the Rupee has shown a stable to appreciating trend. While the currency remains stable – supported by lower current account deficits and higher foreign exchange reserves of the RBI – we should expect to see core inflation to remain on a softer trend.

While the currency impact would affect several goods and services that are traded, a large component of core inflation is housing. Housing accounts for nearly a quarter of core CPI and a tenth of overall CPI. In the CPI calculation housing inflation is measured in a roundabout way. Firstly the index measures house rents rather than house prices. While the actual share of house rents in rural and urban India was found to be only 0.5% and 6.2% respectively (NSSO 68th round) the CPI uses weights of 0% and 22.5% for rural and urban respectively leading to a combined weight of 9.8%. The explanation for this increase is to attribute an “owner’s equivalent rent” to owners of houses (who are not renters). This leads to a much higher weight for house rents than is actually incurred.

A compounding flaw is that instead of surveying rents, house rent allowance changes are used to calculate rent changes. That is to say, if an employee's HRA increases that increase is applied to CPI even if the actual rent paid does not increase. Since wages and HRA (in the public sector at least) are linked to CPI inflation, one year's high CPI inflation leads to next year's high core inflation. To reduce core inflation we need to see headline CPI inflation fall.

Summary and conclusion

The sustained high level of CPI inflation over the past five to six years has led many to believe that inflation is entrenched at high levels. However there is reason to expect inflation to soften in the coming months.

Food inflation is driven by increases in minimum support prices more than the pattern of monsoon. Thus the low MSP increase for crop year 2013-14 gives hope to a fall in food inflation this year. In the coming months we will watch the new government's stance on MSP which would go a long way towards determining the inflation rate for 2015.

Core inflation on the other hand is driven more by currency and housing. The strength that the Rupee has shown since September – and indeed since the US Fed announced tapering in December could lead to a moderation of core inflation in the next several months. True moderation of core inflation can only occur when the HRA-CPI nexus is broken through a fall in headline inflation.

The RBI has been wise therefore to set itself a two year time frame to contain inflation below 6%. In the current year low food inflation should ensure that its target of 8% by January 2015 will be met. This will go a long way towards regaining credibility. For four years between 2010 and 2013 the RBI has missed its year-end inflation target of 5%. In three of these years the actual year-end inflation was between 7.7 and 10.4% (i.e. up to double of the target rate). In 2014, RBI appears to have contained WPI inflation (4.7% in Feb). If RBI meets its 2015 target the markets and the economy at large will begin to accept a lower inflation regime (inflation expectations would be reduced). This is the channel through which RBI can contain long term inflation.

The RBI has projected a trajectory for inflation that takes the CPI to 8% by January 2015 and 6% by January 2016. It has indicated that if it appears that we will meet the 6% target sooner, they would look to cut rates (and if the disinflationary process takes longer they may hike). From the above it would appear that we are at an inflection point for inflation and the trajectory for the coming year is for lower inflation. Currently the bond markets are pricing in inflation levels of 8% with the benchmark 10-year at 9%. As the RBI reclaims credibility on inflation, the bond markets will begin to price off an inflation level of 6% rather than the 8% today. This presents the opportunity to make substantial gains as yields drop over the next 4-6 quarters.

Sources of data: Ministries of Agriculture and Labour, Central Statistical Organisation, National Sample Survey Organisation, Office of the Economic Advisor, Reserve Bank of India, Bloomberg. Data as at 7th April 2014