

3. RECENT DEVELOPMENTS IN INFLATION

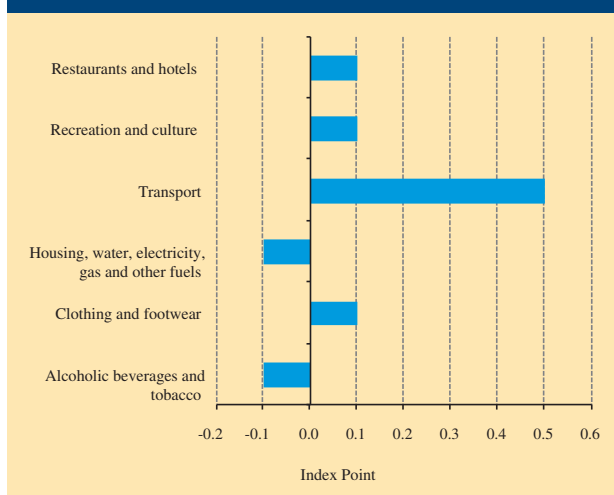
Since the last Inflation Report, headline inflation has been rather steady while y-o-y inflation has dropped substantially after having hovered within a narrow range. A decline in the price of food products which more than offset the increase in bus fares drove y-o-y inflation downwards. The core measures of inflation continue to indicate moderate inflationary pressures.

3.1 Consumer Prices

Effective April 2013, the Consumer Price Index (CPI) has been calculated on the basis of an updated basket of goods and services derived from the 2012 Household Budget Survey conducted by Statistics Mauritius. The base period for this new CPI series is the twelve-month period January 2012 to December 2012.

Since the last Inflation Report, the CPI has increased to 103.3. The largest contributor to the CPI increase was 'transport', more specifically the increase in bus fares, which contributed 0.5 index point to the increase in the CPI. 'Clothing & footwear', 'restaurants & hotels' and 'recreation & culture' each added 0.1 index point to the CPI while 'alcoholic beverages & tobacco' and 'housing, water, electricity, gas & other fuels' each withdrew 0.1 index point from the CPI (Chart 3.1).

Chart 3.1: Weighted Contributions to the Change in CPI: February 2013 - August 2013



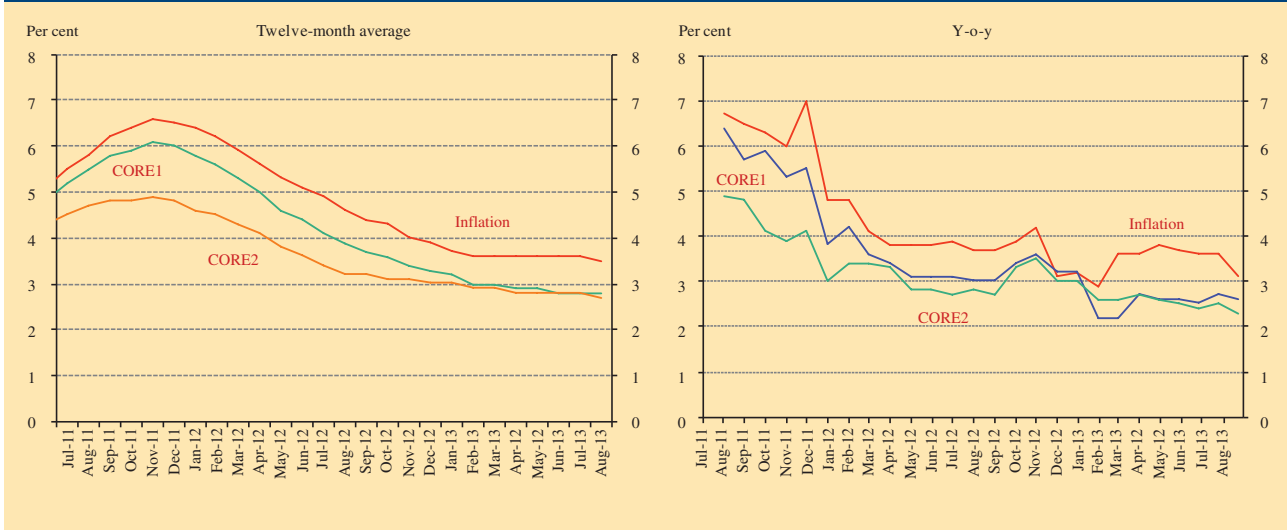
Sources: Statistics Mauritius and Bank of Mauritius.

Headline inflation edged down slightly to 3.5 per cent in August 2013, after remaining steady at 3.6 per cent in the preceding five months. Y-o-Y inflation hovered within a narrow range of 3.6 per cent and 3.8 per cent between February 2013 and July 2013 as base effects remained favourable, external price pressures continued to be subdued and the rupee exchange rate remained relatively stable. In August 2013, contrary to expectations, y-o-y inflation fell noticeably to 3.1 per cent on the back of a decline in the price of food products, which more than offset an increase of 12 per cent in bus fares. As a result, 'food and non-alcoholic beverages' contributed 0.5 percentage point to y-o-y inflation in August 2013 while 'alcoholic beverages and tobacco' and 'transport', respectively contributed 1.1 and 0.6 percentage points.

Movements in the underlying inflation measures remained moderate. Y-o-Y CORE1 inflation rose to 2.6 per cent in August 2013, from 2.2 per cent in February 2013, while CORE2 inflation fell from 2.6 per cent in February 2013 to 2.3 per cent in August 2013 (Chart 3.2).

The y-o-y food price inflation went down from 3.5 per cent in February 2013 to 1.6 per cent in August 2013, reflecting low dynamics in the prices of vegetables and other food products on the domestic market. The unexpected decrease in food prices in August 2013 was a first over the last ten years. Other divisions also experienced declines that could not have been expected gauging from past price behaviour. Box 1 provides an understanding of these recent price dynamics.

Chart 3.2: CPI Inflation

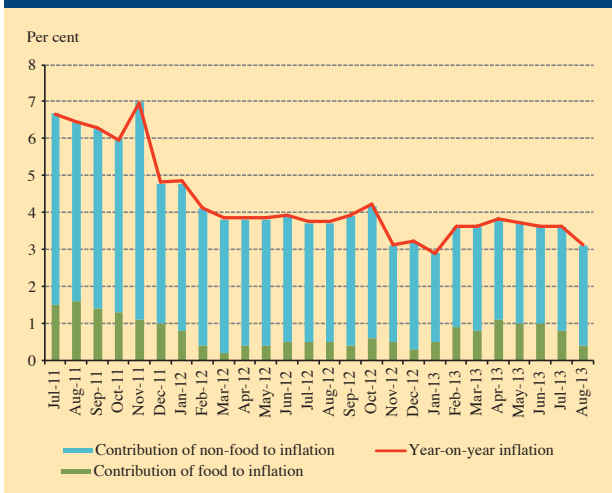


Sources: Statistics Mauritius and Bank of Mauritius.

Non-food inflation rose from 3.6 per cent in February to 3.9 per cent in March 2013, mainly on account of the hike in the prices of domestic petroleum products. It was at 3.6 per cent by the end of August 2013 (Chart 3.3).

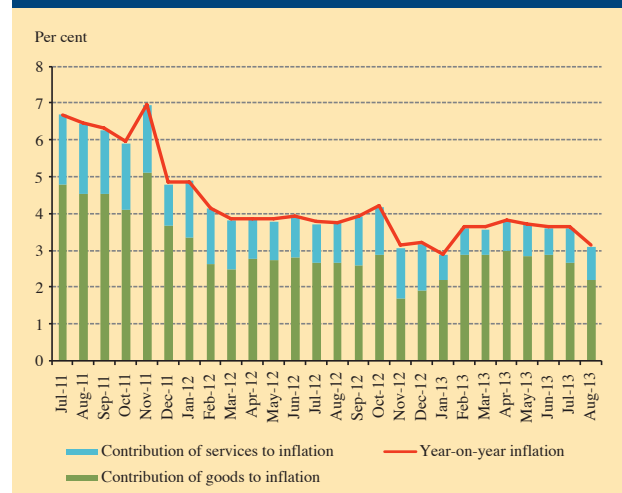
Y-o-Y goods inflation, which had hovered between 4.0 per cent and 4.5 per cent, declined significantly to 3.3 per cent in August 2013, partly reflecting the fall in food prices. Services inflation rose from 1.9 per cent in February 2013 to 2.7 per cent in August (Chart 3.4).

Chart 3.3: Y-o-Y Food and Non-Food Inflation



Sources: Statistics Mauritius and Bank of Mauritius.

Chart 3.4: Y-o-Y Goods and Services Inflation



Sources: Statistics Mauritius and Bank of Mauritius.

Box I

Understanding Recent Price Dynamics

Historical data from 2003 onwards showed that the current situation of low growth and low inflation in 2013 is not exceptional. High real GDP growth rates are generally associated with high inflation rates and vice-versa.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Y-o-Y Inflation (Dec)	3.9	5.6	3.9	11.9	8.7	6.7	1.5	6.1	4.8	3.2	
GDP Growth Rate	4.4	4.8	2.7	5.6	5.7	5.5	3.1	4.2	3.6	3.4	3.2
Cumulative Monthly Changes in the CPI: May to August											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Food & Non-Alcoholic Beverages	2.3	0.5	0.8	6.7	4.1	6.4	1.4	1.1	1.1	1.6	-1.2
Alcoholic Beverages & Tobacco	3.7	6.5	3.1	20.8	9.0	1.7	0.4	-0.2	0.4	0.0	-0.2
Clothing & Footwear	2.1	0.3	0.3	2.3	2.0	0.8	4.4	2.5	2.4	1.8	0.9
Housing, Water, Electricity, Gas & other fuels	1.8	2.4	1.1	4.4	0.9	-0.3	0.2	-0.1	0.5	0.0	-0.6
Furnishings, Household Equipment & Routine Household Maintenance	1.1	1.4	2.1	3.6	2.4	2.7	1.5	2.1	1.1	1.6	-0.1
Health	1.3	3.8	4.2	3.1	5.6	3.9	1.0	2.7	0.1	2.9	0.3
Transport	-0.4	4.8	-1.1	8.6	6.0	12.7	1.8	3.0	0.4	-0.4	0.4
Communication	-0.8	-0.3	-0.2	-3.9	0.0	-3.2	0.6	0.0	-0.1	0.0	0.1
Recreation & Culture	0.8	-0.8	0.0	3.2	-0.9	-0.3	0.6	0.5	1.0	-0.4	3.4
Education	1.4	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.6	0.2
Restaurants & Hotels	1.3	5.0	1.9	14.3	4.7	5.2	1.0	2.6	0.6	0.6	0.3
Miscellaneous Goods & Services	3.0	2.9	-0.2	3.3	2.9	2.8	1.6	2.3	1.7	0.9	-0.3

The cumulative May to August month-on-month changes in the CPI are computed for each year since 2003 for comparison. The year 2013 in the table above stands out relative to the past. Indeed, it is the first time since 2003 that the sub-index for food and non-alcoholic beverages recorded a significant drop with declines also being noted in many more divisions in 2013. Moreover the magnitude of the decline is in most cases bigger than in the past. With regard to food, except for meat and dairy, all other food products recorded cumulative falls.

It is argued that the cumulative decline in the CPI in 2013 from May to August is mainly attributable to the market microstructure and price-setting behaviour (and not necessarily to a change in macroeconomic fundamentals) as supermarkets and hypermarkets change their business model to increase profits with intermittent price discounts and “sales” throughout the month, especially for goods nearing their expiry dates, rather than towards month-end as it used to be in a recent past. Statistics Mauritius collects prices in supermarkets and hypermarkets between the 12th and 18th of the month for food and non-durable household goods with an expiry date of 3 months and above. Lately it appears that price collections have been reflecting such discounts or “sales”.

Research on the CPI has been inconclusive about whether intermittent price discounts, or “sales” should be incorporated in the consumer price index as there is a potential to bias the measurement of inflation.

3.2 Import Prices

Since a large proportion of goods in the CPI basket are imported, the fall in goods inflation was reflected to some extent in the measure of imported inflation. The latter is derived from the price indices of the imported components of the CPI basket.

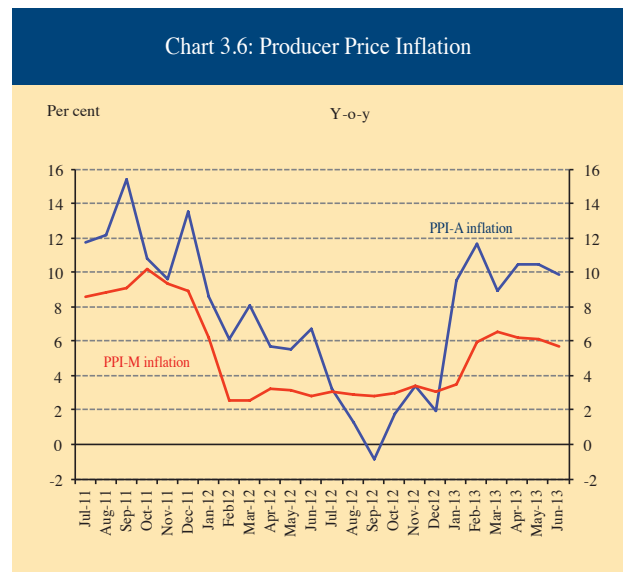
The Import Price Index (IPI), which is available on a quarterly basis from Statistics Mauritius, provides another measure of the change in imported prices. The IPI fell for three consecutive quarters to 121.8 in 2013Q2, representing a drop of 1.8 per cent compared with 2012Q2. Over the year, the drop in the IPI resulted from decreases in the prices of ‘machinery and transport equipment’ (-13.7 per cent) and ‘mineral fuels, lubricants and related materials’ (-4.2 per cent), which were partly offset by increases in the prices of ‘beverages and tobacco’ (+13.2 per cent) and ‘food and live animals’ (+8.5 per cent) (Chart 3.5).

3.3 Producer Prices

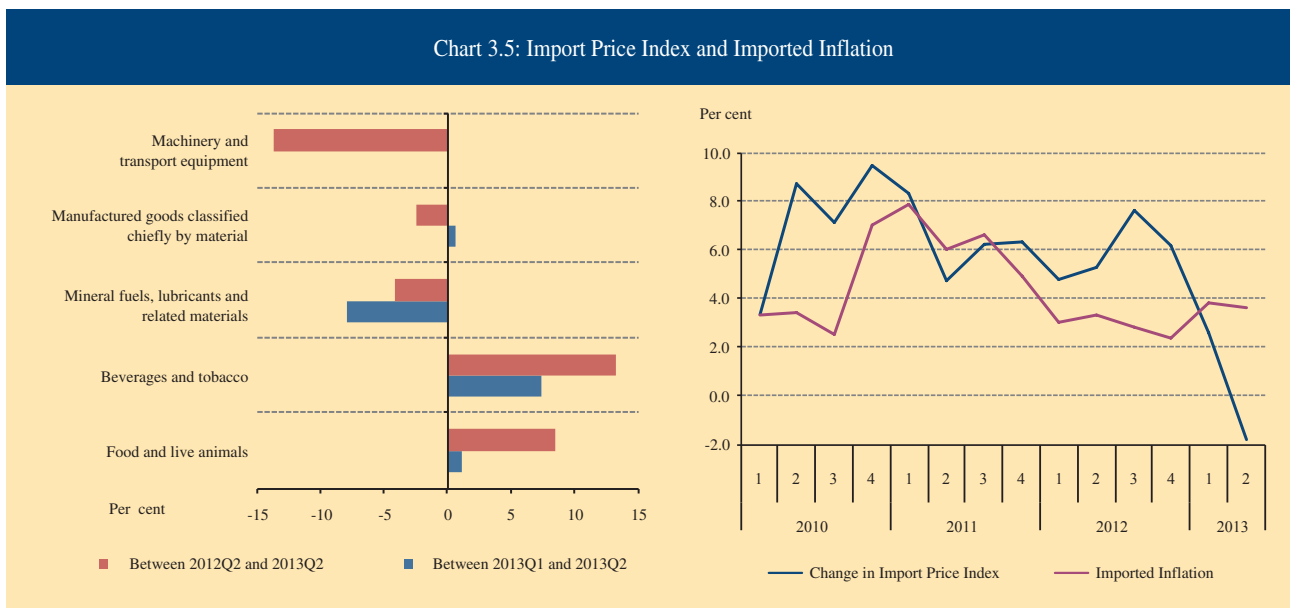
Latest data available for June 2013 show that at the production level, agricultural prices firmed up on account of net increases in the prices of fresh vegetables and fruits. Y-o-Y PPI-A inflation rose to 9.9 per cent in June 2013, up from 6.8 per cent in June 2012. In absolute terms, the PPI-A increased to 118.0 index points, reflecting the increase in the sub-

index ‘crop products’, which accounts for nearly 76 per cent of the overall weight.

In manufacturing, the y-o-y PPI-M inflation increased to 5.6 per cent in June 2013, up from 2.8 per cent in June 2012. In absolute terms, the PPI-M rose from 127.1 index points in June 2012 to 134.3 index points, reflecting the rise in the sub-index ‘manufacture of food products/manufacture of beverages’, which accounts for nearly 61 per cent of the overall weight (Chart 3.6).



Source: Statistics Mauritius.



Source: Statistics Mauritius.

3.4 Inflation Expectations

The Bank’s Inflation Expectations Surveys carried out between August 2012 and August 2013 indicate that the proportion of respondents perceiving inflation to be low initially increased from 18.8 per cent in August 2012 to 22.9 per cent in February 2013 before falling to 17.4 per cent in August 2013 (Chart 3.7). Concurrently, the proportion of respondents who believed that prices had gone up during the past 12 months rose from 64.6 per cent to 69.6 per cent. Some 10.9 per cent of respondents viewed inflation to have remained unchanged over the past 12 months.

In most of the surveys, “external factors”, followed by “changes in aggregate demand” were seen as the two most important reasons for inflation. In August 2013, “changes in the exchange rate” superseded “changes in aggregate demand” as the second most important factor behind inflation.

The results of the surveys showed that the majority of respondents (around 84 per cent on average) expected inflation to go up over the next 12 months. In the August 2013 survey, respondents expected the mean inflation rate to reach 4.1 per cent by December 2013 before rising to 4.5 per cent by June 2014 and to 4.7 per cent a year ahead (Chart 3.8).

Chart 3.7: Perception of Inflation

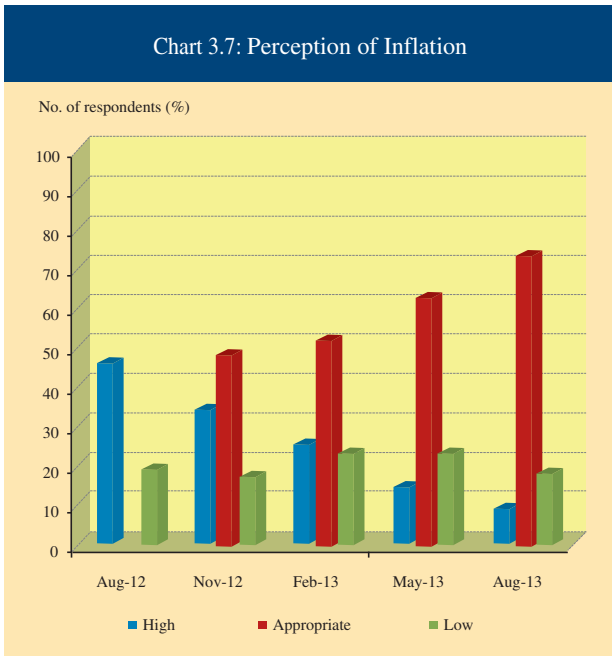
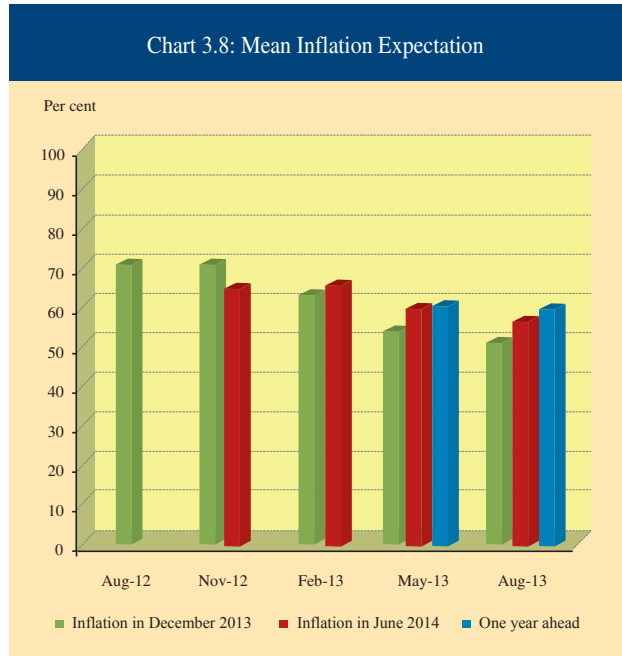


Chart 3.8: Mean Inflation Expectation



Box II

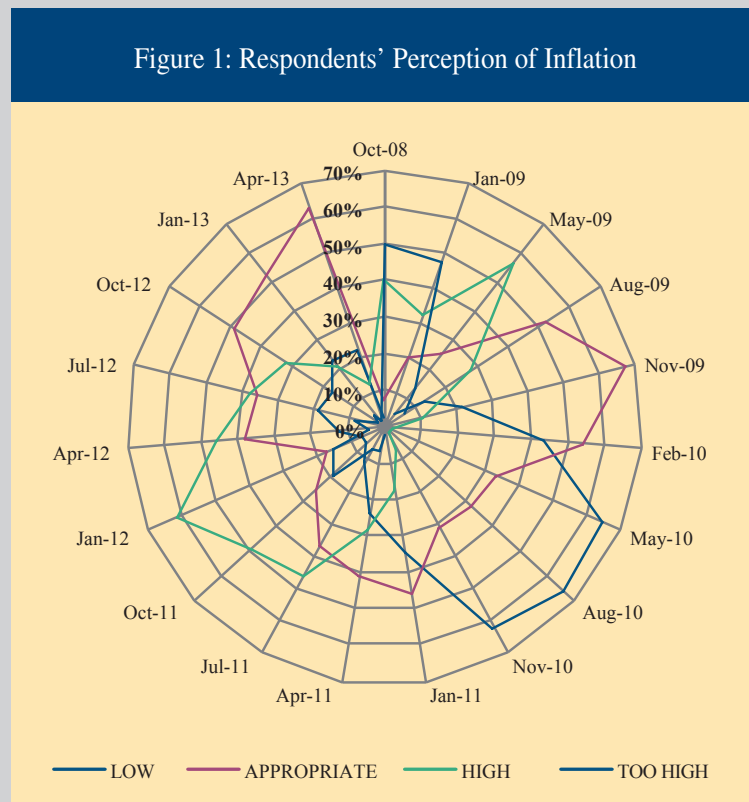
Quantifying results from the Inflation Expectations Surveys

The Inflation Expectations Survey, which the Bank has conducted on a quarterly basis since October 2008, gathers the opinion of 50 stakeholders from the financial and real sectors on inflation trends within the economy. Using the qualitative data collected from the 20 surveys conducted so far, this Box computes a perception index and an opinion coefficient that merge the views of all respondents into single indicators to obtain a better gauge of stakeholders' sentiment.

I. The Perception Index

The Inflation Expectations survey, among others, asks respondents how they have perceived inflation during the twelve-month period ending in the month of the survey. Respondents have the choice between “low”, “appropriate”, “high” and “too high”.

Figure 1 shows the evolution of respondents' perception of inflation over the 20 surveys. In October 2008, with inflation nearly reaching double-digit, 50 per cent of respondents deemed the rate “too high”. Thereafter, and up to November 2010, as inflation took a declining trend, the majority of respondents' perception of inflation moved, in turn, to “high”, “appropriate” and “low”. Lately, with inflation rather contained, the majority of respondents have perceived inflation as “appropriate”.

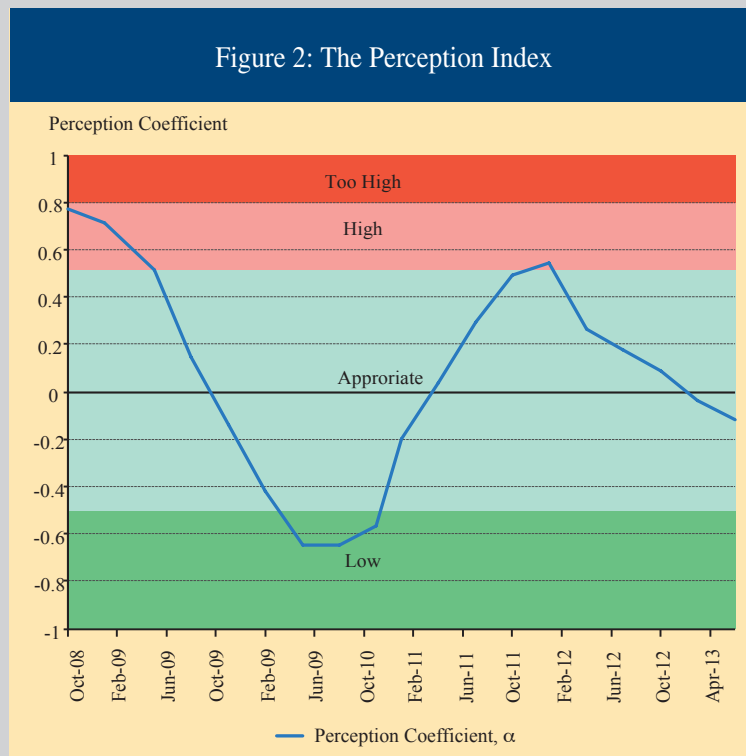


To obtain a better gauge of stakeholders' sentiment on inflation, it is necessary to combine all respondents' answers into a single indicator. A perception index is thus computed by summing up respondents' weighted responses :

$$\alpha = \sum (\text{Perception \%} * \text{Weight})$$

where α is the perception index, which can vary between -1 and +1.

Considering the data available, boundaries have been defined to indicate respondents' perception about the inflation rate. Figure 2, which displays the perception index, shows that since late 2011, stakeholders have considered the levels of inflation as 'appropriate'.



II. The Opinion Coefficient

The survey also asks stakeholders for their opinion on price movements during the preceding 12 months and their expectations for the forthcoming 12 months. Respondents have the choice among “up”, “unchanged” and “down”.

To combine all answers to these two questions into two distinct indicators similar to the perception index, respondents' answers are weighted and an opinion coefficient is then computed as the sum of the weighted responses .

¹ Respective weights of -1, 0, 0.75 and 1 are attributed to the 4 possible responses, that is, “low”, “appropriate”, “high”, “too high”.

² Respective weights of +1, 0 and -1 are allocated to the possible responses “up”, “unchanged” and “down”.

$$\beta = \sum(\text{Opinion \%} * \text{Weight})$$

where β is the opinion coefficient, which can vary between -1 and +1.

The weights applied effectively show the net balance of responses, that is, how many more respondents think that prices were up or would go up. For example, if 50 per cent of respondents viewed that prices were up in the preceding 12 months and 30 per cent thought that prices were down, then there were 20 per cent (50-30=20) more respondents who thought that prices had gone up. A positive opinion coefficient or net balance implies that more respondents are seeing inflation moving up while a negative coefficient means that more respondents think that inflation has gone down. As its name indicates, the opinion coefficient or net balance data is opinion based and does not quantify actual changes in the headline inflation.

Figures 3.1 and 3.2 below show the opinion coefficients on inflation for the 12 months preceding each survey and for the forthcoming 12 months. Figure 3.1 also shows headline inflation and Figure 3.2 headline inflation 12 months forward. While the percentage of respondents who thought that inflation had gone up during the past year did not change much over the recent surveys, there was an increasing proportion of respondents who believed that inflation would go up 12 months ahead.

Figure 3.1

Figure 3.2

