

Inflation Expectations Survey of Households: March 2011 (Round 23)*

This article presents the findings of Inflation Expectations Survey of Households conducted in the January–March 2011 quarter; the 23rd round in the series. The survey captures the inflation expectations of 4,000 urban households across 12 cities for the next three-month (April–June 2011) and for the next one-year (April 2011–March 2012).

The inflation rates from this survey represent the inflation expectations of 4,000 urban households based on their individual consumption baskets and, hence, these rates are not to be considered as predictors of any official measure of inflation. The households' inflation expectations provide useful directional information on near-term inflationary pressures and also supplement other economic indicators to get a better indication of future inflation. The survey results are those of the respondents and not necessarily shared by the Reserve Bank of India.

The current round of the survey shows that inflation expectations of households for the next three-month and for next one-year ahead are lower at 11.9 per cent and 12.7 per cent respectively, from 12.4 per cent and 13.1 per cent assessed during the earlier round of survey. The survey findings, however, indicate that households expect inflation to rise further by 40 and 120 basis points during next three-month and next one-year, respectively, from the perceived current rate of 11.5 per cent. Households' expectations of general price rise were mainly influenced by movements in food prices. The percentage of respondents expecting price rise has gone down for all product groups (viz., general prices, food products, non-food, household durables, housing and services). On category-wise inflation expectations, daily-wage workers and housewives expected higher inflation rates compared to other categories. Across the cities, Bangalore registered the highest inflation expectations and Patna registered the lowest expectations.

I. Introduction

Reserve Bank of India has been conducting Inflation Expectations Survey of Households (IESH) on a quarterly basis, since September 2005. The survey

* Prepared in the Division of Household Surveys, Department of Statistics and Information Management. The previous article on the subject was published in April 2011 RBI Bulletin.

elicits qualitative responses on expected price changes (general prices as well as prices of specific product groups) in the next three-month as well as in the next one-year and quantitative responses on current, three-month ahead and one-year ahead inflations. While inflation affects purchasing power, inflation expectations affect people's behavior in ways that have a long-term economic impact. Inflation expectations of households are subjective assessments and are based on their individual consumption baskets and, therefore, may be different from the official inflation numbers released periodically by the government.

II. Data Coverage & Methodology

The single-page survey schedule (Annex) designed for the IESH has been organised into six blocks. The first block seeks respondents' particulars including name, contact details, gender, age and occupation (category). The second and third blocks seek product-wise price expectations for three-month ahead and one-year ahead, respectively. The fourth block assesses the respondents' feedback on RBI's action to control inflation. The fifth block collects the rate of inflation of the respondent for three time points – current, three-month ahead and one-year ahead. The last block which has been added since the last survey round (October–December 2010) captures the information on the amount paid by the respondents for the purchase of major food items, viz., Milk (per litre), Wheat-atta (per kg), Rice (per kg), Chana dal (per kg) and Tur dal (per kg) during last one month.

II.1 Data Coverage

The Reserve Bank conducts this survey in 12 cities on a quarterly basis. The major metropolitan cities, viz., Delhi, Kolkata, Mumbai and Chennai are represented by 500 households each, while another eight cities, viz., Jaipur, Lucknow, Bhopal, Ahmedabad, Patna, Guwahati, Bangalore and Hyderabad are represented by 250 households each. The respondents are well spread

**Table 1: Respondents' Profile (Category) –
Share in Total Sample**

Category of Respondents	Share in Total (%)	Target Share (%)
Housewives	29.4	30.0
Self-Employed	21.1	20.0
Other Employees	15.4	15.0
Financial Sector Employees	9.8	10.0
Retired Persons	9.1	10.0
Daily Workers	9.6	10.0
Other categories	5.8	5.0
Total	100	100

Note: Sample proportion above is for the March 2011 survey

across the cities to provide a good geographical coverage. The male and female respondents in the group are usually in the ratio of 3:2. The category-wise representation of the respondents is presented in Table 1. The sample coverage is nearly as per the target in all rounds.

II. 2 Information collected

The price expectations are sought for general prices and for five product groups (food products, non-food products, household durables, housing and services). The general price comprises prices of all the product groups taken together. The options for responses are (i) price increase more than current rate, (ii) price increase similar to current rate, (iii) price increase lower than current rate, (iv) no change in prices and (v) decline in prices. The first three of the five options pertain to the respondents' expectations

on the rate of future price increase compared to the current rate. These expectations are sought from the respondents for three-month ahead as well as one-year ahead period. The inflation expectations of the respondents that represent the year-on-year changes in prices are collected through Block 5. The inflation rates are collected in intervals – the lowest being 'less than 1 per cent' and the highest being '16 per cent and above' with 100 basis point size for all intermediate classes. The information on the respondents' awareness on RBI's action to control inflation as well as the impact of RBI's action on inflation is also obtained in Block 4 from the 21st survey round (September 2010). In the last round (December 2010), a new question was added in Block 6 to capture the information on the amount paid by the respondents for the purchase of major food items, viz., Milk (per litre), Wheat-atta (per kg), Rice (per kg), Chana dal (per kg) and Tur dal (per kg) during the last one month.

III. Survey Results

III.1 General Price Expectations

The survey results depict that the percentage of respondents expecting increase in general prices for both three-month ahead and one-year ahead has come down in the latest round. The proportion of respondents in each of these response categories in

Table 2: General Price Expectations

Round No./survey period →	Three-month ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	89.8	92.0	93.1	95.8	97.4	95.7	95.3	96.5	98.6	96.0
Price increase more than current rate	52.9	54.9	63.5	72.2	74.6	66.9	72.7	72.2	74.3	72.9
Price increase similar to current rate	20.1	22.4	20.7	18.4	16.6	20.0	20.0	21.0	22.0	20.4
Price increase less than current rate	16.8	14.8	8.9	5.1	6.2	8.8	2.6	3.3	2.3	2.7
No change in prices	5.7	6.9	6.1	3.7	2.4	3.4	4.2	2.9	1.1	3.5
Decline in price	4.5	1.1	0.9	0.6	0.3	0.9	0.5	0.6	0.4	0.5
Options	One-year Ahead (percentage of respondents)									
Prices will increase	90.6	95.6	93.7	96.3	96.3	96.5	95.2	95.6	98.9	96.1
Price increase more than current rate	59.7	64.7	62.8	69.5	68.2	62.8	70.8	70.4	77.4	73.4
Price increase similar to current rate	18.0	15.9	18.5	17.3	15.2	19.8	18.7	19.7	17.9	18.6
Price increase less than current rate	12.9	15.0	12.4	9.5	12.9	13.9	5.7	5.6	3.6	4.2
No change in prices	3.1	3.3	5.3	3.1	3.1	2.6	3.8	3.5	0.9	3.5
Decline in price	6.3	1.1	0.9	0.7	0.6	0.9	1.1	0.9	0.3	0.3

the last 10 rounds is presented in Table 2. The percentage of respondents expecting price increase over three-month ahead period declined to 96.0 per cent from 98.6 per cent in the previous round (October-December 2010). Similarly, the percentage of respondents expecting general price increase over one-year ahead period also declined to 96.1 per cent from 98.9 per cent in the previous round. The proportion of respondents who expect this price increase to be 'higher than current rate' has also fallen.

III. 2 Product Group-wise Price Expectations

The product group-wise price expectations are given in Statement I. For three-month ahead and one-year ahead price expectations, the percentages of respondents expecting price rise have gone down for all product groups, viz., food products, non-food products, household durables, housing and services. In case of food products, the percentage of households expecting the *price increase more than the current rate* has gone down substantially whereas the proportion of those expecting *price increase similar to the current rate* has decreased marginally as compared to the previous survey round.

III. 3 Coherence between General Prices and Product groups' Prices

General price expectations are influenced by the price expectations in respect of various product groups. However, price expectations of certain product groups can influence the General Price expectations more than

other products. Therefore, a measure of coherence between General Prices and prices of various product groups was derived based on the total percentages of respondents who expect similar movements in General Price and those of various product groups. This degree of coherence between General Prices and prices of various product groups for three-month ahead and one-year ahead is depicted in Table 3 and Table 4.

The General Price expectations are more in tune with Food Price expectations, as compared to other product groups. This association was lowest for Household Durables. This indicates that respondents assign relatively higher priority to food prices when they think about the price movements in general. In the current round of the survey, it is observed that about 85.5 per cent and 89.8 per cent of the respondents are seen to have been influenced by food prices for arriving at three-month ahead and one-year ahead General Price expectations, respectively. There has been an increase in the share of respondents perceiving Household durables as an influencing factor for their General Price expectations.

III. 4 Inflation expectations

The perception of current inflation rate and expectations of three-month ahead and one-year ahead inflation since Round 5 (September 2006) are shown in Table 5 and Chart 1. It represents the average inflation rate of 4000 respondents. The current round of the survey shows that inflation expectations of

Table 3: Percentage of Respondents Expecting General Price Movements in Coherence with Movements in Price Expectations of Various Product Groups: Three-month Ahead

(percentage of respondents)

Round No.	Survey Quarter	Food	Non-Food	Household Durables	Housing	Cost of Services
14	Dec-08	88.9	85.1	60.9	69.0	70.3
15	Mar-09	85.4	85.3	62.8	73.0	73.9
16	Jun-09	87.0	79.3	59.4	72.0	76.7
17	Sep-09	89.1	81.3	56.5	78.1	82.2
18	Dec-09	88.3	83.6	62.3	82.7	79.3
19	Mar-10	87.4	81.4	66.5	78.1	76.6
20	Jun-10	89.9	82.4	63.6	80.2	80.8
21	Sep-10	91.4	86.1	64.8	79.2	76.7
22	Dec-10	92.3	77.3	58.9	82.5	76.6
23	Mar-11	85.5	78.9	62.5	82.5	76.4

Table 4: Percentage of Respondents Expecting General Price Movements in Coherence with Movements in Price Expectations of Various Product Groups: One-year Ahead

(percentage of respondents)

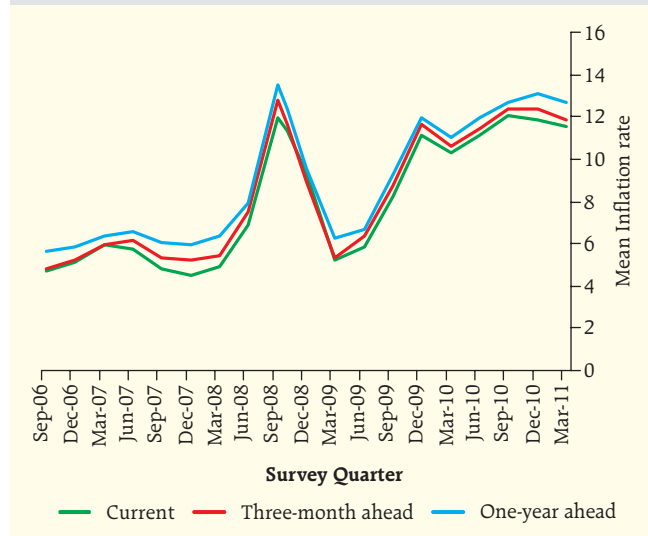
Round No.	Survey Quarter	Food	Non-Food	Household Durables	Housing	Cost of Services
14	Dec-08	91.8	88.3	63.4	70.9	74.4
15	Mar-09	89.1	88.1	65.3	79.4	74.8
16	Jun-09	89.2	82.2	61.4	76.8	78.5
17	Sep-09	91.9	85.8	65.0	78.9	82.3
18	Dec-09	91.1	88.4	69.0	82.8	79.3
19	Mar-10	89.9	83.6	67.3	79.7	76.2
20	Jun-10	91.7	83.2	67.2	79.4	81.1
21	Sep-10	93.4	88.0	66.8	81.0	76.3
22	Dec-10	91.7	83.5	62.4	83.0	78.8
23	Mar-11	89.8	81.6	68.1	82.4	80.6

Table 5: Household Inflation Expectations Current, Three-month Ahead and One-year Ahead

Survey Quarter	Expectation period	Current	Three-month Ahead	One-year Ahead
Sep-06	Oct-Dec06	4.7	4.8	5.6
Dec-06	Jan-Mar07	5.1	5.2	5.8
Mar-07	Apr-Jun07	5.9	5.9	6.3
Jun-07	Jul-Sep07	5.7	6.1	6.5
Sep-07	Oct-Dec07	4.8	5.3	6.0
Dec-07	Jan-Mar08	4.5	5.2	5.9
Mar-08	Apr-Jun08	4.9	5.4	6.3
Jun-08	Jul-Sep08	6.9	7.5	7.9
Sep-08	Oct-Dec08	12.0	12.8	13.5
Oct-08	Oct-Dec08	11.3	11.6	12.4
Dec-08	Jan-Mar09	9.3	8.9	9.6
Mar-09	Apr-Jun09	5.2	5.3	6.2
Jun-09	July-Sep09	5.8	6.3	6.7
Sep-09	Oct-Dec09	8.2	8.7	9.2
Dec-09	Jan-Mar10	11.1	11.6	11.9
Mar-10	Apr-Jun10	10.3	10.6	11.0
Jun-10	July-Sep10	11.1	11.4	11.9
Sep-10	Oct-Dec10	12.1	12.3	12.7
Dec-10	Jan-Mar11	11.8	12.4	13.1
Mar-11	Apr-Jun11	11.5	11.9	12.7

households for the next three-month and for next one-year ahead are lower at 11.9 per cent and 12.7 per cent, respectively, from 12.4 per cent and 13.1 per cent assessed during the earlier round of survey. The perception of current inflation, the three-month ahead and one-year ahead inflation expectations in the current survey round have decreased by 30, 50 and 40 basis points, respectively, as compared to the

Chart 1: Household Inflation expectations – Current, Three-month Ahead and One-year Ahead



corresponding perceptions in the previous round. The movement of inflation expectations shows that the future inflation expectations are usually higher than the perception of current inflation. These inflation expectations provide useful inputs on directional movements of future inflation. However, these are not to be treated as forecast of any official measure of inflation.

It may be seen from Chart 1 that the short term (three-month ahead) expectations of inflation lie between current inflation and long-term (one-year ahead) inflation expectations.

Chart 2: Households Inflation Expectations-vis-à-vis Official Inflation Numbers

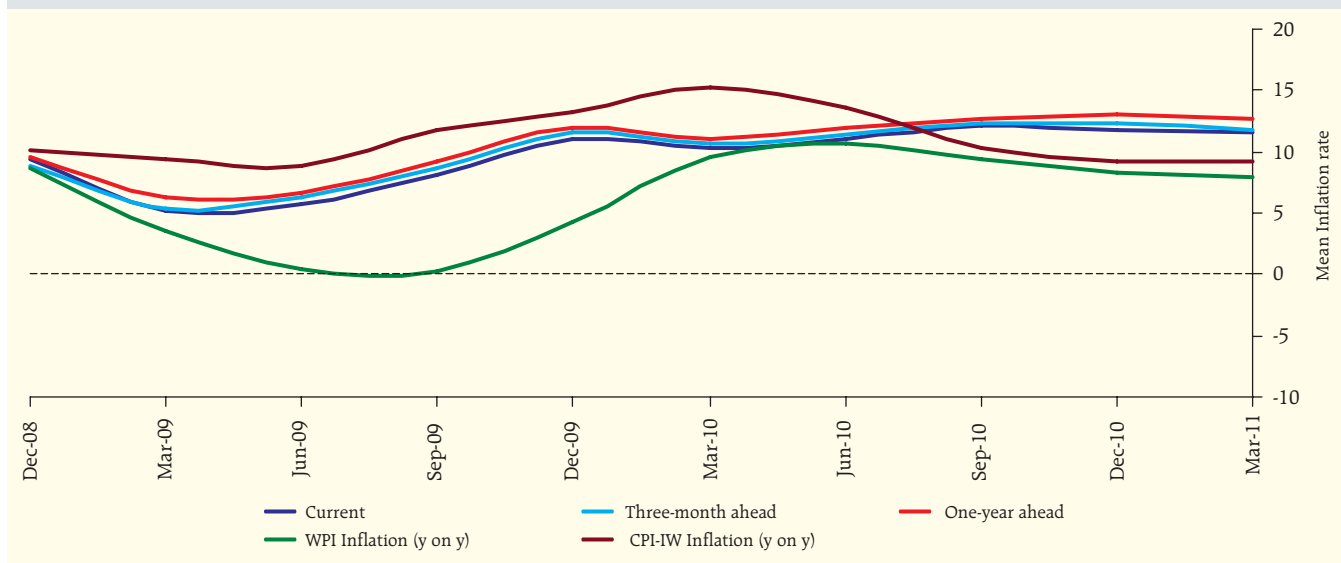


Table 6: Volatility in Responses in Various Rounds

Round No.	Survey Quarter	Inflation Rate					
		Current		Three-month Ahead		One-year Ahead	
		Mean %	Std. Dev.	Mean %	Std. Dev.	Mean %	Std. Dev.
14	Dec-08	9.3	1.9	8.9	3.5	9.6	3.9
15	Mar-09	5.2	1.9	5.3	2.6	6.2	2.7
16	Jun-09	5.8	4.4	6.3	4.6	6.7	4.7
17	Sep-09	8.2	6.0	8.7	6.0	9.2	5.9
18	Dec-09	11.1	4.9	11.6	4.9	11.9	5.1
19	Mar-10	10.3	4.4	10.6	4.7	11.0	4.8
20	Jun-10	11.1	3.6	11.4	4.1	11.9	4.2
21	Sep-10	12.1	3.2	12.3	3.6	12.7	3.8
22	Dec-10	11.8	3.5	12.4	3.7	13.1	3.6
23	Mar-11	11.5	3.1	11.9	3.7	12.7	3.6

Chart 2 depicts the household inflation expectations along with the official inflation measures based on Wholesale Price Index (WPI) – All commodities and Consumer Price Index for Industrial Workers (CPI-IW). It shows that for a large part of the survey history, the households' inflation expectations remained between the WPI and CPI-IW inflations. On the contrary, in the current survey round, household inflation expectations are higher than the official inflation rates. It is observed that expectations that have declined marginally are moving in line with more or less stable official indicators.

III. 5 Volatility in Responses

The volatility in responses is measured through standard deviation. Over different rounds, the standard deviation has been lower for current inflation rate as compared to three-month ahead and one-year ahead (Table 6).

Table 8: Gender-wise Inflation Expectations for March 2011 Survey Round

Gender-wise	Current		Three-month Ahead		One-year Ahead	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Male	11.4	3.1	11.7	3.8	12.6	3.6
Female	11.7	3.0	12.1	3.5	12.7	3.6

The total variability in responses for inflation expectations was elucidated by different classificatory factors (*viz.*, Gender, Age-group, City and Category) of respondents over different rounds. An Analysis of Variance (ANOVA) carried out over different rounds revealed that 'City' has been a significant source of variation in all rounds (Table 7). This may be due to variation in consumption baskets across the cities.

III.6 Gender-wise Expectations

In the current round of survey, female respondents expected higher inflation rates as compared to their male counterparts (Table 8). However, there is no significant difference between male and female respondents in terms of the consistency in responses over various survey rounds and for current, three-month ahead and one-year ahead periods.

III.7 Category-wise Expectations

The category of respondents indicates their occupation status. For the latest survey round, daily workers and housewives reported higher inflation expectations whereas financial sector employees expected the lowest inflation (Table 9).

Table 7: Factors that Explain the Total Variability

Round No.	Survey Quarter	Current	Three-month Ahead	One-year Ahead
14	Dec-08	City, Gender, Age	City, Gender, Category	City, Category
15	Mar-09	City, Category	City, Gender, Category	City, Category
16	Jun-09	City, Gender, Category, Age	City, Gender, Category	City, Category, Age
17	Sep-09	City, Age	City, Age	City, Age
18	Dec-09	City, Category, Age	City, Age	City
19	Mar-10	City, Category, Age	City, Category	City, Category
20	Jun-10	City, Category, Age	City, Category, Age	City, Category, Age
21	Sep-10	City, Gender, Category, Age	City, Gender, Category	City, Category
22	Dec-10	City, Category	City, Category	City, Category
23	Mar-11	City, Category	City, Category	City, Category, Age

Note: Results based on exercise using Analysis of Variance.

Table 9: Category-wise Inflation Expectations for March 2011 Survey Round

Occupation-wise	Current		Three-month Ahead		One-year Ahead	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Financial Sector Employees	11.1	3.3	11.2	4.0	11.9	4.1
Other Employees	11.3	3.1	11.6	3.7	12.5	3.6
Self Employed	11.4	3.1	11.8	3.7	12.7	3.5
Housewives	11.7	3.0	12.1	3.5	12.8	3.6
Retired Persons	11.5	3.0	11.9	3.6	12.7	3.4
Daily Workers	12.0	3.0	12.3	3.7	13.1	3.4
Other categories	11.4	3.0	11.8	3.6	12.7	3.4

III.8 Age Group-wise Expectations

The survey covers only adult respondents of 18 years or more. During the current survey round, the respondents in the age group 'Upto 25 years' and '35 to 40 years' have reported the highest inflation rates for current and three-month ahead periods (Table 10). The one-year ahead inflation expectations were higher for the age-groups '35 to 40 years' and '60 years and above'. However, over the survey rounds, no age-specific consistency is observed in inflation expectations.

III.9 City-wise Expectations

Significant variations were observed in the inflation expectations across different cities, which may be attributed to the divergence in consumption pattern between cities. In the latest round of the survey, current inflation was found to be the highest in Bangalore and the lowest in Patna, three-month ahead inflation expectations were found to be the

Table 10: Age Group-wise Inflation Expectations for March 2011 Survey Round

Age-wise	Current		Three-month Ahead		One-year Ahead	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Upto 25 years	11.8	3.0	12.1	3.6	12.7	3.9
25 to 30 years	11.5	3.0	11.7	3.8	12.3	3.9
30 to 35 years	11.6	3.1	12.0	3.6	12.8	3.4
35 to 40 years	11.8	3.2	12.0	3.8	12.9	3.4
40 to 45 years	11.3	3.0	11.8	3.6	12.6	3.3
45 to 50 years	11.0	3.0	11.4	3.5	12.4	3.3
50 to 55 years	11.3	3.2	12.0	3.5	12.5	3.8
55 to 60 years	11.4	3.0	11.7	3.7	12.8	3.4
60 years and above	11.5	3.1	11.9	3.6	12.9	3.4
All	11.5	3.1	11.9	3.7	12.7	3.6

highest in Jaipur and the lowest in Patna whereas one-year ahead inflation expectations were found to be the highest in Jaipur and Bangalore and the lowest in Guwahati (Table 11). The variability in responses was the highest in Delhi and the lowest in Patna and Bhopal for the current inflation.

III.10 Cross-tabulation of Current Inflation and Future Expectations

The distribution of inflation expectations expresses the degree of respondents' optimism on future price movement *vis-à-vis* current price changes. The cross-tabulation depicting the relationship between the current and future inflation expectations for three-month and one-year ahead are presented in Table 12 & Table 13 and the same is depicted in Chart 3. It may be observed that 66.3 per cent respondents perceived double-digit current inflation. Similarly, 76.4

Table 11: City-wise Inflation Expectations for March 2011 Survey Round

City-wise	Current		Three-month Ahead		One-year Ahead	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Guwahati	9.1	0.8	9.7	1.0	9.8	1.1
Patna	7.7	0.7	9.0	1.4	12.2	1.5
Kolkata	9.7	1.4	9.7	2.9	10.1	3.1
Lucknow	11.7	2.0	11.9	2.1	13.0	2.3
Delhi	11.2	3.6	11.7	4.2	13.7	3.5
Jaipur	15.6	1.5	16.0	1.1	16.1	1.0
Ahmedabad	9.8	1.0	11.5	1.0	13.0	1.0
Mumbai	13.7	3.2	13.6	4.3	14.6	3.4
Bhopal	10.5	0.7	10.4	3.7	10.8	4.5
Hyderabad	10.9	1.0	9.8	4.4	9.8	4.5
Bangalore	15.9	1.9	15.9	1.9	16.1	1.6
Chennai	11.8	2.2	12.6	2.3	12.4	2.9
All	11.5	3.1	11.9	3.7	12.7	3.6

Table 12 : Cross-tabulation of Current and Three-month Ahead Inflation Expectations

		Three-month ahead inflation rate (per cent)																	No Idea	Total		
		< 1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	>=16				
Current inflation rate (per cent)	<1	1		1																2		
	1-2		5	4	4																13	
	2-3			2	1	7															10	
	3-4			1	3	1	3					1	1								10	
	4-5					1	5	3	2								1				12	
	5-6	2					6	6	3	1			1	1							20	
	6-7							16	12	11	2										41	
	7-8	1			1					65	114	20	37	7							4	249
	8-9	20							3	22	130	135	77	27	9	1	2		2	2	430	
	9-10	10								1	14	129	242	121	26	6	2		6	4	561	
	10-11	54									2	16	160	384	150	17	10	4	7	14	818	
	11-12	37											11	103	205	53	10	4	2	2	427	
	12-13	7												3	72	131	19	5	1	1	239	
	13-14	3												1	4	102	84	12	5		211	
	14-15	1														8	68	70	10	2	159	
	15-16	1															1	37	67	1	107	
	>=16	25																3	662	1	691	
	Total	162	5	8	9	9	14	28	105	272	302	528	648	467	319	195	136	762	31	4,000		

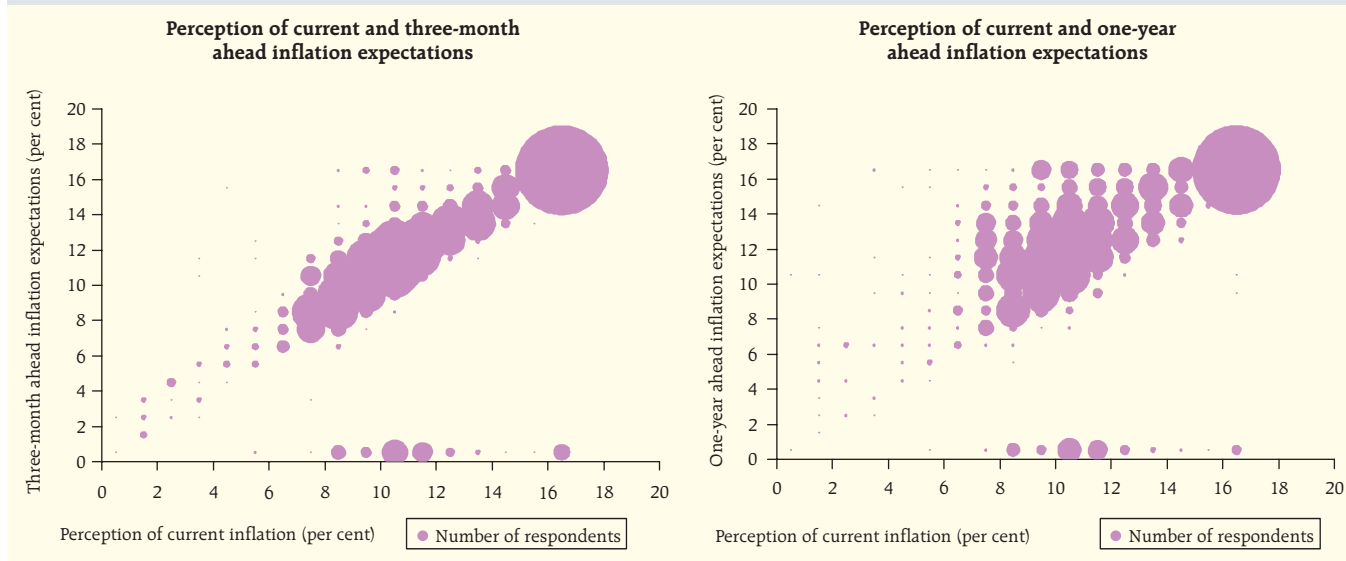
per cent and 82.7 per cent of the respondents expected the three-month ahead inflation and one-year ahead inflation in double-digit figures. A cross-tabulation of the current inflation perception with the future

inflation expectations points out that among the 66.3 per cent respondents who perceived the current inflation in double-digit, 93.7 and 92.3 per cent respondents expected that it would remain in the same

Table 13 : Cross-tabulation of Current and One-year Ahead Inflation Expectations

		One-year ahead inflation rate (per cent)																	No Idea	Total	
		< 1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	>=16			
Current inflation rate (per cent)	<1	1										1								2	
	1-2		1	1	1	2	3	2	1			1				1					13
	2-3			2		2		5												1	10
	3-4				1	3			2		1		1						2		10
	4-5					2	2	2	2		2	1					1				12
	5-6	1				1	4	2	3	3	1	1	1				1	1	1	1	20
	6-7							6	3	9	1	8	4	2	4	2			1	1	41
	7-8	2							2	26	11	24	24	57	48	34	11	5	1	4	249
	8-9	20					1	3	7	105	32	106	68	38	25	10	7	3	5	5	430
	9-10	11							1	17	133	61	119	86	55	27	7	35	9	9	561
	10-11	52							2	6	29	152	131	188	116	64	24	29	25	25	818
	11-12	35									9	12	92	83	100	41	29	20	6	6	427
	12-13	10										2	15	67	23	72	29	19	2	2	239
	13-14	4												20	55	31	79	20	2	2	211
	14-15	2													4	12	51	20	66	4	159
	15-16	1														5	29	71	1	1	107
	>=16	9									1	1					2	673	5	691	
	Total	148	1	4	4	7	10	24	45	151	233	370	488	536	424	315	233	941	66	4,000	

Chart 3: Relationship in the Perception level of Current Inflation with Future Expectations



band for three-month ahead and one-year ahead, respectively.

III.11 Awareness on Reserve Bank of India's Action to Control Inflation

An additional block (Block 4) was added to the survey schedule from the 21st round (September 2010) to determine the awareness of public on Reserve Bank's action on inflation control. Out of the two questions in this block, the first one elicits the respondent's awareness whether the Reserve Bank is taking necessary action on controlling inflation whereas the

second one determines whether the respondent thinks that RBI's action has got any impact on inflation. The responses for the latest survey round are presented in Chart 4. It can be seen that 34 per cent of the respondents felt that RBI is taking necessary action to control inflation. Out of these 34 per cent respondents, 61 per cent are aware that RBI's action has got an impact on inflation.

The category-wise distribution of the responses based on 'Block 4' points out that the awareness on RBI's action on inflation control was the most among

Chart 4: Respondent' view on RBI's Action to Control Inflation

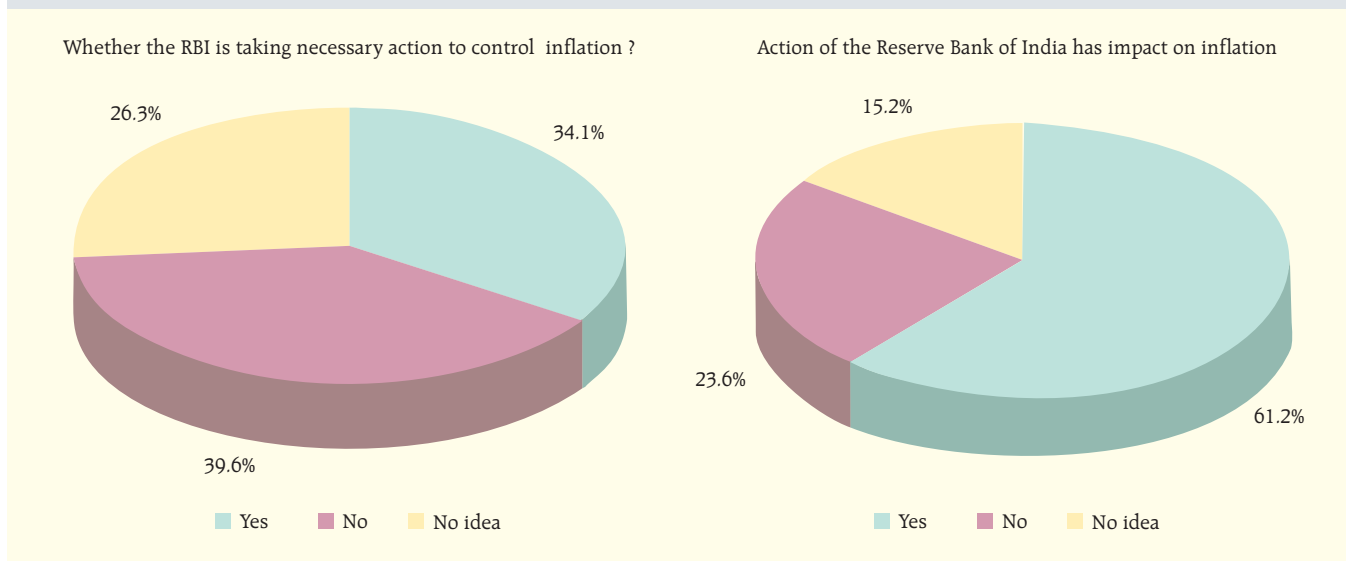
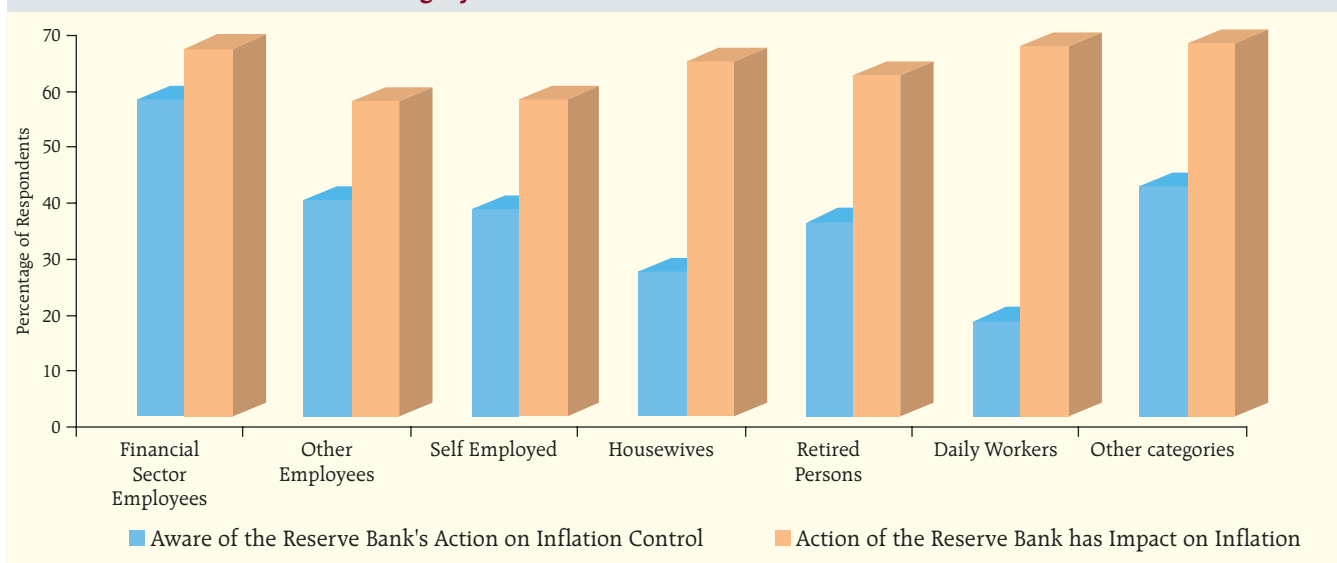


Chart 5: Category-wise Awareness on RBI's Action on Inflation Control

'Financial Sector Employees' and it was least in case of 'Daily Workers' and 'Housewives'. However, impact on RBI's action on inflation control was the least among employees other than 'Financial Sector Employees' (Chart 5).

The category-wise distribution of the responses of 'the impact of RBI's action on inflation control' for the 34 per cent respondents who felt that the Reserve Bank is taking necessary action to control inflation is also depicted in Table 14.

IV. A Bootstrap Confidence Interval for Inflation Expectations

In the previous sections, the average rates of inflation expectations are presented. Using the

Table 14: Category-wise Responses on the Impact of the Reserve Bank's Action on Inflation Control

Category	Impact of RBI's action on inflation control (per cent of respondents*)		
	Yes	No	No Idea
Financial Sector Employees	65.8	23.9	10.4
Other Employees	56.3	27.7	16.0
Self-employed	56.7	24.7	18.6
Housewives	63.5	21.7	14.8
Retired Persons	61.1	28.6	10.3
Daily Workers	66.2	15.4	18.5
Other Categories	66.7	14.6	18.8

* Respondents who are aware of the RBI's action on inflation control

Bootstrap re-sampling method, interval estimates of the average inflation expectations of households are presented, so as to give an idea of the error associated with the estimates of households' inflation expectations.

The Bootstrap is a re-sampling method for statistical inference, wherein the sampling distribution of a statistic can be obtained without specific knowledge of the exact distribution of the population variable under study. It is commonly used to estimate confidence intervals through Bootstrapping, a confidence interval of not only population mean but also the population median and other parameters can be obtained.

Drawing 10,000 re-samples using simple random sampling with replacement from the sample of the survey, 99 per cent Bootstrap Confidence Intervals (BCI) for mean were obtained. The results are presented in Table 15. It is observed that the exercise leads to a confidence interval with a small width indicating that the point estimates are quite precise for estimating the population means of households' expectations of inflation.

Table 15: 99% Bootstrap Confidence Intervals (BCI) Based on 10,000 Re-samples

Current		Three-month Ahead		One-year Ahead	
99% BCI for Mean %	Interval width	99% BCI for Mean %	Interval width	99% BCI for Mean %	Interval width
(11.39,11.64)	0.25	(11.71,12.00)	0.29	(12.51,12.81)	0.30

**Statement 1: Percentage of Respondents – Product-wise Expectations of
Prices for Three-month and one-year Ahead**

1. General										
Round No./survey period '	Three-month Ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	89.8	92.0	93.1	95.8	97.4	95.7	95.3	96.5	98.6	96.0
Price increase more than current rate	52.9	54.9	63.5	72.2	74.6	66.9	72.7	72.2	74.3	72.9
Price increase similar to current rate	20.1	22.4	20.7	18.4	16.6	20.0	20.0	21.0	22.0	20.4
Price increase less than current rate	16.8	14.8	8.9	5.1	6.2	8.8	2.6	3.3	2.3	2.7
No change in prices	5.7	6.9	6.1	3.7	2.4	3.4	4.2	2.9	1.1	3.5
Decline in price	4.5	1.1	0.9	0.6	0.3	0.9	0.5	0.6	0.4	0.5
Options										
One-year Ahead (percentage of respondents)										
Prices will increase	90.6	95.6	93.7	96.3	96.3	96.5	95.2	95.6	98.9	96.1
Price increase more than current rate	59.7	64.7	62.8	69.5	68.2	62.8	70.8	70.4	77.4	73.4
Price increase similar to current rate	18.0	15.9	18.5	17.3	15.2	19.8	18.7	19.7	17.9	18.6
Price increase less than current rate	12.9	15.0	12.4	9.5	12.9	13.9	5.7	5.6	3.6	4.2
No change in prices	3.1	3.3	5.3	3.1	3.1	2.6	3.8	3.5	0.9	3.5
Decline in price	6.3	1.1	0.9	0.7	0.6	0.9	1.1	0.9	0.3	0.3
2. Food Prices										
Round No./survey period '	Three-month Ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	90.9	93.6	94.6	96.3	98.0	95.9	95.8	96.7	98.1	95.4
Price increase more than current rate	53.5	58.6	64.5	76.1	81.1	70.4	74.9	74.7	73.1	69.4
Price increase similar to current rate	19.7	23.3	21.5	15.0	11.7	15.5	17.7	18.0	21.3	21.0
Price increase less than current rate	17.8	11.8	8.6	5.2	5.3	10.0	3.2	4.0	3.7	5.1
No change in prices	5.3	5.6	4.6	3.0	1.4	3.1	3.5	2.3	1.4	3.8
Decline in price	3.8	0.8	0.9	0.8	0.6	1.0	0.7	1.0	0.6	0.8
Options										
One-year Ahead (percentage of respondents)										
Prices will increase	91.4	96.6	94.7	96.2	96.5	96.8	95.6	95.7	98.6	95.9
Price increase more than current rate	60.3	66.2	63.6	71.0	72.1	65.9	72.8	71.7	76.4	75.5
Price increase similar to current rate	17.4	18.1	18.9	15.2	11.9	16.5	16.9	17.8	17.8	16.6
Price increase less than current rate	13.7	12.4	12.2	10.0	12.5	14.5	5.9	6.2	4.4	3.9
No change in prices	2.9	2.7	4.5	2.9	2.7	2.3	3.3	3.2	1.1	3.6
Decline in price	5.8	0.7	0.8	0.9	0.9	0.9	1.1	1.1	0.4	0.5
3. Non-Food Prices										
Round No./survey period '	Three-month Ahead (percentage of respondents)									
	15	16	17	18	19	20	21	22	23	
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	88.6	91.0	91.4	94.7	95.8	94.0	92.9	95.4	95.9	95.0
Price increase more than current rate	47.5	48.6	51.2	59.3	63.1	57.4	60.1	64.4	58.8	58.4
Price increase similar to current rate	23.3	25.5	28.4	27.1	24.8	28.0	29.4	27.3	33.2	31.3
Price increase less than current rate	17.8	17.0	11.8	8.3	7.9	8.7	3.4	3.7	3.9	5.3
No change in prices	6.6	7.8	7.7	4.7	3.7	4.8	6.3	3.9	0.5	4.4
Decline in price	4.9	1.2	1.0	0.7	0.5	1.2	0.9	0.7	0.7	0.6
Options										
One-year Ahead (percentage of respondents)										
Prices will increase	89.3	94.6	91.9	95.2	94.6	94.7	92.8	94.6	97.5	94.7
Price increase more than current rate	54.0	57.5	53.1	59.6	60.7	53.0	59.7	64.0	65.2	59.9
Price increase similar to current rate	21.8	20.4	25.0	23.6	20.7	27.6	26.4	24.9	28.1	29.2
Price increase less than current rate	13.5	16.7	13.8	12.1	13.2	14.1	6.7	5.7	4.2	5.6
No change in prices	4.1	4.1	7.3	4.0	4.6	4.2	5.9	4.4	2.2	4.6
Decline in price	6.6	1.4	0.8	0.8	0.8	1.1	1.3	1.0	0.4	0.7

**Statement I: Percentage of Respondents – Product-wise Expectations of
Prices for Three-month and One-year Ahead (contd.)**

4. Prices of Household durables										
Round No./survey period	Three-month Ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	78.2	82.5	80.0	86.8	87.7	86.4	87.1	89.7	91.9	90.4
Price increase more than current rate	32.6	33.2	37.2	38.4	45.5	44.1	45.1	45.8	45.5	47.0
Price increase similar to current rate	24.6	24.2	26.3	30.5	23.4	27.2	30.5	32.9	28.9	28.0
Price increase less than current rate	21.0	25.2	16.5	18.0	18.9	15.1	11.6	11.0	17.5	15.4
No change in prices	12.9	14.6	15.7	11.0	9.5	8.8	9.1	6.3	5.9	5.9
Decline in price	9.0	2.9	4.4	2.2	2.9	4.8	3.8	4.1	2.4	3.8
One-year Ahead (percentage of respondents)										
Options										
Prices will increase	79.1	84.6	80.4	88.7	87.8	85.2	87.2	89.0	94.4	91.3
Price increase more than current rate	38.6	40.1	38.4	43.3	45.5	43.2	46.6	46.3	48.6	49.6
Price increase similar to current rate	21.5	22.4	24.3	28.2	22.1	25.4	30.1	31.8	32.5	29.0
Price increase less than current rate	19.0	22.1	17.7	17.3	20.3	16.6	10.6	11.0	13.3	12.8
No change in prices	12.1	11.2	16.2	9.1	8.5	9.6	8.0	6.7	3.8	5.7
Decline in price	8.8	4.2	3.5	2.2	3.7	5.3	4.8	4.3	1.9	3.0
5. Housing Prices										
Round No./survey period	Three-month Ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	88.4	89.8	92.4	93.8	96.1	95.2	96.1	96.0	97.0	94.5
Price increase more than current rate	49.7	46.2	55.9	64.4	70.8	60.4	70.8	64.6	73.1	73.5
Price increase similar to current rate	20.8	26.4	25.4	22.0	19.8	25.4	21.0	24.8	21.3	18.3
Price increase less than current rate	17.9	17.2	11.1	7.4	5.6	9.5	4.3	6.7	2.6	2.7
No change in prices	6.8	8.3	6.4	5.0	3.4	3.5	3.1	2.8	2.1	4.7
Decline in price	4.8	1.9	1.3	1.2	0.5	1.3	0.9	1.2	0.9	0.8
One-year Ahead (percentage of respondents)										
Options										
Prices will increase	87.0	93.0	93.0	94.9	96.4	94.1	96.1	95.3	97.9	94.8
Price increase more than current rate	56.3	57.4	57.6	66.0	73.4	61.0	72.0	65.9	75.5	72.1
Price increase similar to current rate	20.2	20.0	22.1	21.4	15.1	21.7	19.1	21.6	19.4	20.1
Price increase less than current rate	10.5	15.6	13.3	7.6	7.9	11.4	5.0	7.9	3.0	2.7
No change in prices	5.5	5.4	5.8	3.8	2.9	4.6	2.7	3.2	1.4	4.6
Decline in price	7.6	1.6	1.2	1.3	0.7	1.3	1.2	1.5	0.8	0.6
6. Cost of Services										
Round No./survey period	Three-month Ahead (percentage of respondents)									
	14	15	16	17	18	19	20	21	22	23
Options	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11
Prices will increase	86.1	87.8	87.3	92.4	91.7	89.9	94.1	94.2	94.1	91.6
Price increase more than current rate	43.9	42.2	53.1	63.7	62.7	58.6	63.2	59.2	61.4	62.1
Price increase similar to current rate	26.9	29.2	22.2	22.9	21.2	23.9	26.2	28.6	28.9	26.4
Price increase less than current rate	15.3	16.4	12.0	5.8	7.8	7.5	4.8	6.4	3.8	3.1
No change in prices	10.3	10.4	11.3	6.3	7.0	6.7	4.8	5.2	4.5	7.7
Decline in price	3.7	1.8	1.5	1.3	1.4	3.4	1.1	0.6	1.4	0.7
One-year Ahead (percentage of respondents)										
Options										
Prices will increase	88.4	90.7	88.1	95.0	92.3	89.9	94.2	94.3	95.2	91.2
Price increase more than current rate	52.1	49.2	54.4	65.6	62.9	57.2	63.2	58.0	64.6	62.6
Price increase similar to current rate	23.5	23.9	20.2	21.5	18.5	23.0	24.9	29.5	25.7	24.4
Price increase less than current rate	12.9	17.6	13.5	7.9	10.9	9.8	6.1	6.8	4.9	4.2
No change in prices	6.7	7.3	10.3	4.1	6.0	6.9	4.6	4.9	4.1	8.2
Decline in price	4.9	2.1	1.6	1.0	1.8	3.2	1.2	0.9	0.7	0.7

Annex



RESERVE BANK OF INDIA
DEPARTMENT OF STATISTICS AND INFORMATION MANAGEMENT
INFLATION EXPECTATIONS SURVEY OF HOUSEHOLDS,
March 2011

Respondent's Code

Round No.	Zone	City	Gender	Age group	Category	Sr. No.
23						

Block 1: Identification of the Respondent

1. Name of the Respondent: _____
2. Address of the Respondent: _____

City		State		PIN					
------	--	-------	--	-----	--	--	--	--	--

3. Telephone/Mobile No.: _____
4. Gender of the respondent (Please tick (✓) appropriate one) [1] Male [2] Female
5. Age of the respondent (in completed years, above 18 years): _____
6. Category of the respondent (Please tick (✓) appropriate one)

Financial Sector Employees	Other Employees	Self-Employed	House Wife	Retired Persons	Daily workers	Others
----------------------------	-----------------	---------------	------------	-----------------	---------------	--------

Block 2: Expectations of respondent on prices in next 3 months: (Please tick (✓) the relevant cell for each Col.)

OPTIONS	General	Food Products	Non-Food Products	Household durables	Housing	Services
i Price increase more than current rate						
ii Price increase similar to current rate						
iii Price increase less than current rate						
iv No change in prices						
v Decline in prices						

Block 3: Expectations of respondent on prices in next one year: (Please tick (✓) the relevant cell for each Col.)

OPTIONS	General	Food Products	Non-Food Products	Household durables	Housing	Services
i Price increase more than current rate						
ii Price increase similar to current rate						
iii Price increase less than current rate						
iv No change in prices						
v Decline in prices						

Block 4: Respondent's feedback on Reserve Bank's Action on Price stability

Do you feel Reserve Bank of India is taking necessary action on controlling Inflation? Options-Yes/No/No idea
If Yes, do you think it has any impact on Inflation? Options- Yes / No / No idea

Block 5: Respondent's views on the following inflation rates: (Please tick (✓) the relevant cell)

Parameters	Options								
	Less than 1%	1 - 2 %	2 - 3 %	3 - 4 %	4 - 5 %	5 - 6 %	6 - 7%	7 - 8%	8 - 9%
Current inflation rate	9 - 10%	10 - 11%	11 - 12%	12 - 13%	13 - 14%	14 - 15%	15 - 16 %	16 % and above	No idea
	Less than 1%	1 - 2 %	2 - 3 %	3 - 4 %	4 - 5 %	5 - 6 %	6 - 7%	7 - 8%	8 - 9%
Inflation rate after 3 months	9 - 10%	10 - 11%	11 - 12%	12 - 13%	13 - 14%	14 - 15%	15 - 16 %	16 % and above	No idea
	Less than 1%	1 - 2 %	2 - 3 %	3 - 4 %	4 - 5 %	5 - 6 %	6 - 7%	7 - 8%	8 - 9%
Inflation rate after one year	9 - 10%	10 - 11%	11 - 12%	12 - 13%	13 - 14%	14 - 15%	15 - 16 %	16 % and above	No idea
	Less than 1%	1 - 2 %	2 - 3 %	3 - 4 %	4 - 5 %	5 - 6 %	6 - 7%	7 - 8%	8 - 9%

Block 6: Please specify the amount you have paid for the purchases of the following major food items during the last one month

(1)	(2)	(3)	(4)	(5)
Milk (₹ per litre)	Wheat-atta (₹ per Kg.)	Rice (₹ per Kg.)	Chana-dal (₹ per Kg.)	Tur-dal (₹ per Kg.)

Name of the Investigator: _____ Signature of the Investigator: _____ Date of the Interview (DD/MM/YYYY) / / 2011

Annex (Contd.)

Description of Parameters

Food Products	<ul style="list-style-type: none"> (i) Cereals (Wheat, Rice, Pulses <i>etc.</i>), Fruits, Vegetables, Sugar, Edible oils, Dairy products and Bakery products, Tea, Coffee, <i>etc.</i> (ii) Meat, fish and sea products (iii) Soft drinks carbonated and Mineral water, Beverages (iv) Bidi, cigarette and other tobacco products like zarda, pan masala and related products <i>etc.</i>
Non-Food Products	<ul style="list-style-type: none"> (i) Clothes and wearing apparels (ii) Pharmaceutical and Medicines, Cleaning and polishing products, Soaps and detergents (iii) Rubber and rubber products, Tyres and tubes (iv) Plastic and plastic products (v) Leather and leather products (footwear <i>etc.</i>) (vi) Paper and paper products (stationery <i>etc.</i>) (vii) Petroleum and coal products (viii) Basic chemical and chemical products, Dyes and dye stuff (ix) Basic metal non-metallic mineral products <i>etc.</i>
Household Durables	<ul style="list-style-type: none"> (i) Audiovisual equipment (Radio, television, video camera, telephone, microphone, mobile <i>etc.</i>) (ii) Furniture, Wood and wood products (iii) Washing machines, Air cooler and Air conditioner (iv) Personal computer (v) Watches and clocks, <i>etc.</i>
Housing	<ul style="list-style-type: none"> (i) Construction and maintenance of residential/office premises (ii) Site preparation
Services	<ul style="list-style-type: none"> (i) Computer, related activities like computer hardware/software consultancy, data processing, computer related education institute (ii) Health and social work (iii) Banking/postal services (iv) Activities of membership organizations (v) Other business activities like washing, cleaning, hairdressing, courier activities, <i>etc.</i>

Annex (Concl.)

Code Lists for filling in Respondents' Codes:

A. Zone Codes

Sr.No.	Zone	Zone Code
1	Mumbai	1
2	Kolkata	2
3	Chennai	3
4	Delhi	4

B. City Codes

Zone	Sr.No	City Name	City Code
Mumbai	1	Mumbai	600
	2	Ahmedabad	540
	3	Bhopal	700
Kolkata	4	Kolkata	100
	5	Guwahati	010
	6	Patna	060
Chennai	7	Chennai	900
	8	Hyderabad	800
	9	Bangalore	840
Delhi	10	Delhi	290
	11	Jaipur	500
	12	Lucknow	200

C. Gender Codes

Sr.No.	Gender	Gender Code
1	Male	1
2	Female	2

D. Category Codes

Sr. No.	Category of Respondent	Category Code
1	Financial sector employees	1
2	Other employees	2
3	Self-employed	3
4	Housewives	4
5	Retired persons	5
6	Daily workers	6
7	Other categories	7

E. Age Group Codes

Sr.No.	Age Group	Age group code
1	Up to 25 years	1
2	25 to 30 years	2
3	30 to 35 years	3
4	35 to 40 years	4
5	40 to 45 years	5
6	45 to 50 years	6
7	50 to 55 years	7
8	55 to 60 years	8
9	60 years and above	9