### Survey of Professional Forecasters: Results of the Fourth Round (Q1:2008-09)

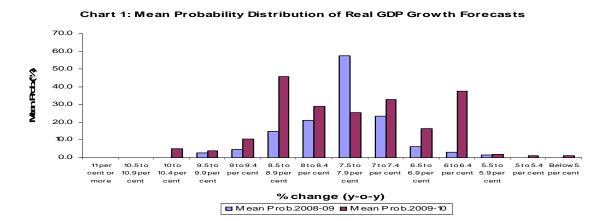
The 'Survey of Professional Forecasters' conducted by the Bank presents short to medium term economic developments on major macroeconomic indicators like component-wise detailed forecasts of GDP growth, inflation, savings, capital formation, consumption expenditure, export, import, interest rates, money supply, credit growth, stock market movements, corporate profit, etc. The results of the fourth round relating to the first quarter of 2008-09 are presented below. The questionnaire was sent to 31 selected forecasters, of which 20 forecasters participated in this round.

Note that the results of the survey represent views of the **respondent forecasters** and in no way reflect the views or forecasts of the Reserve Bank of India.

Overall results of this round suggest a moderation in economic activity for each of the three forthcoming quarters and for 2008-09 on the whole. Some of the salient features are as follows:

#### **Annual Forecasts:**

Forecasters have revised their real GDP growth rate forecast downwards to 7.9 per cent in 2008-09. They however, expect it to improve to 8 per cent in 2009-10. The forecasters are asked to assign the probabilities to the possibility that year over year real GDP will fall into various growth ranges. The highest 57.3 per cent probability was assigned to growth range of 7.5-7.9 per cent for the year 2008-09. For the year 2009-10, they assign highest 45.6 per cent probability to 8.5-8.9 per cent growth range of GDP. The chart 1 below shows mean probability distribution of real GDP growth forecasts.



- Real GDP originating in industry and services sector for the year 2008-09 have been revised to 7.5 and 9.5 per cent. The growth rates were forecast to be 8.1 and 9.7 per cent in the earlier survey. The growth forecast for agriculture GDP remains the same as in the last survey at 3 per cent. For the year 2009-10, these sectors are expected to grow at the rate of 3.3, 7.7 and 9.4 per cent, respectively.
- Forecasters expect gross domestic capital formation to contribute 36.3 per cent to real GDP in 2008-09, while contribution of gross fixed capital formation is expected to be 34.0 per cent (both these figures have been revised upwards from the last survey). The proportion of domestic saving to GDP is indicated to be at 35 per cent in 2008-09 which is same as the forecast of last survey. The forecasters have revised the growth rate of private final consumption expenditure to 7.1 per cent against 6 per cent in the last survey.
- The forecasters have again revised profit growth of corporate sector downwards in 2008-09. Profit after tax is forecast to grow at the rate of 16 per cent in 2008-09 as against 25 per cent expected in last survey. It is, however, expected to improve to 20 per cent in 2009-10.
- Broad money (M3) is expected to grow at the rate of 19.5 per cent in 2008-09
  which is higher than its previous estimate of 19 per cent. The bank credit is
  expected to slow down to 20 per cent.
- One of the key deficit indicators of central government finances viz. fiscal deficit is expected to widen to 3.9 per cent of GDP in 2008-09, whereas the combined gross fiscal deficit is placed at 6.9 per cent of GDP.
- Indian rupee is expected to depreciate to 42 vis-à-vis US dollar in 2008-09. Yield on treasury bills (91 days) are revised to 8.2 per cent by the end of 2008-09 whereas 10-year government securities yield are forecast to be at 8.8 per cent which is higher than the earlier forecast of 7.8 per cent.
- The forecasters expect Repo and Reverse Repo rates to be at 8.9 and 6.4 per cent respectively by the end of current financial year. Both the rates have been revised upwards from the last survey.

• Merchandise trade deficit is expected to widen to US \$126.2 bn. in 2008-09 which is higher than the earlier estimate of US \$115.5 bn. Forecasters expect exports to improve further in 2008-09 as the growth rate has been revised from 16 per cent in the last survey to 20 per cent. Forecasters further revised their imports growth forecasts upward substantially to 29.5 per cent from 20 per cent in the last survey. Forecasters put net surplus under invisibles during 2008-09 to be US \$ 86.0 bn. which is slightly lower than US \$ 86.4 bn. expected three months ago.

#### **Quarterly Forecasts:**

- The real GDP growth in second and third quarter is projected at 7.7 and 7.6 per cent. During the fourth quarter of current financial year, the GDP growth is placed at 7.5 per cent.
- Median forecasts for real GDP originating from agriculture, industry and services sectors in second quarter of 2008-09 are projected to be 3.4, 7 and 9.6 per cent respectively. For agriculture sector, the forecasts have been revised upwards (from 3 per cent in the last survey). The projection for industry has been revised downwards from 8.5 per cent in the last survey. For the third quarter of current financial year, the forecasters have kept the growth rates at 3.1, 7.4 and 9.6 per cent respectively. Index of Industrial Production growth forecasts in second and third quarters of 2008-09 are kept at 7 per cent and 7.3 per cent respectively. For the last quarter, the IIP is projected to grow at 7.4 per cent.
- Contribution of gross domestic capital formation to GDP has been forecast at 36 per cent in second quarter of current financial year, which is same as projected in the last survey. In the third quarter, the same is expected to be 35.8 per cent. Growth rate of corporate profit have been revised further downwards to 17.4 and 16 per cent respectively in second and third quarters of 2008-09. During the last quarter, the growth rate is kept at 20 per cent.
- Forecasters expect repo rate to go up further in second and third quarters of current financial year to 8.8 and 9 per cent respectively. Forecasters also expect increase in CRR in the remaining quarters of 2008-09. They expect CRR to reach the level of 9 per cent by the end of second quarter of 2008-09 and further to 9.3 per cent by the end of the third quarter.

#### Forecasts on prices:

- Forecasters' median estimate for WPI inflation on a year over year basis in the second, third and fourth quarters of 2008-09 are projected to be 11.7, 11.4 and 9.2 per cent respectively. The projections are higher than the earlier forecasts for the same period. The inflation based on CPI-IW has also been revised upwards to 10, 10.5 and 9 per cent respectively during the period.
- The forecasters were asked to assign the probabilities to the possibility that fourth quarter over fourth quarter WPI inflation will fall into various growth ranges. The probabilities for 2008-09 are changed from those assigned in the survey three months ago. They see 40 per cent chance that WPI inflation will fall in the range 9-9.9 per cent in 2008-09. However, they expect it to come down to 5-5.9 per cent in 2009-10. Chart 2 below shows mean probability distribution of WPI forecasts.

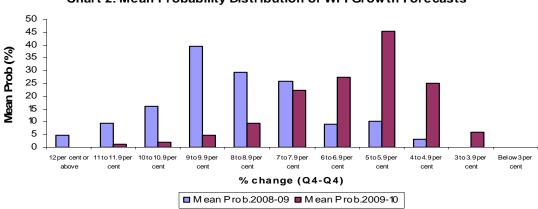


Chart 2: Mean Probability Distribution of WPI Growth Forecasts

## **Long Term Forecasts:**

- Long term forecasts for real GDP for the next five years as well next ten years are revised downwards to 8 per cent and 8.5 per cent (against 8.5 and 8.9 per cent respectively in the last survey, tables A.7 and A.8).
- Over the next five years, the forecasters expect WPI inflation to be 6 per cent, which is revised upwards from the last survey. CPI-IW inflation has also been revised upwards to 6 per cent. Over the next ten years, the WPI and CPI-IW based inflation are expected to be 5 and 5.4 per cent, respectively.

Table A.1

	Key Macroeconomic Indicators	Annual Forecasts for 2008-09				Actuals for	
		Mean	Median	Max	Min	2007-08	
1	Real GDP growth rate at factor cost (in per cent)	7.8	7.9	8.5	7.0	9.0	
а	Agriculture & Allied Activities	3.4	3.0	5.0	2.0	4.5	
b	Industry	7.4	7.5	8.0	6.5	8.1	
С	Services	9.3	9.5	10.5	8.0	10.7	
2	Private Final Consumption Expenditure (growth rate in per cent)	7.2	7.1	8.0	6.2	8.3	
3	Gross Domestic Saving (per cent of GDP at current market price)	34.8	35.0	36.5	31.8	34.8*	
	of which Private Corporate Sector	8.0	7.6	10.5	7.0	7.8*	
4	Gross Domestic Capital Formation (per cent of GDP at current market price)	36.7	36.3	41.6	34.4	35.9*	
5	Gross Fixed Capital Formation (per cent of GDP at current market price)	33.8	34.0	35.9	31.0	33.9	
6	Money Supply (M3) (growth rate in per cent)	19.2	19.5	21.0	17.5	20.7	
7	Bank Credit (growth rate in per cent)	20.3	20.0	24.0	18.0	21.6	
8	Combined Gross Fiscal Deficit (per cent of GDP)	7.1	6.9	9.5	5.5		
9	Central Govt. Fiscal Deficit (per cent of GDP)	4.2	3.9	7.0	2.5		
10	Corporate profit after tax (growth rate in per cent)	17.2	16.0	22.5	15.0		
11	Repo (end period)	8.6	8.9	9.5	6.0	7.75	
12	Reverse Repo (end period)	6.6	6.4	9.0	6.0	6.0	
13	CRR (end period)	9.1	9.1	9.8	8.5	7.5	
14	USD/INR (RBI reference rate-end period)	42.5	42.0	45.0	40.6	39.9	
15	T-Bill 91 days Yield (per cent-end period)	8.2	8.2	9.8	7.2	7.1	
16	10 year Govt. Securities Yield (per cent-end period)	8.8	8.8	9.4	8.0	7.9	
17	Overall Balance (in US \$ bn.)	27.0	23.1	50.0	12.0		
18	Export (in US \$ bn.)	188.8	190.0	203.7	175.0	155.3	
	Export (growth rate in percent)	20.6	20.0	31.0	12.7	22.9	
19	Import (in US \$ bn.)	314.1	315.6	343.3	284.0	235.7	
	Import (Growth rate in percent)	29.4	29.5	38.0	20.9	26.9	
20	Trade Balance (US \$ bn)	-125.2	-126.2	-101.0	-149.7	-80.4	
21	Invisible Balance (US \$ bn)	86.4	86.0	99.4	72.9		
* Fig	ures pertain to 2006-07				•		

	Key Macroeconomic Indicators	Annu	al Forecasts	for 2009-1	10
		Mean	Median	Max	Min
1	Real GDP growth rate at factor cost (in per cent)	7.8	8.0	8.8	6.2
а	Agriculture & Allied Activities	3.4	3.3	5.0	2.5
b	Industry	7.4	7.7	9.0	5.5
С	Services	9.3	9.4	10.8	7.0
2	Private Final Consumption Expenditure (growth rate in per cent)	7.2	7.1	8.5	6.0
3	Gross Domestic Saving (per cent of GDP at current market price)	35.0	35.0	37.0	30.0
	of which Private Corporate Sector	7.7	7.3	10.8	6.5
4	Gross Domestic Capital Formation (per cent of GDP at current market price)	37.4	37.0	43.9	32.9
5	Gross Fixed Capital Formation (per cent of GDP at current market price)	34.0	34.0	37.6	30.9
6	Money Supply (M3) (growth rate in per cent)	18.6	18.0	20.0	17.5
7	Bank Credit (growth rate in per cent)	19.6	19.8	23.0	16.5
8	Combined Gross Fiscal Deficit (per cent of GDP)	6.7	6.5	9.0	4.8
9	Central Govt. Fiscal Deficit (per cent of GDP)	3.8	3.4	6.5	2.5
10	Corporate profit after tax (growth rate in per cent)**	18.8	20.0	23.0	12.0
11	Repo (end period)	8.1	8.4	9.0	6.0
12	Reverse Repo (end period)	6.3	6.3	7.0	5.0
13	CRR (end period)	8.3	8.5	9.3	5.0
14	USD/INR (RBI reference rate-end period)	40.8	41.0	45.0	37.0
15	T-Bill 91 days Yield (per cent-end period)	7.7	7.8	8.6	6.7
16	10 year Govt. Securities Yield (per cent-end period)	8.1	8.0	9.3	7.0
17	Overall Balance (in US \$ bn.)	38.9	45.0	50.0	20.0
18	Export (in US \$ bn.)	225.2	220.0	263.3	200.0
	Export (growth rate in percent)	19.6	20.0	26.6	10.0
19	Import (in US \$ bn.)	364.3	375.0	410.1	300.0
	Import (Growth rate in percent)	22.4	23.5	30.0	12.0
20	Trade Balance (US \$ bn)	-141.2	-145.0	-100.0	-195.0
21	Invisible Balance (US \$ bn)	101.2	100.0	121.8	83.0

Table A.3									
		Quarterly Forecasts							
	07-08: Q4		08-0	9:Q1		08-09:Q2			
Key Macroeconomic Indicators	Actuals	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GDP growth rate at factor cost (per cent)	8.8	8.1	8.0	8.5	7.9	7.7	7.7	8.2	7.4
Agriculture & Allied Activities	2.9	3.4	3.1	4.4	2.5	3.3	3.4	5.0	1.0
Industry	5.8	6.7	7.1	7.5	3.5	7.2	7.0	8.5	6.7
Services	11.4	9.2	9.9	10.9	4.1	9.4	9.6	10.0	8.7
IIP growth rate (per cent)	6.1	7.1	7.2	7.5	6.5	7.0	7.0	8.3	6.0
Private Final Consumption Expenditure (growth rate in per cent)	13.5	10.8	12.6	13.2	6.8	10.3	11.5	13.5	6.6
Gross Domestic Capital Formation (per cent of GDP at current market price)		36.6	36.6	37.0	36.2	36.1	36.0	36.8	35.6
Gross Fixed Capital Formation (per cent of GDP at current market price)	33.7	33.6	33.9	34.6	31.4	33.6	33.6	36.8	30.7
Corporate profit after tax (growth rate in per cent)		20.1	20.3	25.0	15.0	16.7	17.4	22.0	10.0
USD/INR (RBI reference rate- end period)	39.97	42.9	42.9	44.0	41.7	43.3	43.5	44.0	42.0
Repo Rate (end period)	7.75	8.5	8.5	8.5	8.0	8.8	8.8	9.3	8.3
Reverse Repo Rate (end period)	6.0	6.1	6.0	6.5	6.0	6.2	6.1	7.0	6.0
CRR (end period)	7.5	8.3	8.3	8.8	8.3	9.0	9.0	9.3	8.8
BSE INDEX (end period)	15644	13665	13600	14000	13462	13548	13546	15000	12100
Export (US \$ bn.)	43.6	42.2	43.7	46.4	32.8	44.9	44.8	50.1	40.1
Import (US \$ bn.)	64.1	72.0	74.0	77.1	59.1	76.4	78.2	80.6	71.1
Trade Balance (US \$ bn.)	-20.5	-29.8	-31.1	-26.3	-32.0	-31.5	-32.1	-23.4	-38.0

Table A.3 (Contd.)

	Quarterly Forecasts											
Key Macroeconomic Indicators		08-09	:Q3		08-09:Q4				09-10:Q1			
•	Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GDP growth rate at factor cost (per cent)	7.6	7.6	8.4	6.7	7.4	7.5	8.7	6.0	7.8	8.0	8.8	6.4
Agriculture & Allied Activities	3.2	3.1	5.0	1.5	3.6	3.8	5.5	2.0	3.1	3.0	4.4	2.6
Industry	7.4	7.4	8.5	6.4	7.2	7.3	8.5	5.6	7.4	7.6	8.5	5.5
Services	9.5	9.6	10.6	8.6	9.2	9.5	10.7	8.0	9.7	9.8	11.1	8.0
IIP growth rate (per cent)	7.2	7.3	8.2	6.4	7.1	7.4	8.0	6.0	7.4	7.6	8.0	5.8
Private Final Consumption Expenditure (%growth)	10.0	11.4	13.5	5.7	10.5	10.9	13.5	6.8	10.0	11.1	13.1	5.5
Gross Domestic Capital Formation (% of GDP at current market price)	36.1	35.8	37.0	35.5	36.4	36.1	37.0	36.1	36.3	36.1	37.0	35.8
Gross Fixed Capital Formation (% of GDP at current market price)	33.0	33.5	34.3	30.3	33.4	34.0	34.6	30.1	33.5	34.0	35.5	30.3
Corporate profit after tax (growth rate in per cent)	16.0	16.0	22.0	10.0	17.8	19.5	22.0	10.0	21.3	20.0	25.0	19.0
USD/INR (RBI reference rate- end period)	42.9	43.0	45.0	41.0	42.4	42.0	45.0	40.0	42.1	42.0	46.0	39.0
Repo Rate (end period)	8.9	9.0	9.5	8.3	8.8	9.0	9.5	8.0	8.6	8.6	9.0	8.0
Reverse Repo Rate (end period)	6.2	6.1	7.0	6.0	6.4	6.0	8.5	6.0	6.3	6.1	7.0	6.0
CRR (end period)	9.2	9.3	9.5	8.8	9.1	9.3	9.5	8.5	8.8	9.0	9.3	8.0
	1440		155	127	1563		185	1200	173		2100	125
BSE INDEX (end period)	0	14700	00	00	8	16025	00	0	25	17900	0	00
Export (US \$ bn.)	48.6	47.7	51.0	46.0	53.8	53.5	58.3	50.0	53.2	52.0	60.4	49.5
Import (US \$ bn.)	81.0	80.5	91.9	74.7	85.8	79.8	105. 0	74.0	85.3	80.0	96.2	76.7
	-		-	-			-		-			-
Trade Balance (US \$ bn).	32.4	-31.1	27.1	40.8	-31.9	-29.0	24.0	-46.7	30.1	-29.9	-18.0	39.4

Table A.4: Forecasts for WPI and CPI-IW												
	WPI					WPI-MP			CPI-IW	CPI-IW		
	Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
Q2-08-09	11.5	11.7	13.0	9.0	9.3	9.3	10.0	8.5	9.9	10.0	13.0	6.7
Q3-08-09	10.9	11.4	13.0	8.0	9.5	8.9	14.0	6.3	9.8	10.5	12.5	7.2
Q4-08-09	8.9	9.2	11.0	7.0	8.3	7.6	13.0	5.7	8.9	9.0	11.0	6.5
Q1-09-10	6.9	6.1	10.0	5.5	6.9	7.1	8.0	5.2	7.2	7.0	9.0	5.5

# Table A.5

Mean probabilities attached to possible outcomes of GDP						
Growth Range	Forecasts for 2008-09	Forecasts for 2009-10				
10 to 10.4 per cent		5				
9.5 to 9.9 per cent	2.7	4				
9 to 9.4 per cent	4.7	10.6				
8.5 to 8.9 per cent	14.8	45.6				
8 to 8.4 per cent	21.3	28.9				
7.5 to 7.9 per cent	57.3	25.3				
7 to 7.4 per cent	23.4	33				
6.5 to 6.9 per cent	6.3	16.6				
6 to 6.4 per cent	3	37.7				
5.5 to 5.9 per cent	1.5	2				
5 to 5.4 per cent		1				
Below 5 per cent		1				

Table A.6						
Mean probabilities attached to possible outcomes of WPI						
Growth Range Forecasts for 2008-09 Forecasts 2009-10						
12 per cent or above	4.7					
11 to 11.9 per cent	9.2	1				
10 to 10.9 per cent	16	2				
9 to 9.9 per cent	39.6	4.5				
8 to 8.9 per cent	29.2	9.4				
7 to 7.9 per cent	25.9	22.2				
6 to 6.9 per cent	8.8	27.5				
5 to 5.9 per cent	10.1	45.3				
4 to 4.9 per cent	3	25				
3 to 3.9 per cent		6				

Table A.7							
Annual average percentage change over the next five years							
	Real GDP	WPI Inflation	CPI-IW Inflation				
Minimum	7.8	4.5	5.0				
Lower Quartile	8.0	5.0	5.7				
Median	8.0	6.0	6.0				
Upper Quartile	8.4	6.5	6.6				
Maximum	9.0	7.2	7.5				
S.D	0.4	0.8	1.0				

Table A.8								
Annual average percentage change over the next ten years								
		WPI	CPI-IW					
	Real GDP	Inflation	Inflation					
Minimum	7.0	4.5	4.9					
Lower Quartile	7.8	4.6	5.0					
Median	8.5	5.0	5.4					
Upper Quartile	8.5	5.5	5.9					
Maximum	9.0	6.4	7.0					
S.D	0.7	0.6	0.8					