

Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 52nd Round¹

Growth is expected to firm up in 2018-19 and 2019-20 on the back of higher private consumption and investment, according to the 28 forecasters surveyed by the Reserve Bank. Consumer price inflation is expected to remain below 5.0 per cent from Q2:2018-19 to Q4:2018-19.

The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. Twenty eight panellists participated in the 52nd round of the survey conducted during May 2018². The survey results are summarised in terms of their median forecasts and consolidated in Annexes 1-8, along with quarterly paths for key variables.

Highlights:

1. Output

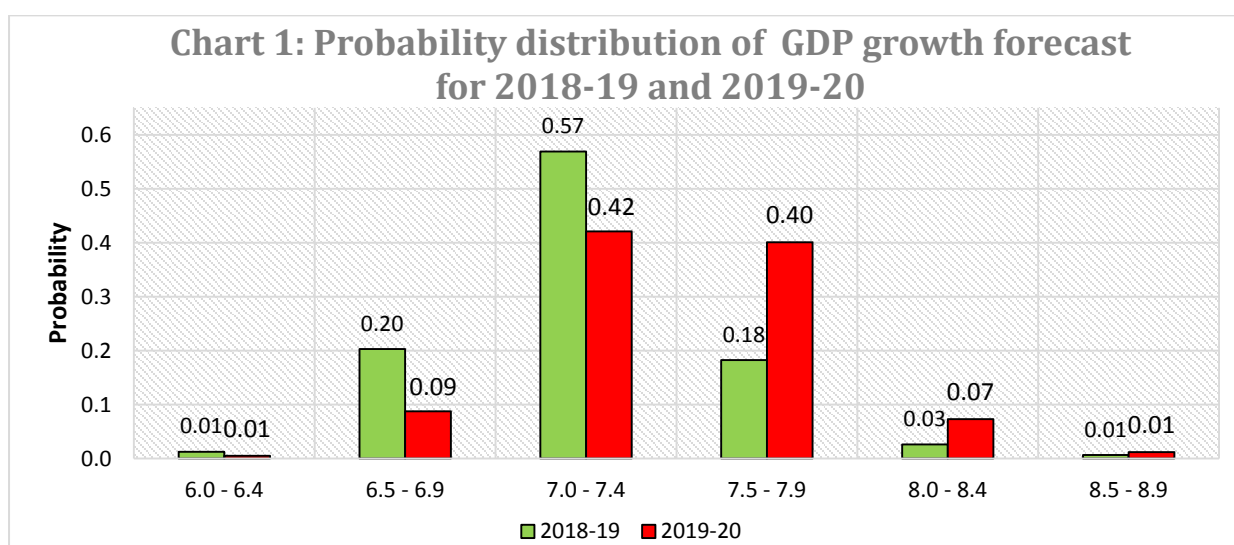
- Real gross domestic product (GDP) is likely to grow at 7.4 per cent in 2018-19 up from 6.7 per cent in 2017-18 and is expected to further accelerate by 20 basis points (bps) in 2019-20 on the back of support from private consumption and investment (Table 1).
- The investment rate, proxied by gross fixed capital formation, is expected to improve in 2018-19 and further in 2019-20, *albeit* at a lower rate than the upturn in the saving rate.
- Real gross value added (GVA) is expected to grow by 7.1 per cent in 2018-19 and by 7.4 per cent in 2019-20, supported by activity in the industry and services sectors.

¹ The results of the last survey round were released on [April 5, 2018](#) on the RBI's website.

² The results presented here represent the views of the respondent forecasters and in no way reflect the views or forecasts of the Reserve Bank.

Table 1: Median Forecast of Growth in Real GDP, GVA and Components (in per cent)		
	2018-19	2019-20
Real GDP Growth	7.4 (+0.1)	7.6
Private Final Consumption Expenditure (nominal) (growth rate in per cent)	11.0 (-0.2)	11.3
Gross Fixed Capital Formation Rate (per cent of GDP)	29.0 (0.0)	29.2
Real GVA Growth	7.1 (0.0)	7.4
a. Agriculture and Allied Activities	3.0 (-0.1)	3.0
b. Industry	6.8 (0.0)	6.8
c. Services	8.3 (-0.1)	8.6
Gross Saving Rate [per cent of gross national deposable income (GNDI)]	30.0 (-0.5)	30.5
Note: In all the tables, the figures in parentheses indicate the extent of revision in median forecasts (percentage points) relative to the previous SPF round.		

- Forecasters have assigned the maximum probability to GDP being in the range of 7.0-7.4 per cent in 2018-19 (Chart 1).
- Forecasters have assigned the maximum probability to GDP growth being in the range 7.0-7.4 per cent in 2019-20 (Chart 1).



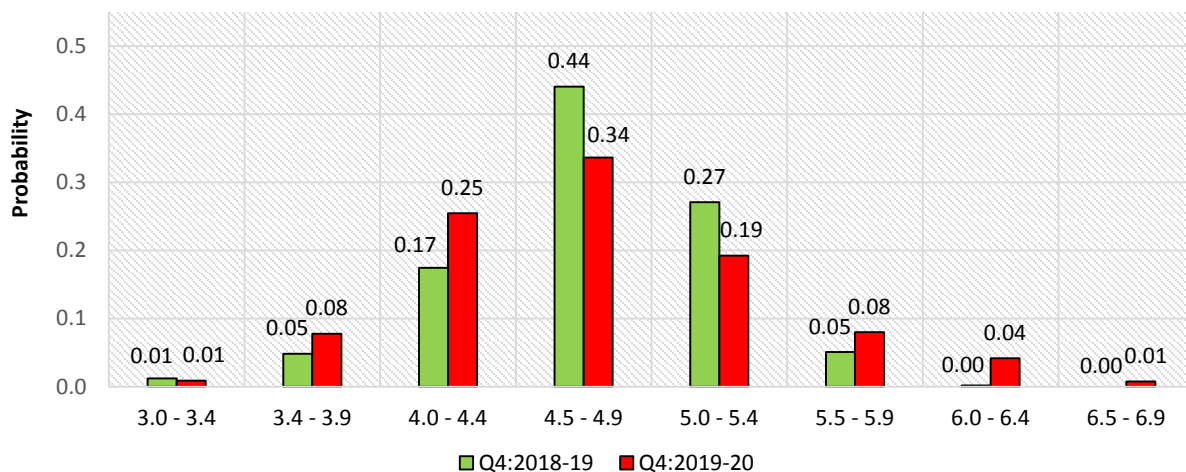
2. Inflation

- Headline consumer price index (CPI) inflation is expected at around 5.0 per cent in Q1:2018-19 and thereafter, it is likely to remain below 5.0 per cent till Q4:2018-19. Median headline inflation forecasts from Q2:2018-19 to Q4:2018-19 have been revised up in the current round by 20-40 bps from the previous round (Table 2).
- Core inflation (*i.e.*, CPI excluding food and beverages, pan, tobacco and intoxicants, and fuel and light) is likely to remain above 5.0 per cent till Q4:2018-19. The core inflation forecast has been revised up in the current round by 60-80 bps from the previous round.

Table 2: Median Forecast of Quarterly Inflation (in per cent)				
	Q1:18-19	Q2:18-19	Q3:18-19	Q4:18-19
CPI Headline	5.0 (-0.1)	4.9 (+0.2)	4.4 (+0.4)	4.6 (+0.3)
CPI excluding <i>food & beverages, pan, tobacco & intoxicants and fuel & light</i>	6.1 (+0.6)	5.9 (+0.6)	5.5 (+0.6)	5.2 (+0.5)
WPI All Commodities	4.1 (+0.3)	4.3 (+0.3)	3.6 (+0.4)	3.2 (+0.2)
WPI Non-food Manufactured Products	3.8 (0.0)	4.0 (+0.1)	3.4 (-0.1)	2.4 (-0.2)

- Forecasters have assigned the highest probability to CPI inflation being in the range 4.5-4.9 per cent in Q4:2018-19 as well as in Q4:2019-20 (Chart 2). The wider probability distribution for Q4:2019-20 as compared to Q4:2018-19 suggests higher uncertainty in the last quarter of 2019-20.

Chart 2: Probability distribution of CPI inflation forecast for Q4:2018-19 and Q4:2019-20



3. External Sector

- The forecast of growth in merchandise exports during 2018-19 has been revised down significantly, whereas import growth has been revised up by 160 bps and is expected at 12.5 per cent (Table 3).
- The current account deficit (CAD) is expected to remain at 2.4 per cent of GDP for both in 2018-19 and 2019-20.
- The Indian rupee is likely to remain range-bound against the US dollar till Q4:2018-19 (Annex 3).

Table 3: Median Forecast of Select External Sector Variables		
	2018-19	2019-20
Merchandise Exports – in US \$ terms (annual growth in per cent)	8.1 (-1.3)	8.4
Merchandise Imports– in US \$ terms (annual growth in per cent)	12.5 (+1.6)	8.5
Current Account Deficit (Ratio to GDP at current market price, in per cent)	2.4 (+0.3)	2.4

The Reserve Bank thanks the following institutions for their participation in this round of the Survey of Professional Forecasters (SPF):

Aditi Nayar, ICRA Limited; Anubhuti Sahay, Standard Chartered Bank; Debopam Chaudhuri, Piramal Enterprises Limited; Dharmakirti Joshi, CRISIL Ltd.; Dr Arun Sing, Dun & Bradstreet India; Gaurav Kapur, IndusInd Bank Ltd.; ICICI Securities PD; Indranil Pan, IDFC Bank Ltd.; National Council of Applied Economic Research; Pinaki M. Mukherjee, Maruti Suzuki; Sameer Narang, Bank of Baroda; Shailesh Kejariwal, B&K Securities India Pvt Ltd; Siddharth V Kothari, Sunidhi Securities & Finance Ltd; and Upasna Bhardwaj, Kotak Mahindra Bank.

The Bank also acknowledges the contribution of 14 others SPF panellists, who preferred to remain anonymous, to the survey.

Annex 1: Annual Forecasts for 2018-19

	Key Macroeconomic Indicators	Annual Forecasts for 2018-19					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.3	7.4	7.8	6.8	7.2	7.5
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.6	11.0	12.5	7.4	10.0	11.9
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	28.9	29.0	30.5	26.5	28.6	29.2
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.1	7.1	7.7	6.5	7.0	7.3
a	Agriculture & Allied Activities (growth rate in per cent)	3.3	3.0	4.5	2.0	3.0	3.6
b	Industry (growth rate in per cent)	6.7	6.8	8.0	5.1	6.2	7.2
c	Services (growth rate in per cent)	8.3	8.3	9.1	7.5	8.1	8.6
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.9	30.0	32.1	28.3	29.0	30.5
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.4	3.3	4.2	3.2	3.3	3.5
7	Combined Gross Fiscal Deficit (per cent to GDP)	6.2	6.2	7.3	5.4	6.0	6.3
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	10.7	11.3	14.0	8.0	9.6	11.8
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	7.8	7.8	8.1	7.3	7.6	7.9
10	Yield on 91-day T-Bill of Central Govt. (end-period)	6.6	6.6	7.0	6.2	6.4	6.8
11	Merchandise Exports - BoP basis - Annual Growth (per cent)	8.9	8.1	16.5	2.0	7.1	9.9
12	Merchandise Imports - BoP basis - Annual Growth (per cent)	12.6	12.5	24.5	7.5	9.9	14.8
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.4	-2.4	-1.8	-2.8	-2.6	-2.2
14	Overall BoP - In US \$ bn.	4.2	7.7	40.0	-21.0	-9.8	13.1
15	Inflation based on CPI-Combined - Headline	4.7	4.7	5.5	4.0	4.5	4.8
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.7	5.6	6.6	4.9	5.5	5.9
17	Inflation based on WPI - All Commodities	4.0	3.9	6.6	2.9	3.5	4.3
18	Inflation based on WPI -Non-food Manufactured Products	3.7	3.6	5.3	2.6	3.3	4.1

Annex 2: Annual Forecasts for 2019-20

	Key Macroeconomic Indicators	Annual Forecasts for 2019-20					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.5	7.6	8.1	6.8	7.3	7.8
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	11.2	11.3	13.3	7.7	10.7	12.2
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	29.1	29.2	30.9	27.0	28.9	29.5
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.4	7.4	7.9	6.6	7.2	7.5
a	Agriculture & Allied Activities (growth rate in per cent)	3.2	3.0	4.7	2.3	3.0	3.4
b	Industry (growth rate in per cent)	7.0	6.8	8.1	6.1	6.4	7.7
c	Services (growth rate in per cent)	8.5	8.6	9.6	7.6	8.1	8.8
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	30.6	30.5	32.4	29.5	29.7	31.2
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.2	3.1	3.8	3.0	3.0	3.5
7	Combined Gross Fiscal Deficit (per cent to GDP)	5.6	5.9	7.0	2.7	5.4	6.1
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	11.9	12.1	14.0	8.3	11.2	13.1
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	7.6	7.6	8.3	7.1	7.4	7.8
10	Yield on 91-day T-Bill of Central Govt. (end-period)	6.6	6.5	7.5	6.0	6.1	7.0
11	Merchandise Exports - BoP basis - Annual Growth (per cent)	8.4	8.4	17.5	1.9	6.0	9.5
12	Merchandise Imports - BoP basis - Annual Growth (per cent)	9.8	8.5	28.2	1.8	6.3	12.0
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.4	-2.4	-1.9	-2.8	-2.7	-2.0
14	Overall BoP - In US \$ bn.	10.2	9.3	60.0	-20.6	-2.1	15.4
15	Inflation based on CPI-Combined - Headline	4.7	4.5	5.7	4.2	4.5	4.9
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.0	5.0	5.8	4.2	4.6	5.4
17	Inflation based on WPI - All Commodities	3.6	3.9	4.8	1.8	2.7	4.4
18	Inflation based on WPI -Non-food Manufactured Products	3.2	3.1	5.1	1.7	1.9	4.3

Annex 3: Quarterly Forecasts from Q4:2017-18 to Q4:2018-19

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q1: 2018-19				Q2: 2018-19			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.3	7.3	7.8	6.7	7.3	7.3	8.0	6.7
2	PFCE at current prices: Y-on-Y Growth (per cent)	11.0	10.8	13.2	9.7	11.1	10.8	13.4	9.3
3	GFCF Rate (per cent of GDP at current market prices)	28.9	28.9	30.0	28.2	28.7	28.7	29.7	28.0
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	7.2	7.2	7.7	6.5	7.2	7.2	7.9	6.6
a	Agriculture & Allied Activities (growth rate in per cent)	3.0	3.0	4.0	2.1	3.0	3.0	4.6	1.1
b	Industry (growth rate in per cent)	7.4	7.3	10.3	5.3	6.5	6.6	7.5	5.3
c	Services (growth rate in per cent)	8.0	8.2	8.9	6.4	8.2	8.2	9.0	7.4
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	5.7	5.6	6.3	5.0	5.7	5.9	6.3	4.4
6	Merchandise Exports - BoP basis (in US\$ bn.)	78.4	78.5	81.2	76.0	81.9	81.4	83.9	80.0
7	Merchandise Imports - BoP basis (in US\$ bn.)	124.9	125.5	127.0	121.9	125.7	125.4	133.0	120.6
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	67.4	67.5	68.5	64.4	67.4	67.5	70.0	64.5
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	73.2	74.0	78.0	64.2	72.4	75.0	77.0	63.8
10	Repo Rate (end-period)	6.1	6.0	6.3	6.0	6.2	6.3	6.5	6.0

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q3: 2018-19				Q4: 2018-19			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.2	7.1	7.8	6.7	7.3	7.3	7.9	6.5
2	PFCE at current prices: Y-on-Y Growth (per cent)	11.0	11.4	12.2	8.3	11.3	11.8	12.5	8.5
3	GFCF Rate (per cent of GDP at current market prices)	28.5	28.8	29.3	27.0	28.8	28.6	29.4	28.5
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	7.1	7.0	7.7	6.5	7.2	7.1	7.7	6.6
a	Agriculture & Allied Activities (growth rate in per cent)	3.4	3.3	5.0	1.5	3.2	3.0	4.5	1.9
b	Industry (growth rate in per cent)	6.8	6.9	8.7	5.6	6.6	6.4	7.9	5.1
c	Services (growth rate in per cent)	8.3	8.2	9.3	7.6	8.4	8.2	9.5	8.0
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	4.8	4.6	6.6	3.3	4.9	4.7	6.8	3.5
6	Merchandise Exports - BoP basis (in US\$ bn.)	83.4	83.0	86.0	80.8	87.9	85.8	105.0	79.8
7	Merchandise Imports - BoP basis (in US\$ bn.)	133.4	131.2	145.0	126.9	136.7	132.7	174.0	122.7
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	67.4	67.5	69.5	65.1	66.8	67.4	69.0	64.5
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	71.2	72.0	80.0	64.2	70.0	70.0	80.0	59.0
10	Repo Rate (end-period)	6.3	6.3	6.5	6.0	6.3	6.5	6.5	6.0

Annex 4: Forecasts of CPI-Combined Inflation (per cent)

	CPI Combined Headline				Core CPI Combined (excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light')			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q1:2018-19	5.1	5.0	5.5	4.8	6.0	6.1	6.3	4.9
Q2:2018-19	4.8	4.9	5.4	4.0	5.9	5.9	6.6	5.2
Q3:2018-19	4.3	4.4	5.0	3.7	5.5	5.5	6.7	4.7
Q4:2018-19	4.6	4.6	5.2	4.2	5.3	5.2	6.8	4.6

Annex 5: Forecasts of WPI Inflation (per cent)

	WPI Headline				WPI Non-food Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q1:2018-19	4.3	4.1	5.5	3.7	3.8	3.8	5.1	2.8
Q2:2018-19	4.4	4.3	5.2	4.0	4.1	4.0	5.3	2.8
Q3:2018-19	3.7	3.6	5.2	2.9	3.7	3.4	5.3	2.4
Q4:2018-19	3.4	3.2	4.8	2.6	3.0	2.4	5.4	1.2

Annex 6: Mean probabilities attached to possible outcomes of Real GDP growth

Growth Range	Forecasts for 2018-19	Forecasts for 2019-20
10.0 per cent or more	0.00	0.00
9.5 to 9.9 per cent	0.00	0.00
9.0 to 9.4 per cent	0.00	0.00
8.5 to 8.9 per cent	0.01	0.01
8.0 to 8.4 per cent	0.03	0.07
7.5 to 7.9 per cent	0.18	0.40
7.0 to 7.4 per cent	0.57	0.42
6.5 to 6.9 per cent	0.20	0.09
6.0 to 6.4 per cent	0.01	0.01
5.5 to 5.9 per cent	0.00	0.00
5.0 to 5.4 per cent	0.00	0.00
4.5 to 4.9 per cent	0.00	0.00
4.0 to 4.4 per cent	0.00	0.00
3.5 to 3.9 per cent	0.00	0.00
3.0 to 3.4 per cent	0.00	0.00
2.5 to 2.9 per cent	0.00	0.00
2.0 to 2.4 per cent	0.00	0.00
Below 2.0 per cent	0.00	0.00

Annex 7: Mean probabilities attached to possible outcomes of Real GVA growth

Growth Range	Forecasts for 2018-19	Forecasts for 2019-20
10.0 per cent or more	0.00	0.00
9.5 to 9.9 per cent	0.00	0.00
9.0 to 9.4 per cent	0.00	0.00
8.5 to 8.9 per cent	0.01	0.01
8.0 to 8.4 per cent	0.02	0.07
7.5 to 7.9 per cent	0.15	0.31
7.0 to 7.4 per cent	0.53	0.48
6.5 to 6.9 per cent	0.27	0.12
6.0 to 6.4 per cent	0.02	0.01
5.5 to 5.9 per cent	0.00	0.00
5.0 to 5.4 per cent	0.00	0.00
4.5 to 4.9 per cent	0.00	0.00
4.0 to 4.4 per cent	0.00	0.00
3.5 to 3.9 per cent	0.00	0.00
3.0 to 3.4 per cent	0.00	0.00
2.5 to 2.9 per cent	0.00	0.00
2.0 to 2.4 per cent	0.00	0.00
Below 2.0 per cent	0.00	0.00

Annex 8: Mean probabilities attached to possible outcomes of CPI (Combined) inflation

Inflation Range	Forecasts for Q4:2018-19	Forecasts for Q4:2019-20
8.0 per cent or above	0.00	0.00
7.5 to 7.9 per cent	0.00	0.00
7.0 to 7.4 per cent	0.00	0.00
6.5 to 6.9 per cent	0.00	0.01
6.0 to 6.4 per cent	0.00	0.04
5.5 to 5.9 per cent	0.05	0.08
5.0 to 5.4 per cent	0.27	0.19
4.5 to 4.9 per cent	0.44	0.34
4.0 to 4.4 per cent	0.17	0.25
3.5 to 3.9 per cent	0.05	0.08
3.0 to 3.4 per cent	0.01	0.01
2.5 to 2.9 per cent	0.00	0.00
2.0 to 2.4 per cent	0.00	0.00
1.5 to 1.9 per cent	0.00	0.00
1.0 to 1.4 per cent	0.00	0.00
0.5 to 0.9 per cent	0.00	0.00
0 to 0.4 per cent	0.00	0.00
Below 0 per cent	0.00	0.00

Note: CPI: Consumer Price Index; GDP: Gross Domestic Products; GNDI: Gross National Disposable Income; GVA: Gross Value Added; IIP: Index of Industrial Production; WPI: Wholesale Price Index.