Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 61st Round¹

Growth is expected to moderate in 2019-20 but improve in 2020-21. Consumer price inflation is expected at 4.7 per cent in Q3:2019-20, moderating thereafter.

The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. Forty-one panellists participated in the 61st round of the survey conducted during November 2019². The survey results are summarised in terms of their median forecasts and consolidated in Annexes 1-7, along with quarterly paths for key variables.

Highlights:

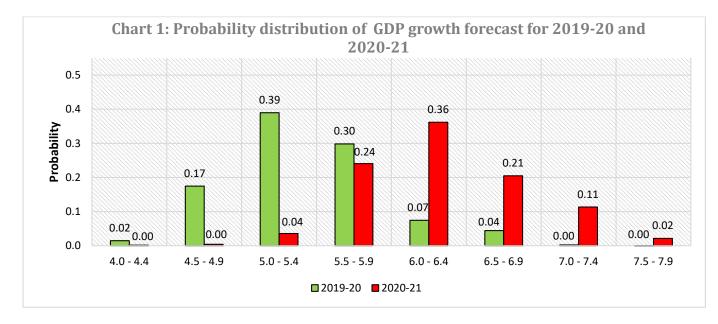
1. Output

- Real gross domestic product (GDP) is likely to grow at 5.3 per cent in 2019-20 and by 6.4 per cent in 2020-21 (Table 1).
- Real private final consumption expenditure (PFCE) growth is expected at 4.4 per cent during 2019-20, improving to 6.4 per cent during 2020-21.
- The growth of real gross fixed capital formation (GFCF) is likely to moderate to 4.9 per cent in 2019-20, but improve to 6.5 per cent in 2020-21.
- Forecasters have assigned the maximum probability to real GDP growth being in the range of 5.0-5.4 per cent in 2019-20 and 6.0-6.4 per cent in 2020-21 (Chart 1).
- Real gross value added (GVA) is expected to grow by 5.3 per cent in 2019-20 and further by 6.3 per cent in 2020-21, supported by upticks in industrial and services sector activity.

¹ The results of the previous survey round were released on <u>October 4, 2019</u> on the Reserve Bank'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 GDP, GVA and Components (in per cent)						
	2019-20	2020-21				
Real GDP growth rate	5.3 (-0.9)	6.4 (-0.6)				
a. Real PFCE growth rate	4.4 (-1.1)	6.4 (-0.6)				
b. Real GFCF growth rate	4.9 (-1.1)	6.5 (-0.9)				
Nominal PFCE growth rate	8.2 (-0.9)	10.1 (-0.1)				
Real GVA Growth	5.3 (-0.7)	6.3 (-0.4)				
a. Agriculture and Allied Activities	2.8 (-0.2)	3.2 (-0.2)				
b. Industry	2.9 (-1.5)	5.5 (-0.7)				
c. Services	7.2 (-0.2)	7.5 (-0.3)				
Gross Saving Rate	30.0	30.3				
[per cent of gross national disposable income] (GNDI)]	(-0.1)	(-0.2)				
Gross Capital Formation (GCF) Rate	30.5	30.8				
[per cent of GDP at current market prices]	(-0.5)	(-0.2)				
<u>Note</u> : In all the tables, the figures in parentheses indi median forecasts (percentage points) relative to						



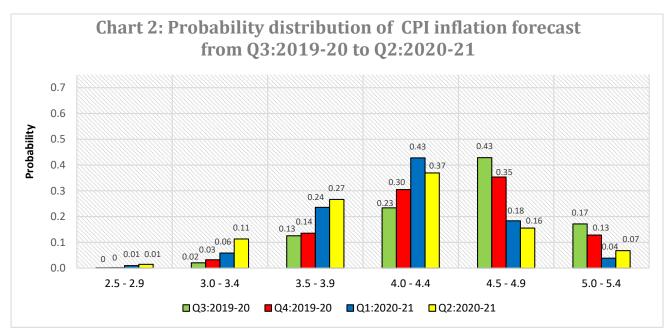
Note: Tails of the distribution are not presented in the chart. Detailed probability distributions are given in Annex 6.

2. Inflation

- Headline consumer price index (CPI) inflation is expected at 4.7 per cent in Q3:2019-20, which is projected to gradually moderate to 4.0 per cent by Q2:2020-21 (Table 2).
- CPI inflation excluding food and beverages, pan, tobacco and intoxicants and fuel and light is expected to remain in the range 3.5 3.7 per cent till Q4:2019-20 and reach 4.0 per cent during the first half of 2020-21.

Table 2: Median Forecast of Quarterly Inflation(in per center)									
	Q3:19-20	Q4:19-20	Q1:20-21	Q2:20-21					
CPI - Combined	4.7	4.5	4.1	4.0					
	(+1.0)	(+0.6)	(+0.2)	(0.0)					
CPI excluding food and beverages, pan, tobacco and intoxicants and fuel and light	3.5 (-0.4)	3.7 (-0.5)	4.0 (-0.4)	4.0 (-0.3)					
WPI All Commodities	0.7	1.7	1.6	2.6					
	(-0.3)	(-0.5)	(-0.6)	(-0.2)					
WPI Non-food Manufactured	-1.4	-0.6	-0.1	1.0					
Products	(-1.2)	(-1.2)	(-1.2)	(-1.0)					

• Forecasters have assigned the highest probability to CPI inflation being in the range of 4.5-4.9 per cent during Q3:2019-20 to Q4:2019-20 and 4.0-4.4 per cent during Q1:2020-21 to Q2:2020-21 (Chart 2).



Note: Tails of the distribution are not presented in the chart. Detailed probability distributions are given in Annex 7.

3. External Sector

- Merchandise exports and imports growth are expected to decline by 1.5 per cent and 4.3 per cent, respectively, during 2019-20; both are, however, expected to improve in the next year (Table 3).
- The current account deficit is expected at 1.5 per cent of GDP at current market prices in 2019-20 and at 1.8 per cent in 2020-21.
- The Indian rupee is likely to remain range bound within ₹71.40 ₹72.60 per US Dollar till Q2:2020-21 (Annex 3).

Table 3: Median Forecast of Select External Sector Variables								
2019-20 2020-2								
Merchandise Exports in US \$ terms	-1.5	5.0						
(annual growth in per cent)	(-3.0)	(-1.3)						
Merchandise Imports in US \$ terms	-4.3	5.5						
(annual growth in per cent)	(-4.8)	(-1.6)						
Current Account Deficit	1.5	1.8						
(per cent of GDP at current market prices)	(-0.4)	(-0.2)						

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

Abhishek Gupta (Bloomberg Economics); Aditi Nayar (ICRA Limited); Bank of Baroda; Barclays Bank PLC; Debopam Chaudhuri (Piramal Enterprises Limited); Devendra Pant (India Ratings and Research); Dr. Arun Singh (Dun & Bradstreet India); Dr. Rupa Rege Nitsure (L&T Finance Holdings); Dr. Tirthankar Patnaik (National Stock Exchange); Gaurav Kapur (IndusInd Bank Limited); ICICI Securities Primary Dealership; Indranil Pan (IDFC FIRST Bank Ltd); NCAER; PHD Chamber of Commerce and Industry; Pinaki M. Mukherjee (Maruti Suzuki); Rini Sen and Sanjay Mathur (ANZ Banking Group); Shailesh Kejariwal (B&K Securities India Pvt Ltd); Siddharth Kothari (Sunidhi Securities & Finance Ltd); TAC Economics; Upasna Bhardwaj (Kotak Mahindra Bank) and Yes Bank.

The Bank also acknowledges the contribution of twenty others SPF panellists, who prefer to remain anonymous.

		Annual Forecasts for 2019-20							
	Key Macroeconomic Indicators	Mean	Median	Max	Min	1st quartile	3rd quartile		
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	5.4	5.3	6.6	4.8	5.1	5.7		
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	4.5	4.4	9.0	2.4	3.7	5.0		
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	5.3	4.9	10.8	2.5	3.9	6.1		
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	8.3	8.2	12.0	5.8	7.2	9.6		
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	30.2	30.5	31.6	25.0	30.4	31.0		
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	5.3	5.3	6.5	4.7	5.1	5.5		
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	2.8	2.8	3.9	1.0	2.5	3.2		
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	3.0	2.9	6.0	1.0	1.9	4.1		
с	Services at constant (2011-12) prices: Annual Growth (per cent)	7.1	7.2	8.0	6.0	6.8	7.2		
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.9	30.0	31.0	29.0	29.3	30.2		
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.6	3.6	3.9	3.3	3.5	3.7		
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.5	6.5	7.0	5.8	6.4	6.8		
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	9.8	9.8	12.0	6.3	9.0	11.0		
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.5	6.4	7.1	6.1	6.3	6.6		
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.3	5.0	7.2	4.8	5.0	5.4		
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	-0.8	-1.5	6.0	-5.0	-2.6	1.5		
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	-3.1	-4.3	5.0	-8.6	-6.0	-1.8		
13	Current Account Balance in US\$ bn.	-45.4	-45.0	-22.3	-66.1	-50.0	-40.1		
14	Current Account Balance (per cent to GDP at current market prices)	-1.6	-1.5	-0.8	-2.4	-1.8	-1.4		
15	Overall BoP in US\$ bn.	29.9	31.6	61.4	0.0	20.0	40.0		
16	Inflation based on CPI Combined: Headline	3.9	3.9	4.6	3.5	3.7	4.0		
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.0	3.9	6.0	3.5	3.8	4.0		
18	Inflation based on WPI: All Commodities	1.7	1.6	4.0	0.8	1.4	1.9		
19	Inflation based on WPI: Non-food Manufactured Products	0.2	-0.2	4.0	-0.5	-0.4	0.4		

Annex 1: Annual Forecasts for 2019-20

		Annual Forecasts for 2020-21							
	Key Macroeconomic Indicators	Mean	Median	Мах	Min	1st quartile	3rd quartile		
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	6.5	6.4	8.0	5.6	6.1	6.8		
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	6.6	6.4	10.0	5.0	6.0	7.1		
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	7.0	6.5	13.5	3.2	5.6	8.0		
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.6	10.1	16.0	8.5	9.0	11.1		
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	30.6	30.8	33.0	25.0	30.3	31.3		
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	6.3	6.3	8.0	5.5	6.0	6.6		
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.3	3.2	5.3	2.2	3.0	3.5		
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	5.3	5.5	8.4	3.2	4.1	6.4		
с	Services at constant (2011-12) prices: Annual Growth (per cent)	7.6	7.5	8.7	6.7	7.1	8.0		
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	30.3	30.3	31.0	29.5	30.0	30.6		
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.4	3.5	3.6	3.2	3.3	3.5		
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.3	6.3	6.8	5.7	6.1	6.5		
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	11.6	11.5	15.0	8.1	10.5	12.1		
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.6	6.7	7.6	5.9	6.1	7.0		
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.4	5.2	7.0	4.9	5.0	5.6		
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	5.4	5.0	12.0	1.5	4.2	6.2		
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	6.4	5.5	14.0	1.4	4.8	7.5		
13	Current Account Balance in US\$ bn.	-55.5	-55.0	-42.0	-71.0	-62.0	-50.1		
14	Current Account Balance (per cent to GDP at current market prices)	-1.8	-1.8	-1.4	-2.5	-2.0	-1.6		
15	Overall BoP in US\$ bn.	22.1	20.2	50.0	0.0	10.3	31.5		
16	Inflation based on CPI Combined: Headline	4.0	4.0	4.8	3.3	3.8	4.1		
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.3	4.2	6.5	3.6	4.0	4.5		
18	Inflation based on WPI: All Commodities	2.7	2.7	4.2	1.1	2.1	3.4		
19	Inflation based on WPI: Non-food Manufactured Products	1.6	1.4	4.3	0.1	0.8	1.8		

Annex 2: Annual Forecasts for 2020-21

		Quarterly Forecasts								
	Key Macroeconomic Indicators		Q3: 2019-20				Q4: 2019-20			
		Mean	Median	Max	Min	Mean	Median	Max	Min	
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	5.6	5.5	6.9	4.7	6.1	6.1	7.5	5.1	
а	PFCE at constant (2011-12) prices: Y-o-Y Growth (per cent)	4.5	4.5	6.9	2.0	5.1	5.5	7.3	3.0	
b	GFCF at constant (2011-12) prices: Y-o-Y Growth (per cent)	4.0	3.8	7.0	-0.7	6.3	5.6	13.7	0.5	
2	PFCE at current prices: Y-on-Y Growth (per cent)	8.4	7.8	11.9	5.5	9.2	8.9	12.4	6.1	
3	GFCF Rate (per cent of GDP at current market prices)	29.5	29.2	32.0	27.6	28.9	28.2	32.0	27.3	
4	GVA at constant (2011-12) prices: Annual Growth (per cent)		5.5	6.9	4.6	6.1	6.2	7.5	5.0	
а	Agriculture & Allied Activities (growth rate in per cent)	3.0	3.0	4.5	1.4	3.9	4.0	6.3	2.0	
b	Industry (growth rate in per cent)	3.1	2.7	7.0	-0.3	4.4	4.7	7.1	1.9	
с	Services (growth rate in per cent)	7.3	7.4	9.0	6.2	7.4	7.3	10.0	6.3	
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	0.5	1.0	4.5	-3.0	2.2	2.5	5.0	-1.4	
6	Merchandise Exports - BoP basis (in US\$ bn.)	83.3	81.9	92.0	78.9	86.2	86.7	92.7	79.5	
7	Merchandise Imports - BoP basis (in US\$ bn.)	122.1	119.8	144.0	110.9	123.5	121.6	142.0	115.0	
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	71.3	71.4	72.5	67.7	71.2	71.5	73.3	68.3	
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	63.5	63.0	71.0	60.3	63.5	64.0	72.5	52.8	
10	Repo Rate (end-period)	4.96	4.90	5.15	4.90	4.85	4.90	5.15	4.50	

Annex 3: Quarterly Forecasts from Q3:2019-20 to Q2:2020-21

		Quarterly Forecasts							
	Key Macroeconomic Indicators	Q1: 2020-21				Q2: 2020-21			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	6.4	6.2	7.7	5.3	6.8	6.6	8.8	5.5
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	6.2	6.0	9.0	4.0	6.4	6.2	9.7	4.5
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	6.2	5.9	11.7	1.8	6.7	7.0	10.1	2.8
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.8	9.1	14.0	7.9	9.9	9.6	12.8	8.0
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)		29.7	32.0	28.9	29.4	29.0	33.2	27.7
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	6.3	6.1	7.4	5.2	6.6	6.5	8.3	5.4
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.3	3.2	5.3	2.0	3.5	3.4	5.9	1.8
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	5.1	4.7	7.3	2.1	5.8	6.0	9.8	2.5
с	Services at constant (2011-12) prices: Annual Growth (per cent)	7.5	7.2	10.0	6.5	7.6	7.4	10.0	6.6
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	2.8	2.7	5.0	-1.1	4.4	4.4	7.0	2.0
6	Merchandise Exports - BoP basis (in US\$ bn.)	86.9	86.7	92.5	82.5	86.2	86.6	90.1	81.5
7	Merchandise Imports - BoP basis (in US\$ bn.)	132.2	130.7	150.0	120.0	132.4	132.0	155.0	119.0
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	72.1	72.4	73.7	70.0	72.5	72.6	76.6	69.0
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	64.0	64.0	70.0	56.3	63.9	64.0	72.4	49.5
10	Repo Rate (end-period)	4.82	4.90	5.15	4.50	4.82	4.75	5.15	4.50

	С	PI Combin	ed (Gener	al)	CPI Combined excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light			and
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q3:2019-20	4.6	4.7	5.1	3.5	3.7	3.5	4.6	3.3
Q4:2019-20	4.5	4.5	6.6	3.6	3.8	3.7	4.7	3.2
Q1:2020-21	4.2	4.1	6.1	3.4	4.0	4.0	4.9	3.4
Q2:2020-21	4.1	4.0	5.1	3.3	4.0	4.0	4.8	3.3

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

Annex 5: Forecasts of WPI Inflation (per cent)

	Ņ	WPI All Co	mmoditie	S	WPI Non-	food Manu	factured P	roducts
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q3:2019-20	0.8	0.7	2.9	-0.2	-0.8	-1.4	1.9	-1.8
Q4:2019-20	1.8	1.7	3.7	-0.3	0.0	-0.6	3.0	-1.3
Q1:2020-21	1.8	1.6	3.9	0.1	0.4	-0.1	3.2	-0.9
Q2:2020-21	2.7	2.6	4.2	0.8	1.3	1.0	3.0	-0.2

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

Growth Range	Forecasts for 2019-20	Forecasts for 2020-21
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	0.00	0.00
8.0 to 8.4 per cent	0.00	0.01
7.5 to 7.9 per cent	0.00	0.02
7.0 to 7.4 per cent	0.00	0.11
6.5 to 6.9 per cent	0.04	0.21
6.0 to 6.4 per cent	0.07	0.36
5.5 to 5.9 per cent	0.30	0.24
5.0 to 5.4 per cent	0.39	0.04
4.5 to 4.9 per cent	0.17	0.00
4.0 to 4.4 per cent	0.02	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

Inflation Range	Forecasts for Q3:2019-20	Forecasts for Q4:2019-20	Forecasts for Q1:2020-21	Forecasts for Q2:2020-21
8.0 per cent or above	0.00	0.00	0.00	0.00
7.5 to 7.9 per cent	0.00	0.00	0.00	0.00
7.0 to 7.4 per cent	0.00	0.00	0.00	0.00
6.5 to 6.9 per cent	0.00	0.03	0.00	0.00
6.0 to 6.4 per cent	0.00	0.01	0.03	0.00
5.5 to 5.9 per cent	0.02	0.01	0.01	0.01
5.0 to 5.4 per cent	0.17	0.13	0.04	0.07
4.5 to 4.9 per cent	0.43	0.35	0.18	0.16
4.0 to 4.4 per cent	0.23	0.30	0.43	0.37
3.5 to 3.9 per cent	0.13	0.14	0.24	0.27
3.0 to 3.4 per cent	0.02	0.03	0.06	0.11
2.5 to 2.9 per cent	0.00	0.00	0.01	0.01
2.0 to 2.4 per cent	0.00	0.00	0.00	0.00
1.5 to 1.9 per cent	0.00	0.00	0.00	0.00
1.0 to 1.4 per cent	0.00	0.00	0.00	0.00
0.5 to 0.9 per cent	0.00	0.00	0.00	0.00
0 to 0.4 per cent	0.00	0.00	0.00	0.00
Below 0 per cent	0.00	0.00	0.00	0.00

Annex 7: Mean probabilities attached to possible outcomes of CPI (Combined) inflation

<u>Note</u>: 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.