Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 62nd Round¹

Professional forecasters expect real GDP growth to improve in 2020-21 after moderation in 2019-20. Consumer price inflation is expected at 6.3 per cent in Q4:2019-20 and moderate thereafter.

The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. This round of the survey (62^{nd} round) was conducted during January 2020^2 , wherein forty panellists participated. The survey results are summarised in terms of median of their forecasts and consolidated in Annex 1-7, along with quarterly paths for key variables.

Highlights:

1. Output

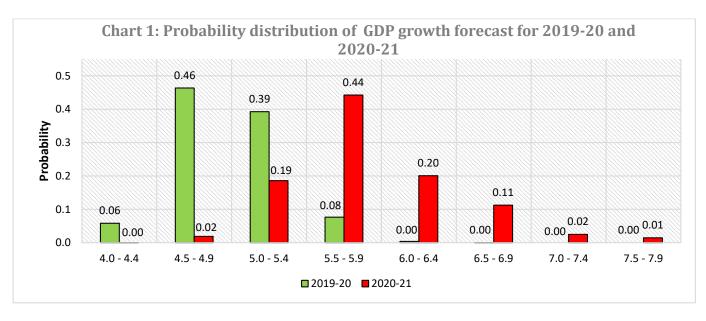
- Real gross domestic product (GDP) is likely to grow by 5.0 per cent in 2019-20 and by 5.9 per cent in 2020-21 (Table 1).
- Real private final consumption expenditure (PFCE) is expected to grow by 4.9 per cent during 2019-20 and by 6.1 per cent during 2020-21.
- Growth in real gross fixed capital formation (GFCF) is likely to moderate to 2.3 per cent in 2019-20 from 9.8 per cent in 2018-19, but improve thereafter to 5.3 per cent in 2020-21.
- Most forecasters have assigned the highest probability to real GDP growth in the range of
 4.5-4.9 per cent in 2019-20 and 5.5-5.9 per cent in 2020-21 (Chart 1).
- Real gross value added (GVA) is expected to grow by 4.8 per cent in 2019-20 and by 5.7 per cent in 2020-21, supported by an uptick in industrial and services sector activities.

¹ The results of the previous survey round were released on December 5, 2019 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 G	DP, GVA and Co	mponents (in per cent)
	2019-20	2020-21
Dool CDD groupth water	5.0	5.9
Real GDP growth rate	(-0.3)	(-0.5)
a Deal DECE away the water	4.9	6.1
a. Real PFCE growth rate	(+0.5)	(-0.3)
h Dool CECE growth rote	2.3	5.3
b. Real GFCF growth rate	(-2.6)	(-1.2)
Namical DECE associate state	9.0	10.1
Nominal PFCE growth rate	(+0.8)	(0.0)
Deal CVA Creatile	4.8	5.7
Real GVA Growth	(-0.5)	(-0.6)
a. Agriculture and Allied Activities	2.8	3.2
a. Agriculture and Amed Activities	(0.0)	(0.0)
b. Industry	2.0	4.0
b. maasa y	(-0.9)	(-1.5)
c. Services	6.8	7.2
c. services	(-0.4)	(-0.3)
Gross Saving Rate	29.9	30.0
[per cent of gross national disposable income]	(-0.1)	(-0.3)
Gross Capital Formation (GCF) Rate	30.0	29.9
[per cent of GDP at current market prices]	(-0.5)	(-0.9)

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.



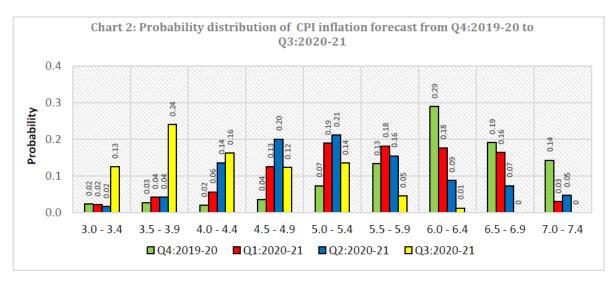
Note: Tails of the distribution are not presented in the chart. Detailed probability distributions are given in Annex 6.

2. Inflation

- Headline consumer price index (CPI) inflation is expected to rise to 6.3 per cent in Q4:2019-20, but moderate thereafter to 3.8 per cent by Q3:2020-21 (Table 2).
- CPI inflation excluding food and beverages, pan, tobacco and intoxicants and fuel and light is expected to remain in the range 4.0 4.4 per cent till Q3:2020-21.

Table 2: Median Forecast of Quarterly Inflation(in per center)										
	Q4:19-20 Q1:20-21 Q2:20-21									
CPI Combined	6.3 (+1.8)	5.1 (+1.0)	4.9 (+0.9)	3.8						
CPI Combined excluding food and beverages, pan, tobacco and intoxicants and fuel and light	4.0 (+0.3)	4.2 (+0.2)	4.2 (+0.2)	4.4						
WPI All Commodities	2.7 (+1.0)	2.8 (+1.2)	3.5 (+0.9)	3.4						
WPI Non-food Manufactured Products	-0.9 (-0.3)	-0.2 (-0.1)	1.0 (0.0)	1.5						

• Forecasters have assigned the highest probability to CPI inflation in the range of 6.0-6.4 per cent for Q4:2019-20; 5.0-5.4 per cent for Q1:2020-21 and Q2:2020-21; and 3.5-3.9 per cent for Q3:2020-21 (Chart 2).



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

3. External Sector

- Growth in merchandise exports and imports is expected to decline by 2.0 per cent and 5.8
 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 1.2 per cent (of GDP at current market prices) in 2019-20 and at 1.5 per cent in 2020-21.
- The Indian rupee is likely to remain range bound within ₹71.50 ₹72.00 per US Dollar till Q3:2020-21 (Annex 3).

Table 3: Median Forecast of Select External Sector Variables								
2019-20 2020-21								
Merchandise Exports in US \$ terms	-2.0	4.9						
(annual growth in per cent)	(-0.5)	(-0.1)						
Merchandise Imports in US \$ terms	-5.8	5.1						
(annual growth in per cent)	(-1.5)	(-0.4)						
Current Account Deficit	1.2	1.5						
(per cent of GDP at current market prices)	(-0.3)	(-0.3)						

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

Anagha Deodhar (ICICI Securities); Abhishek Gupta (Bloomberg Economics); Aditi Nayar (ICRA Limited); Citigroup Global Markets Pvt. Ltd.; CRISIL Ltd; Debopam Chaudhuri (Piramal Enterprises Limited); Devendra Kumar Pant (India Ratings and Research); Edelweiss Professional Investor Research; Gaurav Kapur (IndusInd Bank Limited); ICICI Securities Primary Dealership; Indranil Pan (IDFC FIRST Bank Ltd); Nikhil Gupta (Motilal Oswal Financial Services Ltd.); PHD Chamber of Commerce and Industry; Pinaki M. Mukherjee (Maruti Suzuki); Rini Sen and Sanjay Mathur (ANZ Banking Group Ltd); Sameer Narang (Bank of Baroda); Shailesh Kejariwal (B&K Securities India Pvt Ltd); Siddharth Kothari (Sunidhi Securities & Finance Limited); Sujit Kumar (Union Bank of India); TAC Economics; Tirthankar Patnaik (National Stock Exchange) and Upasna Bhardwaj (Kotak Mahindra Bank).

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

Annex 1: Annual Forecasts for 2019-20

	Annex 1: Annual Forecasts for 2	10 20		nual F	orecas	ts for 2019	9-20
	Key Macroeconomic Indicators	Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	5.0	5.0	5.5	4.6	4.9	5.0
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	4.9	4.9	6.5	3.4	4.5	5.6
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	2.2	2.3	4.9	1.0	1.0	2.9
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	8.5	9.0	9.5	6.4	7.9	9.0
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	29.7	30.0	31.0	28.0	29.1	30.1
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	4.8	4.8	5.4	4.3	4.7	4.9
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	2.8	2.8	3.7	1.9	2.6	3.0
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	2.1	2.0	6.5	0.5	1.4	2.5
С	Services at constant (2011-12) prices: Annual Growth (per cent)	6.8	6.8	8.0	6.0	6.5	6.9
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.7	29.9	30.5	27.9	29.4	30.0
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.7	3.8	4.1	3.3	3.6	3.8
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.6	6.6	7.1	5.8	6.5	6.8
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	8.1	8.0	11.1	6.0	7.0	9.0
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.6	6.6	7.1	6.3	6.5	6.7
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.3	5.2	6.2	5.0	5.1	5.5
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	-1.6	-2.0	4.1	-5.0	-2.6	-1.0
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	-4.8	-5.8	5.9	-10.0	-6.9	-4.3
13	Current Account Balance in US\$ bn.	-35.9	-35.4	-20.9	-55.0	-40.3	-31.0
14	Current Account Balance (per cent to GDP at current market prices)	-1.2	-1.2	-0.7	-1.8	-1.4	-1.0
15	Overall BoP in US\$ bn.	32.4	37.7	52.3	-40.9	30.1	45.0
16	Inflation based on CPI Combined: Headline	4.6	4.6	5.5	3.5	4.4	4.8
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.0	4.0	4.6	3.1	3.9	4.0
18	Inflation based on WPI: All Commodities	1.9	1.8	3.1	1.4	1.8	2.0
19	Inflation based on WPI: Non-food Manufactured Products	-0.2	-0.4	2.1	-1.0	-0.5	-0.3

Annex 2: Annual Forecasts for 2020-21

	Key Macroeconomic Indicators		An	nual Fo	orecas	ts for 2020	0-21
	Key Macroeconomic Indicators	Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	6.0	5.9	7.4	5.4	5.7	6.3
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	6.3	6.1	9.7	4.8	5.9	6.6
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	5.6	5.3	10.0	3.0	4.1	6.4
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.3	10.1	11.5	9.0	9.8	11.0
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	30.0	29.9	32.0	28.2	29.4	30.7
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	5.9	5.7	7.5	5.2	5.5	6.2
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.2	3.2	4.9	2.2	2.9	3.5
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	4.4	4.0	7.0	3.0	3.5	5.5
С	Services at constant (2011-12) prices: Annual Growth (per cent)	7.3	7.2	9.0	6.2	6.9	7.5
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.8	30.0	31.0	27.4	29.5	30.1
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)		3.5	3.8	3.2	3.4	3.6
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.4	6.4	6.7	5.7	6.2	6.6
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	10.4	10.2	13.8	8.0	10.0	11.0
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.6	6.6	7.2	5.8	6.5	7.0
10	Yield on 91-day T-Bill of Central Govt. (end-period)	5.3	5.2	6.3	4.9	5.1	5.3
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	4.5	4.9	9.6	1.5	3.0	5.6
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	5.8	5.1	13.9	2.1	4.1	7.0
13	Current Account Balance in US\$ bn.	-45.5	-47.2	-21.1	-65.0	-52.9	-38.3
14	Current Account Balance (per cent to GDP at current market prices)	-1.5	-1.5	-0.7	-2.1	-1.7	-1.3
15	Overall BoP in US\$ bn.	23.1	25.1	55.0	-39.2	16.4	32.5
16	Inflation based on CPI Combined: Headline	4.4	4.2	6.1	3.4	4.0	4.9
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.2	4.2	4.7	3.0	4.0	4.5
18	Inflation based on WPI: All Commodities	3.1	3.2	4.0	1.3	3.0	3.7
19	Inflation based on WPI: Non-food Manufactured Products	1.3	1.2	4.3	-1.4	0.7	2.0

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

							Quarterly I	orecasts	\$				
	Key Macroeconomic Indicators		Q3: 20	19-20			Q4: 20	19-20		Q1: 2020-21			
		Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	4.8	4.8	5.5	4.2	5.4	5.4	6.4	4.6	5.7	5.7	6.7	5.0
а	PFCE at constant (2011-12) prices: Y-o-Y Growth (per cent)	5.1	5.2	7.9	2.3	5.9	6.0	9.4	3.0	6.3	6.0	12.6	4.5
b	GFCF at constant (2011-12) prices: Y-o-Y Growth (per cent)	2.1	1.1	14.0	-2.8	4.5	4.6	14.0	-0.5	4.7	4.6	8.5	1.5
2	PFCE at current prices: Y-on-Y Growth (per cent)		9.2	11.0	5.5	10.2	10.5	13.2	6.1	10.3	10.4	13.2	7.9
3	GFCF Rate (per cent of GDP at current market prices)		28.3	29.5	26.2	28.1	27.8	31.0	26.2	29.5	29.3	32.0	28.1
4	GVA at constant (2011-12) prices: Annual Growth (per cent)		4.7	5.2	4.1	5.2	5.3	6.2	4.4	5.5	5.6	6.6	4.7
а	Agriculture & Allied Activities (growth rate in per cent)	2.7	2.8	3.5	1.6	4.1	3.9	6.5	2.5	4.7	3.2	27.0	2.2
b	Industry (growth rate in per cent)	1.0	1.1	2.9	-1.5	3.0	3.0	5.4	1.3	3.4	3.2	5.0	1.4
С	Services (growth rate in per cent)	6.7	6.7	8.2	5.2	6.5	6.5	7.5	5.2	6.8	6.8	7.8	5.8
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	-0.2	-0.3	2.1	-2.8	1.9	2.1	3.1	0.0	2.5	2.4	3.7	1.3
6	Merchandise Exports - BoP basis (in US\$ bn.)	82.0	81.1	92.0	78.9	86.5	86.8	90.6	79.5	86.9	86.6	100.0	83.0
7	Merchandise Imports - BoP basis (in US\$ bn.)	117.5	116.5	144.0	100.0	121.8	121.8	142.0	110.0	129.4	129.5	150.0	116.3
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)		-	-	-	71.3	71.5	72.5	70.0	71.5	71.5	73.4	69.6
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)		-	-	-	65.5	65.0	70.0	60.0	65.4	65.0	70.0	58.0
10	Repo Rate (end-period)	-	-	-	-	5.13	5.15	5.15	4.85	5.06	5.15	5.15	4.75

					Quarterly	Forecasts	;			
	Key Macroeconomic Indicators		Q2: 2020-21				Q3: 2020-21			
		Mean	Median	Max	Min	Mean	Median	Max	Min	
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	6.1	6.0	7.3	5.4	6.1	6.1	7.2	5.4	
а	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	6.1	6.1	8.0	4.6	6.3	6.2	7.0	4.6	
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	5.6	5.3	10.0	2.0	6.1	6.0	10.0	3.4	
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	10.2	10.0	12.1	8.3	10.3	10.0	12.1	8.5	
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)		28.0	33.2	26.2	29.2	29.0	33.5	27.1	
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	5.9	5.8	7.2	5.4	5.9	5.9	6.9	5.0	
а	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.3	3.2	5.2	1.8	3.1	3.0	4.0	2.5	
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	4.3	3.8	6.6	2.6	4.6	4.2	6.9	3.1	
С	Services at constant (2011-12) prices: Annual Growth (per cent)	7.0	6.9	7.9	6.4	7.1	7.1	8.2	6.1	
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	3.9	4.0	6.1	2.0	3.5	3.8	5.5	0.0	
6	Merchandise Exports - BoP basis (in US\$ bn.)	87.2	86.1	105.0	81.0	88.3	86.5	105.0	81.3	
7	Merchandise Imports - BoP basis (in US\$ bn.)		128.9	155.0	107.5	130.7	128.9	160.0	112.6	
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	71.8	71.9	76.4	69.0	71.7	72.0	73.7	69.0	
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	65.6	65.0	72.4	55.0	64.7	65.0	70.0	55.0	
10	Repo Rate (end-period)	4.98	5.08	5.15	4.50	4.96	5.00	5.40	4.50	

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

	CI	PI Combine	ed (Gene	ral)	CPI Combined excluding Food an Beverages, Pan, Tobacco and Intoxicants and Fuel and Light			
	Mean	Median	Max	Min	Mean Median Max			
Q4:2019-20	6.1	6.3	7.8	3.6	4.0	4.0	4.7	3.5
Q1:2020-21	5.3	5.1	6.9	3.4	4.2	4.2	4.9	3.4
Q2:2020-21	5.0	4.9	7.1	3.3	4.2	4.2	4.9	3.7
Q3:2020-21	3.9	3.8	5.8	2.1	4.3	4.4	4.9	3.5

Annex 5: Forecasts of WPI Inflation (per cent)

	WPI All Commodities				WPI Non-food Manufactured Produc			roducts
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2019-20	2.6	2.7	3.9	1.5	-0.5	-0.9	2.3	-1.6
Q1:2020-21	2.5	2.8	4.4	0.6	0.0	-0.2	3.2	-1.8
Q2:2020-21	3.4	3.5	5.8	0.9	1.0	1.0	3.0	-2.0
Q3:2020-21	3.3	3.4	4.4	1.4	1.8	1.5	6.1	-0.6

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	0.00
7.5 to 7.9 per cent	0.00	0.01
7.0 to 7.4 per cent	0.00	0.02
6.5 to 6.9 per cent	0.00	0.11
6.0 to 6.4 per cent	0.00	0.20
5.5 to 5.9 per cent	0.08	0.44
5.0 to 5.4 per cent	0.39	0.19
4.5 to 4.9 per cent	0.46	0.02
4.0 to 4.4 per cent	0.06	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 CPI (Combined) inflation

Inflation Range	Forecasts for Q4:2019-20	Forecasts for Q1:2020-21	Forecasts for Q2:2020-21	Forecasts for Q3:2020-21
8.0 per cent or above	0.03	0.00	0.00	0.00
7.5 to 7.9 per cent	0.02	0.00	0.00	0.00
7.0 to 7.4 per cent	0.14	0.03	0.05	0.00
6.5 to 6.9 per cent	0.19	0.16	0.07	0.00
6.0 to 6.4 per cent	0.29	0.18	0.09	0.01
5.5 to 5.9 per cent	0.13	0.18	0.16	0.05
5.0 to 5.4 per cent	0.07	0.19	0.21	0.14
4.5 to 4.9 per cent	0.04	0.13	0.20	0.12
4.0 to 4.4 per cent	0.02	0.06	0.14	0.16
3.5 to 3.9 per cent	0.03	0.04	0.04	0.24
3.0 to 3.4 per cent	0.02	0.02	0.02	0.13
2.5 to 2.9 per cent	0.00	0.01	0.02	0.10
2.0 to 2.4 per cent	0.00	0.00	0.01	0.04
1.5 to 1.9 per cent	0.00	0.00	0.00	0.01
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

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.