

Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 63rd Round¹

The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. The responses for the latest round of the survey (63rd round) were received during March 6-19, 2020², wherein twenty-five panellists participated. The survey results are presented in terms of median forecasts (Annex 1-7), along with quarterly paths for key variables.

Highlights:

1. Output

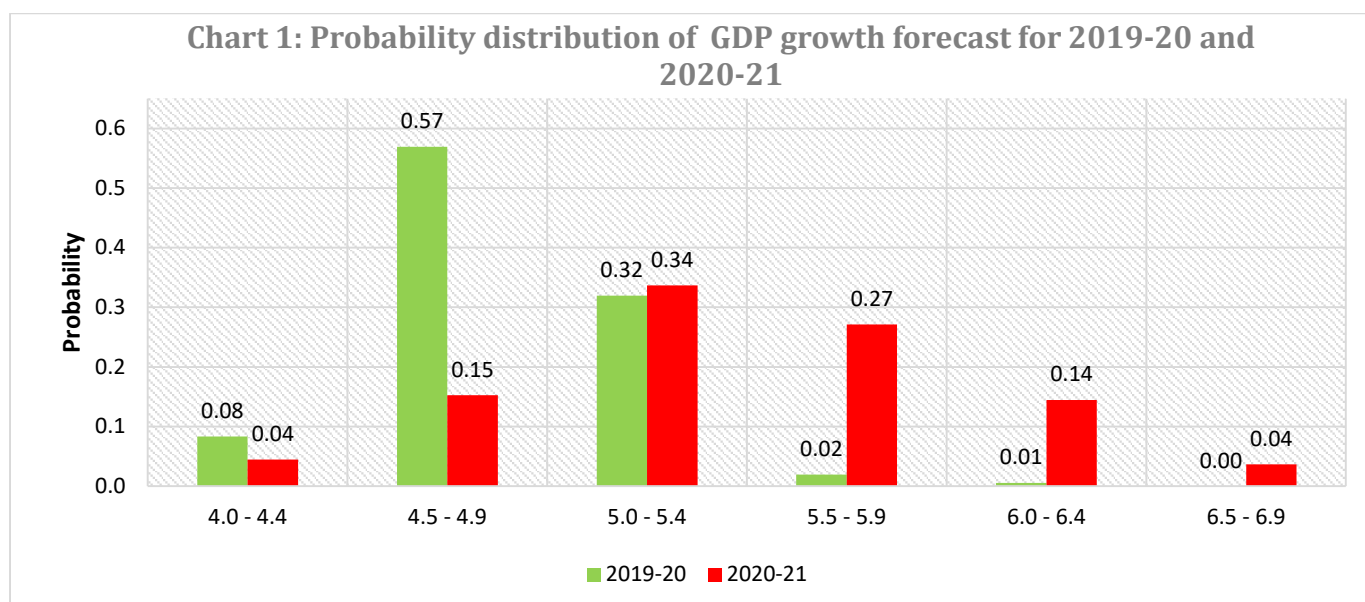
- Real gross domestic product (GDP) is likely to grow by 5.0 per cent in 2019-20 and by 5.5 per cent in 2020-21 (Table 1).
- Real private final consumption expenditure (PFCE) is expected to grow by 5.3 per cent during 2019-20 and by 5.5 per cent during 2020-21.
- Growth in real gross fixed capital formation (GFCF) is likely to decline to -0.6 per cent in 2019-20 from 9.8 per cent in 2018-19, but improve thereafter to 2.6 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 5.0-5.4 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 5.3 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 [February 6, 2020](#) 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	5.0 (0.0)	5.5 (-0.4)
a. Real PFCE growth rate	5.3 (+0.4)	5.5 (-0.6)
b. Real GFCF growth rate	-0.6 (-2.9)	2.6 (-2.7)
Nominal PFCE growth rate	9.1 (+0.1)	9.5 (-0.6)
Real GVA Growth	4.8 (0.0)	5.3 (-0.4)
a. Agriculture and Allied Activities	3.6 (+0.8)	3.0 (-0.2)
b. Industry	1.5 (-0.5)	2.9 (-1.1)
c. Services	6.5 (-0.3)	6.8 (-0.4)
Gross Saving Rate <i>[per cent of gross national disposable income]</i>	29.4 (-0.5)	29.5 (-0.5)
Gross Capital Formation (GCF) Rate <i>[per cent of GDP at current market prices]</i>	30.0 (0.0)	30.0 (+0.1)

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.



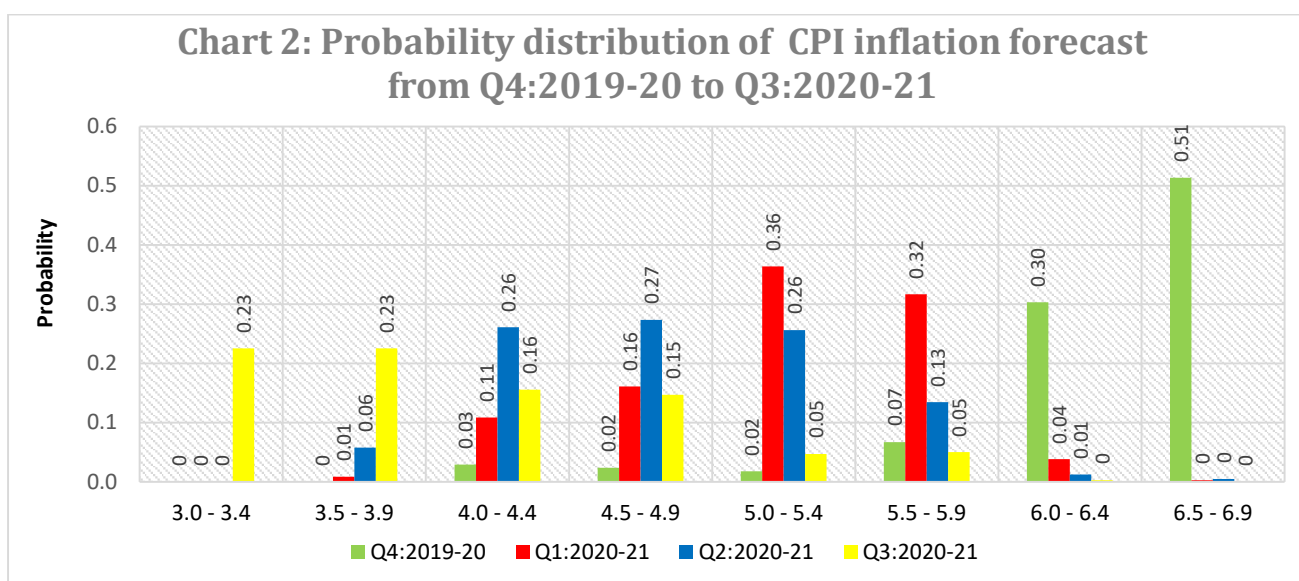
Note: Tails of the distribution are not presented in the chart. Detailed probability distributions are given in Annex 6.

2. Inflation

- Headline consumer price index (CPI) inflation is expected to rise to 6.7 per cent in Q4:2019-20, but moderate thereafter to 3.2 per cent by Q4:2020-21 (Table 2).
- CPI inflation excluding food and beverages, pan, tobacco and intoxicants and fuel and light is expected to remain in the range of 4.0 – 4.2 per cent till Q4:2020-21.

Table 2: Median Forecast of Quarterly Inflation					(in per cent)
	Q4:2019-20	Q1:2020-21	Q2:2020-21	Q3:2020-21	Q4:2020-21
CPI Combined	6.7 (+0.4)	5.3 (+0.2)	4.8 (-0.1)	3.6 (-0.2)	3.2
CPI Combined excluding <i>food and beverages, pan, tobacco and intoxicants and fuel and light</i>	4.1 (+0.1)	4.1 (-0.1)	4.0 (-0.2)	4.2 (-0.2)	4.1
WPI All Commodities	2.4 (-0.3)	1.8 (-1.0)	2.5 (-1.0)	2.5 (-0.9)	2.2
WPI Non-food Manufactured Products	-0.8 (+0.1)	-0.2 (0.0)	1.0 (0.0)	1.8 (+0.3)	1.8

- Forecasters have assigned the highest probability to CPI inflation in the range of 6.5-6.9 per cent for Q4:2019-20; 5.0-5.4 per cent for Q1:2020-21; 4.5-4.9 per cent for Q2:2020-21; and 3.0-3.9 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 2.9 per cent and 7.2 per cent, respectively, during 2019-20; and expected to further decline in 2020-21 (Table 3).
- The current account deficit is expected at 1.0 per cent (of GDP at current market prices) in 2019-20 and 0.7 per cent in 2020-21.
- The Indian rupee is likely to remain range bound within ₹72.00 - ₹73.00 per US Dollar during 2020-21 (Annex 3).

Table 3: Median Forecast of Select External Sector Variables		
	2019-20	2020-21
Merchandise Exports in US \$ terms <i>(annual growth in per cent)</i>	-2.9 <i>(-0.9)</i>	-0.6 <i>(-5.5)</i>
Merchandise Imports in US \$ terms <i>(annual growth in per cent)</i>	-7.2 <i>(-1.4)</i>	-2.9 <i>(-8.0)</i>
Current Account Deficit <i>(per cent of GDP at current market prices)</i>	1.0 <i>(-0.2)</i>	0.7 <i>(-0.8)</i>

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

Aditi Nayar (ICRA Limited); Arun Singh (Dun & Bradstreet India); Bank of Baroda; Charu Chanana (Continuum Economics); CRISIL Ltd; Debopam Chaudhuri (Piramal Enterprises Limited); Gaurav Kapur (IndusInd Bank Limited); Indranil Pan (IDFC FIRST Bank Ltd); Karan Mehrishi (Acuité Ratings & Research Limited); National Council of Applied Economic Research; PHD Chamber of Commerce and Industry; Shailesh Kejariwal (B&K Securities India Pvt Ltd); Tirthankar Patnaik (National Stock Exchange) and Upasna Bhardwaj (Kotak Mahindra Bank).

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

Annex 1: 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)	4.9	5.0	5.1	4.6	4.9	5.0
a	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	5.2	5.3	5.9	3.0	5.3	5.4
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	-1.0	-0.6	0.5	-2.5	-1.7	-0.6
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.1	9.1	10.0	8.0	9.1	9.2
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	30.0	30.0	31.3	28.8	29.7	30.2
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	4.8	4.8	5.1	4.5	4.7	4.9
a	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.3	3.6	3.7	1.5	3.2	3.7
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	1.6	1.5	3.5	0.0	1.3	1.8
c	Services at constant (2011-12) prices: Annual Growth (per cent)	6.7	6.5	7.2	5.0	6.4	7.0
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.2	29.4	30.1	27.9	29.0	29.9
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.8	3.8	4.2	3.7	3.8	3.8
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.7	6.8	7.0	6.5	6.6	6.8
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	7.1	7.2	9.3	5.0	6.3	7.5
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.2	6.2	6.6	5.8	6.1	6.3
10	Yield on 91-day T-Bill of Central Govt. (end-period)	4.9	4.9	5.1	4.7	4.8	5.0
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	-3.1	-2.9	-1.4	-6.7	-3.7	-2.1
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	-6.9	-7.2	-1.8	-9.4	-7.8	-6.4
13	Current Account Balance in US\$ bn.	-29.6	-26.0	-17.4	-66.0	-30.0	-24.1
14	Current Account Balance (per cent to GDP at current market prices)	-1.0	-1.0	-0.6	-1.7	-1.0	-0.9
15	Overall BoP in US\$ bn.	45.1	49.8	61.9	15.0	36.5	57.2
16	Inflation based on CPI Combined: Headline	4.8	4.8	6.0	4.3	4.8	4.8
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.0	4.0	4.1	3.8	4.0	4.0
18	Inflation based on WPI: All Commodities	1.7	1.8	2.0	1.6	1.7	1.8
19	Inflation based on WPI: Non-food Manufactured Products	-0.4	-0.4	0.5	-0.6	-0.4	-0.4

Annex 2: Annual Forecasts for 2020-21

	Key Macroeconomic Indicators	Annual Forecasts for 2020-21					
		Mean	Median	Max	Min	1st quartile	3rd quartile
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	5.4	5.5	6.4	4.5	5.2	5.6
a	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	5.5	5.5	7.4	4.1	5.1	5.8
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	2.7	2.6	5.7	0.0	1.6	3.0
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.5	9.5	11.5	7.8	9.2	9.9
3	Gross Capital Formation (GCF) Rate (per cent of GDP at current market prices)	30.0	30.0	31.7	27.5	29.7	30.7
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	5.3	5.3	6.1	4.3	5.0	5.5
a	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.1	3.0	4.4	2.0	2.6	3.5
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	3.0	2.9	5.0	-0.1	2.5	3.4
c	Services at constant (2011-12) prices: Annual Growth (per cent)	6.8	6.8	8.1	5.5	6.4	7.3
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.3	29.5	30.9	27.4	29.0	30.0
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.7	3.6	5.0	3.3	3.5	3.7
7	Combined Gross Fiscal Deficit (per cent to GDP at current market prices)	6.6	6.5	7.5	6.0	6.5	6.7
8	Bank Credit of Scheduled commercial banks: Annual Growth (per cent)	8.8	9.3	11.0	5.5	8.0	9.5
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	6.2	6.1	7.2	5.5	5.8	6.5
10	Yield on 91-day T-Bill of Central Govt. (end-period)	4.7	4.7	5.5	4.0	4.5	5.1
11	Merchandise Exports (BoP basis in US\$ terms): Annual Growth (per cent)	-0.9	-0.6	9.0	-10.4	-3.5	0.8
12	Merchandise Imports (BoP basis in US\$ terms): Annual Growth (per cent)	-2.6	-2.9	7.5	-14.1	-5.7	0.2
13	Current Account Balance in US\$ bn.	-28.2	-22.0	-6.6	-72.0	-35.6	-17.7
14	Current Account Balance (per cent to GDP at current market prices)	-0.9	-0.7	-0.2	-2.0	-1.1	-0.6
15	Overall BoP in US\$ bn.	40.3	40.0	62.6	20.0	33.5	47.1
16	Inflation based on CPI Combined: Headline	4.3	4.2	6.0	3.5	3.9	4.5
17	Inflation based on CPI Combined: excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light	4.1	4.1	5.0	3.3	3.9	4.2
18	Inflation based on WPI: All Commodities	2.2	2.2	3.3	-0.1	1.9	2.8
19	Inflation based on WPI: Non-food Manufactured Products	1.1	1.0	2.0	-0.4	0.6	1.5

Annex 3: Quarterly Forecasts from Q4:2019-20 to Q4:2020-21

	Key Macroeconomic Indicators	Quarterly Forecasts											
		Q4: 2019-20				Q1: 2020-21				Q2: 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)	4.5	4.6	5.2	3.7	4.6	4.7	5.7	3.3	5.2	5.3	6.7	4.0
a	PFCE at constant (2011-12) prices: Y-o-Y Growth (per cent)	5.1	4.9	6.7	4.3	4.9	5.0	7.5	2.5	5.4	5.5	7.5	3.5
b	GFCF at constant (2011-12) prices: Y-o-Y Growth (per cent)	1.0	2.5	4.0	-3.0	0.8	1.2	3.6	-3.0	3.3	3.0	9.6	-1.0
2	PFCE at current prices: Y-on-Y Growth (per cent)	9.4	9.5	10.5	7.4	8.8	9.2	10.7	6.4	9.6	9.5	11.5	7.6
3	GFCF Rate (per cent of GDP at current market prices)	28.2	28.0	32.3	25.0	27.7	27.8	31.0	24.0	27.3	26.2	31.2	24.8
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	4.5	4.4	5.3	3.7	4.6	4.8	5.6	3.1	5.1	5.1	6.2	3.9
a	Agriculture & Allied Activities (growth rate in per cent)	4.3	5.0	5.0	2.5	3.4	3.0	5.2	2.1	3.2	3.0	4.7	1.7
b	Industry (growth rate in per cent)	1.5	1.6	2.6	0.4	1.8	2.0	4.3	-0.6	3.1	2.8	5.0	-0.3
c	Services (growth rate in per cent)	5.8	6.1	7.0	4.3	6.2	6.3	7.0	4.5	6.5	6.6	7.5	5.4
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	1.4	1.4	2.6	-0.2	0.9	1.4	3.7	-2.0	2.4	2.2	4.6	-0.5
6	Merchandise Exports - BoP basis (in US\$ bn.)	83.3	83.6	87.0	79.7	80.1	81.1	88.0	74.1	79.6	78.5	89.0	71.7
7	Merchandise Imports - BoP basis (in US\$ bn.)	118.5	117.3	123.8	115.0	116.6	116.3	130.0	102.5	117.2	116.4	135.0	99.2
8	Rupee per US \$ Exchange rate (end-period)	73.0	73.8	75.0	70.0	72.9	73.0	75.5	69.8	72.4	72.5	75.5	69.0
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	42.0	37.9	65.0	25.0	40.4	37.7	64.0	25.0	43.3	40.0	64.0	25.0
10	Policy Repo Rate (end-period)	5.02	5.15	5.15	4.50	4.68	4.65	5.15	4.25	4.64	4.65	5.15	4.25

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q3: 2020-21				Q4: 2020-21			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	5.7	5.7	6.7	4.5	6.1	6.1	7.2	5.0
a	Private Final Consumption Expenditure (PFCE) at constant (2011-12) prices: Annual Growth (per cent)	5.9	6.0	7.4	4.5	6.2	6.3	7.3	5.1
b	Gross Fixed Capital Formation (GFCF) at constant (2011-12) prices: Annual Growth (per cent)	4.4	4.0	11.4	1.0	3.6	4.0	6.0	1.5
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	9.7	9.9	12.0	7.4	10.2	10.1	12.5	9.0
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	27.7	27.0	31.0	25.4	28.1	28.2	31.1	25.9
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	5.6	5.6	6.4	4.4	5.9	5.9	6.9	4.7
a	Agriculture & Allied Activities at constant (2011-12) prices: Annual Growth (per cent)	3.3	3.0	4.3	2.5	3.1	3.0	4.6	2.0
b	Industry at constant (2011-12) prices: Annual Growth (per cent)	3.9	4.0	6.0	0.7	4.4	4.7	6.3	1.5
c	Services at constant (2011-12) prices: Annual Growth (per cent)	6.9	6.9	8.1	5.4	7.2	7.2	8.0	6.3
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	3.6	3.5	5.8	0.5	3.5	3.5	6.0	1.0
6	Merchandise Exports - BoP basis (in US\$ bn.)	81.8	80.7	93.0	72.8	85.1	86.0	95.0	73.6
7	Merchandise Imports - BoP basis (in US\$ bn.)	120.4	118.6	140.0	104.3	121.7	120.1	137.0	106.2
8	Rupee per US \$ Exchange rate (end-period)	72.1	72.0	75.3	68.9	72.1	72.0	74.5	68.0
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	48.8	45.0	65.0	35.0	50.2	50.0	65.0	40.0
10	Policy Repo Rate (end-period)	4.62	4.65	5.15	4.25	4.61	4.65	5.15	4.25

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

	CPI Combined (General)				CPI Combined excluding Food and Beverages, Pan, Tobacco and Intoxicants and Fuel and Light			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2019-20	6.5	6.7	6.9	4.8	4.1	4.1	4.4	3.9
Q1:2020-21	5.2	5.3	6.2	4.0	4.0	4.1	4.7	3.4
Q2:2020-21	4.8	4.8	5.7	3.8	4.0	4.0	4.9	3.1
Q3:2020-21	3.7	3.6	5.9	2.4	4.1	4.2	5.1	3.2
Q4:2020-21	3.4	3.2	6.4	2.3	4.1	4.1	5.5	3.2

Annex 5: Forecasts of WPI Inflation (per cent)

	WPI All Commodities				WPI Non-food Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2019-20	2.3	2.4	2.8	1.6	-0.5	-0.8	1.2	-1.5
Q1:2020-21	1.6	1.8	3.0	-1.3	-0.1	-0.2	1.6	-1.8
Q2:2020-21	2.4	2.5	3.2	0.0	1.0	1.0	2.0	-0.7
Q3:2020-21	2.3	2.5	3.5	-0.2	1.7	1.8	2.5	0.4
Q4:2020-21	2.3	2.2	4.6	0.8	1.8	1.8	3.0	0.7

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	0.00
7.0 to 7.4 per cent	0.00	0.01
6.5 to 6.9 per cent	0.00	0.04
6.0 to 6.4 per cent	0.01	0.14
5.5 to 5.9 per cent	0.02	0.27
5.0 to 5.4 per cent	0.32	0.34
4.5 to 4.9 per cent	0.57	0.15
4.0 to 4.4 per cent	0.08	0.04
3.5 to 3.9 per cent	0.00	0.01
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	0.00	0.00	0.00	0.00
7.5 to 7.9 per cent	0.03	0.00	0.00	0.00
7.0 to 7.4 per cent	0.02	0.00	0.00	0.00
6.5 to 6.9 per cent	0.51	0.00	0.00	0.00
6.0 to 6.4 per cent	0.30	0.04	0.01	0.00
5.5 to 5.9 per cent	0.07	0.32	0.13	0.05
5.0 to 5.4 per cent	0.02	0.36	0.26	0.05
4.5 to 4.9 per cent	0.02	0.16	0.27	0.15
4.0 to 4.4 per cent	0.03	0.11	0.26	0.16
3.5 to 3.9 per cent	0.00	0.01	0.06	0.23
3.0 to 3.4 per cent	0.00	0.00	0.00	0.23
2.5 to 2.9 per cent	0.00	0.00	0.00	0.06
2.0 to 2.4 per cent	0.00	0.00	0.00	0.05
1.5 to 1.9 per cent	0.00	0.00	0.00	0.02
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.