

Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 54th Round¹

Growth is expected to firm up in 2018-19 and 2019-20 on the back of higher private consumption. Consumer price inflation is expected to remain above 4.0 per cent till Q2:2019-20.

The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. Twenty-nine panellists participated in the 54th round of the survey conducted during September 2018². 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

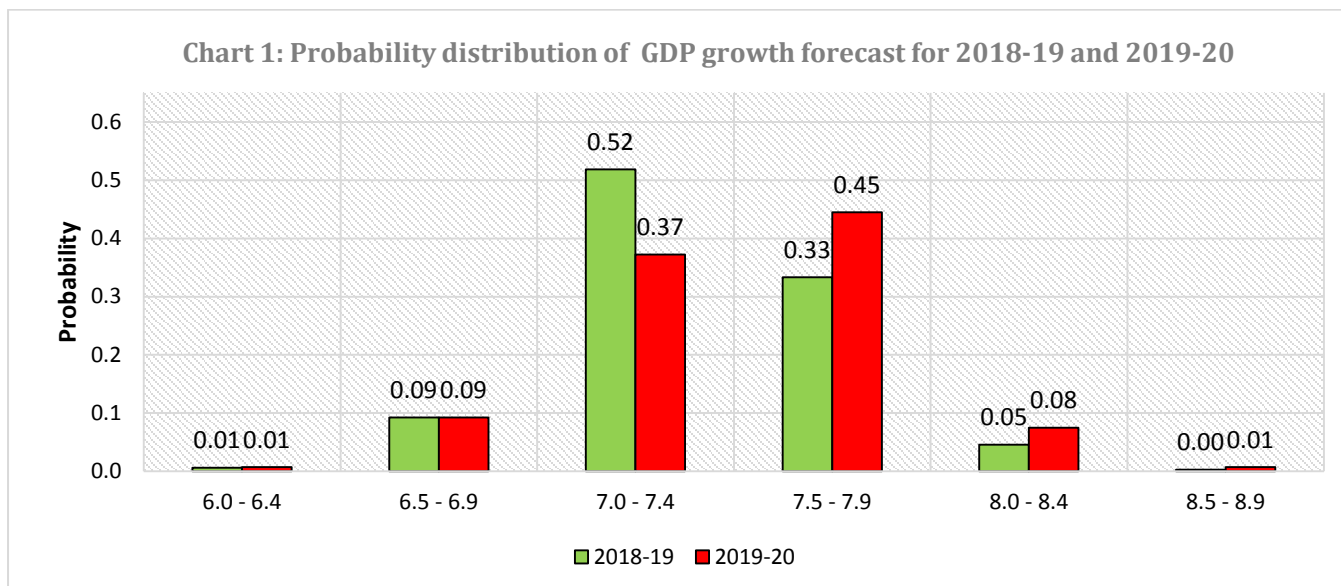
- Real gross domestic product (GDP) is likely to grow at 7.4 per cent in 2018-19 – up from 6.7 per cent in 2017-18 – and is expected to accelerate further by 10 basis points (bps) in 2019-20 on the back of support from private consumption (Table 1).
- The investment rate, proxied by the ratio of gross fixed capital formation to GDP, is expected to improve in 2018-19 and 2019-20, commensurate with an upturn in the saving rate.
- Real gross value added (GVA) is expected to grow by 7.2 per cent in 2018-19 and by 7.3 per cent in 2019-20, supported by activity in the industrial and services sectors.

¹ The results of the last survey round were released on [August 1, 2018](#) 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 Real GDP, GVA and Components (in per cent)		
	2018-19	2019-20
Real GDP Growth	7.4 (0.0)	7.5 (-0.1)
Private Final Consumption Expenditure (nominal) (growth rate in per cent)	12.4 (+0.8)	12.4 (+0.6)
Gross Fixed Capital Formation Rate (per cent of GDP)	28.8 (-0.2)	29.1 (-0.4)
Real GVA Growth	7.2 (0.0)	7.3 (-0.1)
a. Agriculture and Allied Activities	3.9 (+0.5)	3.6 (+0.6)
b. Industry	7.7 (+0.8)	7.2 (+0.2)
c. Services	7.9 (-0.3)	8.4 (-0.2)
Gross Saving Rate [per cent of gross national deposable income (GNDI)]	29.8 (-0.2)	30.0 (-0.5)
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 growth being in the range of 7.0-7.4 per cent in 2018-19 and 7.5-7.9 per cent in 2019-20 (Chart 1).



2. Inflation

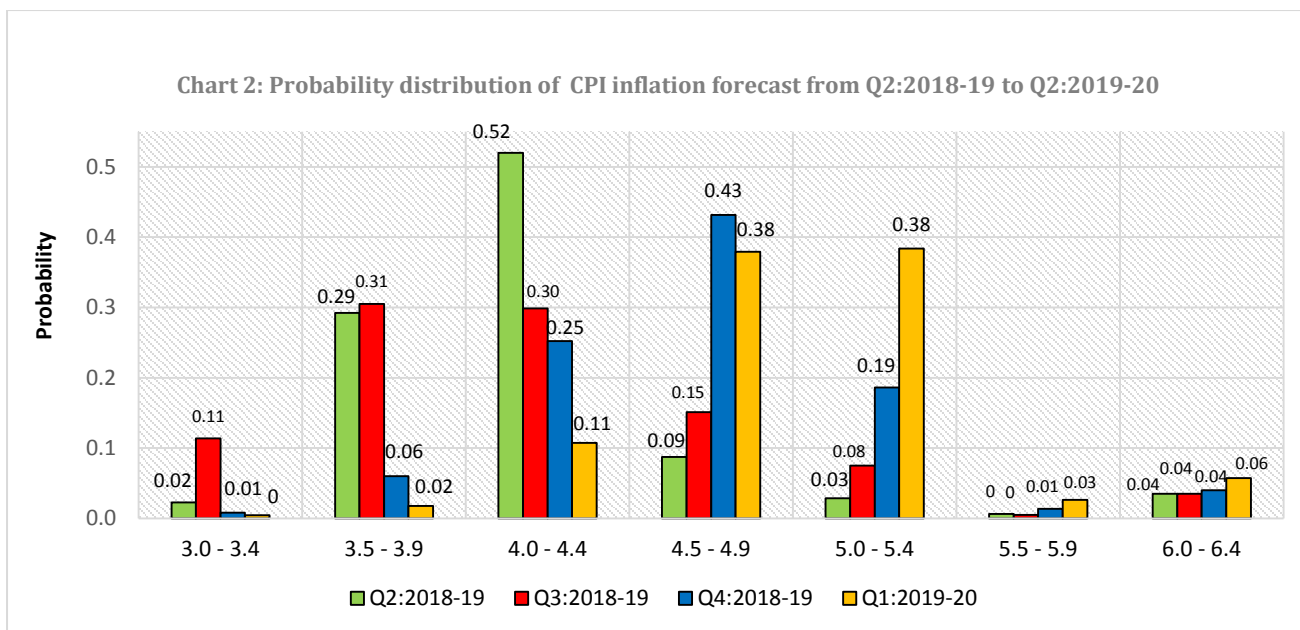
- Headline consumer price index (CPI) inflation is likely to remain above 4.0 per cent till

Q2:2019-20.

- 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 during 2018-19 before edging down to 5.0 per cent in the first half of 2019-20.

Table 2: Median Forecast of Quarterly Inflation					(in per cent)
	Q2:18-19	Q3:18-19	Q4:18-19	Q1:19-20	Q2:19-20
CPI Headline	4.1 (-0.6)	4.1 (-0.2)	4.5 (-0.3)	5.0 (-0.1)	5.1
CPI excluding <i>food & beverages, pan, tobacco & intoxicants and fuel & light</i>	6.0 (-0.1)	5.6 (0.0)	5.3 (0.0)	5.0 (+0.1)	5.0
WPI All Commodities	4.8 (-0.3)	4.2 (-0.1)	4.0 (-0.2)	3.7 (-0.3)	3.6
WPI Non-food Manufactured Products	4.8 (-0.1)	4.6 (+0.1)	3.9 (-0.1)	3.6 (+1.0)	3.3

- Forecasters have assigned the highest probability to CPI inflation being in the range 4.0-4.4 per cent in Q2:2018-19.
- For Q3:2018-19, highest probability has been assigned to inflation being in the range of 3.5-4.4 per cent.
- Forecasters have assigned the highest probability to CPI inflation being in the range 4.5-4.9 per cent for Q4:2018-19.
- Highest probability has been assigned to inflation being in the range of 4.5- 5.4 per during Q1:2019-20 (Chart 2).



3. External Sector

- The forecast of growth in merchandise exports and merchandise imports during 2018-19 have been revised up to 10.4 per cent and 14.3 per cent, respectively, but some deceleration is expected in 2019-20 (Table 3).
- The current account deficit (CAD) is expected at 2.7 per cent of GDP in 2018-19 and at 2.5 per cent of GDP in 2019-20.
- The Indian rupee is likely to remain around ₹72 per US Dollar till Q4:2018-19 (Annex 3).

	2018-19	2019-20
Merchandise Exports – in US \$ terms <i>(annual growth in per cent)</i>	10.4 (+0.6)	9.7 (+1.3)
Merchandise Imports– in US \$ terms <i>(annual growth in per cent)</i>	14.3 (+1.3)	8.4 (-0.2)
Current Account Deficit <i>(Ratio to GDP at current market price, in per cent)</i>	2.7 (+0.2)	2.5 (0.0)

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; Devendra Kumar Pant, India Ratings and Research; Dr Arun Singh, Dun & Bradstreet; Gaurav Kapur, IndusInd Bank Ltd.; ICICI Securities Primary Dealership; Indranil Pan, IDFC Bank Ltd.; Nikhil Gupta, Motilal Oswal; PHD Research Bureau; Sameer Narang, Bank of Baroda; Shailesh Kejariwal, B&K Securities India Pvt Ltd; Siddharth V Kothari, Sunidhi Securities & Finance Ltd; Sumedh Deorukhkar, BBVA and Upasna Bhardwaj, Kotak Mahindra Bank.

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

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)	7.4	7.4	7.8	7.0	7.3	7.5
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	12.3	12.4	13.3	10.3	12.0	12.8
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	28.5	28.8	29.5	26.5	28.1	29.0
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.3	7.2	9.7	6.7	7.1	7.4
a	Agriculture & Allied Activities (growth rate in per cent)	3.9	3.9	7.1	3.0	3.5	4.3
b	Industry (growth rate in per cent)	7.7	7.7	10.9	6.3	7.1	8.0
c	Services (growth rate in per cent)	7.9	7.9	8.6	7.2	7.7	8.1
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.6	29.8	30.6	27.6	29.3	30.1
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.4	3.3	3.7	3.3	3.3	3.5
7	Combined Gross Fiscal Deficit (per cent to GDP)	6.2	6.2	6.9	5.9	6.0	6.4
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	11.7	12.0	15.0	8.0	10.8	12.5
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	8.1	8.1	8.5	7.6	7.9	8.3
10	Yield on 91-day T-Bill of Central Govt. (end-period)	7.2	7.2	8.1	6.6	7.0	7.4
11	Merchandise Exports - BoP basis (in US\$ terms)- Annual Growth (per cent)	10.8	10.4	20.0	4.9	9.0	11.9
12	Merchandise Imports - BoP basis (in US\$ terms)- Annual Growth (per cent)	15.0	14.3	25.0	10.5	12.9	16.9
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.7	-2.7	-2.1	-3.0	-2.8	-2.6
14	Overall BoP - In US \$ bn.	-20.7	-20.7	-3.6	-40.0	-30.0	-13.0
15	Inflation based on CPI-Combined - Headline	4.5	4.5	5.2	3.9	4.3	4.7
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.7	5.7	6.2	5.4	5.6	5.8
17	Inflation based on WPI - All Commodities	4.5	4.5	5.3	4.0	4.2	4.7
18	Inflation based on WPI -Non-food Manufactured Products	4.4	4.4	5.4	3.4	4.0	4.6

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	7.5	8.0	7.0	7.3	7.8
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	12.3	12.4	13.5	10.5	11.5	13.1
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	28.9	29.1	30.0	27.1	28.0	29.5
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.5	7.3	9.5	6.7	7.2	7.8
a	Agriculture & Allied Activities (growth rate in per cent)	3.7	3.6	7.3	1.3	3.0	4.2
b	Industry (growth rate in per cent)	7.3	7.2	10.2	5.8	6.6	7.6
c	Services (growth rate in per cent)	8.3	8.4	8.9	7.5	8.1	8.6
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.9	30.0	30.9	27.8	29.4	30.8
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.2	3.1	3.5	3.0	3.1	3.3
7	Combined Gross Fiscal Deficit (per cent to GDP)	6.1	5.9	6.8	5.6	5.8	6.3
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	12.5	12.3	14.0	11.3	11.6	13.6
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	8.0	8.0	8.5	7.5	7.6	8.4
10	Yield on 91-day T-Bill of Central Govt. (end-period)	7.1	7.2	7.8	6.5	6.5	7.5
11	Merchandise Exports - BoP basis (in US\$ terms)- Annual Growth (per cent)	10.2	9.7	22.0	3.3	7.3	11.6
12	Merchandise Imports - BoP basis (in US\$ terms)- Annual Growth (per cent)	10.8	8.4	30.0	4.3	6.6	12.0
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.5	-2.5	-1.9	-2.8	-2.7	-2.2
14	Overall BoP - In US \$ bn.	4.4	0.3	49.0	-30.0	-7.3	19.8
15	Inflation based on CPI-Combined - Headline	4.8	4.8	5.5	4.5	4.6	5.0
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.1	4.9	6.2	4.1	4.8	5.7
17	Inflation based on WPI - All Commodities	4.0	4.2	5.7	2.3	2.9	4.9
18	Inflation based on WPI -Non-food Manufactured Products	3.8	4.2	6.0	2.0	2.3	4.5

Annex 3: Quarterly Forecasts from Q2:2018-19 to Q2:2019-20

	Key Macroeconomic Indicators	Quarterly Forecasts											
		Q2: 2018-19				Q3: 2018-19				Q4: 2018-19			
		Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.4	7.4	8.1	7.0	7.1	7.1	7.7	6.4	7.0	6.9	7.7	6.3
2	PFCE at current prices: Y-on-Y Growth (per cent)	11.8	12.5	15.7	8.0	11.1	11.8	13.4	7.0	10.8	11.7	13.3	7.0
3	GFCF Rate (per cent of GDP at current market prices)	28.5	28.5	29.6	27.7	28.3	28.6	29.0	27.3	28.7	28.9	29.5	27.1
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	7.3	7.3	8.1	6.8	6.9	6.9	7.4	6.3	6.7	6.8	7.5	6.0
a	Agriculture & Allied Activities (growth rate in per cent)	3.8	3.9	6.3	2.2	3.5	3.6	4.9	2.5	3.3	3.0	5.2	1.1
b	Industry (growth rate in per cent)	7.4	7.2	9.9	6.1	6.9	6.7	10.0	5.6	6.3	6.4	8.0	5.1
c	Services (growth rate in per cent)	8.0	7.8	9.0	7.1	8.0	8.0	9.0	7.1	7.8	7.9	8.7	6.7
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	5.3	5.1	7.2	4.5	4.4	4.0	7.3	2.7	4.1	4.0	6.6	1.8
6	Merchandise Exports - BoP basis (in US\$ bn.)	83.8	84.0	90.0	79.0	84.5	84.9	94.0	77.0	87.3	86.9	98.0	79.6
7	Merchandise Imports - BoP basis (in US\$ bn.)	132.0	131.0	140.0	127.2	136.8	136.4	150.0	130.7	137.2	135.8	161.0	127.1
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	-	-	-	-	72.4	72.3	75.0	69.0	71.8	72.0	75.0	68.5
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	-	-	-	-	75.9	75.5	80.0	72.0	75.1	75.0	78.0	71.5
10	Repo Rate (end-period)	-	-	-	-	6.74	6.75	7.00	6.25	6.79	7.00	7.25	6.00

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q1: 2019-20				Q2: 2019-20			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.2	7.2	7.7	6.5	7.4	7.4	8.2	7.0
2	PFCE at current prices: Y-on-Y Growth (per cent)	11.3	11.7	13.3	7.5	11.6	12.0	13.6	8.0
3	GFCF Rate (per cent of GDP at current market prices)	28.8	28.9	29.3	27.9	28.6	28.6	29.5	27.7
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	7.1	7.1	7.5	6.2	7.3	7.3	8.2	6.8
a	Agriculture & Allied Activities (growth rate in per cent)	3.5	3.5	5.0	1.7	3.5	3.4	6.0	0.9
b	Industry (growth rate in per cent)	6.6	6.6	8.7	4.8	6.9	6.8	9.0	5.4
c	Services (growth rate in per cent)	8.1	8.0	8.6	7.3	8.2	8.0	9.1	7.3
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	5.1	5.7	6.6	2.9	5.4	5.4	7.1	2.9
6	Merchandise Exports - BoP basis (in US\$ bn.)	89.0	89.5	91.3	85.0	91.3	91.3	97.6	87.1
7	Merchandise Imports - BoP basis (in US\$ bn.)	139.6	139.6	145.0	133.1	144.1	138.3	160.0	136.5
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	71.2	71.0	75.0	68.5	70.6	70.5	74.0	66.0
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	75.2	75.0	80.5	70.5	72.8	73.5	75.0	69.0
10	Repo Rate (end-period)	6.78	7.00	7.25	6.00	6.78	7.00	7.25	6.00

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
Q2:2018-19	4.2	4.1	5.1	3.9	6.0	6.0	6.4	5.8
Q3:2018-19	4.2	4.1	5.3	3.5	5.6	5.6	6.4	5.0
Q4:2018-19	4.7	4.5	5.9	3.7	5.4	5.3	6.5	4.6
Q1:2019-20	5.1	5.0	6.0	4.5	5.1	5.0	6.4	4.1
Q2:2019-20	5.1	5.1	6.0	4.2	5.2	5.0	6.5	4.1

Annex 5: Forecasts of WPI Inflation (per cent)

	WPI Headline				WPI Non-food Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q2:2018-19	4.8	4.8	5.2	4.5	4.8	4.8	5.2	4.4
Q3:2018-19	4.2	4.2	5.3	3.5	4.6	4.6	5.7	4.0
Q4:2018-19	4.1	4.0	5.5	3.4	4.0	3.9	6.1	2.9
Q1:2019-20	3.8	3.7	5.5	2.7	3.6	3.6	6.1	2.2
Q2:2019-20	3.7	3.6	5.6	2.4	3.5	3.3	6.3	1.9

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	0.00	0.01
8.0 to 8.4 per cent	0.05	0.08
7.5 to 7.9 per cent	0.33	0.45
7.0 to 7.4 per cent	0.52	0.37
6.5 to 6.9 per cent	0.09	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 CPI (Combined) inflation

Inflation Range	Forecasts for Q2:2018-19	Forecasts for Q3:2018-19	Forecasts for Q4:2018-19	Forecasts for Q1:2019-20
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	0.01	0.01	0.00	0.02
6.0 to 6.4 per cent	0.04	0.04	0.04	0.06
5.5 to 5.9 per cent	0.01	0.01	0.01	0.03
5.0 to 5.4 per cent	0.03	0.08	0.19	0.38
4.5 to 4.9 per cent	0.09	0.15	0.43	0.38
4.0 to 4.4 per cent	0.52	0.30	0.25	0.11
3.5 to 3.9 per cent	0.29	0.31	0.06	0.02
3.0 to 3.4 per cent	0.02	0.11	0.01	0.00
2.5 to 2.9 per cent	0.00	0.00	0.00	0.00
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

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.