

## **Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 56<sup>th</sup> Round<sup>1</sup>**

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Growth is expected to firm up in 2018-19 and 2019-20 on the back of private consumption. Consumer price inflation is expected to increase in Q4:2018-19, firm up further and remain above 4.0 per cent in Q3:2019-20.

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The Reserve Bank has been conducting the Survey of Professional Forecasters (SPF) since September 2007. Twenty-seven panellists participated in the 56<sup>th</sup> round of the survey conducted during January 2019<sup>2</sup>. 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 7.2 per cent in 2018-19 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.
- Real gross value added (GVA) is expected to grow by 7.0 per cent in 2018-19 and by 7.2 per cent in 2019-20, supported by activity in the industrial and services sectors.

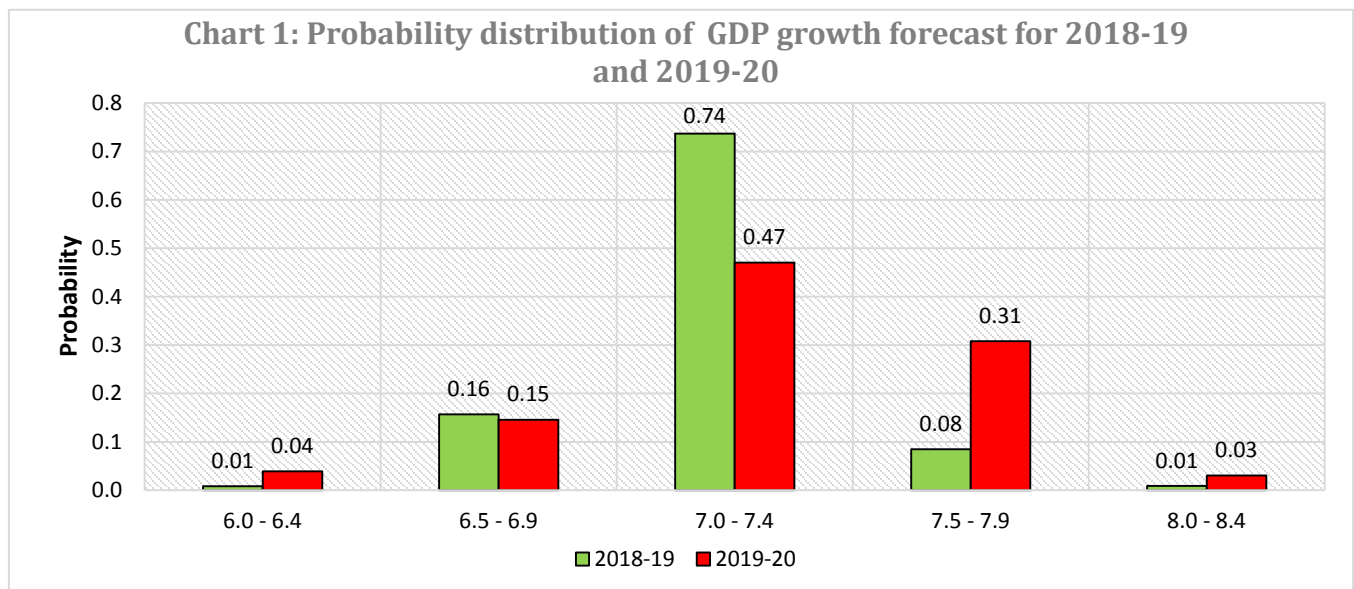
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<sup>1</sup> The results of the last survey round were released on [December 5, 2018](#) on the Reserve Bank's website.

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

<b>Table 1: Median Forecast of Growth in GDP, GVA and Components</b>		
	<b>(in per cent)</b>	
	<b>2018-19</b>	<b>2019-20</b>
Real GDP Growth	7.2 (-0.2)	7.3 (-0.2)
Private Final Consumption Expenditure (nominal) ( <i>growth rate in per cent</i> )	11.4 (-1.1)	11.9 (-0.2)
Gross Fixed Capital Formation Rate ( <i>per cent of GDP</i> )	29.1 (+0.4)	29.4 (+0.4)
Real GVA Growth	7.0 (-0.2)	7.2 (-0.1)
a. Agriculture and Allied Activities	3.8 (-0.3)	3.6 (-0.1)
b. Industry	7.5 (-0.1)	7.3 (+0.2)
c. Services	7.5 (-0.4)	8.0 (-0.3)
Gross Saving Rate ( <i>per cent of gross national depositable income</i> ) (GNDI)]	29.5 (-0.4)	29.7 (-0.6)
<b>Note:</b> 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 both 2018-19 and 2019-20 (Chart 1).



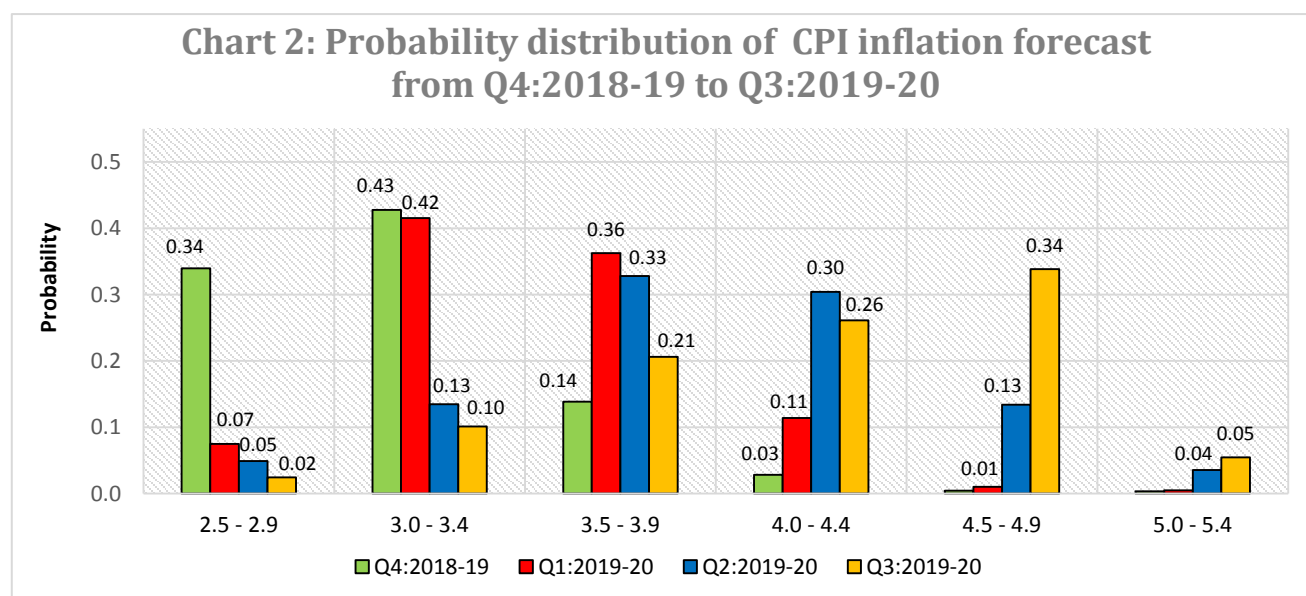
Note: Tails of the distribution are not presented in the chart. Detailed probability distributions are given in Annex 6.

## 2. Inflation

- Headline consumer price index (CPI) inflation is expected at 3.1 per cent in Q4:2018-19 and thereafter may increase gradually to reach 4.4 per cent by Q3:2019-20.
- CPI inflation excluding food and beverages, pan, tobacco and intoxicants and fuel and light is expected at 5.6 per cent in Q4:2018-19 and is likely to decrease gradually thereafter, although remaining above 5.0 per cent till Q2:2019-20.

	<b>Q4:18-19</b>	<b>Q1:19-20</b>	<b>Q2:19-20</b>	<b>Q3:19-20</b>
CPI Headline	3.1 (-0.9)	3.5 (-1.0)	4.0 (-0.6)	4.4
CPI excluding 'food & beverages', 'pan, tobacco & intoxicants' and 'fuel & light'	5.6 (-0.2)	5.2 (-0.2)	5.2 (-0.2)	5.0
WPI All Commodities	3.7 (-0.9)	3.2 (-1.3)	2.7 (-1.7)	3.0
WPI Non-food Manufactured Products	3.6 (-0.6)	3.5 (-0.6)	3.5 (-0.5)	4.1

- Forecasters have assigned the highest probability to CPI inflation being in the ranges of 3.0-3.4 per cent in Q4:2018-19 and Q1:2019-20, 3.5- 4.4 per cent in Q2:2019-20 and 4.5- 4.9 per cent in Q3:2019-20 (Chart 2).



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

### 3. External Sector

- The forecast of growth in merchandise exports and merchandise imports during 2018-19 are expected at 9.7 per cent and 12.2 per cent, respectively, but deceleration is expected in 2019-20 (Table 3).
- The current account deficit (CAD) is expected at 2.5 per cent of GDP in 2018-19 but may improve in 2019-20.
- The Indian rupee is likely to remain around ₹71 per US Dollar till Q3:2019-20 (Annex 3).

<b>Table 3: Median Forecast of Select External Sector Variables</b>		
	<b>2018-19</b>	<b>2019-20</b>
Merchandise Exports – in US \$ terms <i>(annual growth in per cent)</i>	9.7 <i>(-0.9)</i>	7.6 <i>(-1.3)</i>
Merchandise Imports– in US \$ terms <i>(annual growth in per cent)</i>	12.2 <i>(-2.3)</i>	7.5 <i>(-2.9)</i>
Current Account Deficit <i>(Ratio to GDP at current market price, in per cent)</i>	2.5 <i>(-0.2)</i>	2.3 <i>(-0.3)</i>

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

*Debopam Chaudhuri (Piramal Enterprises Limited); Devendra Kumar Pant (India Ratings and Research); Dr Arun Singh (Dun & Bradstreet India); Gaurav Kapur (IndusInd Bank Limited); ICICI Securities Primary Dealership; Nikhil Gupta (Motilal Oswal); Pinaki M. Mukherjee; PHD Research Bureau; Sameer Narang (Bank of Baroda); Shailesh Kejariwal (B&K Securities India Pvt Ltd.); Siddharth V Kothari (Sunidhi Securities & Finance Ltd.); STCI Primary Dealer Ltd.; TAC Economics; and Upasna Bhardwaj (Kotak Mahindra Bank).*

*The Bank also acknowledges the contribution of thirteen 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)	7.2	7.2	7.6	7.0	7.1	7.3
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	11.3	11.4	12.0	10.5	10.9	11.6
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	29.1	29.1	29.5	28.7	28.9	29.5
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.0	7.0	7.5	6.8	6.9	7.1
a	Agriculture & Allied Activities (growth rate in per cent)	3.8	3.8	4.7	3.0	3.6	4.0
b	Industry (growth rate in per cent)	7.5	7.5	8.4	5.9	7.3	7.8
c	Services (growth rate in per cent)	7.5	7.5	7.9	7.2	7.4	7.7
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.5	29.5	30.5	28.2	29.0	30.0
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)	6.5	6.4	7.2	6.2	6.3	6.5
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	13.2	13.1	16.0	10.5	12.0	14.2
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	7.4	7.5	7.7	7.3	7.3	7.6
10	Yield on 91-day T-Bill of Central Govt. (end-period)	6.6	6.7	7.3	6.2	6.3	6.8
11	Merchandise Exports - BoP basis (in US\$ terms)- Annual Growth (per cent)	9.2	9.7	12.0	5.0	7.4	10.4
12	Merchandise Imports - BoP basis (in US\$ terms)- Annual Growth (per cent)	12.1	12.2	14.4	9.2	11.0	13.7
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.5	-2.5	-2.1	-3.0	-2.5	-2.4
14	Overall BoP - In US \$ bn.	-7.5	-10.4	48.2	-25.5	-18.0	-8.7
15	Inflation based on CPI-Combined - Headline	3.6	3.6	4.0	3.4	3.5	3.7
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.7	5.9	5.9	4.2	5.8	5.9
17	Inflation based on WPI - All Commodities	4.6	4.5	4.9	4.3	4.5	4.7
18	Inflation based on WPI -Non-food Manufactured Products	4.5	4.4	6.5	3.3	4.4	4.5

## 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)	7.3	7.3	8.1	6.1	7.2	7.5
2	Private Final Consumption Expenditure (PFCE) at current prices: Annual Growth (per cent)	11.8	11.9	12.7	10.6	11.3	12.4
3	Gross Fixed Capital Formation (GFCF) Rate (per cent of GDP at current market prices)	29.5	29.4	30.2	28.5	29.1	29.9
4	GVA at basic prices at constant (2011-12) prices: Annual Growth rate (per cent)	7.2	7.2	7.9	6.6	7.0	7.4
a	Agriculture & Allied Activities (growth rate in per cent)	3.4	3.6	4.7	1.5	3.0	3.9
b	Industry (growth rate in per cent)	7.3	7.3	9.1	5.6	7.0	7.6
c	Services (growth rate in per cent)	8.0	8.0	9.2	7.3	7.8	8.1
5	Gross Saving Rate (per cent of Gross National Disposable Income) - at current prices	29.8	29.7	30.8	27.5	29.5	30.3
6	Fiscal Deficit of Central Govt. (per cent of GDP at current market prices)	3.3	3.3	3.5	3.0	3.2	3.3
7	Combined Gross Fiscal Deficit (per cent to GDP)	6.3	6.2	7.0	5.7	6.1	6.5
8	Bank Credit - Scheduled commercial banks: Annual Growth (per cent)	12.9	12.6	17.0	9.0	11.2	14.9
9	Yield on 10-Year G-Sec of Central Govt. (end-period)	7.4	7.3	8.7	7.0	7.2	7.6
10	Yield on 91-day T-Bill of Central Govt. (end-period)	6.6	6.6	7.7	6.1	6.1	7.0
11	Merchandise Exports - BoP basis (in US\$ terms)- Annual Growth (per cent)	8.3	7.6	15.0	3.8	5.2	12.4
12	Merchandise Imports - BoP basis (in US\$ terms)- Annual Growth (per cent)	8.0	7.5	22.0	-2.1	3.9	10.8
13	Current Account Balance - Ratio to GDP at current market price (per cent)	-2.3	-2.3	-1.3	-2.9	-2.7	-2.1
14	Overall BoP - In US \$ bn.	9.2	9.1	49.8	-20.5	5.5	14.0
15	Inflation based on CPI-Combined - Headline	4.1	4.2	4.5	3.3	3.8	4.3
16	Inflation based on CPI-Combined - excluding 'Food & Beverages', 'Pan, Tobacco & Intoxicants' and 'Fuel & Light'	5.0	5.2	5.6	4.4	4.6	5.2
17	Inflation based on WPI - All Commodities	3.4	3.7	4.5	1.9	2.9	4.0
18	Inflation based on WPI -Non-food Manufactured Products	3.4	3.7	4.3	1.5	2.8	4.2

**Annex 3: Quarterly Forecasts from Q3:2018-19 to Q3:2019-20**

	Key Macroeconomic Indicators	Quarterly Forecasts											
		Q3: 2018-19				Q4: 2018-19				Q1: 2019-20			
		Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	6.9	6.9	7.6	6.2	6.8	6.7	7.6	6.3	6.9	6.9	7.8	6.2
2	PFCE at current prices: Y-on-Y Growth (per cent)	9.7	9.9	11.3	8.0	10.1	10.4	11.5	7.2	10.4	10.2	12.5	6.3
3	GFCF Rate (per cent of GDP at current market prices)	28.7	28.9	29.3	27.9	29.1	29.2	29.6	28.6	29.3	29.2	29.9	28.7
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	6.7	6.6	7.7	6.0	6.5	6.5	7.5	6.0	6.8	6.7	7.8	6.4
a	Agriculture & Allied Activities (growth rate in per cent)	3.5	3.4	5.0	2.2	3.3	3.3	4.5	2.0	3.6	3.5	5.1	2.3
b	Industry (growth rate in per cent)	6.7	6.8	8.6	3.0	6.2	6.0	7.9	3.5	6.6	6.7	8.1	5.0
c	Services (growth rate in per cent)	7.5	7.5	8.2	7.0	7.4	7.5	8.2	6.7	7.6	7.7	8.7	6.6
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	4.1	3.9	6.0	2.8	3.7	3.7	6.5	0.0	4.9	4.8	7.5	2.1
6	Merchandise Exports - BoP basis (in US\$ bn.)	83.0	82.8	87.6	79.9	85.8	85.3	90.4	77.0	88.2	88.4	93.0	82.5
7	Merchandise Imports - BoP basis (in US\$ bn.)	131.5	130.9	141.2	125.2	131.2	131.3	142.3	122.0	137.2	135.7	146.0	124.0
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	-	-	-	-	70.6	70.6	73.0	68.5	70.7	71.1	74.0	67.6
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	-	-	-	-	63.6	60.5	80.0	56.0	62.3	62.5	75.0	47.2
10	Repo Rate (end-period)	-	-	-	-	6.44	6.50	6.50	6.25	6.31	6.25	6.50	6.00

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q2: 2019-20				Q3: 2019-20			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	GDP at constant (2011-12) prices: Annual Growth (per cent)	7.3	7.4	8.1	6.3	7.3	7.4	8.0	5.8
2	PFCE at current prices: Y-on-Y Growth (per cent)	10.6	11.1	12.4	6.8	11.3	11.7	13.5	7.5
3	GFCF Rate (per cent of GDP at current market prices)	29.2	29.2	29.8	28.8	29.0	29.0	29.4	28.6
4	GVA at constant (2011-12) prices: Annual Growth (per cent)	7.2	7.2	8.0	6.6	7.3	7.3	7.9	6.5
a	Agriculture & Allied Activities (growth rate in per cent)	3.4	3.2	4.6	2.5	3.5	3.5	4.5	1.6
b	Industry (growth rate in per cent)	7.3	7.1	8.9	5.3	7.6	7.5	10.3	5.9
c	Services (growth rate in per cent)	7.9	7.9	8.9	7.1	8.2	8.1	9.7	7.4
5	IIP (2011-12=100): Quarterly Average Growth (per cent)	5.0	4.8	8.4	2.2	5.2	5.0	8.7	1.9
6	Merchandise Exports - BoP basis (in US\$ bn.)	88.9	89.2	93.1	82.1	90.6	90.5	99.0	84.6
7	Merchandise Imports - BoP basis (in US\$ bn.)	139.7	140.1	151.0	125.0	142.3	143.9	155.0	126.5
8	Rupee – US Dollar Exchange rate (RBI reference rate) (end-period)	70.8	71.0	74.5	68.0	70.9	71.4	75.0	65.6
9	Crude Oil (Indian basket) price (US \$ per barrel) (end-period)	63.1	61.0	76.0	57.4	63.6	64.0	77.0	53.0
10	Repo Rate (end-period)	6.25	6.25	6.50	6.00	6.26	6.25	6.75	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
Q4:2018-19	3.0	3.1	3.7	2.3	5.6	5.6	6.2	5.1
Q1:2019-20	3.5	3.5	4.5	2.3	5.3	5.2	6.3	4.9
Q2:2019-20	3.8	4.0	4.6	2.7	5.3	5.2	6.0	4.8
Q3:2019-20	4.2	4.4	4.9	3.0	5.1	5.0	6.1	4.3

**Annex 5: Forecasts of WPI Inflation (per cent)**

	WPI Headline				WPI Non-food Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q4:2018-19	3.9	3.7	5.0	3.1	3.8	3.6	4.8	2.8
Q1:2019-20	3.5	3.2	5.0	2.7	3.5	3.5	4.7	2.3
Q2:2019-20	3.0	2.7	4.4	1.4	3.2	3.5	4.6	1.5
Q3:2019-20	3.1	3.0	4.5	1.3	3.4	4.1	4.7	0.8

**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	0.00
8.0 to 8.4 per cent	0.01	0.03
7.5 to 7.9 per cent	0.08	0.31
7.0 to 7.4 per cent	0.74	0.47
6.5 to 6.9 per cent	0.16	0.15
6.0 to 6.4 per cent	0.01	0.04
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 Q4:2018-19	Forecasts for Q1:2019-20	Forecasts for Q2:2019-20	Forecasts for Q3:2019-20
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	0.00	0.00	0.00	0.00
6.0 to 6.4 per cent	0.00	0.00	0.00	0.00
5.5 to 5.9 per cent	0.00	0.00	0.00	0.01
5.0 to 5.4 per cent	0.00	0.00	0.04	0.05
4.5 to 4.9 per cent	0.00	0.01	0.13	0.34
4.0 to 4.4 per cent	0.03	0.11	0.30	0.26
3.5 to 3.9 per cent	0.14	0.36	0.33	0.21
3.0 to 3.4 per cent	0.43	0.42	0.13	0.10
2.5 to 2.9 per cent	0.34	0.07	0.05	0.02
2.0 to 2.4 per cent	0.05	0.01	0.01	0.00
1.5 to 1.9 per cent	0.01	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.