

Results of the Survey of Professional Forecasters on Macroeconomic Indicators– Round 34¹

The Reserve Bank has been conducting the Survey of Professional Forecasters since September 2007. **The results of the survey represent views of the respondent forecasters and in no way reflect the views or forecasts of the Reserve Bank of India.**

Twenty seven professional forecasters participated in the latest survey round (Round 34) conducted in May 2015. The results of the survey in tabular form are presented in the [Annex](#).

Highlights:

1. Annual Forecasts[^]

- Forecasters expect real Gross Value Added at basic price (GVA) to increase by 7.8 per cent in 2015-16. 'Agriculture & Allied Activities' and 'Services' are expected to grow by 2.2 per cent and 10.0 per cent, respectively. 'Industry' growth forecast has been placed at 6.2 per cent (**Table 1**).
- In 2016-17, GVA is expected to increase by 8.2 per cent, led by growth in 'Services' by 10.1 per cent.
- In terms of subjective probabilities assigned to growth projections, forecasters ascribed maximum 55 per cent chance that GVA growth in 2015-16 will be in the range of 7.5-7.9 per cent (**Chart 1**). For the year 2016-17, GVA growth in 8.0-8.4 per cent range is the most probable outcome.

Table 1: Median Forecast of Real GVA (Growth Rate) for 2015-16 and 2016-17	Chart 1: Mean Probability Pattern of GVA Growth Forecast for 2015-16 and 2016-17	
	2015-16	2016-17
Real GVA	7.8 (-0.1)	8.2
Agriculture and Allied Activities	2.2 (-1.2)	3.0
Industry	6.2 (-0.1)	7.0
Services	10.0 (-0.1)	10.1

GDP Growth Forecast Range (%)	2015-16 Probability	2016-17 Probability
6.5-6.9	0.08	0.02
7.0-7.4	0.18	0.08
7.5-7.9	0.55	0.25
8.0-8.4	0.18	0.38
8.5-8.9	0.02	0.25
9.0-9.4	0.00	0.03

Note: 1. Growth rates are in per cent.
2. Figures in parentheses are change in forecasts from the previous survey round. This is applicable for all the Tables.

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The results for the previous survey round were released on [April 7, 2015](#) on the RBI website. The results of the survey represent views of the respondent forecasters and in no way reflect the views or forecasts of the Reserve Bank of India. .

[^] Median of forecasts of the respondents.

- Private final consumption expenditure at current prices is expected to increase by 12.7 per cent in 2015-16 and further by 13.1 per cent in 2016-17 (**Table 2**).
- Gross Saving rate is projected at 30.8 per cent of Gross National Disposable Income (GNDI) in 2015-16 and 31.0 per cent of GNDI in 2016-17 (**Table 2**).
- Forecasters expect Gross Fixed Capital Formation rate at 28.8 per cent of GDP in 2015-16, which is expected to improve to 29.4 per cent of GDP in 2016-17 (**Table 2**).

Table 2: Median Forecast of PFCE and Capital Formation		
	2015-16	2016-17
Private final consumption expenditure	12.7 (-0.3)	13.1
Gross Saving Rate (per cent of GNDI)	30.8 (-0.2)	31.0
Gross Fixed Capital Formation Rate (per cent of GDP)	28.8 (-0.5)	29.4

- Both money supply and bank credit growth expectations declined for 2015-16 in this round. While money supply (M_3) is expected to increase by 12.5 per cent in 2015-16 and further by 13.5 per cent in 2016-17, bank credit is expected to expand by 13.5 per cent in 2015-16 and further by 14.5 per cent in 2016-17 (**Table 3**).

Table 3: Median Forecast of Select Monetary and Banking Variables		
	2015-16	2016-17
Money Supply (M_3)	12.5 (-1.0)	13.5
Bank Credit	13.5 (-0.5)	14.5

- Central Government's gross fiscal deficit (GFD) is projected at 3.9 per cent of GDP in 2015-16 and is expected to moderate to 3.5 per cent of GDP in 2016-17. The combined GFD of Central and State Governments is projected at 6.5 per cent of GDP in 2015-16 and is expected to improve to 6.2 per cent of GDP in 2016-17 (**Table 4**).

Table 4: Median Forecast of Fiscal Deficit		
	2015-16	2016-17
Central Government Gross Fiscal Deficit (per cent of GDP)	3.9 (0.0)	3.5
Combined Gross Fiscal Deficit (per cent of GDP)	6.5 (+0.2)	6.2

- Merchandise Exports growth is forecast at 1.2 per cent in 2015-16, 220 basis points (bps) downward revision from 3.4 per cent in the previous round. Growth of merchandise exports is expected to improve to 6.2 per cent in 2016-17 (**Table 5**).
- Current Account Deficit is projected at 1.0 per cent and 1.3 per cent (of GDP) in 2015-16 and 2016-17, respectively. Capital Account surplus is expected at 3.4 per cent of GDP in 2015-16 (**Table 5**).

	2015-16	2016-17
Merchandise Exports (growth rate in per cent)	1.2 (-2.2)	6.2
Merchandise Imports (growth rate in per cent)	1.5 (-0.5)	9.0
Current Account Balance (per cent of GDP)	-1.0 (0.0)	-1.3
Capital Account Balance (per cent of GDP)	3.4 (+0.5)	2.9

2. Quarterly Forecasts

- Real GVA growth at basic prices is expected to improve gradually from 7.5 per cent in Q1: 2015-16 to 8.4 per cent in Q1:2016-17 (**Table 6**).

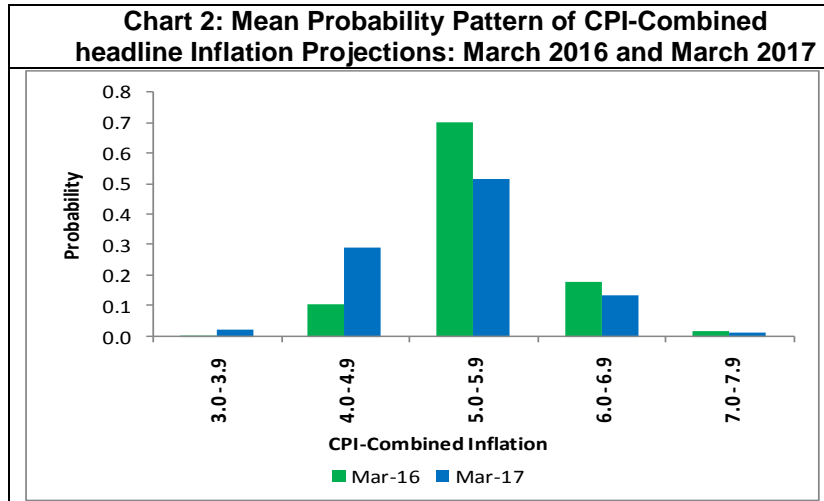
	Q1:15-16	Q2:15-16	Q3:15-16	Q4:15-16	Q1:16-17
Real GVA at basic prices	7.5 (0.0)	7.7 (-0.2)	7.8 (+0.1)	8.0 (-0.1)	8.4
Agriculture and Allied Activities	1.0 (-1.2)	2.0 (-1.1)	3.0 (-0.5)	3.4 (0.0)	3.0
Industry	5.2 (-0.3)	6.0 (0.0)	6.6 (-0.1)	6.6 (-0.1)	7.0
Services	10.0 (0.0)	9.5 (-0.5)	9.4 (-0.5)	9.6 (-0.6)	9.8

- CPI (Combined) headline inflation forecast has been cut between 20 bps to 40 bps in the current round from the previous round. Headline inflation is expected to increase from 5.0 per cent in Q1:2015-16 to 5.5 per cent in Q1:2016-17 (**Table 7**).
- The forecasters expect core CPI (defined as excluding food and fuel) to remain above 5.0 per cent from Q3:2015-16 (**Table 7**).
- WPI inflation is expected to remain in the negative zone till Q2:2015-16 and is likely to increase to 3.0 per cent in Q1:2016-17 (**Table 7**).

	Q1:15-16	Q2:15-16	Q3:15-16	Q4:15-16	Q1:16-17
CPI (Combined) headline	5.0 (-0.2)	4.7 (-0.4)	5.3 (-0.3)	5.6 (-0.2)	5.5
Core CPI (Combined) (excluding food & fuel)	4.4 (+0.2)	4.5 (+0.2)	5.1 (+0.1)	5.7 (+0.5)	5.2
WPI headline	-2.3 (-2.0)	-1.9 (-2.9)	0.8 (-1.6)	2.9 (-0.1)	3.0

- Forecasters assigned maximum probability of 70 per cent (based on average of individual forecasts) that CPI headline inflation will be in the range 5.0-5.9 per cent in March 2016 (**Chart 2**). Based on this probability distribution, the implicit CPI inflation rate for March 2016 is expected at 5.6 per cent. Similarly, for March 2017, the forecasters assigned

maximum probability of 52 per cent that CPI inflation will be in the range of 5.0-5.9 per cent.



- The Indian Rupee is expected to depreciate gradually against the US Dollar from ₹64.00 per US\$ in Q1:2015-16 to ₹66.00 per US\$ in Q1:2016-17 (**Annex Table A.3**).

3. Long Term Forecasts

- Over the next five and ten years, average real GVA growth is expected at 8.0 per cent and 8.25 per cent, respectively (**Chart 3**). The long-term growth expectations have remained unchanged from the previous round.
- The average CPI inflation forecast for both, the next five and ten years is expected at 5.0 per cent (**Chart 4**).

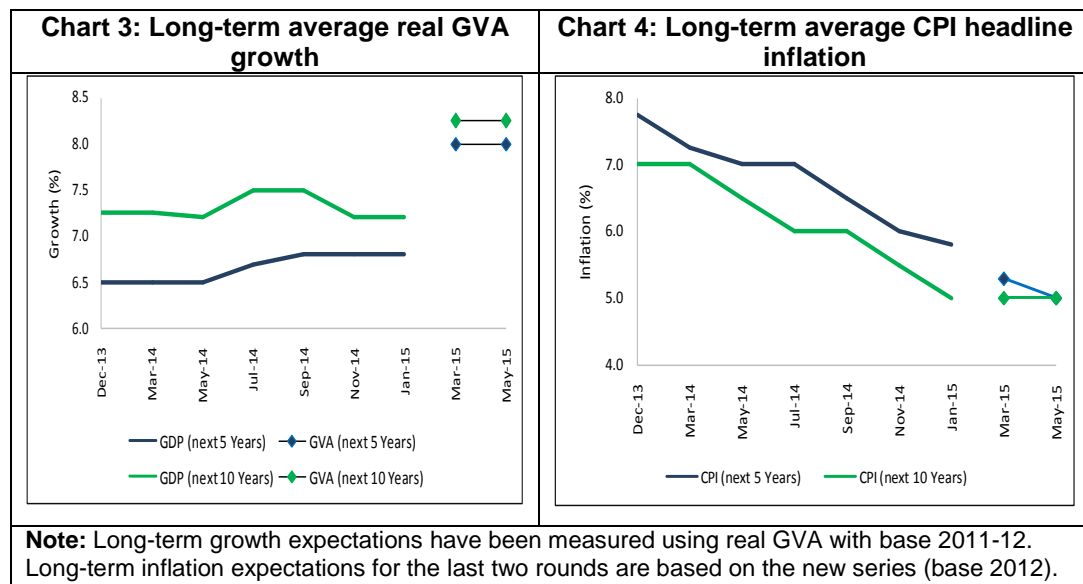


Table A.1: Annual Forecasts for 2015-16

Key Macroeconomic Indicators		Annual Forecasts for 2015-16			
		Mean	Median	Max	Min
1	Real GVA at basic prices (growth rate in per cent)	7.7	7.8	8.4	6.8
a	Agriculture & Allied Activities (growth rate in per cent)	2.4	2.2	4.0	1.0
b	Industry (growth rate in per cent)	6.4	6.2	7.5	5.7
c	Services (growth rate in per cent)	10.1	10.0	13.4	8.5
2	Private Final Consumption Expenditure at current market price (growth rate in per cent)	11.8	12.7	14.0	5.7
3	Gross Saving (per cent of Gross National Disposable Income)	30.3	30.8	31.5	27.9
4	Gross Fixed Capital Formation (per cent of GDP)	28.8	28.8	31.0	27.5
5	Money Supply (M3) (growth rate in per cent)	12.8	12.5	15.6	11.2
6	Bank Credit of Scheduled Commercial banks (growth rate in per cent)	13.6	13.5	17.5	10.5
7	Combined Gross Fiscal Deficit (per cent of GDP)	6.5	6.5	6.9	6.1
8	Central Government Gross Fiscal Deficit (per cent of GDP)	3.9	3.9	4.1	3.5
9	Repo Rate(end period)	7.09	7.00	7.50	6.75
10	CRR (end period)	3.97	4.00	4.00	3.50
11	Yield of 91-Days Treasury Bills (end period)	7.6	7.7	8.0	7.3
12	YTM of Central Govt. Securities with term to maturity of 10-years (end period)	7.4	7.5	8.0	6.8
13	Overall Balance of Payments (in US \$ bn.)	52.2	52.3	74.6	22.0
14	Merchandise Exports (in US \$ bn.)	324.1	321.8	356.6	290.0
15	Merchandise Exports (growth rate in per cent)	1.8	1.2	9.5	-4.3
16	Merchandise Imports (in US \$ bn.)	468.7	464.2	509.8	437.9
17	Merchandise Imports (growth rate in percent)	1.1	1.5	10.5	-5.6
18	Merchandise Trade Balance (per cent of GDP)	-6.8	-6.6	-5.9	-8.8
19	Net Invisible Balance (in US \$ bn.)	121.2	119.2	160.0	110.0
20	Current Account Balance (in US \$ bn.)	-23.0	-20.3	-9.1	-42.0
21	Current Account Balance (per cent of GDP)	-1.1	-1.0	-0.4	-1.8
22	Capital Account Balance (in US \$ bn.)	73.7	74.7	97.1	42.0
23	Capital Account Balance (per cent of GDP)	3.3	3.4	4.8	2.1

Table A.2: Annual Forecasts for 2016-17

Key Macroeconomic Indicators		Annual Forecasts for 2016-17			
		Mean	Median	Max	Min
1	Real GVA at basic prices (growth rate in per cent)	8.2	8.2	8.8	7.3
a	Agriculture & Allied Activities (growth rate in per cent)	3.1	3.0	4.2	1.9
b	Industry (growth rate in per cent)	7.2	7.0	8.6	6.0
c	Services (growth rate in per cent)	10.3	10.1	13.7	8.5
2	Private Final Consumption Expenditure at current market price (growth rate in per cent)	12.6	13.1	15.3	6.2
3	Gross Saving (per cent of Gross National Disposable Income)	30.7	31.0	32.0	28.1
4	Gross Fixed Capital Formation (per cent of GDP)	29.0	29.4	31.0	26.7
5	Money Supply (M3) (growth rate in per cent)	14.1	13.5	18.5	12.5
6	Bank Credit of Scheduled Commercial banks (growth rate in per cent)	14.8	14.5	20.4	12.5
7	Combined Gross Fiscal Deficit (per cent of GDP)	6.2	6.2	7.0	5.6
8	Central Government Gross Fiscal Deficit (per cent of GDP)	3.5	3.5	3.9	3.0
9	Repo Rate(end period)	6.82	6.75	7.25	6.25
10	CRR (end period)	3.83	4.00	4.00	3.00
11	Yield of 91-Days Treasury Bills (end period)	7.4	7.2	8.2	6.8
12	YTM of Central Govt. Securities with term to maturity of 10-years (end period)	7.3	7.3	8.2	6.8
13	Overall Balance of Payments (in US \$ bn.)	44.2	46.7	73.0	18.5
14	Merchandise Exports (in US \$ bn.)	340.4	339.8	395.7	311.0
15	Merchandise Exports (growth rate in per cent)	6.3	6.2	14.0	-0.7
16	Merchandise Imports (in US \$ bn.)	504.4	496.3	593.9	455.0
17	Merchandise Imports (growth rate in per cent)	8.1	9.0	16.5	-1.2
18	Merchandise Trade Balance (per cent of GDP)	-6.7	-6.5	-5.5	-10.2
19	Net Invisible Balance (in US \$ bn.)	129.9	122.7	195.0	115.0
20	Current Account Balance (in US \$ bn.)	-30.6	-30.1	-12.0	-55.0
21	Current Account Balance (per cent of GDP)	-1.3	-1.3	-0.5	-2.2
22	Capital Account Balance (in US \$ bn.)	71.1	73.0	106.9	40.0
23	Capital Account Balance (per cent of GDP)	2.9	2.9	4.3	1.9

Table A.3: Quarterly Forecasts from Q1:2015-16 to Q1:2016-17

	Key Macroeconomic Indicators	Quarterly Forecasts							
		Q1: 2015-16				Q2: 2015-16			
		Mean	Median	Max	Min	Mean	Median	Max	Min
1	Real GVA at basic prices (growth rate in per cent)	7.4	7.5	8.1	6.6	7.6	7.7	8.4	6.6
a	Agriculture & Allied Activities (growth rate in per cent)	1.3	1.0	3.4	-0.3	2.1	2.0	4.4	0.2
b	Industry (growth rate in per cent)	5.6	5.2	8.9	2.8	6.2	6.0	7.3	5.0
c	Services (growth rate in per cent)	10.1	10.0	13.0	8.8	9.7	9.5	13.2	8.0
2	Index of Industrial Production(growth rate in per cent)	3.7	3.3	7.0	-0.2	5.2	4.9	7.3	4.0
3	Private Final Consumption Expenditure (growth rate in per cent)	9.3	9.0	12.9	6.0	9.4	9.2	12.6	6.0
4	Gross Fixed Capital Formation (per cent of GDP)	28.9	28.9	31.0	27.8	29.0	28.8	31.4	27.8
5	₹ per U.S. Dollar (RBI reference rate-end period)	64.08	64.00	65.50	62.80	64.91	64.70	67.00	63.00
6	Repo Rate (end period)	7.35	7.25	7.50	7.25	7.18	7.25	7.25	7.00
7	CRR (end period)	3.99	4.00	4.00	3.75	3.97	4.00	4.00	3.50
8	Merchandise Export (in US\$ bn.)	73.5	74.8	80.9	67.0	79.2	79.9	85.2	69.6
9	Merchandise Import (in US\$ bn.)	104.6	105.5	117.4	92.0	113.1	115.4	119.5	100.0
10	Indian Crude Oil basket Price (in US\$ per barrel)	63.0	62.8	66.0	60.0	65.8	65.0	72.0	63.7

	Key Macroeconomic Indicators	Quarterly Forecasts											
		Q3: 2015-16				Q4: 2015-16				Q1: 2016-17			
		Mean	Median	Max	Min	Mean	Median	Max	Min	Mean	Median	Max	Min
1	Real GVA at basic prices (growth rate in per cent)	7.7	7.8	8.5	6.6	7.8	8.0	8.7	6.6	8.2	8.4	9.4	7.0
a	Agriculture & Allied Activities (growth rate in per cent)	2.8	3.0	5.0	0.5	3.2	3.4	5.0	1.1	3.0	3.0	4.0	1.1
b	Industry (growth rate in per cent)	7.0	6.6	9.7	5.8	6.7	6.6	8.1	4.8	7.1	7.0	8.7	6.0
c	Services (growth rate in per cent)	9.7	9.4	13.2	7.5	10.1	9.6	14.2	7.6	10.1	9.8	12.3	9.0
2	Index of Industrial Production(growth rate in per cent)	5.5	5.6	7.6	2.2	4.6	4.6	7.9	1.7	5.6	6.1	7.5	3.5
3	Private Final Consumption Expenditure (growth rate in per cent)	11.3	12.6	14.6	6.0	10.6	10.5	14.1	5.5	12.5	13.4	15.1	5.5
4	Gross Fixed Capital Formation (per cent of GDP)	28.5	28.5	30.0	27.5	29.1	28.8	30.9	27.6	29.4	29.4	30.3	28.0
5	₹ per U.S. Dollar (RBI reference rate-end period)	65.27	65.50	68.10	63.50	65.13	65.75	67.30	62.00	65.71	66.00	67.00	64.50
6	Repo Rate (end period)	7.13	7.25	7.25	6.75	7.07	7.00	7.25	6.75	7.02	7.00	7.25	6.75
7	CRR (end period)	3.97	4.00	4.00	3.50	3.97	4.00	4.00	3.50	3.98	4.00	4.00	3.75
8	Merchandise Export (in US\$ bn.)	81.9	81.5	93.5	71.9	84.0	82.7	91.6	78.6	80.6	81.1	92.0	72.6
9	Merchandise Import (in US\$ bn.)	121.7	122.1	133.7	113.6	122.2	122.2	137.2	112.0	122.0	123.2	134.2	110.2
10	Indian Crude Oil basket Price (in US\$ per barrel)	66.1	64.3	80.0	58.0	66.8	66.0	85.0	54.0	67.5	65.0	90.0	54.0

	CPI Combined Headline				Core CPI Combined (excluding food & fuel)			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q1:2015-16	5.1	5.0	6.1	4.6	4.4	4.4	5.5	3.5
Q2:2015-16	4.7	4.7	6.3	3.5	4.5	4.5	5.5	3.8
Q3:2015-16	5.3	5.3	6.2	4.8	5.0	5.1	5.6	4.0
Q4:2015-16	5.6	5.6	6.0	5.0	5.4	5.7	6.5	4.2
Q1:2016-17	5.6	5.5	5.9	5.3	5.0	5.2	5.5	4.2

	WPI Headline				WPI-Manufactured Products			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Q1:2015-16	-1.6	-2.3	1.5	-3.0	-0.1	-0.5	2.1	-1.0
Q2:2015-16	-1.2	-1.9	2.1	-3.3	0.1	-0.3	2.9	-1.3
Q3:2015-16	0.8	0.8	4.1	-2.4	1.0	0.7	3.9	-0.1
Q4:2015-16	3.1	2.9	6.1	0.3	2.0	2.0	4.5	0.6
Q1:2016-17	3.4	3.0	5.5	2.3	2.5	2.5	4.0	1.2

Table A.6: Mean probabilities attached to possible outcomes of real GVA growth

Growth Range	Forecasts for 2015-16	Forecasts for 2016-17
Below 2.0 per cent	0	0
2.0 to 2.4 per cent	0	0
2.5 to 2.9 per cent	0	0
3.0 to 3.4 per cent	0	0
3.5 to 3.9 per cent	0	0
4.0 to 4.4 per cent	0	0
4.5 to 4.9 per cent	0	0
5.0 to 5.4 per cent	0	0
5.5 to 5.9 per cent	0	0
6.0 to 6.4 per cent	0	0
6.5 to 6.9 per cent	0.08	0.02
7.0 to 7.4 per cent	0.17	0.07
7.5 to 7.9 per cent	0.55	0.25
8.0 to 8.4 per cent	0.18	0.39
8.5 to 8.9 per cent	0.02	0.25
9.0 to 9.4 per cent	0	0.03
9.5 to 9.9 per cent	0	0
10.0 per cent or more	0	0

Table A.7: Mean probabilities attached to possible outcomes of CPI (Combined) inflation

Inflation Range	Forecasts for March 2016	Forecasts for March 2017
Below 0 per cent	0	0
0 to 0.9 per cent	0	0
1.0 to 1.9 per cent	0	0
2.0 to 2.9 per cent	0	0.01
3.0 to 3.9 per cent	0	0.03
4.0 to 4.9 per cent	0.10	0.29
5.0 to 5.9 per cent	0.70	0.52
6.0 to 6.9 per cent	0.18	0.14
7.0 to 7.9 per cent	0.02	0.02
8.0 to 8.9 per cent	0	0
9.0 to 9.9 per cent	0	0
10.0 to 10.9 per cent	0	0
11.0 to 11.9 per cent	0	0
12.0 to 12.9 per cent	0	0
13.0 to 13.9 per cent	0	0
14.0 per cent or above	0	0

Table A.8: Mean probabilities attached to possible outcomes of WPI inflation

Inflation Range	Forecasts for March 2016	Forecasts for March 2017
Below 0 per cent	0.05	0.00
0 to 0.9 per cent	0.04	0.02
1.0 to 1.9 per cent	0.14	0.12
2.0 to 2.9 per cent	0.28	0.21
3.0 to 3.9 per cent	0.18	0.20
4.0 to 4.9 per cent	0.13	0.22
5.0 to 5.9 per cent	0.10	0.15
6.0 to 6.9 per cent	0.07	0.07
7.0 to 7.9 per cent	0.01	0.02
8.0 to 8.9 per cent	0	0
9.0 to 9.9 per cent	0	0
10.0 to 10.9 per cent	0	0
11.0 to 11.9 per cent	0	0
12.0 to 12.9 per cent	0	0
13.0 to 13.9 per cent	0	0
14.0 per cent or above	0	0

Table A.9: Annual Average Percentage Change

	Annual average percentage change over the next five years				Annual average percentage change over the next ten years			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GVA	7.9	8.0	10.0	7.0	8.2	8.25	10.0	7.0
CPI Combined	5.1	5.0	6.0	4.0	4.8	5.0	6.0	3.5
WPI	3.7	3.75	5.5	1.5	3.8	3.5	5.5	2.0