# The Industrial Outlook Survey, 2016-17\*

This article, the fifth in the series, presents the broad features of the results obtained in quarterly rounds of the Reserve Bank's Industrial Outlook Survey (IOS) in the year 2016-17 against the backdrop of salient macroeconomic developments. It provides useful insights into the performance of the manufacturing sector, including price developments relating to industrial raw materials and manufactured products.

#### 1. Introduction

The Industrial Outlook Survey (IOS) of the Indian manufacturing sector is conducted by the Reserve Bank on a quarterly basis since 1998<sup>1</sup>. The survey assesses business sentiment for the current quarter and expectations for the ensuing quarter, based on qualitative responses on a set of indicators pertaining to demand conditions, financial conditions, employment conditions and the price situation.

By design, the results of the survey are expected to track manufacturing activity in India and provides lead indicators thereof. Although the survey is focused on the manufacturing sector, it also provides some information about the state of the overall economy.

Against this backdrop, this article aims at (a) presenting underlying central tendencies in the survey results; and (b) analysing empirically their tracking performance in respect of relevant official statistics. The rest of the article is organised as follows:

section two describes broad features of the survey with a focus on the process of summarising individual survey responses, while Section three presents broad central tendencies in the survey results and Section four provides empirical results on tracking performance of the survey with respect to a few official statistics. Section five summarises the observations.

## 2. Survey Responses and Aggregation

The survey questionnaire is canvassed among a panel of about 2,500 manufacturing companies – mostly with paid-up capital above ₹5 million – which represents a mix of size and industry groups. The list is updated periodically with addition of new companies and deletion of closed/merged companies. Participation in the survey is voluntary. The response rates have been around 45 per cent in 2016-17.

The questionnaire contains questions/parameters relating to demand conditions, price situation, employment and financial conditions. Respondents are asked to offer qualitative answers on each question on a three-point scale — 'improvement', 'no change/ status quo', and 'worsening'. The two extremes, *viz...*, 'improvement' and 'worsening' refer to positive (optimistic) and negative (pessimistic) responses, respectively.

Survey responses on each question or parameter are aggregated/summarised through a measure called 'Net Response (NR)', which is the difference between the proportions of 'optimistic (positive)' and 'pessimistic (negative)' responses. Thus, by construction, NRs can take values between (-)100 and 100, zero being interpreted as 'no change/status quo'. Larger value of NR indicates improved optimism (or declining pessimism).

The results of the survey are summarised in a composite 'Business Expectation Index (BEI)', which is based on NRs relating to nine select performance

<sup>\*</sup> Prepared in the Division of Enterprise Surveys, Department of Statistics and Information Management, Reserve Bank of India. The latest round of the survey data was released on April 6, 2017 on the RBI website and is available at https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/IOSED05042017141845951743420C8BD77C5FDAB831D4. PDF. The business sentiments (assessment and expectations) reflected in the survey results are those of the respondents and are not necessarily shared by the Reserve Bank of India.

<sup>&</sup>lt;sup>1</sup> The 74<sup>th</sup> to 77<sup>th</sup> rounds of the survey cover the four quarters of 2016-17. The quarterly survey results are regularly disseminated on the RBI website.

indicators<sup>2</sup>. The BEI, scaled between 0 and 200, gives a snapshot of industrial performance and outlook in each quarter—the value 100 representing the threshold of no change (status quo) and a reading above (below) 100 indicates an expansion (a contraction) of the overall business activity. For each of the survey round, two forms of BEI are computed—one based on the assessment of the current quarter (BEI-Asmt) and another based on expectations for the ensuing quarter (BEI-Expt).

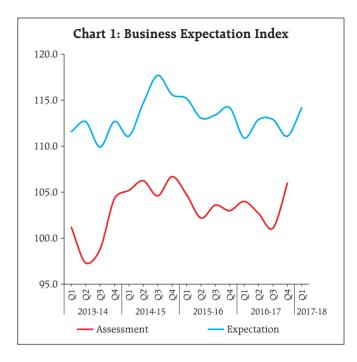
## 3. Highlights in Recent Survey Results

The results of the IOS rounds for 2016-17 has been encapsulated under three broad heads, *i.e.*, overall business sentiment, demand conditions and price situation, in the context of the findings from the survey rounds since Q1:2013-14. The trends observed since 2013-14 throws up interesting insights into the state of the industrial sector in the medium term.

#### 3.1 Overall Business Sentiment

The BEI-Asmt reached an inflection point in Q4:2016-17, reversing successive declines in the previous two quarters. By the end of the year, it reached a level of 106.2, which was close to the most recent peak observed in Q4:2014-15 (Chart 1). Expectations of the respondents were generally formed in an adaptive manner and the BEI-Expt tracked the BEI-Asmt with a one quarter lag<sup>3</sup>.

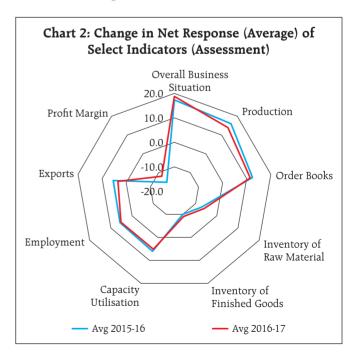
On the basis of the average of quarters, the year 2016-17 was not very different from the previous year (Chart 2). Production, order books and the overall



business situation lifted the BEI measurement in both the years, while lower profit margin and the pile up of inventories operated as drags.

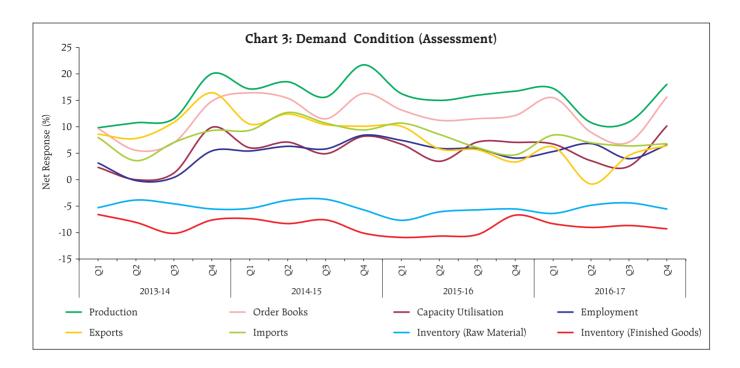
#### 3.2 Demand Conditions

On most of the parameters reflecting demand conditions, there was dip in optimism in the middle two quarters of 2016-17, but the situation reversed in the fourth quarter. However, manufacturers'



 $<sup>^2\,</sup>$  The methodology used for the analysis of survey data was published in the article 'Quarterly Industrial Outlook Survey: Trends since 2000-01' in the RBI Monthly Bulletin of October 2009. For ready reference, the nine parameters/indicators considered for computation of the BEI are - (1) overall business situation; (2) production; (3) order books; (4) inventory of raw materials; (5) inventory of finished goods; (6) profit margin; (7) employment; (8) exports; and (9) capacity utilisation.

<sup>&</sup>lt;sup>3</sup> Generally, the BEI-Expt remains higher than the BEI-Asmt. This is not unique to the RBI's IOS; a similar phenomenon is found in the Manufacturing Business Outlook Survey conducted by the Federal Reserve Bank of Philadelphia and in the Empire State Manufacturing Survey conducted by the Federal Reserve Bank of New York among others.

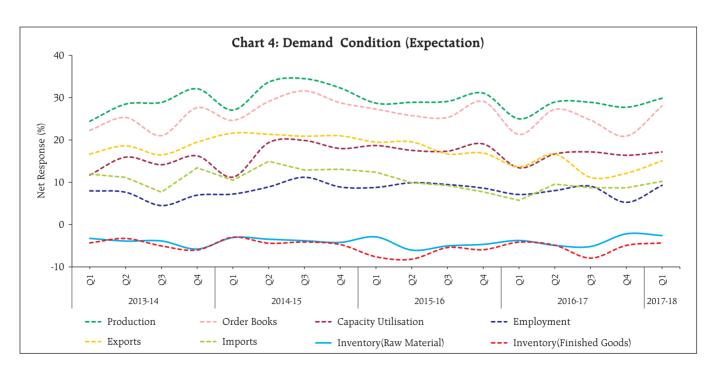


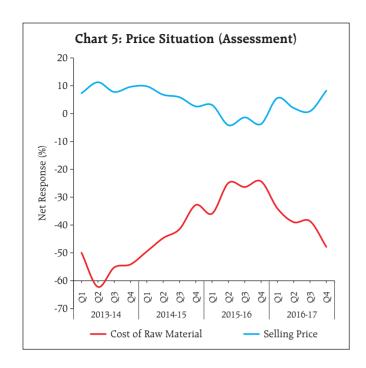
sentiment on inventory positions remained persistently negative (Chart 3).

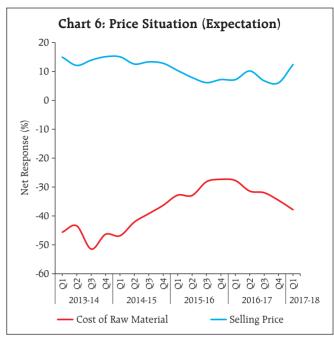
The outlook for Q1:2017-18 shows further improvement, contributed by parameters like production, order books, capacity utilisation, exports and employment. Negative sentiment on inventory positions, however, remain unchanged (Chart 4).

#### 3.3 Price Situation

The survey assesses the price situation through the parameters for cost of raw materials, and the selling price. Manufacturers' pessimism on the cost of raw materials has gradually increased in the recent period, whereas the sentiment on the selling price has been improving (Chart 5-6 and Annex 2).







## 4. Tracking Performance of the Survey

Are the survey results able to track select official statistics on output and prices? In particular, the ability of BEIs (*i.e.*, BEI-Asmt and BEI-Expt) to track the official statistics on output, and the co-movement of NRs on cost of raw materials (CRM) and the selling price (SP) with the wholesale price index (WPI) for

industrial raw materials and manufactured products, respectively, assume significance.

### 4.1 Output

Chart 7 shows that both BEI-Asmt and BEI-Expt track alternative output measures – the index of industrial production for the manufacturing sector (IIP-Manf), and gross value added in the manufacturing

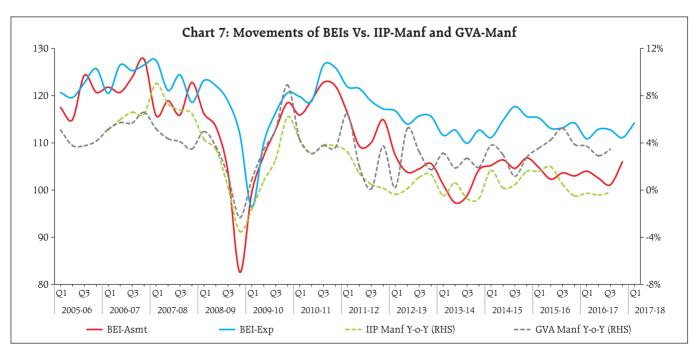


Table 1: Correlation Coefficient between Survey Indices and Official Statistics on Output

Annual Growth in	Survey Index					
Output Measure	BEI-Asmt	BEI-Expt				
IIP-Manf	0.8505*	0.7745*				
GVA-Manf	0.6311*	0.4518*				

<sup>&#</sup>x27;\*' Significant at 1 per cent level

sector (GVA-Manf)<sup>4</sup> – reasonably well. The pair-wise correlation coefficients between survey-based indices and annual growth in the alternative output measures are statistically significant. Further, the relationship appears to be relatively stronger in case of the BEI-Asmt (Table 1).

To buttress these results, the annual growth in the output measure is regressed on a constant, its own past values (lags upto 4 quarters) and the BEI-Asmt/BEI-Expt. The explanatory power of the regression (as measured by the adjusted-R<sup>2</sup> statistics) indicates a reasonably good fit (Table 2).

#### 4.2 Prices

Given that IOS results usually come out before the release of provisional data on wholesale price index (WPI), it would be interesting to examine what

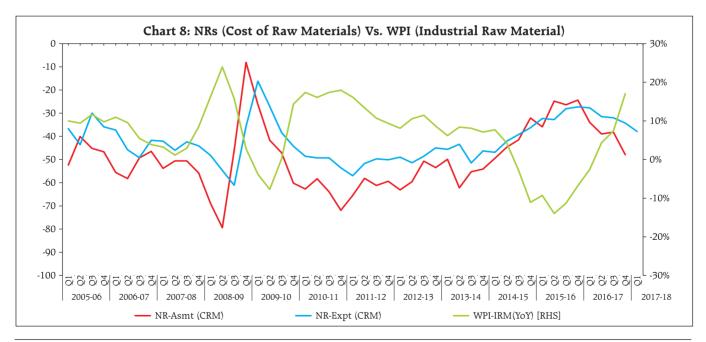
Table 2: The Adjusted-R<sup>2</sup> Statistics for Fitted Regression Equations

Dependent Variable	Survey Index as Explanatory Variable*					
(Annual Growth in Output Measure)	BEI-Asmt	BEI-Expt				
IIP-Manf	0.7896	0.7020				
GVA-Manf	0.5374	0.2510				

<sup>&#</sup>x27;\*' Explanatory variables in each regression equation include a constant, past values of the dependent variable (lags upto 4 quarters) and BEI.

insight the survey results offer regarding the WPI, even for the assessment quarter. By definition, higher value of NRs on any parameter indicates improvement or greater optimism with respect to the parameter. Thus, the NRs on CRM should be negatively correlated with changes in WPI for industrial raw materials (WPI-IRM). On the other hand, the NRs on SP should be positively correlated with changes in WPI for manufactured products (WPI-Manf).

The NR-Asmt and NR-Expt on cost of raw materials seemed to have moved reasonably well with Y-o-Y changes in the WPI-IRM, but in the opposite direction – the correlation coefficients between the NR-Asmt and growth in WPI-IRM at (-)0.7731 and the same for NR-Expt at (-)0.6876 are statistically significant (Chart 8, Table 3). NRs on the selling price



<sup>&</sup>lt;sup>4</sup> Base Year for IIP and GVA data are 2004-05 and 2011-12 respectively. Since the data on GVA (Basic Price) is available only since 2011-12; GDP at factor cost price were spliced (using linking factor) to get GVA for earlier period.

Table 3: Correlation Coefficient between NRs and Price Indices									
Annual Growth in Price Index	Cost of Raw	Materials	Selling Price						
	NR-Asmt	NR-Expt	NR-Asmt	NR-Expt					
WPI-IRM WPI-Manf	-0.7731* -	-0.6876* -	- 0.6546*	- 0.7098*					

<sup>&#</sup>x27;\*' Significant at 1 per cent level.

and annual change in WPI-Manf also exhibited strong co-movement in the same direction – the correlation coefficients for NR-Asmt and NR-Expt at 0.6546 and 0.7098, respectively, are statistically significant (Chart 9, Table 3).

Regression analysis indicates a strong relationship between NR-Asmt (CRM) and WPI-IRM, and between NR-Asmt (SP) and WPI-Manf. The adjusted-R<sup>2</sup> statistics for these equations turn out to be robust (Table 4).

Table 4: Performance of NR-Asmt in Explaining WPI

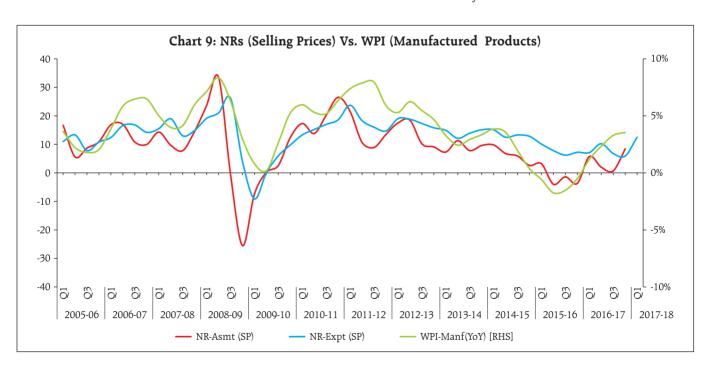
Dependent Variable (Y)	NR-Asmt on the Parameter (X)	Adjusted-R <sup>2</sup>
YoY Change in WPI-IRM	Cost of Raw Materials	0.9123
YoY Change in WPI-Manf	Selling Price	0.9234

<sup>&#</sup>x27;\*' Explanatory variables in each regression equation include a constant, past values of the dependent variable (lags upto 4 quarters) and BEI.

The corresponding results for NR-Expt are similar, though relationship is relatively weaker.

## 5. Summary

The demand conditions as assessed by the manufacturing sector companies in the recent rounds of IOS, through the parameters production, order books, exports, capacity utilisation and the employment, indicate an upturn in Q4:2016-17, which is likely to persist in Q1:2017-18. However, the inventory positions are yet to improve. On the price front, sentiments on cost of raw materials have deteriorated during 2016-17. However, the survey results reflect moderate improvement in the pricing power of the manufacturing sector. Overall, the survey results for 2016-17 indicate that the sector is poised in the absence of any clear-cut turnaround.



In this article, empirical analyses were carried out to examine if the survey results provide some insights into the direction of change in relevant official statistics. It is found that the BEIs track the activities of the manufacturing sector reasonably well, more so for concurrent period assessment. Further, price

parameters of the survey contain useful information in tracking the corresponding WPI-inflation. Thus, the survey results provide useful information on short-term movements in Indian manufacturing for policymakers as well as for practitioners in financial markets and business.

Annex 1: Business Expectation Index (BEI)

Quarter	BEI-Assessment Quarter	BEI-Expectation Quarter
Q1:2015-16	104.8	115.2
Q2:2015-16	102.4	113.1
Q3:2015-16	103.6	113.4
Q4:2015-16	103.0	114.2
Q1:2016-17	104.0	110.9
Q2:2016-17	102.7	112.9
Q3:2016-17	101.1	112.9
Q4:2016-17	106.0	111.1
Q1:2017-18		114.2

Annex 2

Table 2.1: Assessment & Expectation – Production

<b>Quart</b> er	Total				Expectation				
	response	Increase	Decrease	No change	Net re- sponse#	Increase	Decrease	No change	Net response
Q1:2015-16	1299	34.1	17.8	48.1	16.3	39.6	10.9	49.5	28.7
Q2:2015-16	1304	34.1	18.9	46.9	15.2	40.3	11.4	48.3	28.9
Q3:2015-16	1337	34.2	18.2	47.6	16.0	40.5	11.3	48.2	29.2
Q4:2015-16	1342	35.6	18.8	45.6	16.8	41.2	10.2	48.6	31.1
Q1:2016-17	1275	34.5	17.2	48.3	17.3	38.8	13.8	47.4	25.0
Q2:2016-17	723	31.4	20.6	48.0	10.8	40.2	11.2	48.6	29.0
Q3:2016-17	1221	32.0	21.2	46.8	10.8	40.9	12.0	47.2	28.9
Q4:2016-17	1244	35.8	17.8	46.4	18.0	41.1	13.3	45.6	27.8
Q1:2017-18						41.6	11.7	46.7	29.9

<sup>&#</sup>x27;Increase' in production is optimistic

Table 2.2: Assessment & Expectation - Order Books

(Percentage responses)

Quarter	Total		Assessment				Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response	
Q1:2015-16	1299	30.8	17.7	51.5	13.2	37.8	10.5	51.7	27.3	
Q2:2015-16	1304	31.1	19.7	49.3	11.4	37.4	11.6	51.0	25.8	
Q3:2015-16	1337	30.4	18.8	50.8	11.5	37.4	11.9	50.8	25.5	
Q4:2015-16	1342	31.8	19.7	48.5	12.1	39.7	10.6	49.8	29.1	
Q1:2016-17	1275	32.1	16.5	51.3	15.6	35.5	14.3	50.3	21.2	
Q2:2016-17	723	29.3	20.4	50.3	9.0	38.1	10.8	51.1	27.3	
Q3:2016-17	1221	29.1	22.0	48.9	7.1	36.4	11.7	51.9	24.7	
Q4:2016-17	1244	34.8	19.2	46.0	15.6	35.1	14.2	50.7	20.9	
Q1:2017-18						39.5	11.5	49.0	28.0	

<sup>&#</sup>x27;Increase' in order books is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.3: Assessment & Expectation - Pending Orders

(Percentage responses)

Quarter	Total		Asses	sment		Expectation			
	response	Below Normal	Above Normal	Normal	Net response	Below Normal	Above Normal	Normal	Net response
Q1:2015-16	1299	18.6	5.1	76.3	13.6	13.1	6.9	80.1	6.2
Q2:2015-16	1304	18.6	5.1	76.3	13.5	14.6	6.1	79.4	8.5
Q3:2015-16	1337	19.2	5.0	75.8	14.3	14.1	6.5	79.4	7.6
Q4:2015-16	1342	18.2	4.3	77.4	13.9	13.3	7.0	79.7	6.3
Q1:2016-17	1275	16.7	5.7	77.6	11.0	15.1	4.9	80.0	10.2
Q2:2016-17	723	18.9	5.2	75.9	13.7	12.9	6.3	80.8	6.6
Q3:2016-17	1222	19.0	5.3	75.7	13.7	12.9	6.7	80.4	6.2
Q4:2016-17	1244	18.1	5.1	76.9	13.0	15.3	5.0	79.7	10.3
Q1:2017-18						13.4	4.9	81.8	8.5

Pending orders 'Below Normal' is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

 $<sup>^{@}</sup>$ : Due to rounding off percentage may not add up to 100. This is applicable for all the tables from 2.1 to 2.22.

<sup>#:.</sup> Net Response (NR) is the difference of percentage of the respondents reporting optimism and that reporting pessimism. The range is (-) 100 to 100. Any value greater than zero indicates expansion and any value less than zero indicates contraction.

Table 2.4: Assessment & Expectation – Capacity Utilisation (Main Product)

Quarter	Total		Asses	sment		Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	23.3	16.7	60.0	6.7	27.5	8.8	63.7	18.7
Q2:2016-16	1304	21.7	18.1	60.2	3.6	27.7	10.2	62.1	17.6
Q3:2015-16	1337	23.4	16.3	60.4	7.1	27.8	10.2	62.0	17.5
Q4:2015-16	1342	24.6	17.5	57.9	7.1	27.8	8.7	63.5	19.1
Q1:2016-17	1275	21.8	15.1	63.1	6.7	26.3	12.9	60.8	13.4
Q2:2016-17	723	21.5	17.9	60.7	3.6	26.5	9.7	63.9	16.8
Q3:2016-17	1222	20.2	17.9	61.9	2.3	27.4	10.2	62.5	17.2
Q4:2016-17	1244	25.9	15.7	58.4	10.2	27.6	11.2	61.2	16.4
Q1:2017-18						28.1	10.9	61.0	17.2

<sup>&#</sup>x27;Increase' in capacity utilisation is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.5: Assessment & Expectation – Level of CU (compared to the average in last 4 quarters)

(Percentage responses)

Quarter	Total		Assessment				Expectation			
	response	Above Normal	Below Normal	Normal	Net response	Above Normal	Below Normal	Normal	Net response	
Q1:2015-16	1299	10.2	18.6	71.3	-8.4	12.1	12.3	75.6	-0.2	
Q2:2016-16	1304	8.8	19.3	71.9	-10.5	10.5	13.9	75.5	-3.4	
Q3:2015-16	1337	8.7	18.6	72.6	-9.9	9.2	13.1	77.6	-3.9	
Q4:2015-16	1342	9.8	19.2	71.0	-9.4	9.4	12.4	78.2	-3.0	
Q1:2016-17	1275	10.9	16.6	72.5	-5.7	9.8	14.6	75.6	-4.8	
Q2:2016-17	723	9.3	15.4	75.3	-6.0	10.3	11.9	77.8	-1.6	
Q3:2016-17	1222	8.7	16.4	74.9	-7.7	10.8	11.5	77.7	-0.7	
Q4:2016-17	1244	9.3	16.1	74.6	-6.8	10.6	12.9	76.5	-2.3	
Q1:2017-18						9.9	12.2	77.9	-2.3	

<sup>&#</sup>x27;Above Normal' in Level of capacity utilisation is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.6: Assessment & Expectation – Assessment of Production Capacity (with regard to expected demand in next 6 months)

(Percentage responses)

Quarter	Total		Asses	sment		Expectation				
	response	More than adequate	Less than adequate	Adequate	Net response	More than adequate	Less than adequate	Adequate	Net response	
Q1:2015-16	1299	15.1	8.0	76.9	7.2	13.9	6.9	79.2	7.0	
Q2:2016-16	1304	14.1	7.7	78.3	6.4	15.8	6.8	77.5	9.0	
Q3:2015-16	1337	14.3	8.5	77.2	5.8	14.4	6.8	78.8	7.5	
Q4:2015-16	1342	13.9	8.5	77.7	5.4	14.5	7.0	78.5	7.5	
Q1:2016-17	1275	14.6	8.6	76.8	6.0	13.8	7.1	79.1	6.7	
Q2:2016-17	723	14.4	8.2	77.3	6.2	13.6	7.6	78.8	6.0	
Q3:2016-17	1222	12.3	9.1	78.6	3.2	14.2	7.4	78.4	6.8	
Q4:2016-17	1244	14.1	7.1	78.7	7.0	11.9	7.4	80.7	4.5	
Q1:2017-18						13.3	6.7	79.9	6.6	

(Percentage responses) 'More than adequate' in Assessment of Production Capacity is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.7: Assessment & Expectation - Exports

Quarter	Total		Asses	sment		Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	24.1	14.0	62.0	10.1	27.6	8.1	64.3	19.5
Q2:2015-16	1304	23.5	17.8	58.7	5.7	27.5	8.0	64.5	19.6
Q3:2015-16	1337	23.3	17.7	59.0	5.7	27.3	10.6	62.1	16.7
Q4:2015-16	1342	22.1	18.8	59.1	3.3	26.9	10.0	63.1	16.9
Q1:2016-17	1275	21.5	15.3	63.1	6.2	25.7	12.0	62.3	13.7
Q2:2016-17	723	19.8	20.6	59.6	-0.8	26.3	9.5	64.2	16.8
Q3:2016-17	1221	22.9	18.5	58.6	4.4	24.3	13.2	62.5	11.2
Q4:2016-17	1244	24.3	17.7	58.0	6.6	25.3	13.2	61.5	12.1
Q1:2017-18						26.5	11.3	62.2	15.2

<sup>&#</sup>x27;Increase' in exports is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.8: Assessment & Expectation - Imports

(Percentage responses)

Quarter	Total		Asses	sment		Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	19.8	9.1	71.0	10.7	20.3	7.9	71.8	12.4
Q2:2015-16	1304	18.8	10.4	70.7	8.4	18.0	8.1	73.9	9.9
Q3:2015-16	1337	17.2	11.1	71.8	6.1	18.0	8.8	73.2	9.2
Q4:2015-16	1342	17.6	12.9	69.4	4.7	16.4	8.6	75.0	7.7
Q1:2016-17	1275	18.1	9.7	72.3	8.4	16.7	10.9	72.4	5.8
Q2:2016-17	723	17.5	10.6	71.9	7.0	17.5	7.9	74.6	9.6
Q3:2016-17	1221	17.9	11.7	70.4	6.2	18.1	9.4	72.5	8.7
Q4:2016-17	1244	17.5	10.7	71.8	6.8	17.7	9.3	73.1	8.4
Q1:2017-18						17.3	7.2	75.5	10.1

<sup>&#</sup>x27;Increase' in imports is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.9: Assessment & Expectation – Level of Raw Materials Inventory

(Percentage responses)

Quarter	Total		Asses	sment	Expectation				
	response	Below average	Above average	Average	Net response	Below average	Above average	Average	Net response
Q1:2015-16	1299	6.5	14.2	79.3	-7.7	7.1	10.0	83.0	-2.9
Q2:2015-16	1304	7.4	13.7	78.9	-6.3	5.5	11.5	83.0	-6.0
Q3:2015-16	1337	6.5	12.2	81.4	-5.7	5.5	10.6	83.9	-5.1
Q4:2015-16	1342	7.0	12.5	80.5	-5.5	5.3	9.9	84.8	-4.7
Q1:2016-17	1275	6.0	12.4	81.7	-6.4	5.9	9.7	84.4	-3.8
Q2:2016-17	723	7.0	11.8	81.2	-4.8	5.8	10.8	83.5	-5.0
Q3:2016-17	1221	7.3	11.7	81.2	-4.4	5.2	10.3	84.5	-5.2
Q4:2016-17	1244	6.9	12.4	81.1	-5.5	6.8	9.0	84.2	-2.2
Q1:2017-18						6.1	8.7	85.2	-2.6
	1	1	I	1	1		I	1	1

 $<sup>\</sup>label{thm:continuous} \mbox{'Below average' Inventory of raw materials is optimistic. Footnotes '@' and '\#' given in Table 2.1 are applicable here. \\$ 

Table 2.10: Assessment & Expectation – Level of Finished Goods Inventory

Quarter	Total		Asses	sment		Expectation				
	response	Below average	Above average	Average	Net response	Below average	Above average	Average	Net response	
Q1:2015-16	1299	7.2	18.1	74.7	-10.9	5.8	13.4	80.9	-7.6	
Q2:2015-16	1304	6.9	17.5	75.6	-10.6	6.4	14.6	78.9	-8.2	
Q3:2015-16	1337	7.0	17.4	75.7	-10.4	6.3	11.6	82.1	-5.3	
Q4:2015-16	1342	8.7	15.4	75.9	-6.7	6.2	12.1	81.6	-5.9	
Q1:2016-17	1275	7.0	15.3	77.7	-8.3	7.0	11.1	81.9	-4.9	
Q2:2016-17	723	6.7	15.8	77.5	-9.0	7.1	12.1	80.8	-5.0	
Q3:2016-17	1221	6.4	15.3	78.3	-8.9	4.5	12.5	83.0	-7.9	
Q4:2016-17	1244	7.3	16.6	76.1	-9.3	6.5	11.6	81.9	-5.1	
Q1:2017-18						6.4	10.7	82.8	-4.3	

'Below average' Inventory of finished goods is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.11: Assessment & Expectations - Employment

(Percentage responses)

Quarter	Total		Asses	sment					
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	16.7	9.3	74.0	7.4	15.8	7.0	77.2	8.8
Q2:2015-16	1304	15.2	9.3	75.5	5.9	16.5	6.6	76.8	9.9
Q3:2015-16	1337	15.3	9.4	75.3	5.8	15.7	6.1	78.2	9.6
Q4:2015-16	1342	14.2	10.1	75.7	4.1	15.3	6.7	78.0	8.6
Q1:2016-17	1275	15.0	9.7	75.3	5.3	15.1	8.0	76.9	7.1
Q2:2016-17	723	14.5	7.7	77.8	6.8	15.8	7.7	76.5	8.1
Q3:2016-17	1221	13.5	9.7	76.8	3.8	14.7	5.6	79.7	9.1
Q4:2016-17	1244	15.9	9.3	74.8	6.6	12.1	6.9	81.0	5.2
Q1:2017-18						15.9	6.6	77.5	9.3

'Increase' in employment is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.12: Assessment & Expectation – Overall Financial Situation

(Percentage responses)

Quarter	Total		Asses	sment		Expectation				
	response	Better	Worsen	No change	Net response	Better	Worsen	No change	Net response	
Q1:2015-16	1299	27.9	13.2	59.1	14.4	34.3	8.0	57.7	26.3	
Q2:2015-16	1304	27.5	14.0	58.6	13.5	34.2	9.1	56.7	25.1	
Q3:2015-16	1337	26.2	12.9	60.9	13.2	34.8	8.8	56.4	26.0	
Q4:2015-16	1342	26.6	12.3	61.0	14.3	33.3	8.5	58.2	24.7	
Q1:2016-17	1275	27.9	11.9	60.1	16.0	33.1	8.3	58.6	24.8	
Q2:2016-17	723	27.7	11.3	61.1	16.4	35.2	8.3	56.5	26.9	
Q3:2016-17	1221	26.0	14.1	59.9	11.9	33.9	6.8	59.3	27.1	
Q4:2016-17	1244	30.6	13.6	55.9	17.0	34.1	9.5	56.4	24.6	
Q1:2017-18						37.9	7.0	55.1	30.9	

'Better' overall financial situation is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.13: Assessment & Expectation - Working Capital Finance Requirement

Quarter	Total		Asses	sment		Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	30.2	6.8	63.0	23.5	32.3	5.1	62.6	27.2
Q2:2015-16	1304	30.2	6.0	63.8	24.2	29.6	4.7	65.7	25.0
Q3:2015-16	1337	30.3	6.7	62.9	23.6	29.9	4.3	65.8	25.5
Q4:2015-16	1342	31.7	6.8	61.4	24.9	30.1	4.9	65.0	25.2
Q1:2016-17	1275	28.1	7.2	64.7	20.8	30.0	5.4	64.6	24.6
Q2:2016-17	723	26.0	6.6	67.4	19.4	29.7	5.6	64.7	24.1
Q3:2016-17	1221	28.9	6.9	64.3	22.0	28.1	4.1	67.8	24.1
Q4:2016-17	1244	30.2	5.6	64.2	24.6	29.2	5.3	65.5	23.9
Q1:2017-18						29.4	5.1	65.5	24.3

<sup>&#</sup>x27;Increase' in working capital finance is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.14: Assessment & Expectation – Availability of Finance (from Internal Accruals)

(Percentage responses)

Quarter	Total		Asses	sment		Expectation				
	response	Improve	Worsen	No change	Net response	Improve	Worsen	No change	Net response	
Q1:2015-16	1299	21.5	10.1	68.3	11.4	24.7	6.6	68.8	18.1	
Q2:2015-16	1304	21.1	10.8	68.1	10.4	23.9	7.2	68.9	16.7	
Q3:2015-16	1337	22.3	9.4	68.3	12.9	23.5	6.7	69.8	16.8	
Q4:2015-16	1342	21.7	9.3	69.0	12.4	26.1	6.1	67.8	20.0	
Q1:2016-17	1275	22.4	8.9	68.6	13.5	25.6	6.1	68.3	19.5	
Q2:2016-17	723	21.0	8.5	70.5	12.5	25.9	5.8	68.3	20.1	
Q3:2016-17	1221	21.6	11.7	66.7	9.9	25.2	5.0	69.8	20.2	
Q4:2016-17	1244	25.6	10.3	64.1	15.3	25.4	8.0	66.6	17.4	
Q1:2017-18						27.5	6.2	66.3	21.3	

<sup>&#</sup>x27;Improvement' in availability of finance is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.15: Assessment & Expectation – Availability of Finance (from banks & other sources)

(Percentage responses)

Quarter	Total		Asses	sment		Expectation			
	response	Improve	Worsen	No change	Net response	Improve	Worsen	No change	Net response
Q1:2015-16	1299	19.1	5.4	75.6	13.7	22.6	4.9	72.4	17.7
Q2:2015-16	1304	19.3	5.7	75.0	13.6	21.2	3.8	75.0	17.3
Q3:2015-16	1337	19.2	6.3	74.4	12.9	20.0	3.8	76.3	16.2
Q4:2015-16	1342	18.3	7.5	74.2	10.8	20.6	4.7	74.7	16.0
Q1:2016-17	1275	18.7	7.7	73.6	11.0	21.6	5.2	73.2	16.4
Q2:2016-17	723	18.3	5.6	76.1	12.7	21.7	5.5	72.7	16.2
Q3:2016-17	1221	19.6	7.9	72.5	11.7	21.8	3.3	74.9	18.5
Q4:2016-17	1244	21.3	7.6	71.1	13.7	22.5	5.6	71.9	16.9
Q1:2017-18						24.8	4.9	70.3	19.9

<sup>&#</sup>x27;Improvement' in availability of finance is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.16: Assessment & Expectation – Availability of Finance (from overseas, if applicable)

Quarter	Total		Asses	sment		Expectation			
	response	Improve	Worsen	No change	Net response	Improve	Worsen	No change	Net response
Q1:2015-16	1299	13.0	4.8	82.2	8.2	14.4	4.0	81.6	10.4
Q2:2015-16	1304	11.1	5.0	83.9	6.1	12.9	3.5	83.6	9.3
Q3:2015-16	1337	11.3	5.2	83.5	6.2	11.5	3.5	85.0	8.0
Q4:2015-16	1342	8.8	5.9	85.3	2.9	12.1	3.9	84.1	8.2
Q1:2016-17	1275	10.6	5.0	84.4	5.6	10.0	4.7	85.4	5.3
Q2:2016-17	723	10.0	3.3	86.6	6.7	12.2	3.8	84.1	8.4
Q3:2016-17	1221	9.1	4.8	86.1	4.3	10.3	2.0	87.7	8.3
Q4:2016-17	1244	8.1	3.3	88.6	4.8	10.0	3.5	86.5	6.5
Q1:2017-18						9.8	2.8	87.4	7.0

<sup>&#</sup>x27;Improvement' in availability of finance is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.17: Assessment & Expectation - Cost of Finance

(Percentage responses)

Quarter	Total		Asses	sment		Expectation				
	response	Decrease	Increase	No change	Net response	Decrease	Increase	No change	Net response	
Q1:2015-16	1299	10.2	22.3	67.5	-12.1	8.8	21.8	69.4	-13.0	
Q2:2015-16	1304	9.4	20.8	69.7	-11.4	9.9	18.7	71.4	-8.7	
Q3:2015-16	1337	14.0	19.4	66.6	-5.4	10.2	17.9	71.9	-7.6	
Q4:2015-16	1342	11.0	19.7	69.2	-8.7	10.5	15.9	73.6	-5.5	
Q1:2016-17	1275	10.1	19.9	70.0	-9.8	8.8	17.1	74.1	-8.3	
Q2:2016-17	723	9.4	17.3	73.3	-7.9	9.9	17.4	72.6	-7.5	
Q3:2016-17	1221	12.9	16.1	71.1	-3.2	9.4	16.9	73.8	-7.5	
Q4:2016-17	1244	15.8	16.7	67.6	-0.9	14.5	14.8	70.8	-0.3	
Q1:2017-18						12.9	15.4	71.7	-2.5	

<sup>&#</sup>x27;Decrease' in cost of finance is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.18: Assessment & Expectation - Cost of Raw Materials

(Percentage responses)

Quarter	Total		Asses	sment		Expectation			
	response	Decrease	Increase	No change	Net response	Decrease	Increase	No change	Net response
Q1:2015-16	1299	8.6	44.5	46.9	-35.9	6.0	38.8	55.2	-32.8
Q2:2015-16	1304	13.2	38.1	48.7	-24.8	5.2	38.1	56.6	-32.9
Q3:2015-16	1337	12.4	38.7	48.9	-26.4	7.1	35.2	57.7	-28.1
Q4:2015-16	1342	13.3	37.7	49.0	-24.4	6.9	34.2	58.9	-27.3
Q1:2016-17	1275	7.5	41.5	51.0	-34.0	8.3	36.0	55.7	-27.7
Q2:2016-17	723	4.2	43.1	52.7	-39.0	6.0	37.5	56.5	-31.5
Q3:2016-17	1221	6.4	44.6	48.9	-38.2	5.5	37.4	57.1	-32.0
Q4:2016-17	1244	3.5	51.4	45.0	-47.9	5.1	39.4	55.6	-34.3
Q1:2017-18						4.1	42.0	54.0	-37.9

<sup>&#</sup>x27;Decrease' in cost of raw materials is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.19: Assessment & Expectation - Selling Price

Quarter	Total		Asses	sment		Expectation			
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response
Q1:2015-16	1299	18.3	15.2	66.5	3.1	19.1	8.8	72.1	10.3
Q2:2015-16	1304	15.8	19.8	64.4	-4.0	19.5	11.6	68.8	7.9
Q3:2015-16	1337	16.7	18.0	65.3	-1.4	18.3	12.2	69.5	6.2
Q4:2015-16	1342	15.9	19.6	64.5	-3.7	17.9	10.7	71.4	7.2
Q1:2016-17	1275	18.9	13.2	67.9	5.7	20.2	13.1	66.7	7.1
Q2:2016-17	723	16.5	14.5	69.0	2.0	19.8	9.7	70.5	10.1
Q3:2016-17	1221	16.9	16.2	66.9	0.7	17.2	10.4	72.4	6.8
Q4:2016-17	1244	21.4	13.0	65.6	8.4	16.8	10.9	72.3	5.9
Q1:2017-18						21.6	9.1	69.3	12.5

<sup>&#</sup>x27;Increase' in selling price is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.20: Assessment & Expectation - Profit Margin

(Percentage responses)

Quarter	Total	Assessment				Expectation				
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response	
Q1:2015-16	1299	14.2	28.5	57.3	-14.2	18.8	19.3	61.9	-0.5	
Q2:2015-16	1304	13.1	30.0	56.9	-16.9	18.5	20.0	61.5	-1.6	
Q3:2015-16	1337	14.3	29.5	56.2	-15.3	18.4	19.7	61.9	-1.3	
Q4:2015-16	1342	13.4	30.1	56.5	-16.7	18.1	20.1	61.8	-2.0	
Q1:2016-17	1275	14.4	27.4	58.2	-12.8	18.5	22.1	59.4	-3.6	
Q2:2016-17	723	15.8	28.8	55.4	-12.9	19.1	19.3	61.6	-0.2	
Q3:2016-17	1221	15.3	28.3	56.4	-13.0	19.5	19.4	61.2	0.1	
Q4:2016-17	1244	16.7	27.8	55.5	-11.1	18.5	21.3	60.2	-2.8	
Q1:2017-18						20.3	19.2	60.4	1.1	

<sup>&#</sup>x27;Increase' in profit margin is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.21: Assessment & Expectation – Overall Business Situation

(Percentage responses)

	(refeelinge tesp								age responses,
Quarter	Total	Assessment				Expectation			
	response	Better	Worsen	No change	Net response	Better	Worsen	No change	Net response
Q1:2015-16	1299	32.5	12.9	54.6	19.6	42.7	6.7	50.6	36.0
Q2:2015-16	1304	30.2	16.3	53.6	13.9	40.3	8.2	51.5	32.0
Q3:2015-16	1337	31.3	14.0	54.7	17.4	39.9	8.3	51.8	31.6
Q4:2015-16	1342	30.8	14.6	54.6	16.2	40.9	7.6	51.5	33.3
Q1:2016-17	1275	33.3	12.1	54.6	21.2	39.4	8.9	51.7	30.5
Q2:2016-17	723	31.4	14.0	54.6	17.4	41.2	7.7	51.1	33.5
Q3:2016-17	1221	29.4	16.4	54.2	13.0	40.1	8.7	51.2	31.3
Q4:2016-17	1244	36.3	14.3	49.5	22.0	39.4	11.5	49.1	27.9
Q1:2017-18						43.6	7.6	48.8	36.0

<sup>&#</sup>x27;Better' Overall Business Situation is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.

Table 2.22: Assessment & Expectation – Salary/Other Remuneration

Quarter	Total	Assessment				Expectation				
	response	Increase	Decrease	No change	Net response	Increase	Decrease	No change	Net response	
Q1:2015-16	1299	36.9	2.6	60.5	34.2	27.4	3.9	68.7	23.5	
Q2:2015-16	1304	31.7	2.8	65.6	28.9	30.0	2.7	67.3	27.3	
Q3:2015-16	1337	28.4	3.2	68.4	25.1	24.3	2.3	73.4	22.0	
Q4:2015-16	1342	30.5	3.0	66.5	27.5	25.0	2.8	72.2	22.1	
Q1:2016-17	1275	34.9	2.9	62.2	32.0	33.2	2.9	63.9	30.3	
Q2:2016-17	723	35.8	3.0	61.2	32.8	30.0	3.1	66.9	26.9	
Q3:2016-17	1222	28.9	2.8	68.3	26.1	26.6	2.0	71.4	24.7	
Q4:2016-17	1244	30.0	2.7	67.3	27.3	25.0	3.3	71.8	21.7	
Q1:2017-18						38.8	2.2	59	36.6	

<sup>&#</sup>x27;Increase in Salary / other remuneration' is optimistic. Footnotes '@' and '#' given in Table 2.1 are applicable here.