# Position of Order Books, Inventories and Capacity Utilisation for the Quarters October 2012 to September 2013*

*This annual article, second in the series, presents the findings of Order Books, Inventories and Capacity Utilisation Survey (OBICUS) conducted during October 2012 to September 2013 (covering 20th to 23rd rounds of the survey). In the first three quarters between October 2012 and June 2013, all the parameters viz., new orders growth, level of CU and finished goods (FG) inventory to sales ratio reflected a weaker condition as compared to the corresponding position a year ago. In the following July-September 2013 quarter, some turnaround was observed in all the above parameters. This was corroborated in the improved sales position of the private manufacturing sector during the quarter.*

## I. Introduction:

The Reserve Bank of India tracks several macroeconomic variables to assess the aggregate demand-supply position in the economy and formulates its monetary policy stance accordingly. Data on sales and profit margin of the manufacturing sector, an important segment of the economy, are available as part of the disclosures of such companies. However, information relating to order books, level of capacity utilisation and finished goods' inventory level, which are also reflective of incipient demand conditions, are generally not disclosed by most of the companies. To bridge this data gap, the Reserve Bank has been conducting Order Books, Inventories and Capacity Utilisation Survey (OBICUS) of Indian manufacturing companies on a quarterly basis since 2008. Results of the survey are now regularly disseminated on the RBI website.

In the absence of a comprehensive Business Register in Indian context, the sample for OBICUS is purposive and the companies are selected so as to get a good size-mix of industries. The survey schedule is canvassed among a fixed panel of 2,500 manufacturing companies sector which is common in many business tendency surveys. However, responding to the survey is voluntary and it has not been possible to obtain responses from all the companies and in all the quarters. The information collected in the survey includes quantitative data on new orders received during the reference quarter, backlog orders at the beginning of the quarter, pending orders at the end of the quarter, total inventories with breakup of work-in-progress (WiP) and finished goods (FG) inventories at the end of the quarter and item-wise production in terms of quantity and value during the quarter *vis-à-vis* the installed capacity from the targeted group. The level of capacity utilization (CU) is estimated from the above data.
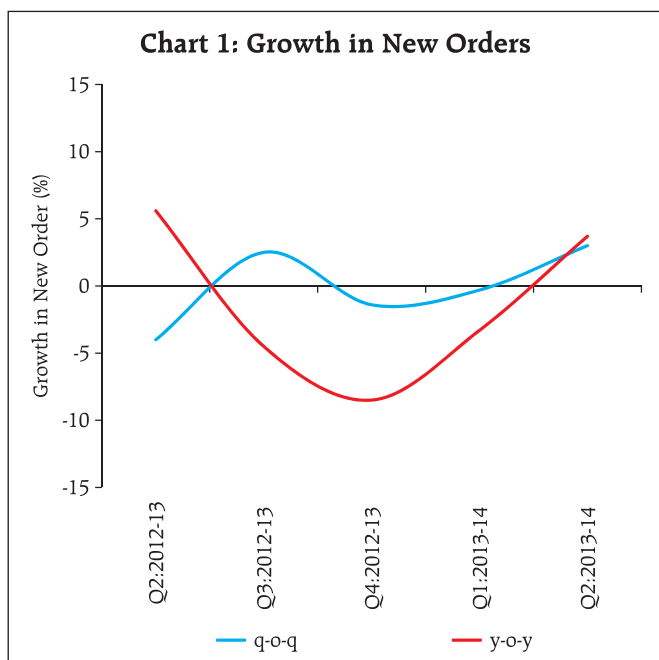
In this article, position of order books, inventories and capacity utilisation of Indian manufacturing industry during October 2012 to September 2013 is based on the data obtained in the latest round (Round 23) of the survey, which pertains to the survey quarter Q2:2013-14[1]. However, data for the same quarter from previous survey rounds are also presented to gauge the robustness of the analysis (Section III). The related data tables are presented in Annex.

## II. Findings of Survey

### II.1 Order Books Growth

Average value of new orders of sample companies was lower in Q3:2012-13 as compared with the position in Q3:2011-12 but was marginally higher than that in Q2:2012-13. For the next two quarters, new orders

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[1] The first annual article on the subject covering the period October 2011 to September 2012 was published in March 2013 Bulletin. Prior to the annual series, Reserve Bank used to publish results of the survey on a quarterly basis. The first quarterly article was published in December 2011. In a change in methodology, apart from the latest quarter data, this article presents revised data for the earlier four quarters rather than twelve quarters, as given in the earlier article. The survey results are based on the replies of the respondents and are not necessarily shared by the Reserve Bank of India.

## Chart 1: Growth in New Orders



## Chart 2: Capacity Utilisation (CU) and De-trended IIP (Manufacturing)



contracted both on year-on-year (y-o-y) and quarter-on-quarter (q-o-q) basis. However, the position turned around in Q2: 2013-14 when new orders grew both on y-o-y and q-o-q basis (Chart 1, Table 1).

### II.2 Capacity Utilisation

Capacity utilization level in the Indian manufacturing industry moved in a lower trajectory since 2012-13. During Q3:2012-13 to Q1:2013-14, CU at the aggregate level was lower when compared with the position in the corresponding quarter a year ago. But, reflecting seasonal trend, CU recorded a high in Q4:2012-13 and a low in Q1:2013-14. CU picked up in the second quarter of 2013-14 and at 73.7 per cent, it was marginally higher than the level observed in the same quarter of the previous year (*i.e.*, Q2:2012-13). The movements in CU remained broadly in line with the movements in the de-trended IIP for manufacturing sector (Chart 2, Table 2).

A further disaggregated size-wise analysis of data indicates that CU levels continued to be higher for larger companies in all the quarters. Taking top 10 companies from each industry-group (based on value of production in the latest survey round), it is observed that CU level for these group was higher by 25-30 percentage points
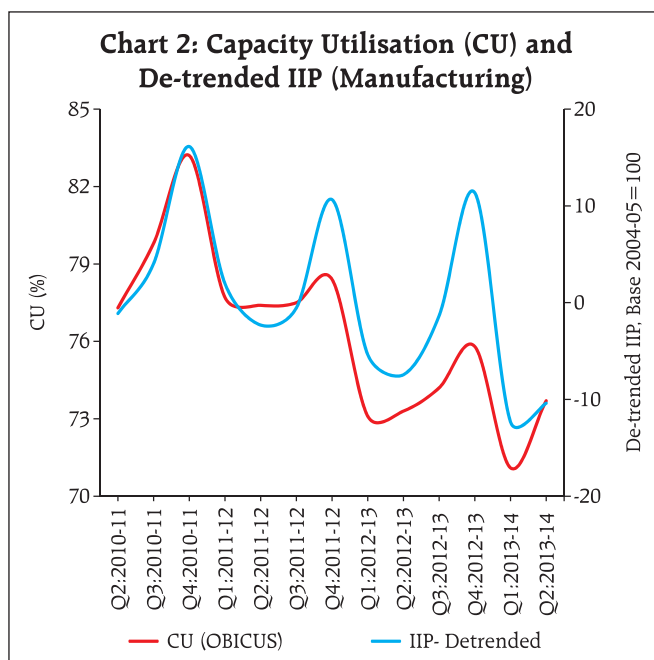
than CU level of remaining companies (Chart 3, Table 2).

Distribution of companies across various CU ranges indicated that a large proportion of sample companies operated with CU below 60 per cent and their share rose marginally in the first half of 2013-14. On the other hand, around 20 per cent of respondent companies had CU levels of more than 90 per cent and

## Chart 3: CU of companies - Size-wise

**Chart 4: Distribution of companies by CU ranges**
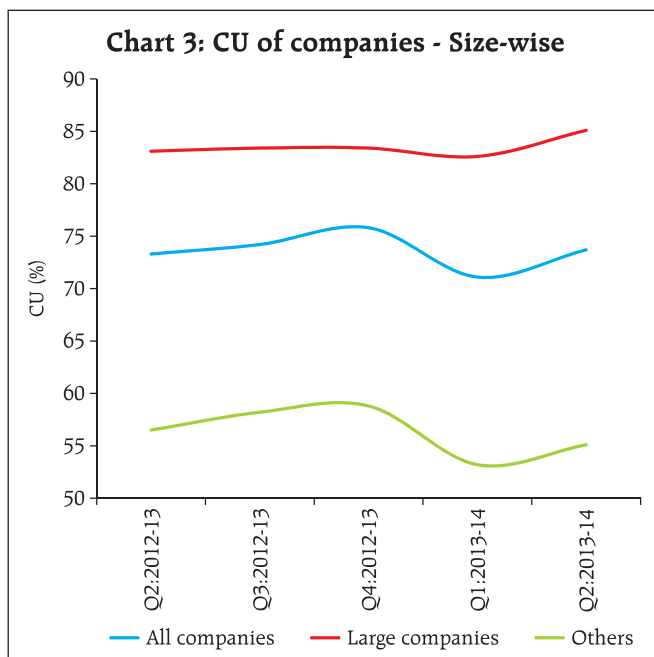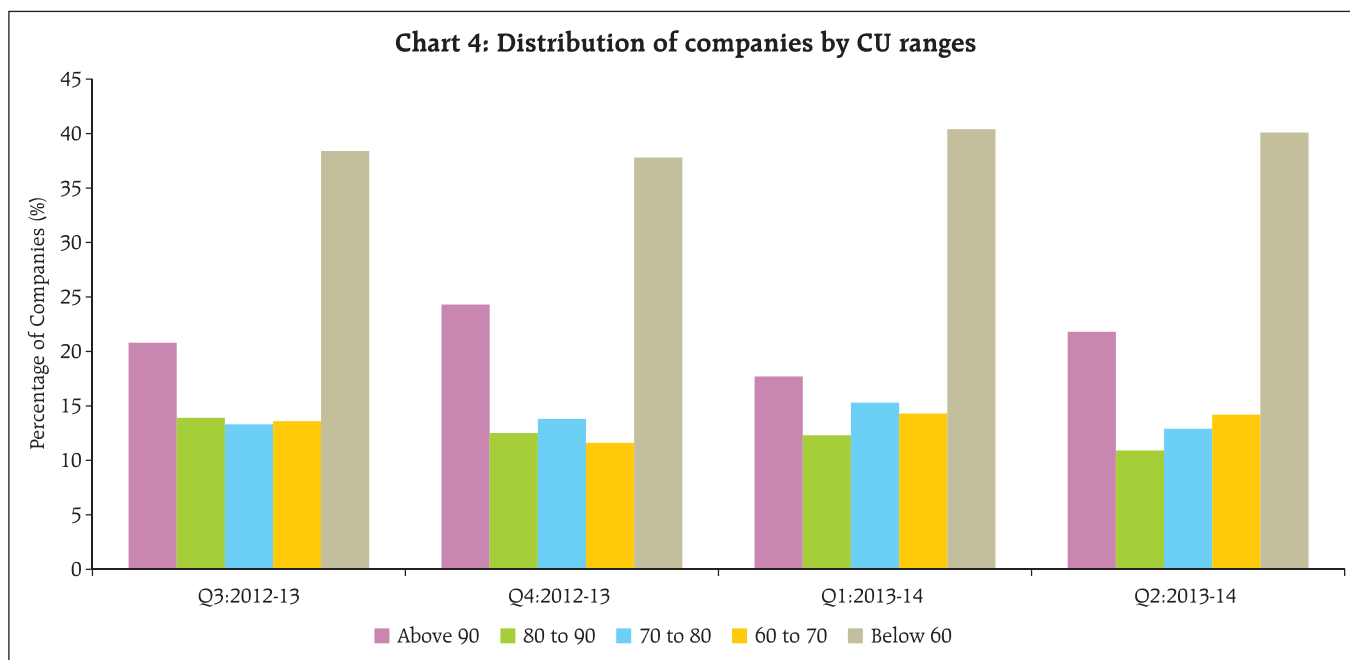


the share reached a maximum in Q4:2012-13 (Chart 4, Table 3).

## II.3 Inventory to Sales Ratio

During the period under reference, the average raw material (RM) inventory to sales ratio peaked at 30.6 per cent in Q3:2012-13 and declined thereafter to 26.3 per cent in Q2:2013-14. As compared to the levels in the same quarter a year ago, RM inventory to sales

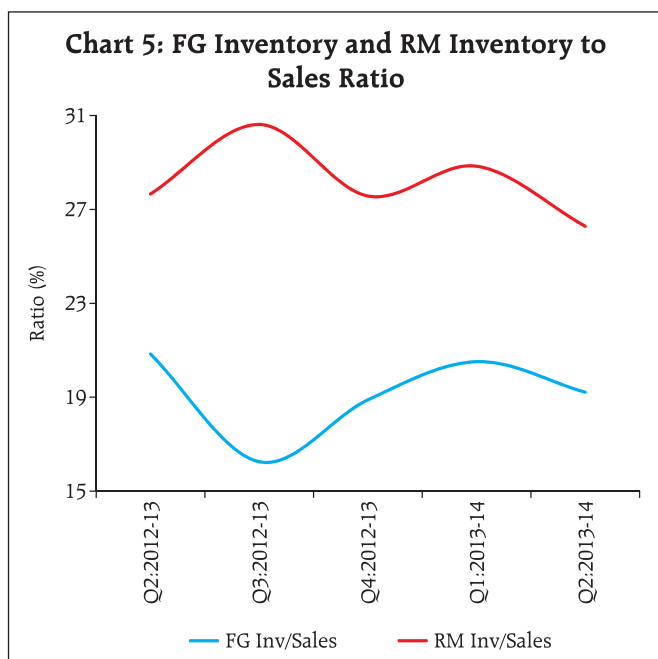**Chart 5: FG Inventory and RM Inventory to Sales Ratio**



ratio was slightly higher in all the quarters except in Q2:2013-14. On the other hand, FG inventory to sales ratio was at the lowest level in Q3:2012-13 and rose gradually in the next two quarters. Following the trend in other parameters, FG inventory to sales ratio also dipped in Q2:2013-14 (Chart 5, Table 4).

## III. Validation of results of different rounds of Surveys (Round 20 to Round 23):

The estimated survey parameters undergo some changes from one round to another due to changes in the constituent sample of companies. However, the above changes may not pose any problem as long as the trend observed earlier is retained. It may also be mentioned that the direction of changes in the key parameters have more relevance rather than their absolute values for the decision makers.

New orders growth (y-o-y) in Q3:2012-13 to Q1:2013-14 reported in rounds 20 to 23 moved in a reasonable range and its direction remained similar (Table 5). It was, however, observed that new order growth for Q2:2012-13 varied considerably among different rounds, due to inclusion/exclusion of a few big companies.

Movements of CU also remained consistent across the survey rounds. Chart 6 exhibits the minimum and

**Chart 6: Maximum and Minimum CUs across Quarters**



Note: The latest quarter (Q2:2013-14) has only a single estimate of CU (based on 23$^{rd}$ round). Similarly, Q1:2013-14 has only two estimates and Q4:2012-13 has only three estimates of CU.
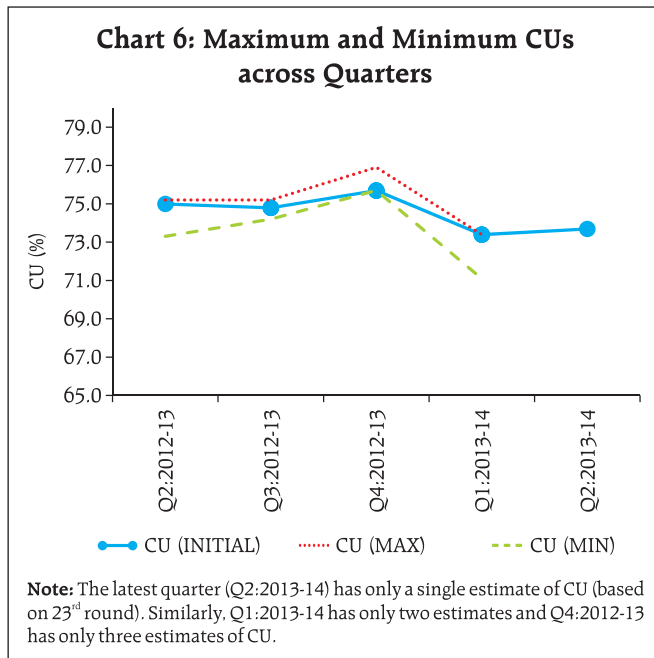
maximum values of CU for a given quarter, as estimated through different rounds of survey along with its initial estimate (derived in the survey quarter itself). It can be observed that the estimates of CU in round 23 have generally tended to be lower (Table 6).

Estimates of FG inventory to sales ratio for a particular quarter remained quite range bound in different rounds of the survey, except that results of round 23 were relatively higher (Table 7). Overall, it is observed that there were some variations in the key parameters due to change in the constituent set of companies but the broad trend remained similar.

## IV. Concluding Observation

Demand conditions in the Indian manufacturing sector during October 2012 to September 2013 remained weak as assessed through new orders growth, level of CU and FG inventory to sales ratio in the quarterly OBICUS conducted by the Reserve Bank. This is in line with lower economic growth at the aggregate level since 2012-13. For the three quarters between October 2012 and June 2013, all the above parameters were weaker than the corresponding position a year ago. However, some turnaround was observed in the July-September 2013 quarter. This was also corroborated in the results of non-government non-financial listed companies in the manufacturing sector as their sales growth (y-o-y) improved in Q2 of 2013-14 after successive deceleration since Q3 of 2011-12.

**Annex - Data Tables**

## Table 1: Order Books (Q2: 2012-13 to Q2: 2013-14) – Based on Round 23

| Quarter | Amount in ₹ Billion | | | Q-o-Q growth ( per cent) | | | Y-o-Y growth ( per cent) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Avg Backlog order (484) | Avg New Order book (484) | Avg Pending order (484) | Avg Backlog order | Avg New Order book | Avg Pending order | Avg Backlog order | Avg New Order book | Avg Pending order |
| Q2:2012-13 | 1.56 | 1.14 | 1.55 | 3.8 | -4.0 | -0.7 | 12.3 | 5.6 | 11.0 |
| Q3:2012-13 | 1.55 | 1.16 | 1.53 | -0.7 | 2.5 | -0.9 | 11.2 | -4.5 | 2.2 |
| Q4:2012-13 | 1.53 | 1.15 | 1.42 | -1.2 | -1.4 | -7.5 | 1.9 | -8.5 | -5.9 |
| Q1:2013-14 | 1.41 | 1.14 | 1.45 | -7.5 | -0.3 | 2.0 | -5.7 | -3.3 | -7.1 |
| Q2:2013-14 | 1.45 | 1.18 | 1.49 | 2.2 | 3.0 | 2.8 | -7.1 | 3.7 | -3.9 |

Figures in brackets are number of companies reporting order books.

## Table 2: Capacity Utilisation & Index of Industrial Production (Manufacturing) (Base: 2004-05=100) – Based on Round 23

| Quarter | IIP –Mfg (Qtly avg Base 2004-05) | De-trended Qtly IIP-Mfg | CU | CU of large Companies | CU of residual Companies |
|---|---|---|---|---|---|
| Q2:2012-13 | 175.9 | -7.4 | 73.3 | 83.1 | 56.5 |
| Q3:2012-13 | 183.3 | -1.3 | 74.2 | 83.4 | 58.2 |
| Q4:2012-13 | 197.2 | 11.3 | 75.8 | 83.4 | 58.8 |
| Q1:2013-14 | 174.8 | -12.3 | 71.1 | 82.6 | 53.2 |
| Q2:2013-14 | 177.9 | -10.4 | 73.7 | 85.1 | 55.1 |

## Table 3: Variation in CU across companies – Based on Round 23

| CU Range per cent | Per cent of Total Respondent Companies in | | | | |
|---|---|---|---|---|---|
| | Q2:2012-13 | Q3:2012-13 | Q4:2012-13 | Q1:2013-14 | Q2:2013-14 |
| Above 90 | 21.8 | 20.8 | 24.3 | 17.7 | 21.8 |
| 80 to 90 | 13.6 | 13.9 | 12.5 | 12.3 | 10.9 |
| 70 to 80 | 14.1 | 13.3 | 13.8 | 15.3 | 12.9 |
| 60 to 70 | 13.6 | 13.6 | 11.6 | 14.3 | 14.2 |
| Below 60 | 37.0 | 38.4 | 37.8 | 40.4 | 40.1 |

## Table 4: Average Sales and Inventories and their ratios (Q2: 2012-13 to Q2: 2013-14) – Based on Round 23

| Quarter | Amount in ₹ Billion | | | | | Ratio ( per cent) | | |
|---|---|---|---|---|---|---|---|---|
| | Avg Sales (979) | Avg Total Inv (979) | Avg FG Inv (979) | Avg WiP Inv (979) | Avg RM Inv | Total Inv/Sales | FG Inv/Sales | RM Inv/Sales |
| Q2:2012-13 | 4.10 | 2.36 | 0.85 | 0.37 | 1.13 | 57.5 | 20.8 | 27.7 |
| Q3:2012-13 | 4.32 | 2.39 | 0.70 | 0.37 | 1.32 | 55.3 | 16.3 | 30.6 |
| Q4:2012-13 | 4.31 | 2.36 | 0.81 | 0.35 | 1.19 | 54.7 | 18.9 | 27.6 |
| Q1:2013-14 | 4.05 | 2.39 | 0.83 | 0.39 | 1.17 | 59.0 | 20.5 | 28.8 |
| Q2:2013-14 | 4.59 | 2.51 | 0.88 | 0.43 | 1.21 | 54.8 | 19.2 | 26.3 |

FG: Finished Goods. WiP: Work in Progress RM: Raw Material
Figures in brackets are number of companies reporting inventory.

### Table 5: Order Books Y-o-Y growth – Round 20 to 23

| Quarter | Round-20 (504) | Round-21 (436) | Round-22 (451) | Round-23 (484) |
|---|---|---|---|---|
| Q3:2011-12 | 9.6 | | | |
| Q4:2011-12 | 7.5 | 7.3 | | |
| Q1:2012-13 | 15.2 | 23.7 | 22.1 | |
| Q2:2012-13 | 0.0 | 0.7 | 7.8 | 5.6 |
| Q3:2012-13 | -2.4 | -0.2 | 1.1 | -4.5 |
| Q4:2012-13 | | -5.3 | -2.6 | -8.5 |
| Q1:2013-14 | | | -3.9 | -3.3 |
| Q2:2013-14 | | | | 3.7 |

Figures in brackets are number of companies reporting order books.

### Table 6: CU level – Round 20 to 23

| Quarter | Round-20 | Round-21 | Round-22 | Round-23 |
|---|---|---|---|---|
| Q3:2011-12 | 77.5 | | | |
| Q4:2011-12 | 79.3 | 78.4 | | |
| Q1:2012-13 | 73.2 | 73.2 | 73.1 | |
| Q2:2012-13 | 75.0 | 75.2 | 74.8 | 73.3 |
| Q3:2012-13 | 74.8 | 74.4 | 75.2 | 74.2 |
| Q4:2012-13 | | 75.7 | 76.9 | 75.8 |
| Q1:2013-14 | | | 73.4 | 71.1 |
| Q2:2013-14 | | | | 73.7 |

### Table 7: Finished Goods Inventory to Sales – Round 20 to 23

| Quarter | Round-20 | Round-21 | Round-22 | Round-23 |
|---|---|---|---|---|
| Q3:2011-12 | 19.5 | | | |
| Q4:2011-12 | 16.8 | 15.7 | | |
| Q1:2012-13 | 18.5 | 18.1 | 17.9 | |
| Q2:2012-13 | 20.4 | 20.3 | 20.1 | 20.8 |
| Q3:2012-13 | 15.7 | 15.6 | 15.6 | 16.3 |
| Q4:2012-13 | | 18.1 | 17.8 | 18.9 |
| Q1:2013-14 | | | 19.6 | 20.5 |
| Q2:2013-14 | | | | 19.2 |