Quarterly Order Books, Inventories and Capacity Utilisation Survey: April-June2011 (14th Round)

The Reserve Bank of India has been conducting Order Books, Inventories and Capacity Utilisation Survey (OBICUS) on a quarterly basis. The survey captures the movements in order books, inventories and capacity utilisation which are important indicators of economic activities, inflationary pressures and overall business cycle and are useful for assessing the consumption and investment demand outlook. This article presents the findings of OBICUS conducted for Q1:2011-12, the 14th round in the series. During Q1:2011-12, the new orders of respondent companies dropped significantly by 13.8 per cent as compared with the previous quarter, which in turn is reflected in lower capacity utilisation (CU) rate that could be mainly due to seasonal factors. There has also been an increase in finished goods inventory.

I.   Introduction

The Reserve Bank of India has been conducting Order Books, Inventories and Capacity Utilisation Survey (OBICUS) on a quarterly basis. The survey captures the movements in order books, inventories and capacity utilisation which are important indicators of economic activities, inflationary pressures and overall business cycle and as such, are useful for assessing the consumption and investment demand outlook. The survey captures 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 and finished goods inventories at the end of the quarter and item-wise production in terms of quantity and values during the quarter vis-à-vis the installed capacity from a targeted group of manufacturing companies. The survey schedule is given in **Annex I**. The capacity utilisation is being derived from the data provided by companies as per the methodology placed in **Annex II**. The survey is canvassed among 2500 public and private limited companies in the manufacturing sector with a good size/industry representation. Trend analysis is done to study the movements in inventories, order books and capacity utilisation based on a *common set of companies* in each round to facilitate better comparability of data over the reference quarters. The *common set of companies* may vary to some extent across the survey rounds depending upon the response pattern in each survey round.

## II.   Sample composition and response to the present survey

In all 1232 companies responded to the survey for the quarter April-June2011. Of this,49 are government companies, 311 are non-government private limited and 872are non-government public limited companies. The analysis is based on the data provided by these companies for last 13 quarters i.e. Q1:2008-09 to Q1:2011-12.The data tables are given in **Annex III.**

III. Findings of Survey

III.1 Order Books – Average new orders of respondent companies, which had increased every quarter since Q4:2008-09, with the exception of Q1:2010-11, reversed the trend and declined by 13.8 per cent in the current survey quarter. Average executed orders[1] has also shown a similar trend and declined by 12.3 per cent(Chart1, Table 1).
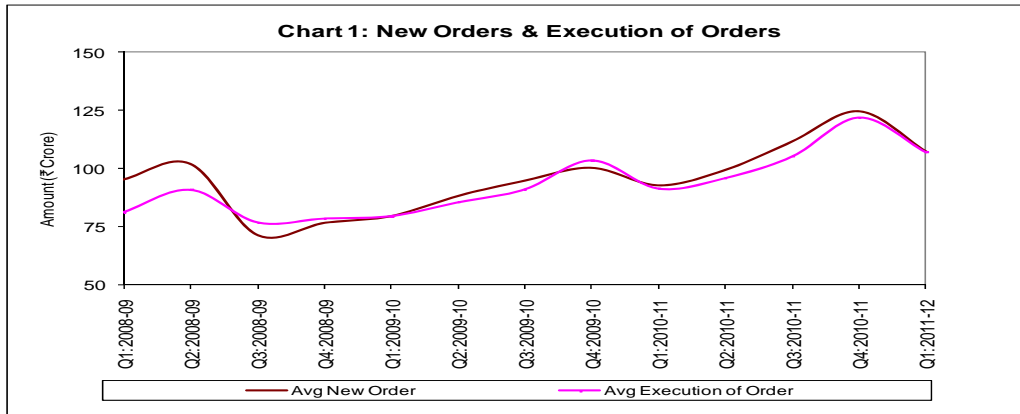

III.2 Capacity Utilisation (CU)– In line with lower new orders, CU of respondent companies witnessed a significant decline. CU at overall level dropped to 72.3per cent in Q1:2011-12 from 77.8 per cent in the previous quarter. Index of Industrial Production (IIP) for manufacturing sector also declined during Q1:2011-12 (Chart2, Table 2).
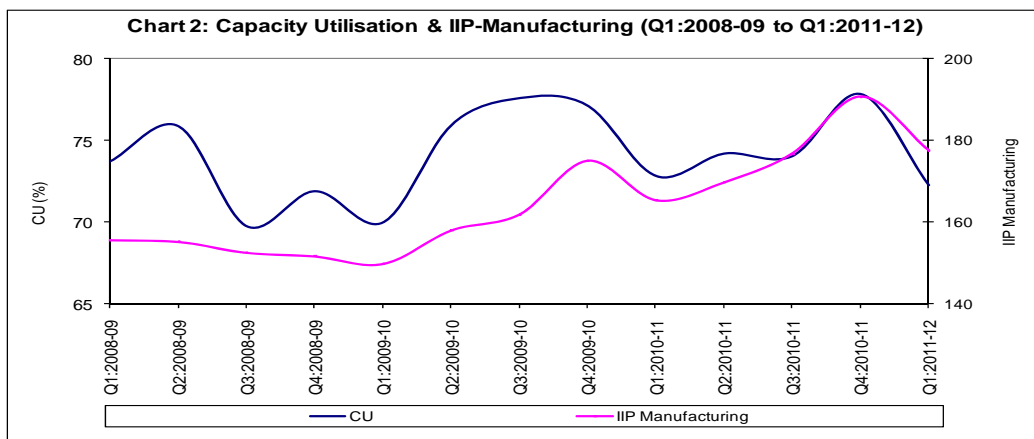
III.3 Inventories - During Q1: 2011-12, the average total inventory of respondent companies grew by 4.8 per cent over the previous quarter, whereas the average finished goods (FG) inventory and average raw material (RM) inventory increased by 5.8 per cent and 6.3 per cent respectively. On the other hand, the work-in-progress (WiP) inventory declined by 2.1 per cent in the latest quarter. Total

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[1] Executed orders = backlog order at the beginning of the quarter *plus* new orders received during the quarter *minus* pending orders at the end of the quarter

inventory to sales ratio, FG inventory to sales ratio and RM inventory to sales ratio increased by 3.2, 1.4 and 1.9 percentage points respectively in Q1:2011-12 (Chart 3, Table 3).

Chart 3: Inventory to Sales Ratio
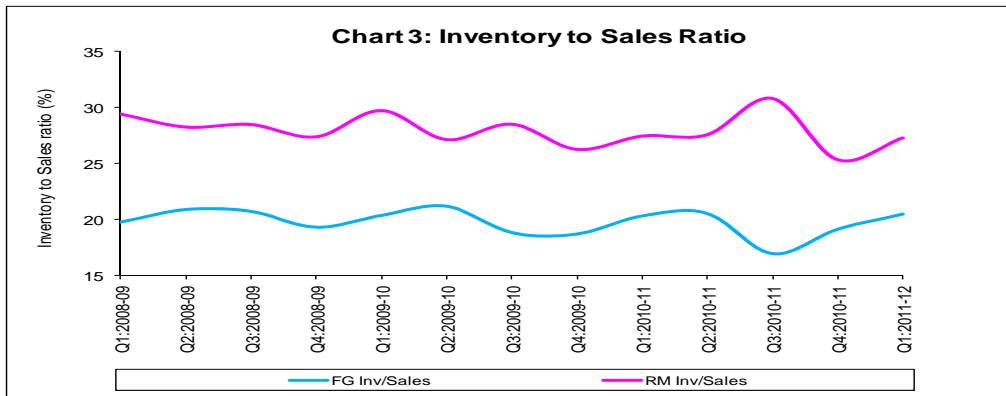
IV.   Conclusion

OBICUS survey for the first quarter of 2011-12 indicated decline in new orders and level of capacity utilisation, mainly due to seasonal factors, while finished goods inventory increased.

Annex-I

RESERVE BANK OF INDIA
Department of Statistics and Information Management
Quarterly Survey of Inventories, Order books and Capacity Utilisation
(For April-June 2011 quarter)

Company Code:

IND	STATUS	TYPE	ST	SRNO

Block 1: Identification Particulars:

101. Company Name: --

102. Company Address: --

-- City/Town: ---------------------------------

State: --------------------------------- Pin-code: -----------------------------------

103. Name and Designation of Respondent: ---

104. Telephone Number: --------------------------   **105. Fax Number:** ----------------------------

106. E-mail Address: -----------------------------   **107. Web Address:** --------------------------

108. Industry: ---------------------------------------   **109. Status: Listed ------- Unlisted--------**

110. Type of Company: Public-------Private-------   **111. Ownership: Govt.----- Non-Govt.-----**

112. NIC Code for Industry: ----------------

Block 2: Balance Sheet and Other Details*   (Rs. Lakh)

Item Code	Item	As on Quarter ending April-June 2011
201	**Paid-up Capital**	
202	**Net Sales (during the quarter)**	
203	**Total Assets**	
204	**Total Inventories**	
205	*Of which, (i) Finished goods*	
206	*(ii) Work-in-Progress*	
207	**Backlog order value at the beginning of the quarter**	
208	**Value of the new order received during the quarter**	
209	*Of which, Export order*	
210	**Value of pending order books at the end of the quarter**	
211	**Number of workers (In Number)**	

* If data is 'Nil' or 'Zero' may be mentioned as '0'; if data is 'Not applicable', please write 'NA' and in case data is 'Not available', please write 'Not available'.

Block 3: Product Wise Quarterly Installed Capacity, Quantity Produced, Capacity utilized (%) and Value of Production

Sr. Number	Product Name	NIC 2004 Code (4 digits)	Unit (Capacity / Production)	Installed Capacity April-June 2011 Quarter	Quantity produced April-June 2011 Quarter	Capacity utilized (%) April-June 2011 Quarter	Value of Production (Rs. Lakhs) April-June 2011 Quarter
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Note: - 1. If the same product is produced at more than one location the combined data for all the locations should be reported in these fields.

2. Only the quantity produced (not sold) using the installed capacity of the company has to be reported. **The production by outsourcing etc., need not be reported.**

3. Unit of Installed capacity and quantity produced should be same.

4. *In case of "Sugar" Industry; Recovery ratio and number of cane crushing days during the respective quarter/ year may be given as foot note.*

5. In case of zero production for any product please indicate reason thereof.

PLEASE SEND THE QUARTERLY DATA TO:
CENTRE FOR MONITORING INDIAN ECONOMY PVT. LTD. (CMIE)
11, Apple Heritage, 54-C, Andheri – Kurla Road,
Andheri (E), Mumbai – 400093.
Tel – 022 – 66778233
Fax – 022 - 66778231/2
E-Mail - **rbi.bom@cmie.com**

Annex II - Methodology for Compiling Capacity Utilization Rates/Index

From the survey, data on installed capacity, quantity produced, capacity utilised (per cent) and value of production are available for products at NIC-2004, 4 digit level. This data is aggregated to compute the Capacity Utilisation Rate first at the NIC-2004, 3 digit industry level, thereafter at the 2-digit industry level and finally at the overall level. The methodology followed at various levels is described below.

(i) Capacity Utilisation rate at NIC-2004, 3 digit industry level

The capacity utilisation rate is computed at NIC-2004, 3 digit level in two ways.

a) In case the installed capacity and production data of all the products belonging to a group have been reported in a single measurement unit, then aggregation of installed capacity and production is done and capacity utilisation rate is computed as follows:

Product	Production	Installed Capacity	Capacity Utilisation
A	P_A	C_A	$CU_A = (P_A/C_A)*100$
B	P_B	C_B	$CU_B = (P_B/C_B)*100$
3 digit level	P_A+P_B	C_A+C_B	$CU = ((P_A+P_B)/(C_A+C_B))*100$

b) If the installed capacity and production data for different products in a group/same product have been reported in two or more different measurement units (like, paper and paper products has been reported by few companies in 'number' and by few other companies in 'tonnes' or the chemical products are reported in 'number' and 'litres'), the capacity utilisation rates are computed for each measurement unit separately (by aggregation of installed capacity and production separately). Then the group level capacity utilisation rate is computed by taking a weighted average of these rates (taking 'value of production' of the products as weight).

$$CU_{P_i} = \frac{1}{\sum_{k=1}^{n}(VoP)_{P_i k}} \sum_{k=1}^{n} (VoP)_{P_i k} * CU_{P_i k}$$

where, let n different measurement units are available for group P_i;

$(VoP)_{P_i k}$ = Value of Production of a product in group P_i with k^{th} measurement unit and

$CU_{P_i k}$ = Capacity Utilization of a product in group P_i with k^{th} measurement unit.

(ii) Capacity Utilisation rate at NIC 2004, 2 digit industry level

Industry level (NIC-2004, 2 digit industry level) capacity utilisation rate is computed as weighted average of capacity utilisation rate of the 3digit group level under each industry as follows:

$$CU_{IND_i} = \frac{\sum_{P_i} [(W]_{P_i} * CU_{P_i})}{\sum_{P_i} W_{P_i}}$$

where, W_{P_i} = weight to the $P_i{}^{th}$ group at 3 digit level, and

CU_{P_i} = Capacity Utilisation of $P_i{}^{th}$ group at 3digit level.

To arrive at these rates, share of Net value added (NVA) by the group at 3 digit level in the total NVA of industry at 2 digit level, from the Annual Survey of Industries (ASI), 2004-05, is being used as the weight.

(iii)Capacity Utilisation rate at overall level

The Capacity Utilisation rate at overall level is calculated as a weighted average of the Capacity Utilisations of the industries. Thus

$$CU_{Overall} = \frac{\sum_j [(W]_j * CU_{IND_j})}{\sum_j W_j}$$

where, W_j = weight to the jth industry at 2 digit level, and

CU_{IND_j} = Capacity Utilisation of the jth industry at 2 digit level.

To arrive at overall Capacity Utilisation, share of Net value added by the industry (2 digit level) in total manufacturing sector from the Annual Survey of Industries (ASI), 2004-05 is used as weights.

Annex III – Data Tables

Table 1: Order Books (Q1: 2008-09 to Q1: 2011-12)									
	Amount in ₹Crore					Quarterly growth (%)				
Quarter	Avg Backlog order (523)	Avg New Order book (567)	Avg Sale (1232)	Avg Pending order (524)	Avg Execution of Order	Avg Backlog order	Avg New Order book	Avg Sales	Avg Pending order	Avg execution of order
Q1:2008-09	129.0	95.3	247.7	143.1	81.1	-	-	-	-	
Q2:2008-09	143.9	101.9	267.6	155.1	90.7	11.5	7.0	8.0	8.3	11.9
Q3:2008-09	155.4	71.5	217.6	150.2	76.7	8.0	-29.9	-18.7	-3.1	-15.5
Q4:2008-09	150.2	76.6	208.3	148.5	78.3	-3.3	7.2	-4.3	-1.1	2.1
Q1:2009-10	148.1	79.5	212.4	148.2	79.4	-1.4	3.8	1.9	-0.2	1.4
Q2:2009-10	148.7	88.2	239.9	151.5	85.3	0.4	10.9	13.0	2.2	7.4
Q3:2009-10	152.0	94.7	259.8	155.8	90.9	2.2	7.5	8.3	2.8	6.6
Q4:2009-10	155.9	100.2	279.5	152.6	103.4	2.6	5.8	7.6	-2.0	13.8
Q1:2010-11	151.8	92.7	271.2	153.3	91.3	-2.6	-7.5	-3.0	0.4	-11.8
Q2:2010-11	153.5	99.3	288.0	157.0	95.8	1.1	7.1	6.2	2.4	5.0
Q3:2010-11	157.4	111.5	307.4	163.8	105.2	2.5	12.3	6.7	4.3	9.7
Q4:2010-11	164.6	124.5	350.5	167.1	122.0	4.6	11.6	14.0	2.1	16.0
Q1:2011-12	159.7	107.2	346.4	159.9	107.0	-3.0	-13.8	-1.2	-4.3	-12.3

Note: Number in brackets indicate number of commmon companies who reported the data for last 12 quarters.

Table 2: Capacity Utilisation& Index of Industrial Production (Manufacturing) (Base:2004-05)													
Quarter	Q1: 2008-09	Q2: 2008-09	Q3: 2008-09	Q4: 2008-09	Q1: 2009-10	Q2: 2009-10	Q3: 2009-10	Q4: 2009-10	Q1: 2010-11	Q2: 2010-11	Q3: 2010-11	Q4: 2010-11	Q1: 2011-12
CU	73.7	75.9	69.8	71.9	70.0	75.9	77.6	77.1	72.8	74.2	74.1	77.8	72.3
IIP MF	155.7	155.3	152.6	151.7	149.9	158.1	162.0	175.1	165.4	169.8	176.9	190.7	177.6

Table 3: Average Sales and Inventories and their ratios (Q1: 2008-09 to Q1: 2011-12)								
	Amount in ₹ Crore					Ratio in per cent		
Quarter	Avg Sales (1232)	Avg Total Inv (990)	Avg FG Inv (1096)	AvgWiPInv (1092)	Avg RM Inv	Total Inv/Sales	FG Inv/Sales	RM Inv/Sales
Q1:2008-09	247.7	141.6	48.9	19.9	72.8	57.2	19.7	29.4
Q2:2008-09	267.6	151.9	55.9	20.5	75.6	56.8	20.9	28.2
Q3:2008-09	217.6	124.5	45.1	17.4	62.0	57.2	20.7	28.5
Q4:2008-09	208.3	115.0	40.2	17.8	57.0	55.2	19.3	27.4
Q1:2009-10	212.4	126.2	43.2	19.9	63.1	59.4	20.4	29.7
Q2:2009-10	239.9	137.9	50.8	21.9	65.1	57.5	21.2	27.1
Q3:2009-10	259.8	145.2	48.9	22.2	74.0	55.9	18.8	28.5
Q4:2009-10	279.5	147.5	52.2	21.9	73.4	52.8	18.7	26.3
Q1:2010-11	271.2	153.5	55.1	24.1	74.4	56.6	20.3	27.4
Q2:2010-11	288.0	164.9	59.2	26.3	79.4	57.2	20.5	27.6
Q3:2010-11	307.4	174.2	52.1	27.5	94.6	56.7	16.9	30.8
Q4:2010-11	350.5	186.2	67.0	30.3	88.9	53.1	19.1	25.4
Q1:2011-12	346.4	195.1	70.9	29.7	94.5	56.3	20.5	27.3

Note: Number in brackets indicate number of commmon companies who reported the data for last 12 quarters.