

**Central Bank of Nigeria**



**Purchasing Managers’  
Index (PMI) Survey  
Report**

Statistics Department

*August 2017*

# PURCHASING MANAGERS' INDEX (PMI) AUGUST 2017 REPORT

## 1.0 Introduction

The August 2017 PMI was conducted by the Statistics Department of the Central Bank of Nigeria during the period August 7 - 11, 2017. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in 13 locations in Nigeria (2 states in each geopolitical zone and the Federal Capital Territory, Fig. 1). A total of 1,671 responses were received from a sample of 1,950 respondents, representing a response rate of 85.7 per cent.

The Bank makes no representation regarding the individual companies, other than the data they provided. The data contained herein further provides input for policy decisions.

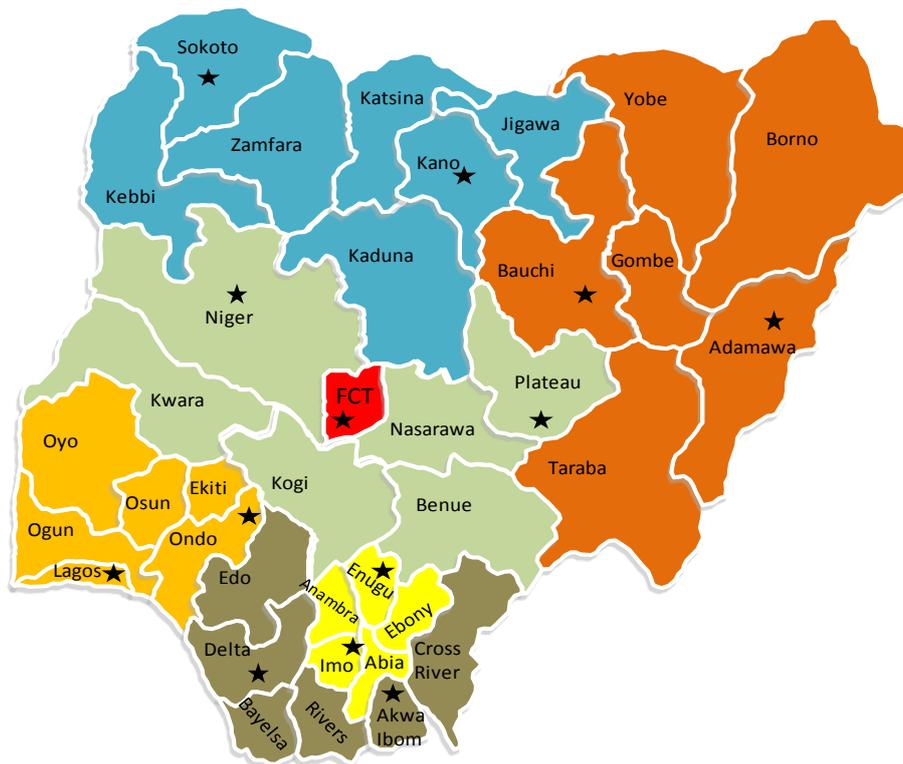


Fig. 1: Map of Nigeria showing the survey locations

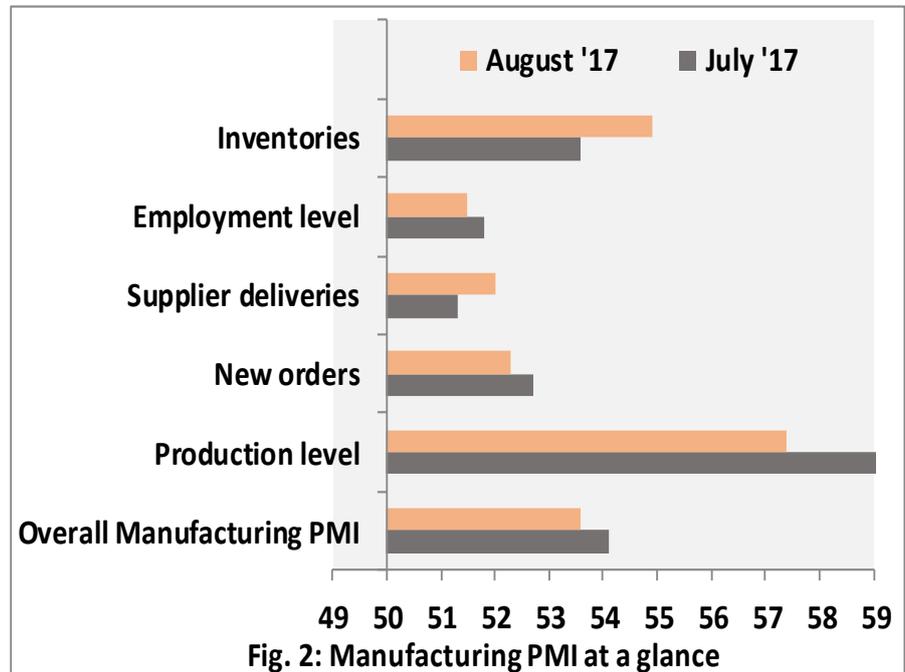
### 1.1 Data and Method of Presentation

The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. The diffusion index is computed as the percentage of *responses with positive change plus one-half* of the percentage of those reporting *no change*, except for supplier delivery time, which is computed as the percentage of *responses with negative change plus one-half* of the percentage of those reporting *no change*. The composite PMI for the manufacturing sector is computed as the *weighted average* of five diffusion indices: production level, new orders, supplier delivery time, employment level and raw materials inventory, with assigned weights of *25%, 30%, 15%, 10%* and *20%*, respectively. The composite PMI for the non-manufacturing sector is computed from four diffusion indices: business activity, new orders, employment level and raw materials inventory, with equal weights of *25% each*.

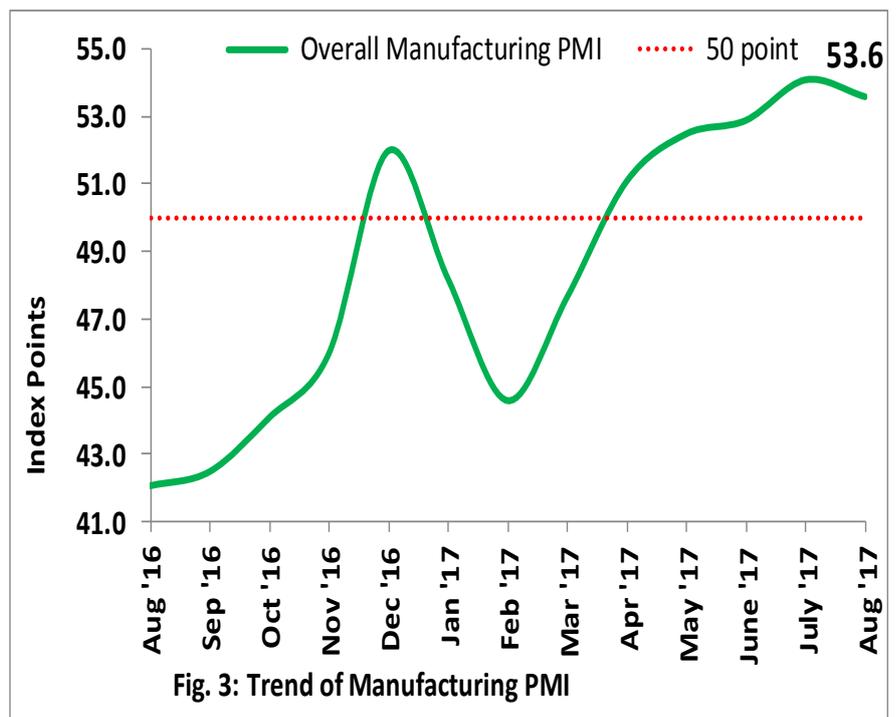
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those reporting contraction are listed in the order of the highest to the lowest contraction.

## 2.0 Manufacturing PMI Report

*Production level, new orders and employment level growing at a slower rate; while supplier delivery time and inventories growing at a faster rate in August 2017*

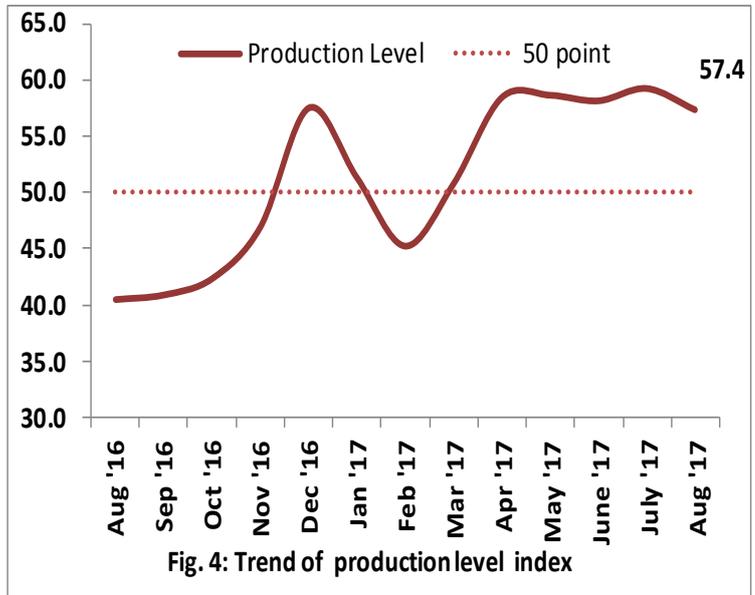


The *Manufacturing PMI* stood at 53.6 index points in August 2017, indicating expansion in the manufacturing sector for the fifth consecutive month (Fig. 3 and Table 1). Twelve of the 16 subsectors reported growth in the review month in the following order: computer & electronic products; appliances and components; chemical & pharmaceutical products; textile, apparel, leather and footwear; electrical equipment; printing & related support activities; paper products; nonmetallic mineral products; food, beverage & tobacco products; furniture & related products; cement and plastics & rubber products. The remaining 4 subsectors contracted in the order: transportation equipment; primary metal; petroleum & coal products and fabricated metal products.



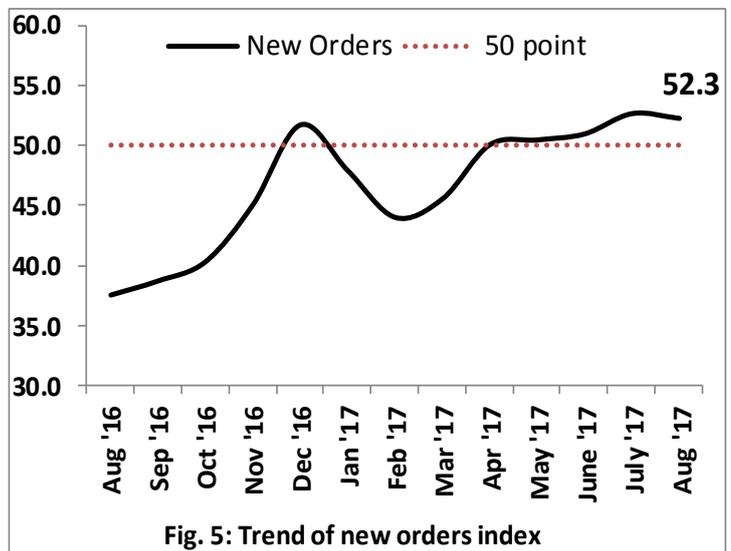
### 2.1 Production Level

The production level index for manufacturing sector grew for the sixth consecutive month in August 2017. At 57.4 points, the index indicated an increase in production at a slower rate, when compared to its level in the preceding month. Eleven of the 16 manufacturing subsectors recorded increase in production level, 1 remained unchanged and the other 4 declined during the review month (Fig. 4 and Table 2).



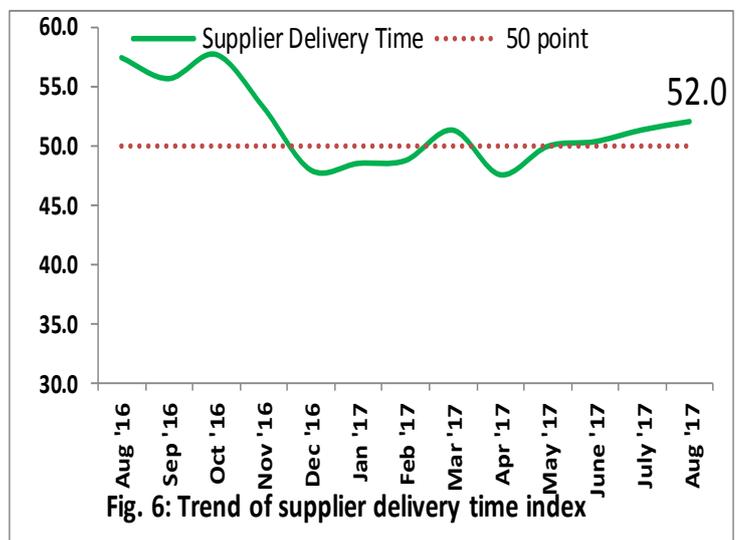
### 2.2 New Orders

At 52.3 points, the new orders index grew for the fifth consecutive month. Six subsectors reported growth, 1 remained unchanged while 9 contracted in the review month (Fig. 5 and Table 3).



### 2.3 Supplier Delivery Time

The supplier delivery time index for the manufacturing sector, at 52.0 points in August 2017, rose for the third consecutive month. Nine subsectors recorded improved suppliers' delivery time, 2 remained unchanged while 5 subsectors recorded delayed delivery time (Fig. 6 and Table 4).



### 2.4 Employment Level

The employment level index in August 2017 stood at 51.5 points, indicating growth in employment level for the fourth consecutive month. Of the 16 subsectors, 7 recorded growth, 4 remained unchanged while 5 subsectors recorded decline in employment level over the preceding month (Fig. 7 and Table 5).

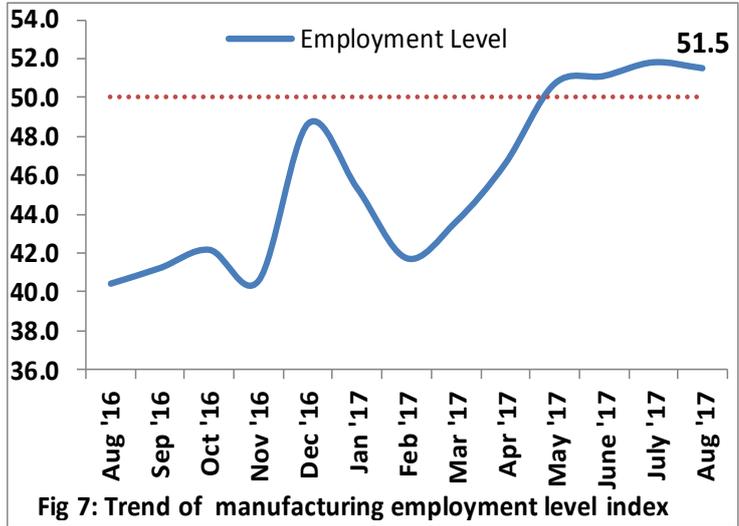


Fig. 7: Trend of manufacturing employment level index

### 2.5 Inventories

At 54.9 points, inventories index grew for the fifth consecutive month, and at a faster rate when compared to its level in July 2017. Thirteen of the 16 subsectors recorded growth, 1 remained unchanged while 2 subsectors recorded decline in inventories (Fig. 8 and Table 6).

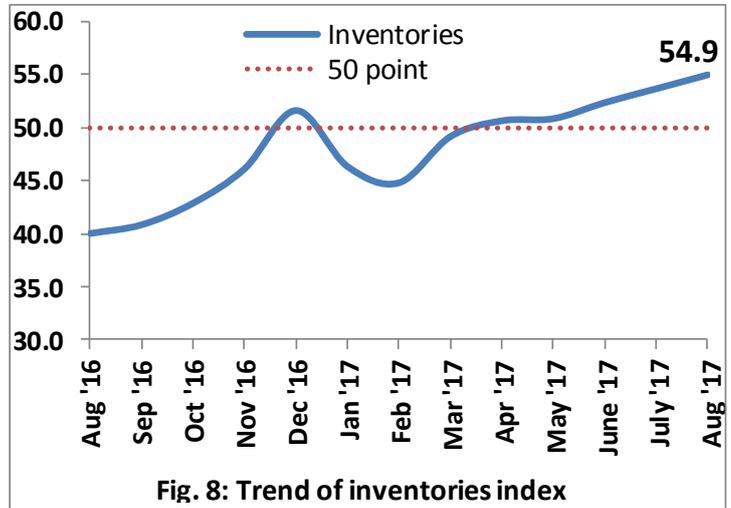


Fig. 8: Trend of inventories index

### 3.0 Non-Manufacturing PMI Report

*Business activity and new orders growing at a slower rate; employment level and inventories growing at a faster rate in August 2017*

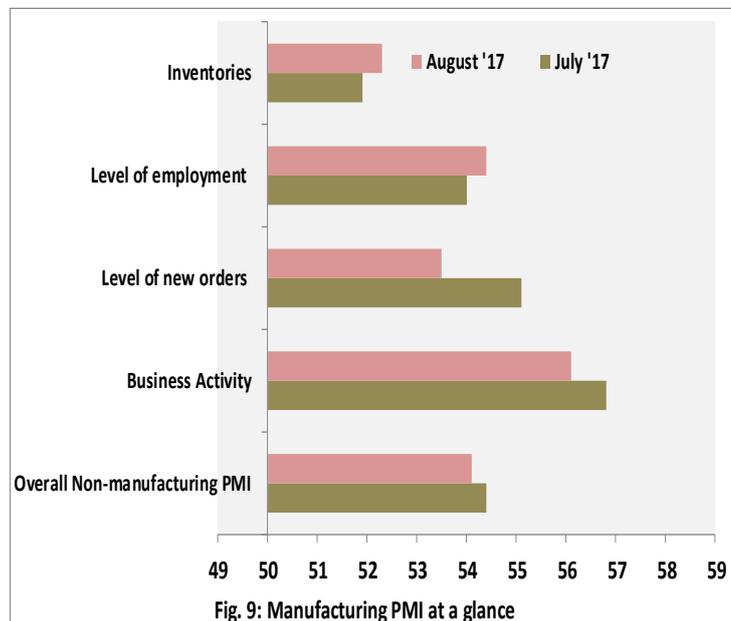


Fig. 9: Manufacturing PMI at a glance

The *composite PMI* for the *non-manufacturing* sector stood at 54.1 points in August 2017, indicating growth in Non-manufacturing PMI for the fourth consecutive month. Of the 18 non-manufacturing subsectors, 15 recorded growth in the following order: utilities; public administration; information & communication; finance & insurance; health care & social assistance; agriculture; accommodation & food services; electricity, gas, steam & air conditioning supply; transportation & warehousing; repair, maintenance/washing of motor vehicles; wholesale trade; educational services; professional, scientific, & technical services; arts, entertainment & recreation; and water supply, sewage & waste management. The real estate, rental & leasing; construction; and management of companies sub sectors recorded contraction in the review period (Fig. 10 and Table 7).

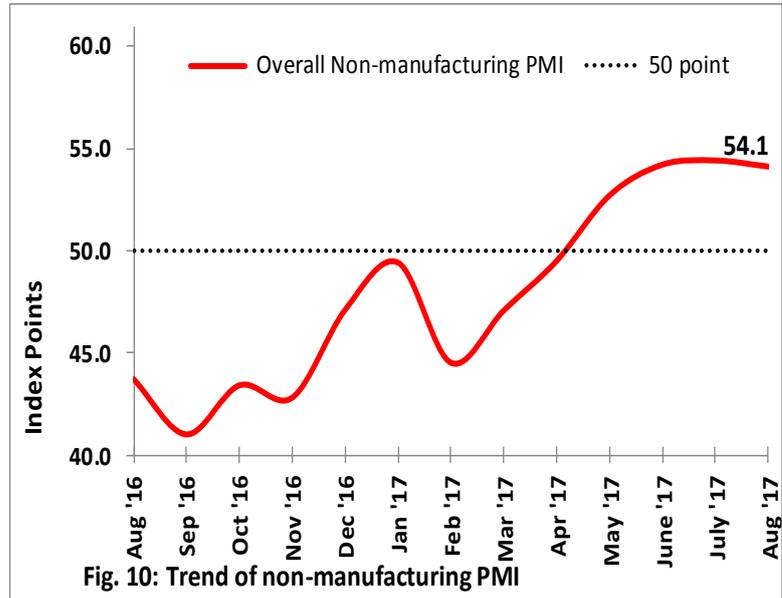


Fig. 10: Trend of non-manufacturing PMI

### 3.1 Business Activity

The business activity index moderated to 56.1 points in August 2017, indicating growth for the fifth consecutive month. The index grew at a slower rate, when compared to its level in the previous month. Twelve subsectors recorded growth in business activity, 3 remained unchanged while 3 declined in the review month (Table 8).

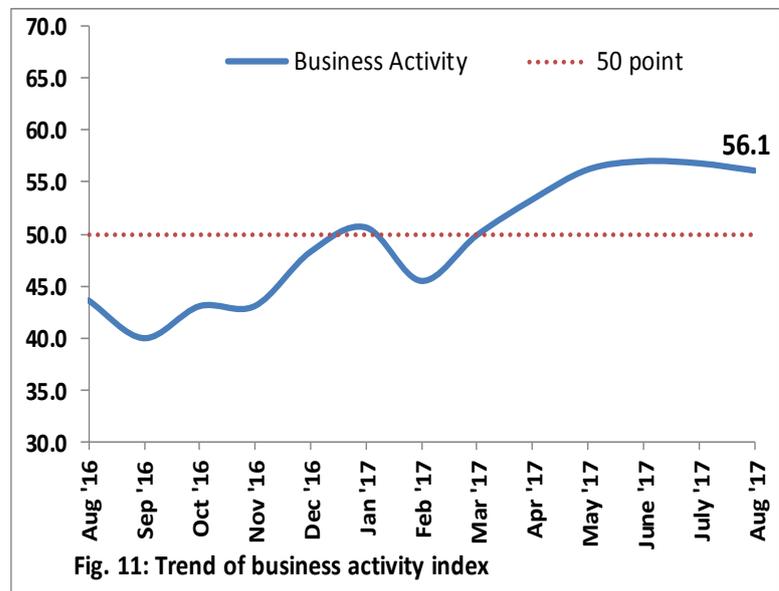
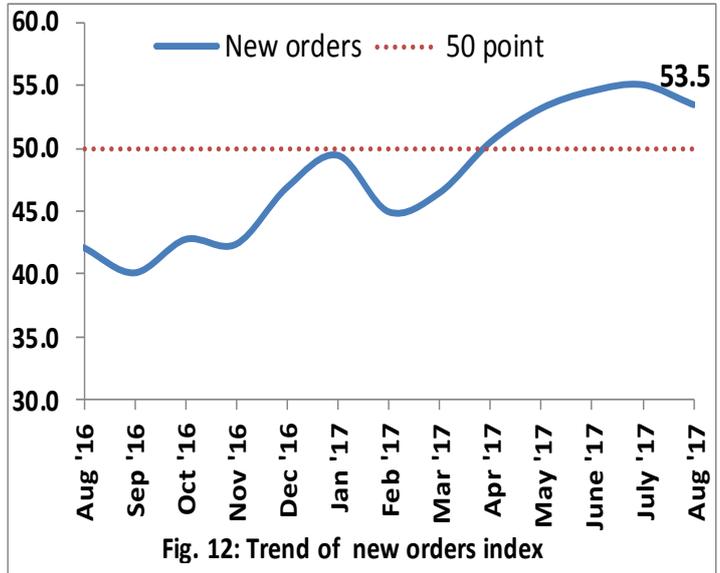


Fig. 11: Trend of business activity index

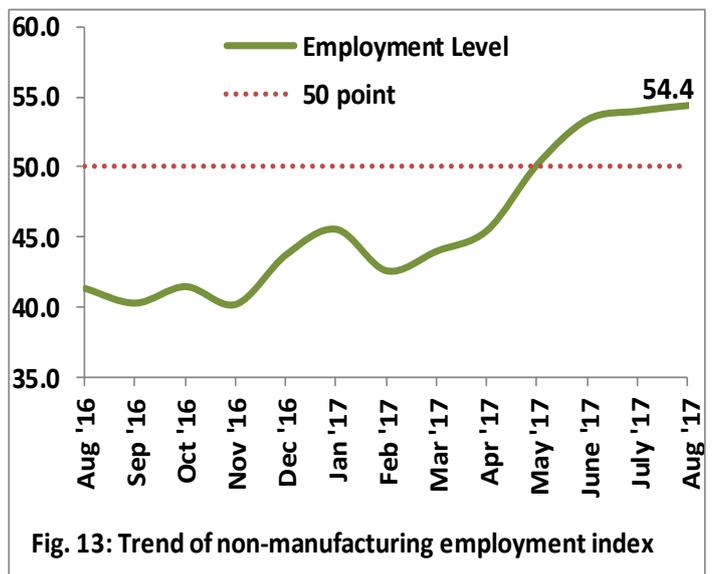
### 3.2 New Orders

New orders index at 53.5 points grew in August 2017 for the fifth consecutive month. Of the 18 subsectors, 12 reported growth, 1 remained unchanged while 5 recorded declines (Table 9).



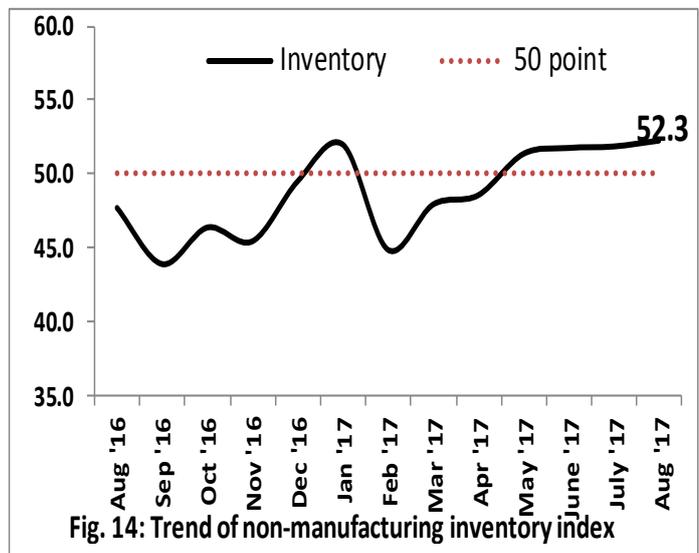
### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 54.4 points, indicating growth in employment for the fourth consecutive month. Fifteen subsectors recorded growth in the review month, 1 remained unchanged while 2 recorded declines (Table 10).



### 3.4 Non-manufacturing Inventory

At 52.3 points, non-manufacturing inventory index grew for the fourth consecutive month, indicating growth in inventories in the review period. Eleven subsectors recorded higher inventories, 2 remained unchanged while 5 subsectors recorded lower inventory in August, 2017 (Table 11).



## APPENDICES

**Table 1: Manufacturing at a Glance**

Index	Series Index*	Series Index*	Change	Direction	Rate of	Trend** (Months)
	July	August			Change	
Composite PMI \1	54.1	53.6	-0.5	Growing	Slower	5
Production level	59.3	57.4	-1.9	Growing	Slower	6
New orders	52.7	52.3	-0.4	Growing	Slower	5
Supplier delivery time	51.3	52.0	0.7	Growing	Faster	3
Employment level	51.8	51.5	-0.3	Growing	Slower	4
Raw materials/WIP Inventory	53.6	54.9	1.3	Growing	Faster	5
New Export Orders	37.5	36.7	-0.8	Declining	Faster	30
Output Prices	60.4	58.8	-1.6	Growing	Slower	20
Input Prices	64.1	64.9	0.8	Growing	Faster	38
Quantity of Purchases	48.0	49.0	1.0	Declining	Slower	5
Outstanding Business/Backlog of Work	42.1	47.9	5.8	Declining	Slower	30
Stock of Finished Goods	48.5	51.6	3.1	Growing	From Contraction	1
<b>Manufacturing Sub-Sectors</b>						
Appliances & components	66.0	61.0	-5.0	Growing	Slower	9
Cement	64.1	51.2	-12.9	Growing	Slower	2
Chemical & pharmaceutical products	60.9	59.9	-1.0	Growing	Slower	2
Computer & electronic products	65.5	69.2	3.7	Growing	Faster	3
Electrical equipment	53.3	55.5	2.2	Growing	Faster	5
Fabricated metal products	47.1	48.8	1.7	Declining	Slower	2
Food, beverage & tobacco products	56.5	53.2	-3.3	Growing	Slower	11
Furniture & related products	48.2	51.9	3.7	Growing	From Contraction	1
Nonmetallic mineral products	48.9	54.1	5.2	Growing	From Contraction	1
Paper products	53.5	54.6	1.1	Growing	Faster	4
Petroleum & coal products	45.2	47.7	2.5	Declining	Slower	2
Plastics & rubber products	49.8	50.2	0.4	Growing	From Contraction	1
Primary metal	61.8	42.7	-19.1	Declining	From Expansion	1
Printing & related support activities	54.8	55.3	0.5	Growing	Faster	2
Textile, apparel, leather & footwear	56.5	56.5	0.0	Growing	Flat	6
Transportation equipment	51.1	17.5	-33.6	Declining	From Expansion	1

\1 The composite PMI is a weighted average of the following diffusion indices: production level, new orders, supplier deliveries, employment level and inventories. The weights assigned to these variables are 25%, 30%, 15%, 10% and 20% respectively.

\*The series index is a diffusion index defined as a weighted percentage of high, same and low with 1.0, 0.5 and 0.0 as weights respectively.

\*\* Number of month moving in current direction

**Table 2: Production at a Glance**

Index	Series Index	Series Index	Change	Direction	Rate of	Trend (Months)
	July	August			Change	
PRODUCTION PMI	59.3	57.4	-1.9	Growing	Slower	6
Appliances & components	90.0	80.0	-10.0	Growing	Slower	8
Cement	75.0	58.3	-16.7	Growing	Slower	6
Chemical & pharmaceutical products	68.1	66.3	-1.8	Growing	Slower	2
Computer & electronic products	71.4	75.0	3.6	Growing	Faster	6
Electrical equipment	57.5	60.7	3.2	Growing	Faster	5
Fabricated metal products	45.7	52.1	6.4	Growing	From Contraction	1
Food, beverage & tobacco products	61.5	56.4	-5.1	Growing	Slower	11
Furniture & related products	54.0	57.8	3.8	Growing	Faster	6
Nonmetallic mineral products	55.0	62.5	7.5	Growing	Faster	2
Paper products	56.9	50.0	-6.9	No Change	From Expansion	1
Petroleum & coal products	46.4	37.5	-8.9	Declining	Faster	2
Plastics & rubber products	58.8	48.2	-10.6	Declining	From Expansion	1
Primary metal	66.7	40.9	-25.8	Declining	From Expansion	1
Printing & related support activities	62.2	55.3	-6.9	Growing	Slower	5
Textile, apparel, leather & footwear	61.5	63.1	1.6	Growing	Faster	6
Transportation equipment	64.3	0.0	-64.3	Declining	From Expansion	1

**Table 3: New Orders at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	52.7	52.3	-0.4	Growing	Slower	5
Appliances & components	65.0	40.0	-25.0	Declining	From Expansion	1
Cement	62.5	45.0	-17.5	Declining	From Expansion	1
Chemical & pharmaceutical products	60.3	58.7	-1.6	Growing	Slower	2
Computer & electronic products	50.0	75.0	25.0	Growing	From No Change	1
Electrical equipment	42.5	46.4	3.9	Declining	Slower	3
Fabricated metal products	44.2	45.3	1.1	Declining	Slower	2
Food, beverage & tobacco products	59.8	53.5	-6.3	Growing	Slower	11
Furniture & related products	44.9	50.0	5.1	No Change	From Contraction	1
Nonmetallic mineral products	41.7	45.8	4.1	Declining	Slower	4
Paper products	52.8	53.8	1.0	Growing	Faster	4
Petroleum & coal products	35.7	45.8	10.1	Declining	Slower	2
Plastics & rubber products	47.1	48.2	1.1	Declining	Slower	2
Primary metal	61.1	36.4	-24.7	Declining	From Expansion	1
Printing & related support activities	57.4	59.3	1.9	Growing	Faster	2
Textile, apparel, leather & footwear	57.3	58.1	0.8	Growing	Faster	6
Transportation equipment	42.9	0.0	-42.9	Declining	Faster	2

**Table 4: Supplier Delivery Time at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	51.3	52.0	0.7	Growing	Faster	3
Appliances & components	40.0	60.0	20.0	Growing	From Contraction	1
Cement	51.6	55.0	3.4	Growing	Faster	3
Chemical & pharmaceutical products	50.9	51.9	1.0	Growing	Faster	3
Computer & electronic products	75.0	58.3	-16.7	Growing	Slower	7
Electrical equipment	67.5	78.6	11.1	Growing	Faster	8
Fabricated metal products	51.4	55.3	3.9	Growing	Faster	2
Food, beverage & tobacco products	47.4	49.5	2.1	Declining	Slower	2
Furniture & related products	54.0	48.2	-5.8	Declining	From Expansion	1
Nonmetallic mineral products	53.3	63.9	10.6	Growing	Faster	2
Paper products	47.2	61.5	14.3	Growing	From Contraction	1
Petroleum & coal products	64.3	58.3	-6.0	Growing	Slower	2
Plastics & rubber products	45.5	48.2	2.7	Declining	Slower	3
Primary metal	58.3	50.0	-8.3	No Change	From Expansion	1
Printing & related support activities	50.7	44.7	-6.0	Declining	From Expansion	1
Textile, apparel, leather & footwear	49.0	48.0	-1.0	Declining	Faster	2
Transportation equipment	42.9	50.0	7.1	No Change	From Contraction	1

**Table 5: Employment Level at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	51.8	51.5	-0.3	Growing	Slower	4
Appliances & components	50.0	50.0	0.0	No Change	Flat	2
Cement	64.1	48.3	-15.8	Declining	From Expansion	1
Chemical & pharmaceutical products	59.5	59.6	0.1	Growing	Faster	2
Computer & electronic products	71.4	58.3	-13.1	Growing	Slower	3
Electrical equipment	50.0	50.0	0.0	No Change	Flat	2
Fabricated metal products	51.0	42.6	-8.4	Declining	From Expansion	1
Food, beverage & tobacco products	51.3	51.0	-0.3	Growing	Slower	3
Furniture & related products	46.0	54.2	8.2	Growing	From Contraction	1
Nonmetallic mineral products	48.3	48.6	0.3	Declining	Slower	20
Paper products	51.4	53.8	2.4	Growing	Faster	4
Petroleum & coal products	46.4	50.0	3.6	No Change	From Contraction	1
Plastics & rubber products	45.6	50.0	4.4	No Change	From Contraction	1
Primary metal	61.1	45.5	-15.6	Declining	From Expansion	1
Printing & related support activities	45.9	56.7	10.8	Growing	From Contraction	1
Textile, apparel, leather & footwear	54.7	52.5	-2.2	Growing	Slower	3
Transportation equipment	50.0	0.0	-50.0	Declining	From No Change	1

**Table 6: Raw Materials Inventory at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	53.6	54.9	1.3	Growing	Faster	5
Appliances & components	80.0	100.0	20.0	Growing	Faster	9
Cement	60.9	51.7	-9.2	Growing	Slower	2
Chemical & pharmaceutical products	62.3	59.6	-2.7	Growing	Slower	3
Computer & electronic products	71.4	75.0	3.6	Growing	Faster	3
Electrical equipment	60.0	46.4	-13.6	Declining	From Expansion	1
Fabricated metal products	45.0	53.7	8.7	Growing	From Contraction	1
Food, beverage & tobacco products	58.2	54.0	-4.2	Growing	Slower	11
Furniture & related products	39.8	43.4	3.6	Declining	Slower	4
Nonmetallic mineral products	50.0	54.3	4.3	Growing	From No Change	1
Paper products	61.1	59.6	-1.5	Growing	Slower	4
Petroleum & coal products	39.3	58.3	19.0	Growing	From Contraction	1
Plastics & rubber products	50.0	64.3	14.3	Growing	From No Change	1
Primary metal	58.3	50.0	-8.3	No Change	From Expansion	1
Printing & related support activities	52.7	56.7	4.0	Growing	Faster	2
Textile, apparel, leather & footwear	56.5	56.1	-0.4	Growing	Slower	3
Transportation equipment	57.1	100.0	42.9	Growing	Faster	4

**Table 7: Non-Manufacturing at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
Composite PMI \1	54.4	54.1	-0.3	Growing	Slower	4
Business Activity	56.8	56.1	-0.7	Growing	Slower	5
Level of new orders/customers/incoming business	55.1	53.5	-1.6	Growing	Slower	5
Level of employment	54.0	54.4	0.4	Growing	Faster	4
Inventory	51.9	52.3	0.4	Growing	Faster	4
Average price of Inputs (volume weighted)	58.1	54.5	-3.6	Growing	Slower	22
Level of outstanding business/ Backlog of work	42.9	42.8	-0.1	Declining	Faster	38
New Exports orders	32.0	34.5	2.5	Declining	Slower	38
Imports	36.8	34.8	-2.0	Declining	Faster	38
Inventory (sentiments)	41.5	42.0	0.5	Declining	Slower	38
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	51.3	56.7	5.4	Growing	Faster	4
Agriculture	63.1	56.8	-6.3	Growing	Slower	15
Arts, entertainment & recreation	48.6	50.7	2.1	Growing	From Contraction	1
Construction	44.7	47.1	2.4	Declining	Slower	27
Educational services	57.1	51.4	-5.7	Growing	Slower	9
Electricity, gas, steam & air conditioning supply	53.3	56.5	3.2	Growing	Faster	6
Finance & insurance	58.4	58.4	0.0	Growing	Flat	6
Health care & social assistance	54.9	58.0	3.1	Growing	Faster	4
Information & communication	59.8	58.7	-1.1	Growing	Slower	5
Management of companies	56.3	48.9	-7.4	Declining	From Expansion	1
Professional, scientific, & technical services	52.0	51.3	-0.7	Growing	Slower	3
Public administration	62.5	59.1	-3.4	Growing	Slower	2
Real estate rental & leasing	52.6	42.6	-10.0	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	55.7	53.8	-1.9	Growing	Slower	3
Transportation & warehousing	57.6	55.8	-1.8	Growing	Slower	6
Utilities	62.0	63.8	1.8	Growing	Faster	5
Water supply, sewage & waste management	51.9	50.6	-1.3	Growing	Slower	6
Wholesale/Retail trade	52.5	53.2	0.7	Growing	Faster	3

\1 The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories

**Table 8: Business activity at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	56.8	56.1	-0.7	Growing	Slower	5
Accommodation & food services	56.4	56.8	0.4	Growing	Faster	4
Agriculture	72.7	60.3	-12.4	Growing	Slower	15
Arts, entertainment & recreation	50.0	44.3	-5.7	Declining	From No Change	1
Construction	47.8	51.3	3.5	Growing	From Contraction	1
Educational services	64.0	50.0	-14.0	No Change	From Expansion	1
Electricity, gas, steam & air conditioning supply	52.2	62.0	9.8	Growing	Faster	6
Finance & insurance	61.5	60.8	-0.7	Growing	Slower	5
Health care & social assistance	53.3	65.6	12.3	Growing	Faster	6
Information & communication	56.7	62.5	5.8	Growing	Faster	5
Management of companies	56.3	50.0	-6.3	No Change	From Expansion	1
Professional, scientific, & technical services	47.3	46.5	-0.8	Declining	Faster	4
Public administration	70.0	59.1	-10.9	Growing	Slower	2
Real estate rental & leasing	52.4	42.1	-10.3	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	63.6	53.3	-10.3	Growing	Slower	5
Transportation & warehousing	56.5	63.8	7.3	Growing	Faster	5
Utilities	72.7	65.0	-7.7	Growing	Slower	5
Water supply, sewage & waste management	42.5	50.0	7.5	No Change	From Contraction	1
Wholesale/Retail trade	50.3	56.6	6.3	Growing	Faster	4

**Table 9: New Orders at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.1	53.5	-1.6	Growing	Slower	5
Accommodation & food services	53.2	54.2	1.0	Growing	Faster	4
Agriculture	59.1	58.1	-1.0	Growing	Slower	2
Arts, entertainment & recreation	47.3	47.1	-0.2	Declining	Faster	2
Construction	47.8	41.3	-6.5	Declining	Faster	27
Educational services	54.4	48.8	-5.6	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	55.4	58.7	3.3	Growing	Faster	6
Finance & insurance	57.3	63.7	6.4	Growing	Faster	6
Health care & social assistance	57.8	58.8	1.0	Growing	Faster	3
Information & communication	61.7	56.7	-5.0	Growing	Slower	5
Management of companies	50.0	45.5	-4.5	Declining	From No Change	1
Professional, scientific, & technical services	58.0	50.9	-7.1	Growing	Slower	3
Public administration	60.0	54.5	-5.5	Growing	Slower	2
Real estate rental & leasing	56.3	38.9	-17.4	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	53.0	54.2	1.2	Growing	Faster	3
Transportation & warehousing	62.0	54.3	-7.7	Growing	Slower	6
Utilities	61.4	75.0	13.6	Growing	Faster	5
Water supply, sewage & waste management	55.0	50.0	-5.0	No Change	From Expansion	1
Wholesale/Retail trade	54.3	53.0	-1.3	Growing	Slower	3

**Table 10: Employment at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	54.0	54.4	0.4	Growing	Faster	4
Accommodation & food services	47.7	59.5	11.8	Growing	From Contraction	1
Agriculture	59.8	51.5	-8.3	Growing	Slower	4
Arts, entertainment & recreation	51.4	55.7	4.3	Growing	Faster	4
Construction	43.3	53.8	10.5	Growing	From Contraction	1
Educational services	52.6	58.1	5.5	Growing	Faster	8
Electricity, gas, steam & air conditioning supply	50.0	53.3	3.3	Growing	From No Change	1
Finance & insurance	61.5	55.9	-5.6	Growing	Slower	3
Health care & social assistance	55.6	51.3	-4.3	Growing	Slower	3
Information & communication	63.3	56.7	-6.6	Growing	Slower	4
Management of companies	56.3	50.0	-6.3	No Change	From Expansion	1
Professional, scientific, & technical services	51.8	60.5	8.7	Growing	Faster	3
Public administration	60.0	63.6	3.6	Growing	Faster	3
Real estate rental & leasing	51.6	45.2	-6.4	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	53.8	54.2	0.4	Growing	Faster	3
Transportation & warehousing	64.1	57.4	-6.7	Growing	Slower	6
Utilities	59.1	65.0	5.9	Growing	Faster	5
Water supply, sewage & waste management	47.5	40.0	-7.5	Declining	Faster	2
Wholesale/Retail trade	55.6	52.7	-2.9	Growing	Slower	3

**Table 11: Inventory at a Glance**

Index	Series Index July	Series Index August	Change	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	51.9	52.3	0.4	Growing	Faster	4
Accommodation & food services	48.1	56.3	8.2	Growing	From Contraction	1
Agriculture	60.6	57.4	-3.2	Growing	Slower	5
Arts, entertainment & recreation	45.9	55.7	9.8	Growing	From Contraction	1
Construction	40.0	42.3	2.3	Declining	Slower	2
Educational services	57.5	48.8	-8.7	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	55.7	52.2	-3.5	Growing	Slower	2
Finance & insurance	53.3	53.1	-0.2	Growing	Slower	3
Health care & social assistance	52.9	56.3	3.4	Growing	Faster	4
Information & communication	57.5	58.8	1.3	Growing	Faster	2
Management of companies	62.5	50.0	-12.5	No Change	From Expansion	1
Professional, scientific, & technical services	50.9	47.3	-3.6	Declining	From Expansion	1
Public administration	60.0	59.1	-0.9	Growing	Slower	2
Real estate rental & leasing	50.0	44.4	-5.6	Declining	From No Change	1
Repair, maintenance/washing of motor vehicles	52.3	53.4	1.1	Growing	Faster	2
Transportation & warehousing	47.8	47.8	0.0	Declining	Flat	2
Utilities	55.0	50.0	-5.0	No Change	From Expansion	1
Water supply, sewage & waste management	62.5	62.5	0.0	Growing	Flat	4
Wholesale/Retail trade	50.0	50.3	0.3	Growing	From No Change	1

**Table 12: Manufacturing PMI Data Series**

Month	COMPOSITE PMI	Production Level	New Orders	Supplier Delivery Time	Employment Level	Raw Materials Inventory	New Export Orders	Output Prices	Input Prices	Quantity of Purchases	Backlog of Work	Stock of Finished Goods
Jul '14	51.3	55.2	53.0	46.4	46.9	52.9	43.6	50.6	54.2	53.3	46.4	47.2
Aug '14	49.7	49.7	51.2	49.9	45.9	52.2	40.8	48.6	52.7	50.8	45.4	48.6
Sep '14	54.0	57.4	57.6	46.4	49.3	55.7	45.4	49.3	52.9	55.1	46.9	49.8
Oct '14	51.9	55.1	55.3	46.2	46.8	52.4	45.9	49.7	56.7	57.1	50.5	51.7
Nov '14	52.2	55.1	56.9	45.1	47.2	51.7	46.0	53.3	60.9	56.0	50.0	47.6
Dec '14	49.8	51.2	51.1	49.7	46.8	48.4	44.6	53.6	56.3	51.4	47.5	51.1
Jan '15	50.2	50.4	49.3	51.3	51.1	49.3	47.7	48.7	55.6	52.5	48.8	45.5
Feb '15	53.0	57.4	54.7	43.8	50.0	56.4	50.1	54.0	60.9	58.0	50.7	53.7
Mar '15	48.9	52.1	48.9	47.8	46.4	47.1	38.1	50.1	56.4	48.7	44.5	46.5
Apr '15	52.0	56.9	54.1	42.7	48.9	53.9	43.0	50.2	54.4	53.0	48.3	48.7
May '15	49.4	53.6	49.7	44.6	48.0	48.0	36.9	51.6	59.0	50.5	44.9	45.6
Jun '15	49.5	51.5	50.8	42.0	48.5	53.3	40.0	49.2	56.7	53.0	45.3	49.3
Jul '15	47.8	49.7	46.2	43.5	48.4	52.6	40.1	47.9	55.0	51.7	45.2	45.3
Aug '15	48.4	51.0	50.1	43.1	44.8	52.4	37.6	49.0	53.1	50.2	43.7	46.1
Sep '15	50.7	54.9	52.1	46.8	47.1	49.0	40.3	47.5	52.8	51.0	42.5	43.2
Oct '15	49.2	52.0	49.3	42.7	48.4	53.1	39.8	49.1	53.8	48.3	45.6	46.8
Nov '15	51.2	55.4	52.9	47.3	45.5	52.2	38.7	46.2	52.8	51.0	46.0	46.9
Dec '15	51.2	55.4	52.7	45.2	47.5	52.7	38.0	48.6	56.5	54.5	45.1	46.4
Jan '16	47.2	49.3	46.2	48.4	46.0	45.8	38.3	52.6	56.7	49.9	44.2	46.3
Feb '16	45.5	45.0	43.0	52.8	45.0	44.7	39.2	53.0	57.0	42.8	38.5	44.4
Mar '16	45.9	46.6	43.0	50.6	45.5	47.1	37.8	56.4	60.9	41.6	41.2	43.8
Apr '16	43.7	42.7	41.8	52.2	42.0	43.0	36.3	63.9	67.8	43.6	42.6	41.6
May '16	45.8	47.9	42.7	50.2	45.7	43.9	38.7	59.6	68.4	42.7	37.0	40.1
Jun '16	41.9	40.2	37.0	55.6	42.2	39.4	35.3	61.4	70.0	39.0	40.2	36.0
Jul '16	44.1	43.0	42.4	51.7	43.8	41.4	38.5	60.8	64.2	41.6	41.9	39.0
Aug '16	42.1	40.5	37.5	57.4	40.4	40.0	31.2	64.1	69.8	39.9	38.3	38.3
Sep '16	42.5	40.9	38.7	55.6	41.2	40.9	26.3	66.5	74.0	42.8	37.1	42.4
Oct '16	44.1	42.3	40.3	57.7	42.2	42.9	37.3	65.2	71.8	43.5	39.2	39.9
Nov '16	46.0	46.9	45.1	53.2	40.6	46.1	39.6	65.7	71.2	48.1	45.2	42.0
Dec '16	52.0	57.6	51.8	47.9	48.6	51.6	37.2	70.4	73.2	52.7	45.3	48.5
Jan '17	48.2	51.3	47.9	48.5	45.3	46.3	33.1	67.9	71.4	48.4	43.6	46.9
Feb '17	44.6	45.2	44.0	48.7	41.7	44.8	38.4	69.9	70.9	47.7	43.2	43.9
Mar '17	47.7	50.8	45.6	51.3	43.6	49.1	38.5	65.0	68.3	50.1	43.6	45.1
Apr '17	51.1	58.5	50.1	47.5	46.6	50.6	37.7	65.1	69.2	45.1	40.0	46.4
May '17	52.5	58.7	50.5	49.9	50.7	50.8	37.6	61.3	68.4	46.1	42.3	51.8
June '17	52.9	58.2	51.0	50.3	51.1	52.3	32.6	62.7	66.6	46.2	43.9	49.1
July '17	54.1	59.3	52.7	51.3	51.8	53.6	37.5	60.4	64.1	48.0	42.1	48.5
Aug '17	53.6	57.4	52.3	52.0	51.5	54.9	36.7	58.8	64.9	49.0	47.9	51.6

**Table 13: Non-Manufacturing PMI Data Series**

Month	COMPOSITE PMI	Business Activity	New orders	Employment Level	Inventory	Average Input Price	Backlog of Work	New Exports Orders	Imports	Inventories (sentiment)
Jul '14	55.0	58.9	55.9	50.2	55.2	54.0	46.2	44.0	47.3	47.8
Aug '14	58.9	60.6	59.8	58.3	57.0	56.1	47.0	46.1	46.4	48.1
Sep '14	54.7	57.1	57.5	49.9	54.3	52.8	46.2	40.7	45.2	47.6
Oct '14	57.3	59.6	59.4	53.9	56.4	53.3	46.4	40.8	44.9	43.8
Nov '14	59.6	62.5	63.6	57.9	54.6	57.3	49.6	45.2	47.5	48.1
Dec '14	53.8	56.2	56.0	51.4	51.5	54.5	45.6	43.6	46.5	43.8
Jan '15	50.6	48.8	50.4	51.2	51.9	48.8	43.2	41.1	44.3	47.0
Feb '15	54.0	54.2	54.7	52.5	54.5	54.1	46.0	43.0	44.6	46.1
Mar '15	48.6	49.7	51.1	45.6	48.0	49.8	46.5	39.9	44.2	40.2
Apr '15	53.7	58.2	56.8	49.1	50.8	51.5	46.6	41.1	44.5	43.0
May '15	51.7	52.9	53.1	49.7	51.1	51.3	44.1	37.2	39.1	44.3
Jun '15	50.1	51.5	50.3	46.4	52.0	48.5	44.4	36.9	40.4	42.7
Jul '15	50.0	50.4	51.4	48.6	49.5	50.3	43.8	39.1	39.2	44.0
Aug '15	50.7	52.3	52.4	48.0	50.1	50.7	43.0	39.8	38.3	44.0
Sep '15	50.1	52.1	52.3	47.0	49.1	48.7	44.5	42.9	41.4	45.9
Oct '15	51.9	54.2	54.1	49.3	50.1	49.9	43.9	40.3	42.4	45.2
Nov '15	49.6	52.9	51.6	45.6	48.5	51.8	42.8	37.7	39.0	41.8
Dec '15	53.4	55.9	56.4	50.0	51.5	54.7	47.0	41.9	42.7	47.2
Jan '16	46.9	46.2	46.4	47.0	47.9	57.3	44.3	36.2	39.0	41.6
Feb '16	44.3	43.7	42.0	44.5	47.1	53.6	39.6	37.5	36.6	43.6
Mar '16	45.4	46.3	44.7	43.9	46.5	58.5	43.8	34.3	35.0	41.1
Apr '16	44.3	44.2	42.2	43.3	47.6	62.2	43.1	31.8	33.1	39.8
May '16	44.3	44.3	41.3	44.6	46.9	62.9	38.1	33.2	35.0	40.3
Jun '16	42.3	40.2	39.6	42.5	47.1	60.7	39.6	33.2	34.7	38.5
Jul '16	43.2	42.8	42.3	41.9	45.8	60.4	38.6	30.0	32.7	38.0
Aug '16	43.7	43.6	42.0	41.4	47.7	60.8	39.4	32.9	34.2	39.4
Sep '16	41.0	39.9	40.0	40.3	43.9	63.1	39.6	28.6	30.2	37.9
Oct '16	43.4	43.0	42.7	41.5	46.4	65.3	40.9	32.8	33.8	38.7
Nov '16	42.8	43.0	42.3	40.2	45.5	66.8	42.4	30.8	34.0	41.1
Dec '16	47.1	48.2	46.9	43.8	49.5	64.0	41.5	33.8	35.5	41.6
Jan '17	49.4	50.6	49.4	45.6	52.0	65.6	43.6	32.5	36.1	45.5
Feb '17	44.5	45.4	44.9	42.6	44.9	65.4	42.9	33.4	34.5	38.7
Mar '17	47.1	49.8	46.4	44.0	48.0	62.1	42.7	33.1	34.5	40.6
Apr '17	49.5	53.3	50.5	45.5	48.6	63.1	41.6	29.2	33.2	41.1
May '17	52.7	56.2	53.2	50.2	51.4	62.7	45.3	31.6	34.1	43.6
June '17	54.2	57.0	54.6	53.4	51.8	58.6	40.5	30.3	33.5	42.7
July '17	54.4	56.8	55.1	54.0	51.9	58.1	42.9	32.0	36.8	41.5
Aug '17	54.1	56.1	53.5	54.4	52.3	54.5	42.8	34.5	34.8	42.0