

**Central Bank of Nigeria**



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

Statistics Department

*September 2018*

# PURCHASING MANAGERS' INDEX (PMI) SEPTEMBER 2018 REPORT

## 1.0 Introduction

The September 2018 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period September 10-17, 2018. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in all 36 states in Nigeria and the Federal Capital Territory (FCT) (Fig. 1). The Bank makes no representation regarding the individual companies, other than the information they have provided. The data contained herein further provides input for policy decisions.

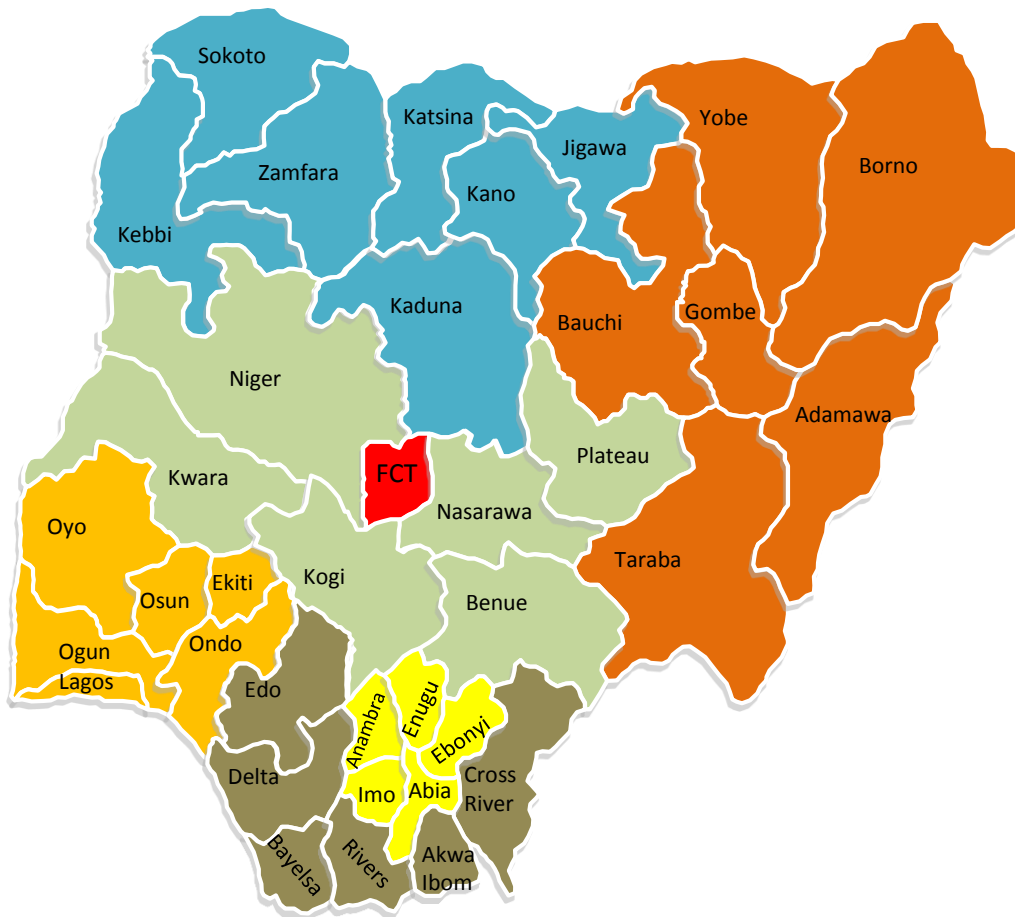


Fig. 1: Map of Nigeria Showing the 36 States and the FCT

### 1.1 Data and Method of Presentation

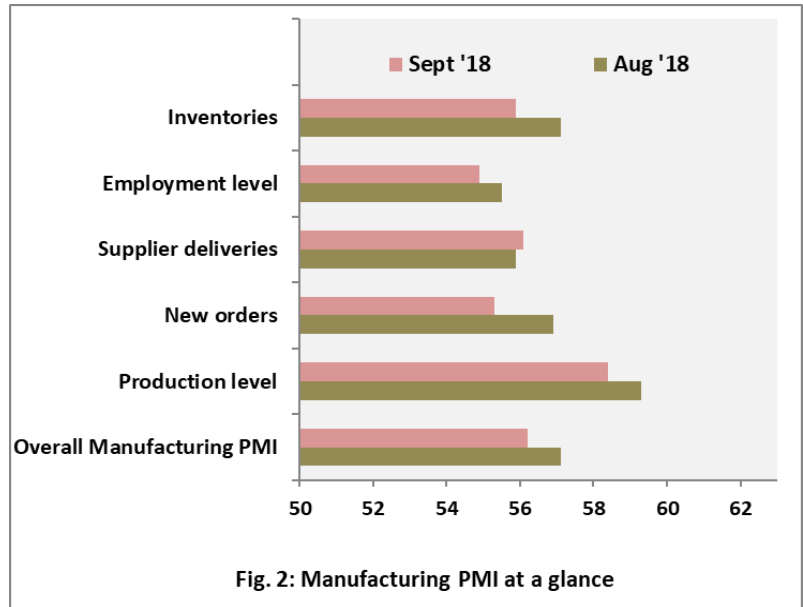
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses, indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. The diffusion index is computed as the percentage of *responses with positive change plus 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 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, namely: production level, level of new orders, suppliers' delivery time, employment level and raw materials inventory/work in progress, 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, namely: business activity, level of new orders, employment level and raw materials inventory, with equal weights of *25% each*.

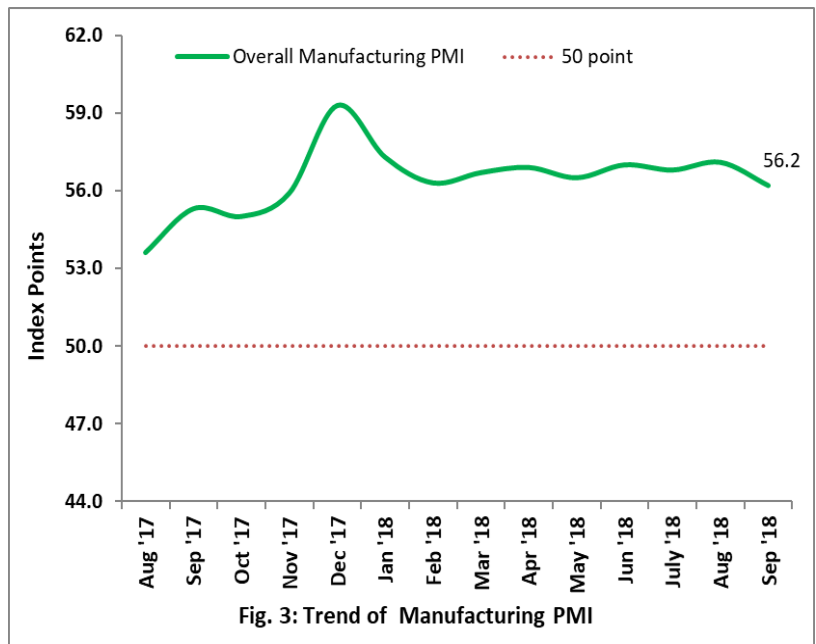
*A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while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

**2.0 Manufacturing PMI Report**

*Production level, new orders employment level and inventories grew at a slower rate; supplier delivery time grew at a faster rate in September 2018*

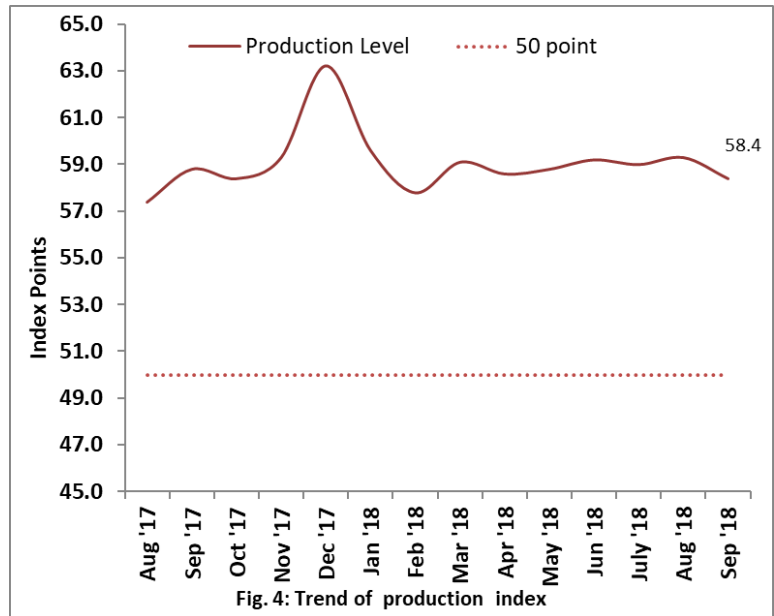


The *Manufacturing PMI* in the month of September stood at 56.2 index points, indicating expansion in the manufacturing sector for the eighteenth consecutive month. (Fig. 3 and Table 1). The index however grew at a slower rate when compared to the index in the previous month. Of the 14 subsectors surveyed, 10 reported growth in the review month in the following order: Electrical equipment; Printing & related support activities; Transportation equipment; Nonmetallic mineral products; Chemical & pharmaceutical products; Fabricated metal products; Furniture & related products; Textile, apparel, leather & footwear; Food, beverage & tobacco products; and Plastics & rubber products. The Petroleum & coal products; Cement; Paper products; and Primary metal subsectors declined in the review month.



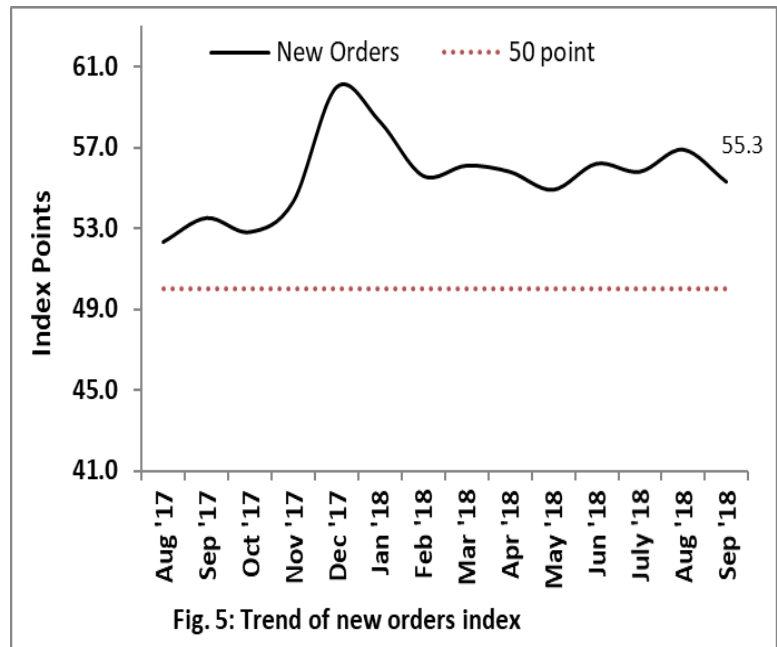
### 2.1 Production Level

At 58.4 points, the production level index for the manufacturing sector grew for the nineteenth consecutive month in September 2018. The index indicated a slower growth in the current month, when compared to its level in the preceding month. Ten of the 14 manufacturing subsectors recorded increase in production level, 1 remained unchanged while 3 declined (Fig. 4 and Table 2).



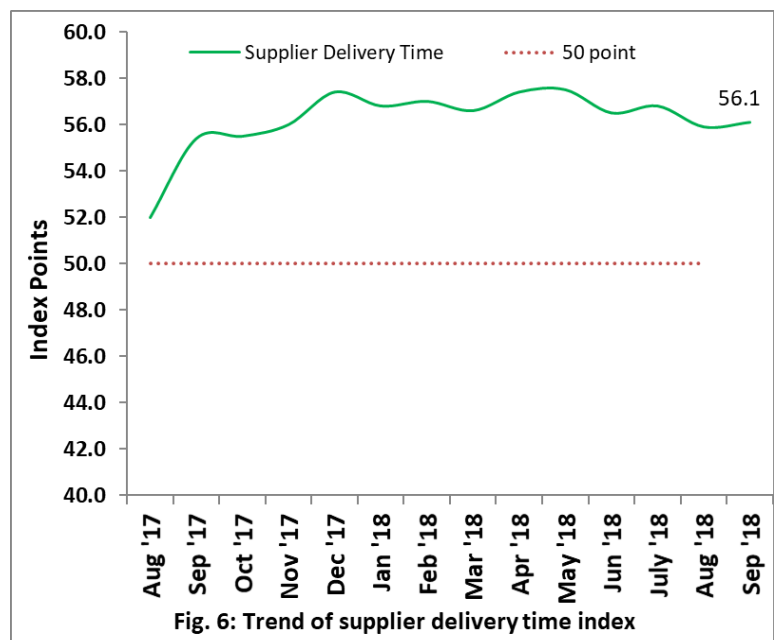
### 2.2 New Orders

At 55.3 points, the new orders index grew for the eighteenth consecutive month, indicating increase in new orders in September 2018. Nine subsectors reported growth, 2 remained unchanged, while 3 contracted in the review month (Fig. 5 and Table 3).



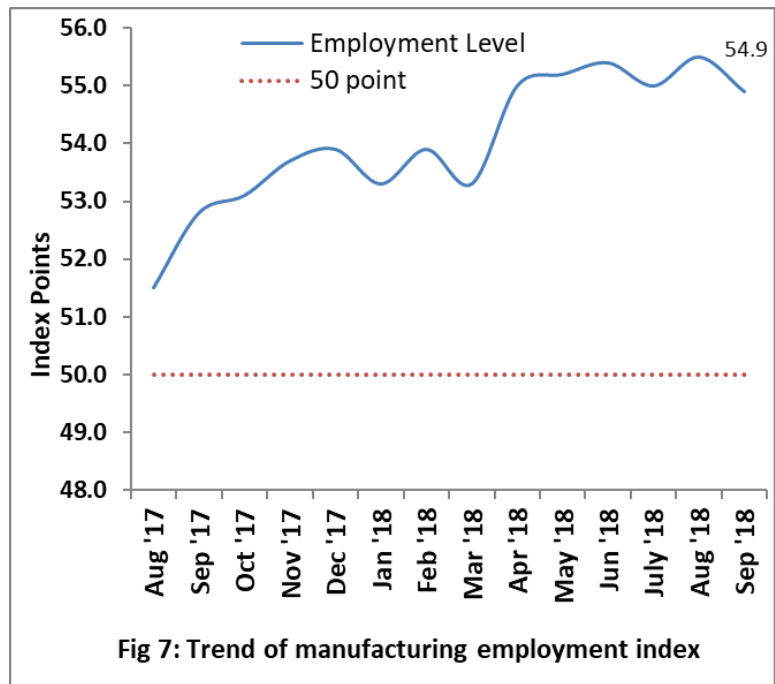
### 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 56.1 points in September 2018, indicating faster supplier delivery time for the sixteenth consecutive month. Eleven subsectors recorded improved suppliers' delivery time, 2 remained unchanged while 1 reported worsening delivery times (Fig. 6 and Table 4).



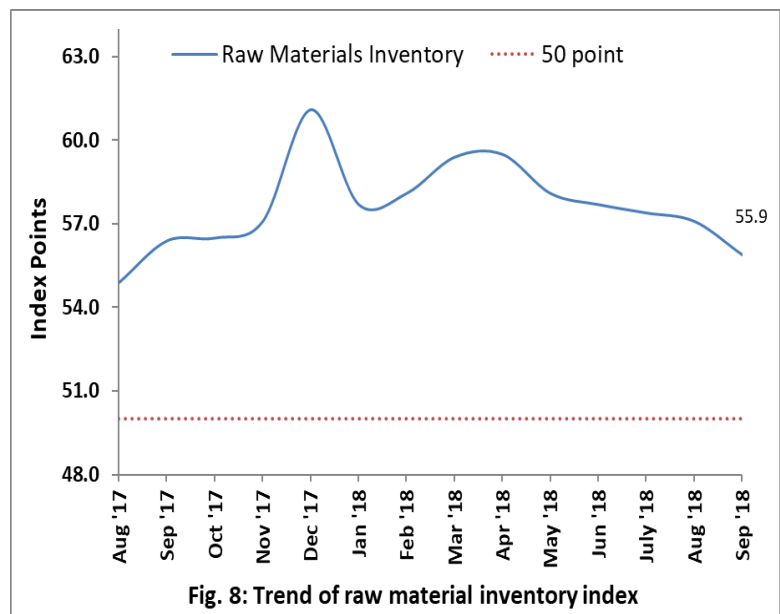
## 2.4 Employment Level

The employment level index in September 2018 stood at 54.9 points, indicating growth in employment level for the seventeenth consecutive month. Of the 14 subsectors, 12 reported increased employment level, 1 remained unchanged while 1 reported reduced employment level in the review month (Fig. 7 and Table 5).



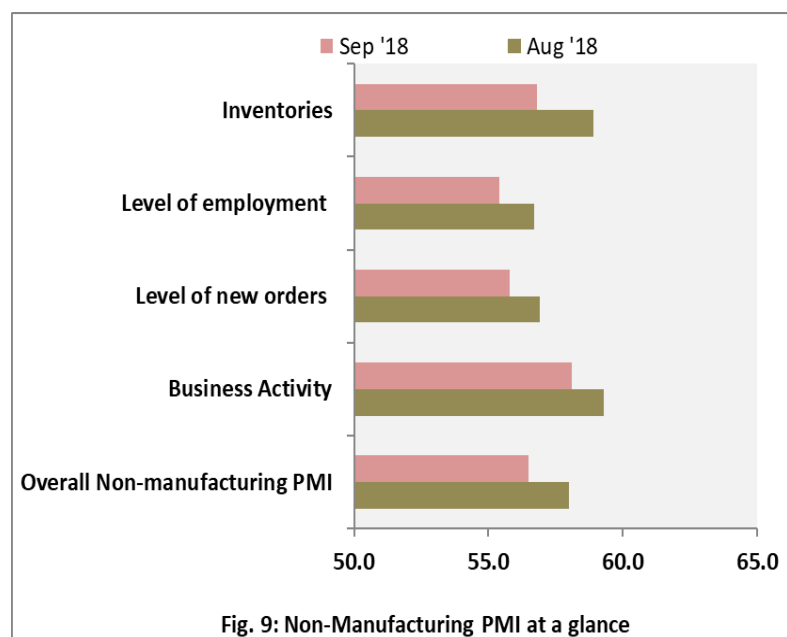
## 2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the eighteenth consecutive month in September 2018. At 55.9 points, the index grew at a slower rate when compared to its level in the previous month. Ten of the 14 subsectors recorded growth, while 4 recorded decline in raw material inventories (Fig. 8 and Table 6).



## 3.0 Non-Manufacturing PMI Report

*Business activity, new orders, employment level and inventories grew at a slower rate in September 2018*



The *composite PMI* for the *non-manufacturing* sector stood at 56.5 points in September 2018, indicating expansion in the Non-manufacturing PMI for the seventeenth consecutive month. The index grew at a slower rate when compared to that in August 2018. Fifteen of the 17 subsectors recorded growth in the following order: Educational services; Management of companies; Information & communication; Agriculture; Finance &

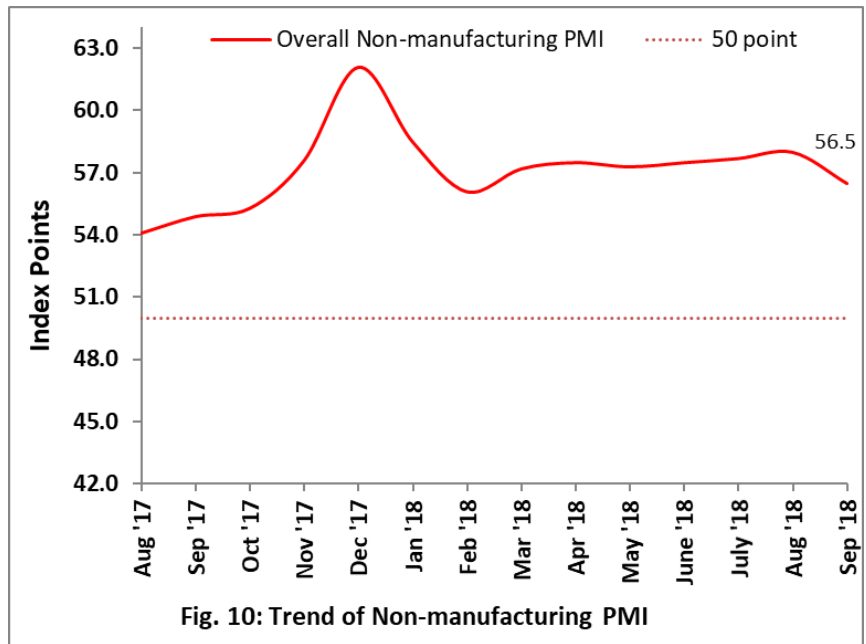


Fig. 10: Trend of Non-manufacturing PMI

insurance; Water supply, sewage & waste management; Wholesale/Retail trade; Real estate rental & leasing; Utilities; Accommodation & food services; Transportation & warehousing; Electricity, gas, steam & air conditioning supply; Professional, scientific, & technical services; Health care & social assistance; and Repair, Maintenance/Washing of Motor Vehicles. The Arts, Entertainment & Recreation subsector remained unchanged, while construction subsector recorded contraction in the review period (Fig. 10 and Table 7).

### 3.1 Business Activity

At 58.1 points, the business activity index grew for the eighteenth consecutive month, indicating expansion in non-manufacturing business activity in September 2018. 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 2 declined in the review month (Fig 11 Table 8).

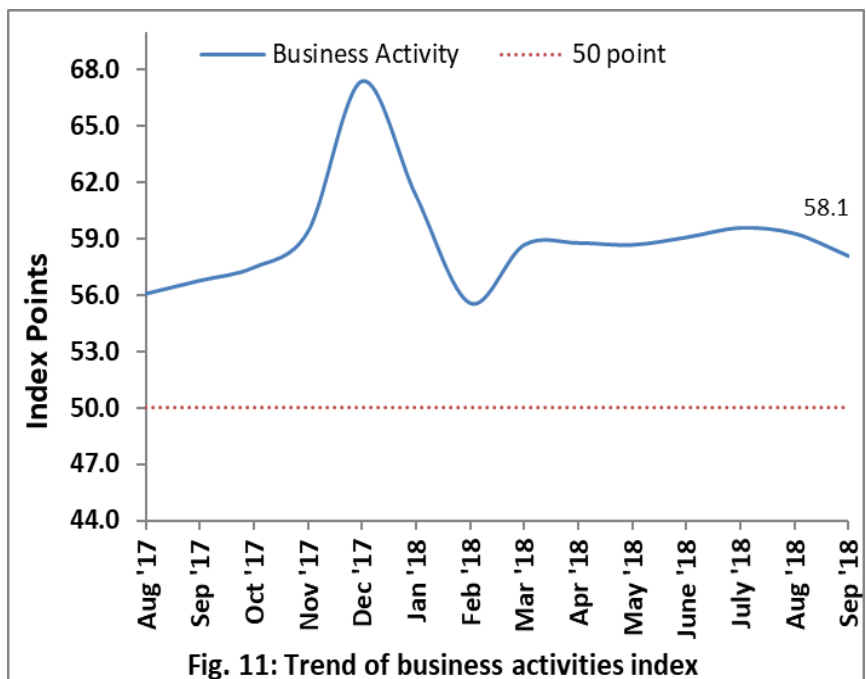
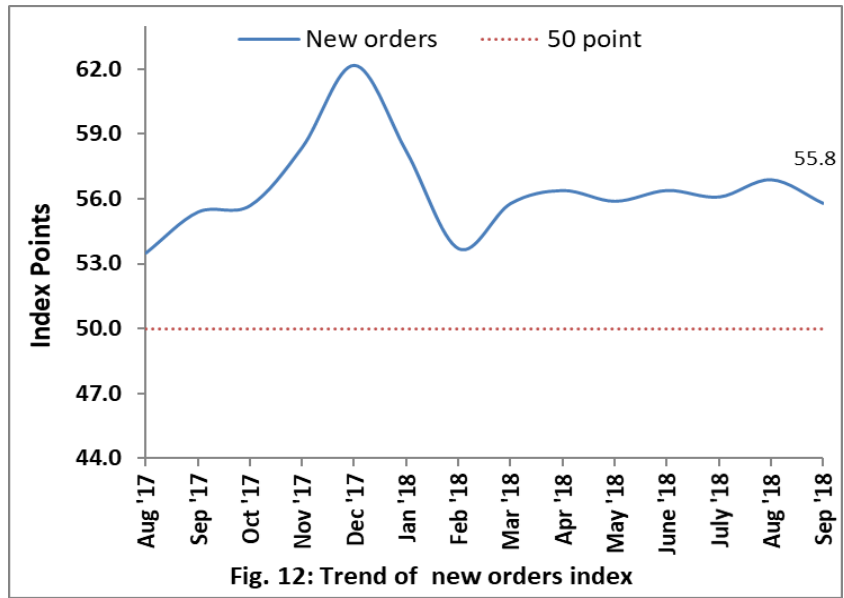


Fig. 11: Trend of business activities index

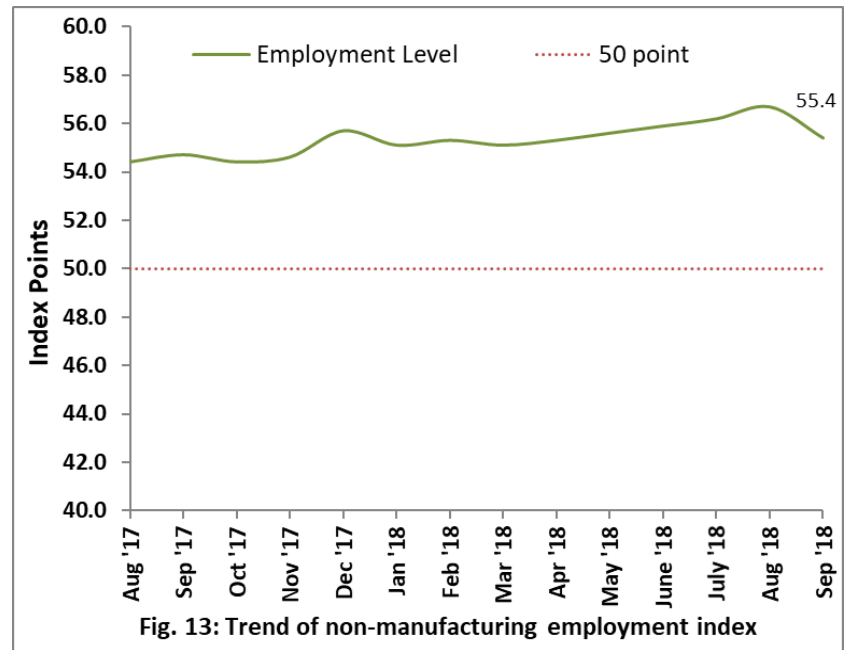
### 3.2 New Orders

At 55.8 points, new orders index grew for the eighteenth consecutive month in September 2018. Of the 17 subsectors, 13 reported growth, 1 remained unchanged, while 3 recorded a decline (Fig 12 Table 9).



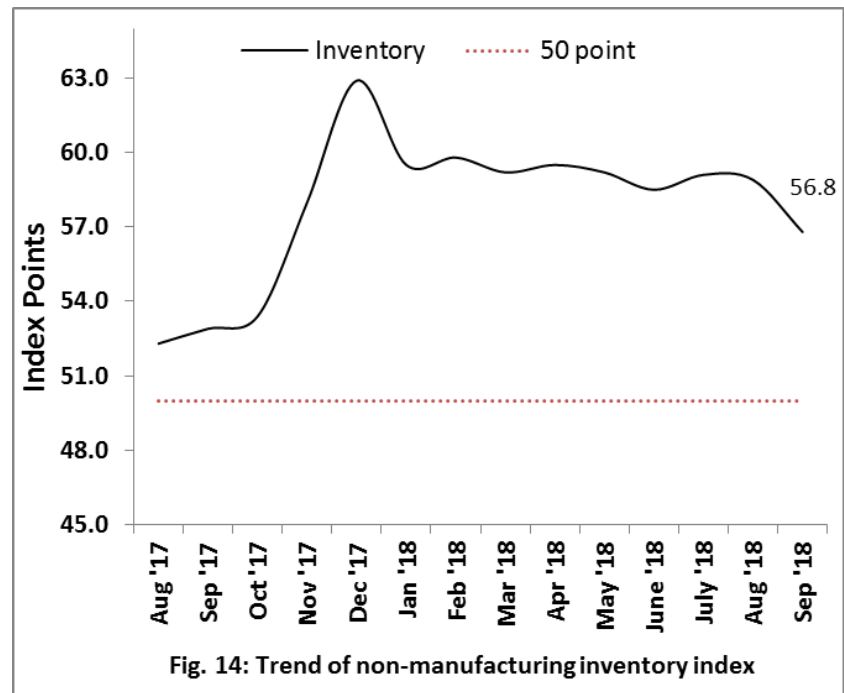
### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.4 points, indicating growth in employment for the seventeenth consecutive month. Thirteen subsectors recorded growth, 1 remained unchanged while 3 recorded decline in the review month (Fig 13 Table 10).



### 3.4 Non-manufacturing Inventory

At 56.8 points, non-manufacturing inventory index grew for the seventeenth consecutive month, indicating growth in inventories in the review period. Thirteen subsectors recorded higher inventories, subsector 1 remained unchanged while 3 declined in September 2018 (Fig 14 Table 11).



## APPENDICES

**Table 1: Manufacturing at a Glance**

Index	Series Index* August	Series Index* September	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	57.1	56.2	-0.9	Growing	Slower	18
Production level	59.3	58.4	-0.9	Growing	Slower	19
New orders	56.9	55.3	-1.6	Growing	Slower	18
Supplier delivery time	55.9	56.1	0.2	Growing	Faster	16
Employment level	55.5	54.9	-0.6	Growing	Slower	17
Raw materials/WIP Inventory	57.1	55.9	-1.2	Growing	Slower	18
New Export Orders	39.7	37.1	-2.6	Declining	Faster	43
Output Prices	50.1	52.4	2.3	Growing	Faster	33
Input Prices	59.3	57.5	-1.8	Growing	Slower	51
Quantity of Purchases	50.1	49.4	-0.7	Declining	From Expansion	1
Outstanding Business/Backlog of Work	43.1	42.2	-0.9	Declining	Faster	10
Stock of Finished Goods	50.7	50.5	-0.2	Growing	Slower	6
<b>Manufacturing Sub-Sectors</b>						
Cement	61.3	46.6	-14.7	Declining	From Expansion	1
Chemical & pharmaceutical products	59.0	58.7	-0.3	Growing	Slower	8
Electrical equipment	67.5	63.8	-3.7	Growing	Slower	8
Fabricated metal products	56.9	58.7	1.8	Growing	Faster	3
Food, beverage & tobacco products	53.4	55.3	1.9	Growing	Faster	24
Furniture & related products	60.8	57.7	-3.1	Growing	Slower	4
Nonmetallic mineral products	62.4	59.4	-3.0	Growing	Slower	4
Paper products	58.3	48.4	-9.9	Declining	From Expansion	1
Petroleum & coal products	59.2	44.2	-15.0	Declining	From Expansion	1
Plastics & rubber products	60.7	55.2	-5.5	Growing	Slower	2
Primary metal	53.0	49.2	-3.8	Declining	From Expansion	1
Printing & related support activities	55.6	61.7	6.1	Growing	Faster	6
Textile, apparel, leather & footwear	60.3	57.1	-3.2	Growing	Slower	19
Transportation equipment	49.5	61.7	12.2	Growing	From Contraction	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 August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	59.3	58.4	-0.9	Growing	Slower	19
Cement	87.5	42.9	-44.6	Declining	From Expansion	1
Chemical & pharmaceutical products	63.6	63.2	-0.4	Growing	Slower	8
Electrical equipment	75.0	62.5	-12.5	Growing	Slower	8
Fabricated metal products	58.6	65.0	6.4	Growing	Faster	3
Food, beverage & tobacco products	53.2	57.4	4.2	Growing	Faster	24
Furniture & related products	66.1	64.3	-1.8	Growing	Slower	4
Nonmetallic mineral products	69.0	64.7	-4.3	Growing	Slower	3
Paper products	60.0	36.4	-23.6	Declining	From Expansion	1
Petroleum & coal products	83.3	50.0	-33.3	No Change	From Expansion	1
Plastics & rubber products	63.6	52.3	-11.3	Growing	Slower	2
Primary metal	46.4	42.3	-4.1	Declining	Faster	2
Printing & related support activities	55.6	68.4	12.8	Growing	Faster	6
Textile, apparel, leather & footwear	55.3	58.8	3.5	Growing	Faster	6
Transportation equipment	60.0	66.7	6.7	Growing	Faster	3



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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	56.9	55.3	-1.6	Growing	Slower	18
Cement	62.5	50.0	-12.5	No Change	From Expansion	1
Chemical & pharmaceutical products	55.7	59.2	3.5	Growing	Faster	7
Electrical equipment	75.0	62.5	-12.5	Growing	Slower	8
Fabricated metal products	57.1	55.0	-2.1	Growing	Slower	3
Food, beverage & tobacco products	53.7	55.9	2.2	Growing	Faster	24
Furniture & related products	62.5	57.1	-5.4	Growing	Slower	4
Nonmetallic mineral products	57.1	61.8	4.7	Growing	Faster	2
Paper products	65.0	45.5	-19.5	Declining	From Expansion	1
Petroleum & coal products	33.3	16.7	-16.6	Declining	Faster	2
Plastics & rubber products	63.6	52.3	-11.3	Growing	Slower	2
Primary metal	50.0	42.3	-7.7	Declining	From No Change	1
Printing & related support activities	61.1	65.8	4.7	Growing	Faster	5
Textile, apparel, leather & footwear	63.2	55.9	-7.3	Growing	Slower	4
Transportation equipment	30.0	50.0	20.0	No Change	From Contraction	1

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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	55.9	56.1	0.2	Growing	Faster	16
Cement	62.5	58.3	-4.2	Growing	Slower	2
Chemical & pharmaceutical products	59.1	57.9	-1.2	Growing	Slower	3
Electrical equipment	58.3	62.5	4.2	Growing	Faster	2
Fabricated metal products	61.4	51.7	-9.7	Growing	Slower	7
Food, beverage & tobacco products	54.2	55.0	0.8	Growing	Faster	3
Furniture & related products	46.4	57.1	10.7	Growing	From Contraction	1
Nonmetallic mineral products	64.3	58.8	-5.5	Growing	Slower	5
Paper products	65.0	68.2	3.2	Growing	Faster	4
Petroleum & coal products	33.3	33.3	0.0	Declining	Flat	3
Plastics & rubber products	59.1	61.4	2.3	Growing	Faster	4
Primary metal	50.0	50.0	0.0	No Change	Flat	2
Printing & related support activities	44.1	50.0	5.9	No Change	From Contraction	1
Textile, apparel, leather & footwear	55.3	58.8	3.5	Growing	Faster	13
Transportation equipment	90.0	66.7	-23.3	Growing	Slower	3

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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.5	54.9	-0.6	Growing	Slower	17
Cement	37.5	42.9	5.4	Declining	Slower	2
Chemical & pharmaceutical products	59.1	52.6	-6.5	Growing	Slower	8
Electrical equipment	41.7	62.5	20.8	Growing	From Contraction	1
Fabricated metal products	50.0	68.3	18.3	Growing	From No Change	1
Food, beverage & tobacco products	53.3	52.5	-0.8	Growing	Slower	5
Furniture & related products	58.9	51.8	-7.1	Growing	Slower	5
Nonmetallic mineral products	61.9	58.8	-3.1	Growing	Slower	3
Paper products	50.0	54.5	4.5	Growing	From No Change	1
Petroleum & coal products	66.7	66.7	0.0	Growing	Flat	3
Plastics & rubber products	52.3	56.8	4.5	Growing	Faster	2
Primary metal	64.3	57.7	-6.6	Growing	Slower	3
Printing & related support activities	52.8	50.0	-2.8	No Change	From Expansion	1
Textile, apparel, leather & footwear	68.4	52.9	-15.5	Growing	Slower	2
Transportation equipment	40.0	66.7	26.7	Growing	From Contraction	1

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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	57.1	55.9	-1.2	Growing	Slower	18
Cement	37.5	35.7	-1.8	Declining	Faster	2
Chemical & pharmaceutical products	56.8	59.2	2.4	Growing	Faster	4
Electrical equipment	91.7	75.0	-16.7	Growing	Slower	10
Fabricated metal products	58.6	45.0	-13.6	Declining	From Expansion	1
Food, beverage & tobacco products	51.9	54.5	2.6	Growing	Faster	24
Furniture & related products	67.9	55.4	-12.5	Growing	Slower	7
Nonmetallic mineral products	59.5	41.2	-18.3	Declining	From Expansion	1
Paper products	40.0	45.5	5.5	Declining	Slower	2
Petroleum & coal products	100.0	83.3	-16.7	Growing	Slower	8
Plastics & rubber products	63.6	59.1	-4.5	Growing	Slower	2
Primary metal	60.7	69.2	8.5	Growing	Faster	3
Printing & related support activities	61.8	73.7	11.9	Growing	Faster	4
Textile, apparel, leather & footwear	55.3	62.5	7.2	Growing	Faster	12
Transportation equipment	40.0	66.7	26.7	Growing	From Contraction	1

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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
Composite PMI \1	58.0	56.5	-1.5	Growing	Slower	17
Business Activity	59.3	58.1	-1.2	Growing	Slower	18
Level of new orders/customers/incoming business	56.9	55.8	-1.1	Growing	Slower	18
Level of employment	56.7	55.4	-1.3	Growing	Slower	17
Inventory	58.9	56.8	-2.1	Growing	Slower	17
Average price of Inputs (volume weighted)	50.8	50.2	-0.6	Growing	Slower	35
Level of outstanding business/ Backlog of work	43.3	41.5	-1.8	Declining	Faster	51
New Exports orders	40.1	40.3	0.2	Declining	Slower	51
Imports	40.3	41.3	1.0	Declining	Slower	51
Inventory (sentiments)	44.8	45.7	0.9	Declining	Slower	51
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	54.4	55.9	1.5	Growing	Faster	3
Agriculture	69.8	60.2	-9.6	Growing	Slower	28
Arts, Entertainment & Recreation	58.8	50.0	-8.8	No Change	From Expansion	1
Construction	49.6	47.5	-2.1	Declining	Faster	2
Educational services	60.9	65.9	5.0	Growing	Faster	3
Electricity, gas, steam & air conditioning supply	53.7	53.1	-0.6	Growing	Slower	5
Finance & insurance	59.5	59.4	-0.1	Growing	Slower	19
Health care & social assistance	57.8	52.5	-5.3	Growing	Slower	17
Information & communication	65.0	61.9	-3.1	Growing	Slower	18
Management of companies	55.0	64.8	9.8	Growing	Faster	2
Professional, scientific, & technical services	48.3	52.8	4.5	Growing	From Contraction	1
Real estate rental & leasing	58.1	56.8	-1.3	Growing	Slower	7
Repair, Maintenance/Washing Of Motor Vehicles...	65.4	50.8	-14.6	Growing	Slower	4
Transportation & warehousing	55.3	55.7	0.4	Growing	Faster	5
Utilities	42.9	56.3	13.4	Growing	From Contraction	1
Water supply, sewage & waste management	62.5	57.7	-4.8	Growing	Slower	7
Wholesale/Retail trade	60.0	57.3	-2.7	Growing	Slower	16

\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 August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	59.3	58.1	-1.2	Growing	Slower	18
Accommodation & food services	57.2	57.0	-0.2	Growing	Slower	3
Agriculture	70.7	64.8	-5.9	Growing	Slower	28
Arts, Entertainment & Recreation	62.1	50.0	-12.1	No Change	From Expansion	1
Construction	47.1	44.3	-2.8	Declining	Faster	2
Educational services	61.3	73.3	12.0	Growing	Faster	13
Electricity, gas, steam & air conditioning supply	53.7	47.5	-6.2	Declining	From Expansion	1
Finance & insurance	60.8	61.5	0.7	Growing	Faster	18
Health care & social assistance	55.5	50.0	-5.5	No Change	From Expansion	1
Information & communication	71.2	67.3	-3.9	Growing	Slower	18
Management of companies	58.8	71.9	13.1	Growing	Faster	2
Professional, scientific, & technical services	43.3	52.3	9.0	Growing	From Contraction	1
Real estate rental & leasing	66.3	58.6	-7.7	Growing	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles...	69.2	50.0	-19.2	No Change	From Expansion	1
Transportation & warehousing	56.3	55.0	-1.3	Growing	Slower	3
Utilities	43.8	62.5	18.7	Growing	From Contraction	1
Water supply, sewage & waste management	65.6	57.7	-7.9	Growing	Slower	5
Wholesale/Retail trade	58.2	60.4	2.2	Growing	Faster	3

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

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	56.9	55.8	-1.1	Growing	Slower	18
Accommodation & food services	55.7	53.5	-2.2	Growing	Slower	3
Agriculture	72.4	68.5	-3.9	Growing	Slower	5
Arts, Entertainment & Recreation	50.0	50.0	0.0	No Change	Flat	2
Construction	51.4	40.0	-11.4	Declining	From Expansion	1
Educational services	66.1	63.3	-2.8	Growing	Slower	3
Electricity, gas, steam & air conditioning supply	57.4	57.5	0.1	Growing	Faster	2
Finance & insurance	60.2	63.4	3.2	Growing	Faster	19
Health care & social assistance	57.4	44.6	-12.8	Declining	From Expansion	1
Information & communication	65.4	65.6	0.2	Growing	Faster	18
Management of companies	50.0	62.5	12.5	Growing	From No Change	1
Professional, scientific, & technical services	43.3	52.3	9.0	Growing	From Contraction	1
Real estate rental & leasing	50.0	55.7	5.7	Growing	From No Change	1
Repair, Maintenance/Washing Of Motor Vehicles...	65.4	40.0	-25.4	Declining	From Expansion	1
Transportation & warehousing	50.0	52.5	2.5	Growing	From No Change	1
Utilities	27.8	56.3	28.5	Growing	From Contraction	1
Water supply, sewage & waste management	65.6	53.8	-11.8	Growing	Slower	4
Wholesale/Retail trade	57.6	58.5	0.9	Growing	Faster	16

**Table 10: Employment at a Glance**

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	56.7	55.4	-1.3	Growing	Slower	17
Accommodation & food services	50.0	57.5	7.5	Growing	From No Change	1
Agriculture	69.0	59.3	-9.7	Growing	Slower	17
Arts, Entertainment & Recreation	59.1	53.7	-5.4	Growing	Slower	3
Construction	48.6	48.6	0.0	Declining	Flat	2
Educational services	59.7	65.0	5.3	Growing	Faster	3
Electricity, gas, steam & air conditioning supply	53.7	57.5	3.8	Growing	Faster	5
Finance & insurance	54.9	53.6	-1.3	Growing	Slower	16
Health care & social assistance	59.3	58.0	-1.3	Growing	Slower	16
Information & communication	60.4	50.0	-10.4	No Change	From Expansion	1
Management of companies	50.0	59.4	9.4	Growing	From No Change	1
Professional, scientific, & technical services	53.3	47.7	-5.6	Declining	From Expansion	1
Real estate rental & leasing	58.1	54.3	-3.8	Growing	Slower	4
Repair, Maintenance/Washing Of Motor Vehicles...	65.4	66.7	1.3	Growing	Faster	11
Transportation & warehousing	58.3	60.0	1.7	Growing	Faster	6
Utilities	44.4	43.8	-0.6	Declining	Faster	2
Water supply, sewage & waste management	59.4	65.4	6.0	Growing	Faster	3
Wholesale/Retail trade	62.0	52.8	-9.2	Growing	Slower	4

**Table 11: Inventory at a Glance**

Index	Series Index August	Series Index September	Difference	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	58.9	56.8	-2.1	Growing	Slower	17
Accommodation & food services	54.7	55.6	0.9	Growing	Faster	3
Agriculture	67.2	48.1	-19.1	Declining	From Expansion	1
Arts, Entertainment & Recreation	64.1	46.2	-17.9	Declining	From Expansion	1
Construction	51.5	57.1	5.6	Growing	Faster	3
Educational services	56.7	62.1	5.4	Growing	Faster	3
Electricity, gas, steam & air conditioning supply	50.0	50.0	0.0	No Change	Flat	2
Finance & insurance	61.9	59.2	-2.7	Growing	Slower	8
Health care & social assistance	59.3	57.1	-2.2	Growing	Slower	17
Information & communication	63.2	64.6	1.4	Growing	Faster	5
Management of companies	61.1	65.6	4.5	Growing	Faster	2
Professional, scientific, & technical services	53.3	59.1	5.8	Growing	Faster	10
Real estate rental & leasing	58.1	58.6	0.5	Growing	Faster	7
Repair, Maintenance/Washing Of Motor Vehicles	61.5	46.7	-14.8	Declining	From Expansion	1
Transportation & warehousing	56.5	55.3	-1.2	Growing	Slower	4
Utilities	55.6	62.5	6.9	Growing	Faster	2
Water supply, sewage & waste management	59.4	53.8	-5.6	Growing	Slower	10
Wholesale/Retail trade	62.0	57.6	-4.4	Growing	Slower	14

**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
Sep '17	55.3	58.8	53.5	55.4	52.8	56.4	30.4	58.2	65.7	49.4	51.9	50.4
Oct '17	55.0	58.4	52.8	55.5	53.1	56.5	35.5	55.4	62.7	49.6	50.8	50.0
Nov '17	55.9	59.3	54.3	56.0	53.7	57.1	37.6	54.0	64.3	48.1	50.0	48.8
Dec '17	59.3	63.2	60.0	57.4	53.9	61.1	40.2	54.3	63.4	53.6	45.7	47.4
Jan '18	57.3	59.6	58.3	56.8	53.3	57.7	35.1	55.0	63.3	49.1	42.9	45.4
Feb '18	56.3	57.8	55.6	57.0	53.9	58.1	42.0	55.9	65.4	54.3	37.6	53.3
Mar '18	56.7	59.1	56.1	56.6	53.3	59.4	36.4	52.1	61.1	54.1	42.1	48.7
Apr '18	56.9	58.6	55.8	57.4	55.0	59.5	37.6	51.3	62.4	52.9	41.4	51.1
May '18	56.5	58.8	54.9	57.5	55.2	58.1	40.1	53.9	61.8	50.8	38.5	55.8
June '18	57.0	59.2	56.2	56.5	55.4	57.7	37.6	53.8	61.9	47.6	38.0	51.1
July '18	56.8	59.0	55.8	56.8	55.0	57.4	39.4	52.3	60.7	51.1	40.7	51.3
Aug '18	57.1	59.3	56.9	55.9	55.5	57.1	39.7	50.1	59.3	50.1	43.1	50.7
Sep '18	56.2	58.4	55.3	56.1	54.9	55.9	37.1	52.4	57.5	49.4	42.2	50.5

**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
Sep '17	54.9	56.8	55.4	54.7	52.9	56.9	42.2	31.2	35.9	44.2
Oct '17	55.3	57.5	55.7	54.4	53.4	56.4	41.4	29.6	35.4	38.9
Nov '17	57.6	59.4	58.4	54.6	58.0	55.7	43.6	28.8	33.3	40.6
Dec '17	62.1	67.4	62.2	55.7	62.9	56.1	44.6	34.6	39.1	40.3
Jan '18	58.5	61.3	58.2	55.1	59.5	56.9	41.3	31.0	35.1	42.8
Feb '18	56.1	55.6	53.7	55.3	59.8	52.8	41.2	34.7	39.1	40.3
Mar '18	57.2	58.7	55.8	55.1	59.2	50.3	42.9	39.0	38.5	44.1
Apr '18	57.5	58.8	56.4	55.3	59.5	50.3	41.5	34.2	34.9	45.0
May '18	57.3	58.7	55.9	55.6	59.2	50.8	40.6	36.4	38.4	46.2
June '18	57.5	59.1	56.4	55.9	58.5	52.2	44.0	33.2	40.1	42.4
July '18	57.7	59.6	56.1	56.2	59.1	52.1	43.1	42.1	40.5	45.0
Aug '18	58.0	59.3	56.9	56.7	58.9	50.8	43.3	40.1	40.3	44.8
Sep '18	56.5	58.1	55.8	55.4	56.8	50.2	41.5	40.3	41.3	45.7