

**Central Bank of Nigeria**



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

Statistics Department

*July 2019*

# PURCHASING MANAGERS' INDEX (PMI) JULY 2019 REPORT

## 1.0 Introduction

The July 2019 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period July 8-12, 2019. 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). 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.

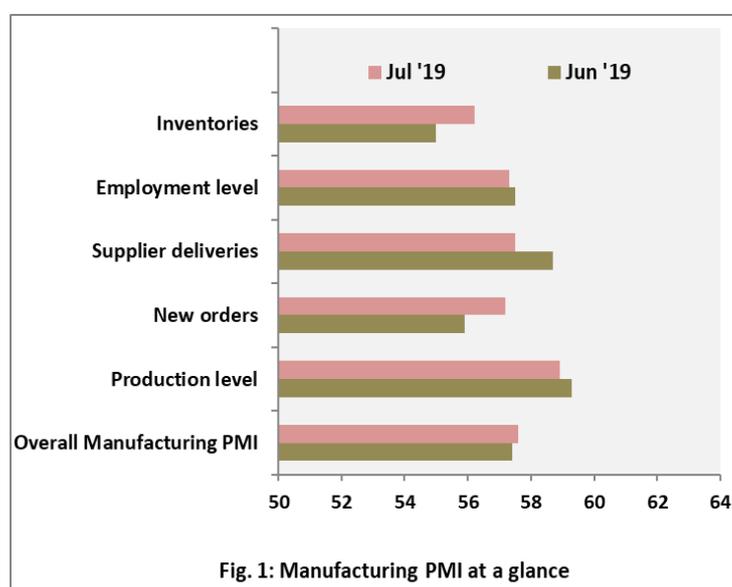
### 1.1 Data and Method of Presentation

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

*New orders and raw materials grew at a faster rate, while production level, supplier delivery time and employment level grew at a slower rate in July 2019*



The *Manufacturing PMI* in the month of July stood at 57.6 index points, indicating expansion in the manufacturing sector for the twenty-eighth consecutive month (Fig. 2 and Table 1). The index grew at a faster rate when compared to the index in the previous month. Of the 14 subsectors surveyed, 13 reported growth in the review month in the following order: petroleum & coal products; transportation equipment; cement; printing & related support activities; paper products; food, beverage & tobacco products; furniture & related products; fabricated metal products; nonmetallic mineral products; plastics & rubber products; primary metal; chemical & pharmaceutical products; and electrical equipment. The Textile, apparel, leather & footwear subsector recorded decline in the review period (Fig. 2 and Table 1).

### 2.1 Production Level

At 58.9 points, the production level index for the manufacturing sector grew for the twenty-ninth consecutive month in July 2019. The index indicated a slower growth in the current month, when compared to its level in the month of June 2019. Twelve of the 14 manufacturing subsectors recorded increased production level, while 2 recorded decline (Fig. 3 and Table 2).

### 2.2 New Orders

At 57.2 points, the new orders index grew for the twenty-eighth consecutive month, indicating increase in new orders in July 2019. Eleven subsectors reported growth, 1 remained unchanged, while 2 contracted in the review month (Fig. 4 and Table 3).

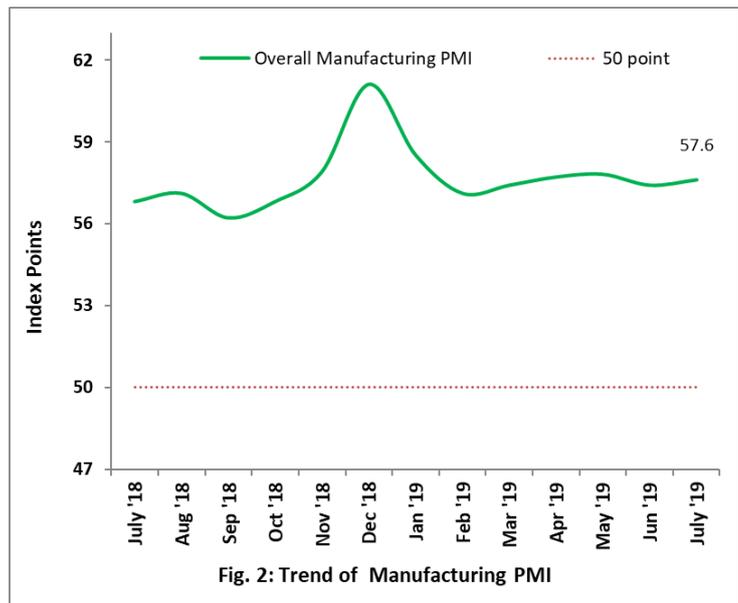


Fig. 2: Trend of Manufacturing PMI

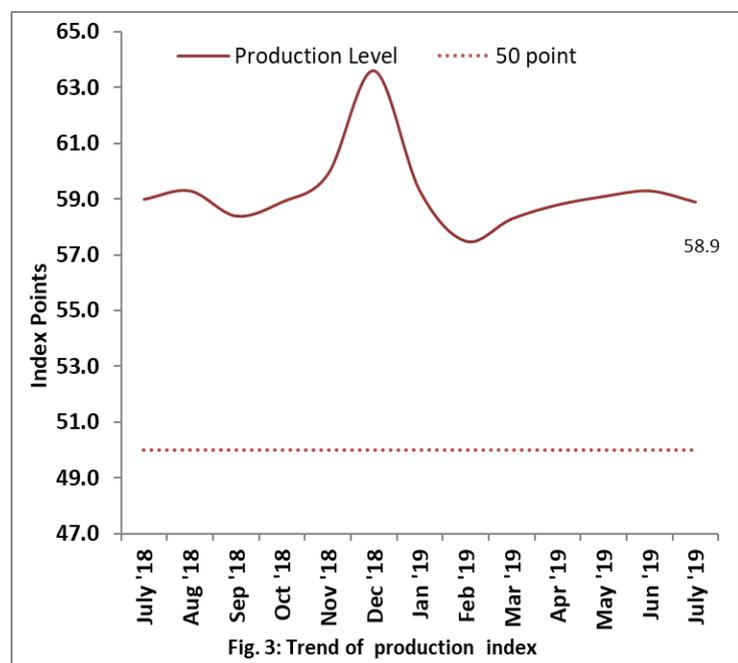


Fig. 3: Trend of production index

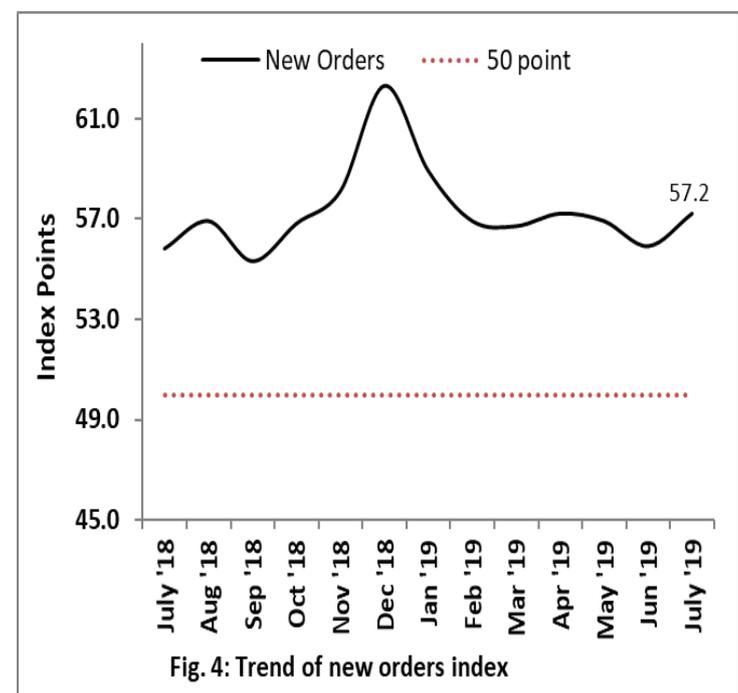
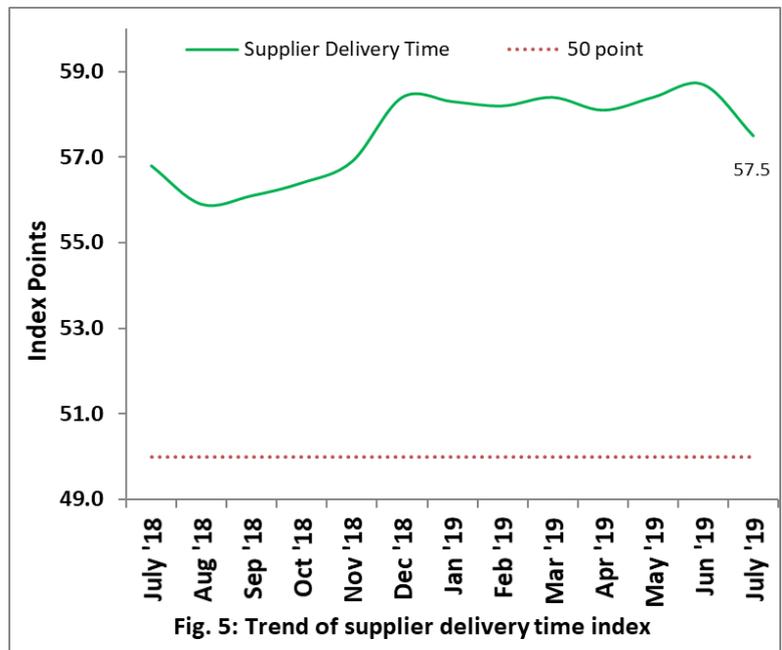


Fig. 4: Trend of new orders index

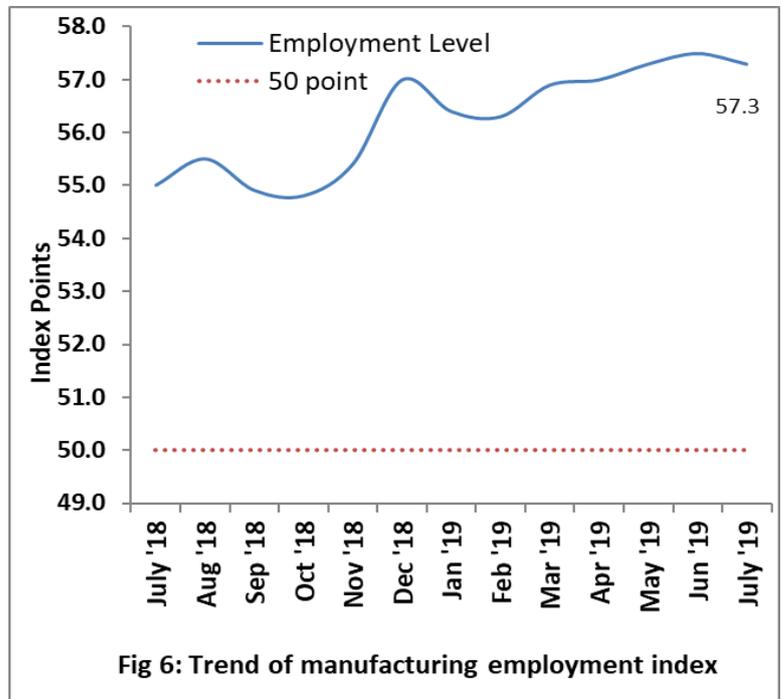
### 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 57.5 points in July 2019, indicating faster supplier delivery time. The index has recorded growth for twenty-six consecutive months. Ten of the 14 subsectors recorded improved suppliers' delivery time, while 1 remained unchanged and 3 recorded decline in the review period (Fig. 5 and Table 4).



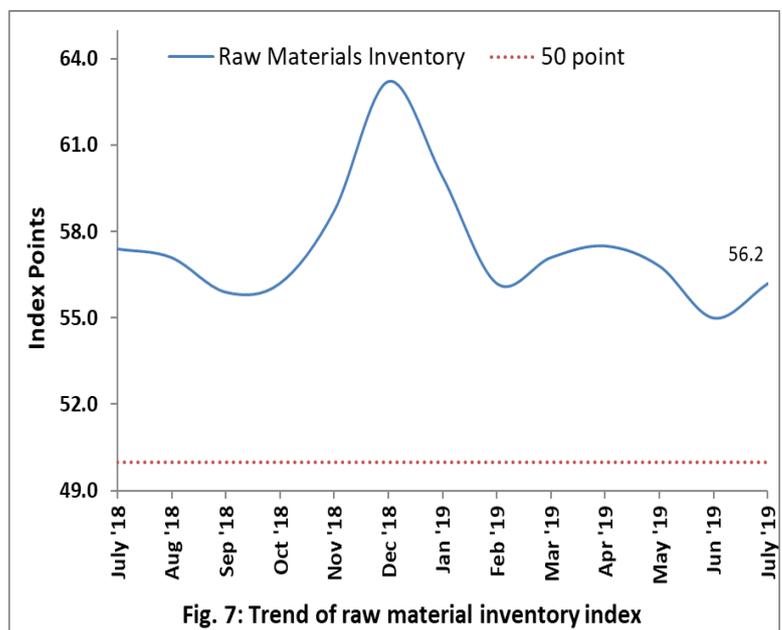
### 2.4 Employment Level

The employment level index for July 2019 stood at 57.3 points, indicating growth in employment level for the twenty-seventh consecutive month. Of the 14 subsectors, 10 reported increased employment level, 1 reported unchanged employment level while 3 reported decreased employment in the review month (Fig. 6 and Table 5).



### 2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the twenty-eighth consecutive month in July 2019. At 56.2 points, the index grew at a faster rate when compared to its level in June 2019. Ten of the 14 subsectors recorded growth, 1 remain unchanged, while 3 subsectors reported declined raw material inventories in the review month (Fig. 7 and Table 6).



### 3.0 Non-Manufacturing PMI Report

*New orders and inventories grew at a faster rate, while business activity and employment level grew at a slower rate in July 2019*

The *composite PMI* for the *non-manufacturing* sector stood at 58.7 points in July 2019, indicating expansion in the Non-manufacturing PMI for the twenty-seventh consecutive month. The index grew at a faster rate when compared to its level in June 2019. All 17 surveyed subsectors recorded growth in the following order: management of companies; arts, entertainment & recreation; finance & insurance; repair, maintenance/washing of motor vehicles; construction; real estate rental & leasing; agriculture; health care & social assistance; information & communication; accommodation & food services; wholesale/retail trade; water supply, sewage & waste management; transportation & warehousing; electricity, gas, steam & air conditioning supply; professional, scientific, & technical services; educational services; and utilities. (Fig. 9 and Table 7).

#### 3.1 Business Activity

At 57.6 points, the business activity index grew for the twenty-eighth consecutive month, indicating expansion in non-manufacturing business activity in July 2019. Sixteen subsectors recorded growth in business activity, while 1 remained unchanged in the review month (Fig 10 Table 8).

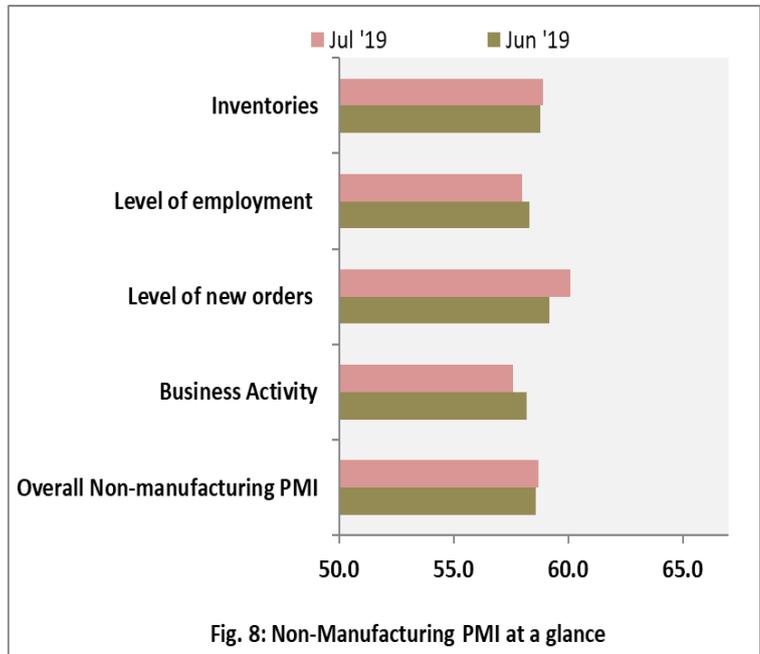


Fig. 8: Non-Manufacturing PMI at a glance

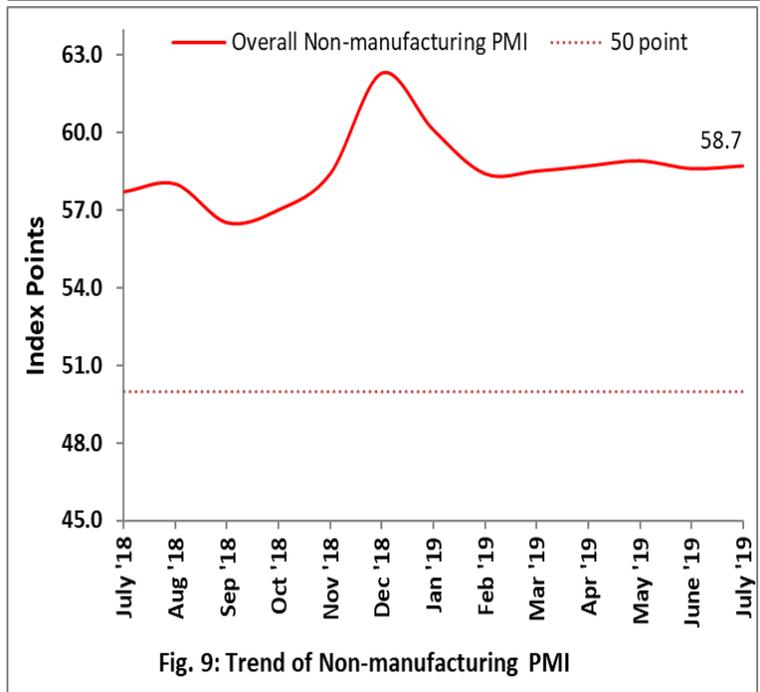


Fig. 9: Trend of Non-manufacturing PMI

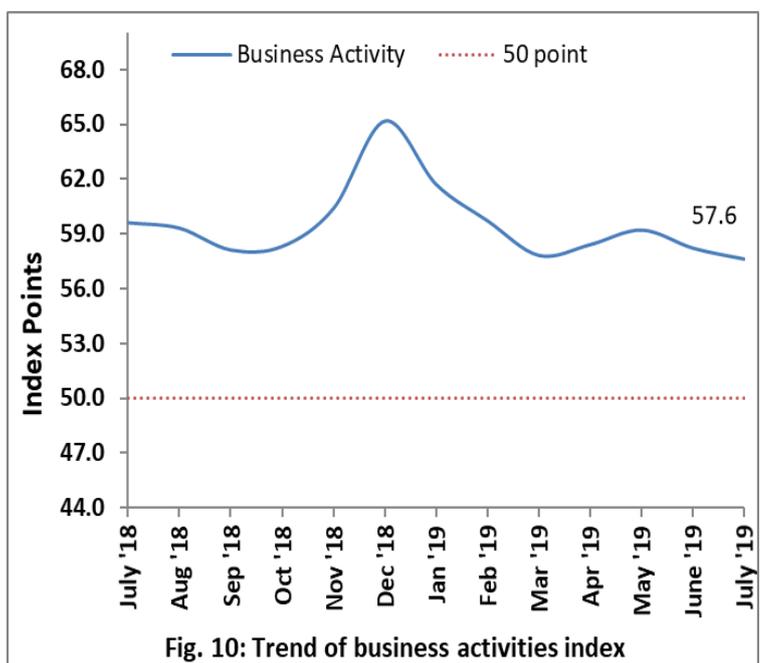
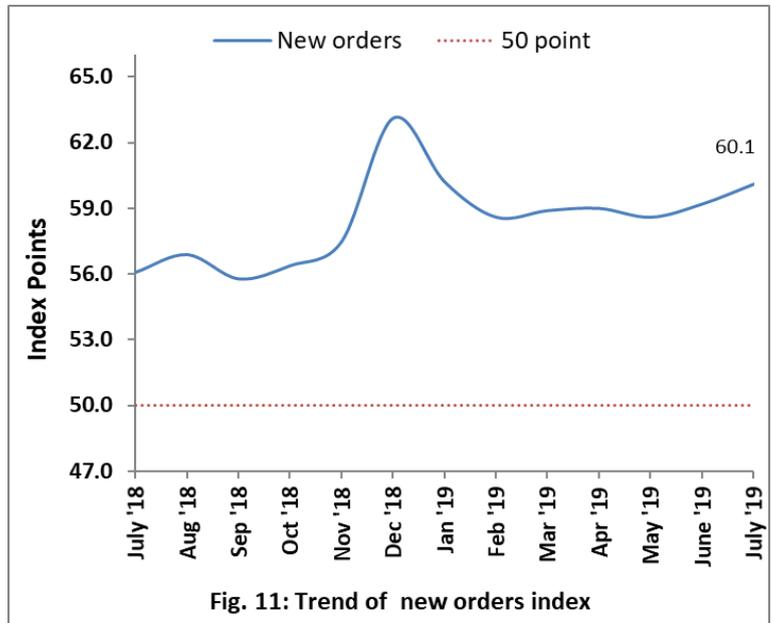


Fig. 10: Trend of business activities index

### 3.2 New Orders

At 60.1 points, new orders index grew for the twenty-eighth consecutive month in July 2019. All 17 surveyed subsectors recorded growth in new orders during the review period (Fig 11 Table 9).



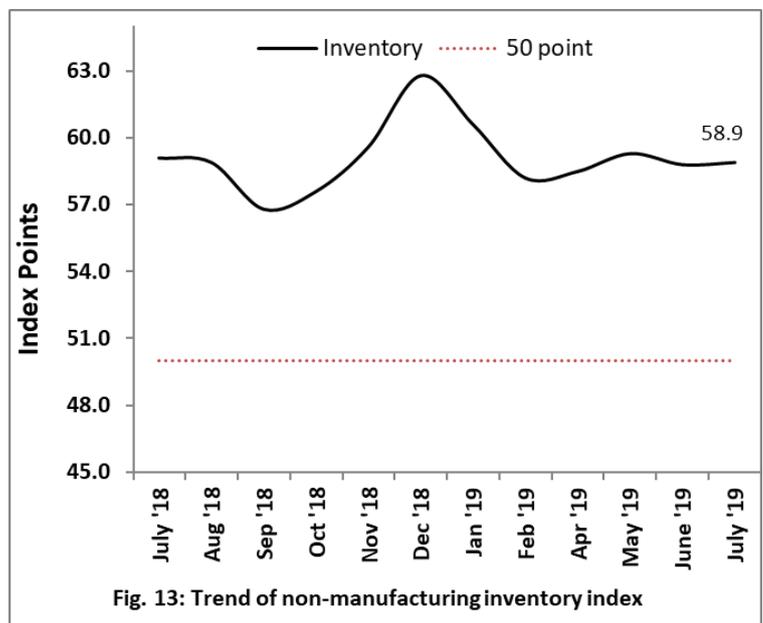
### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 58.0 points, indicating growth in employment for the twenty-seventh consecutive month. Fourteen subsectors recorded growth in employment level, 1 remained unchanged, while 2 subsectors declined in the review period (Fig 12 Table 10).



### 3.4 Non-manufacturing Inventory

At 58.9 points, non-manufacturing inventory index grew for the twenty-seventh consecutive month, indicating growth in inventories in the review period. Of the seventeen surveyed subsectors, 15 recorded higher inventories, while 2 recorded declining inventories in July 2019 (Fig 13, Table 11).



## APPENDICES

**Table 1: Details of Overall Manufacturing PMI**

Index	June 2019 Index*	July 2019 Index*	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	57.4	57.6	0.2	Growing	Faster	28
Production level	59.3	58.9	-0.4	Growing	Slower	29
New orders	55.9	57.2	1.3	Growing	Faster	28
Supplier delivery time	58.7	57.5	-1.2	Growing	Slower	26
Employment level	57.5	57.3	-0.2	Growing	Slower	27
Raw materials/WIP Inventory	55.0	56.2	1.2	Growing	Faster	28
New Export Orders	38.0	41.1	3.1	Declining	Slower	53
Output Prices	52.4	52.2	-0.2	Growing	Slower	43
Input Prices	62.7	59.5	-3.2	Growing	Slower	61
Quantity of Purchases	52.1	52.5	0.4	Growing	Faster	10
Outstanding Business/Backlog of Work	43.8	41.8	-2.0	Declining	Faster	20
Stock of Finished Goods	51.1	51.5	0.4	Growing	Faster	16
<b>Manufacturing Sub-Sectors</b>						
Cement	61.7	61.4	-0.3	Growing	Slower	10
Chemical & pharmaceutical products	60.1	57.1	-3.0	Growing	Slower	18
Electrical equipment	60.0	56.0	-4.0	Growing	Slower	18
Fabricated metal products	57.3	58.0	0.7	Growing	Faster	13
Food, beverage & tobacco products	59.2	58.8	-0.4	Growing	Slower	34
Furniture & related products	54.6	58.2	3.6	Growing	Faster	14
Nonmetallic mineral products	49.0	57.9	8.9	Growing	From Contraction	1
Paper products	55.6	59.5	3.9	Growing	Faster	3
Petroleum & coal products	65.0	72.5	7.5	Growing	Faster	4
Plastics & rubber products	54.3	57.4	3.1	Growing	Faster	12
Primary metal	49.4	57.3	7.9	Growing	From Contraction	1
Printing & related support activities	57.4	59.9	2.5	Growing	Faster	16
Textile, apparel, leather & footwear	54.5	45.8	-8.7	Declining	From Expansion	1
Transportation equipment	77.9	72.5	-5.4	Growing	Slower	11

\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: Details of Production PMI**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	59.3	58.9	-0.4	Growing	Slower	29
Cement	75.0	71.4	-3.6	Growing	Slower	5
Chemical & pharmaceutical products	61.4	64.5	3.1	Growing	Faster	18
Electrical equipment	58.3	60.0	1.7	Growing	Faster	4
Fabricated metal products	59.5	53.9	-5.6	Growing	Slower	5
Food, beverage & tobacco products	63.2	61.4	-1.8	Growing	Slower	34
Furniture & related products	56.7	58.6	1.9	Growing	Faster	14
Nonmetallic mineral products	43.3	59.5	16.2	Growing	From Contraction	1
Paper products	56.3	65.0	8.7	Growing	Faster	3
Petroleum & coal products	83.3	100.0	16.7	Growing	Faster	4
Plastics & rubber products	57.9	58.3	0.4	Growing	Faster	12
Primary metal	50.0	46.2	-3.8	Declining	From No Change	1
Printing & related support activities	59.6	62.0	2.4	Growing	Faster	2
Textile, apparel, leather & footwear	52.2	42.0	-10.2	Declining	From Expansion	1
Transportation equipment	66.7	75.0	8.3	Growing	Faster	4

**Table 3: Details of New Orders PMI**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.9	57.2	1.3	Growing	Faster	28
Cement	41.7	57.1	15.4	Growing	From Contraction	1
Chemical & pharmaceutical products	60.0	59.7	-0.3	Growing	Slower	17
Electrical equipment	50.0	60.0	10.0	Growing	From No Change	1
Fabricated metal products	60.8	63.2	2.4	Growing	Faster	2
Food, beverage & tobacco products	56.8	55.8	-1.0	Growing	Slower	34
Furniture & related products	53.3	62.1	8.8	Growing	Faster	2
Nonmetallic mineral products	43.3	69.0	25.7	Growing	From Contraction	1
Paper products	56.3	45.0	-11.3	Declining	From Expansion	1
Petroleum & coal products	33.3	50.0	16.7	No Change	From Contraction	1
Plastics & rubber products	44.7	52.1	7.4	Growing	From Contraction	1
Primary metal	37.5	53.8	16.3	Growing	From Contraction	1
Printing & related support activities	67.3	64.0	-3.3	Growing	Slower	2
Textile, apparel, leather & footwear	56.5	38.0	-18.5	Declining	From Expansion	1
Transportation equipment	83.3	75.0	-8.3	Growing	Slower	6

**Table 4: Details of Supplier Delivery Time PMI**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	58.7	57.5	-1.2	Growing	Slower	26
Cement	58.3	57.1	-1.2	Growing	Slower	6
Chemical & pharmaceutical products	48.6	55.0	6.4	Growing	From Contraction	1
Electrical equipment	58.3	40.0	-18.3	Declining	From Expansion	1
Fabricated metal products	56.8	47.4	-9.4	Declining	From Expansion	1
Food, beverage & tobacco products	59.8	58.2	-1.6	Growing	Slower	13
Furniture & related products	65.0	60.3	-4.7	Growing	Slower	8
Nonmetallic mineral products	56.7	59.5	2.8	Growing	Faster	15
Paper products	43.8	65.0	21.2	Growing	From Contraction	1
Petroleum & coal products	83.3	50.0	-33.3	No Change	From Expansion	1
Plastics & rubber products	60.5	60.4	-0.1	Growing	Slower	3
Primary metal	70.8	69.2	-1.6	Growing	Slower	8
Printing & related support activities	50.0	56.0	6.0	Growing	From No Change	1
Textile, apparel, leather & footwear	67.4	66.0	-1.4	Growing	Slower	23
Transportation equipment	75.0	25.0	-50.0	Declining	From Expansion	1

**Table 5: Details of Employment Level PMI**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	57.5	57.3	-0.2	Growing	Slower	27
Cement	83.3	57.1	-26.2	Growing	Slower	2
Chemical & pharmaceutical products	64.3	48.4	-15.9	Declining	From Expansion	1
Electrical equipment	75.0	60.0	-15.0	Growing	Slower	8
Fabricated metal products	56.8	63.2	6.4	Growing	Faster	3
Food, beverage & tobacco products	60.2	60.4	0.2	Growing	Faster	15
Furniture & related products	50.0	60.3	10.3	Growing	From No Change	1
Nonmetallic mineral products	53.3	42.9	-10.4	Declining	From Expansion	1
Paper products	62.5	70.0	7.5	Growing	Faster	2
Petroleum & coal products	66.7	75.0	8.3	Growing	Faster	6
Plastics & rubber products	55.3	58.3	3.0	Growing	Faster	4
Primary metal	50.0	69.2	19.2	Growing	From No Change	1
Printing & related support activities	46.0	50.0	4.0	No Change	From Contraction	1
Textile, apparel, leather & footwear	45.7	48.0	2.3	Declining	Slower	2
Transportation equipment	83.3	87.5	4.2	Growing	Faster	5

**Table 6: Details of Raw Materials Inventory PMI**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	55.0	56.2	1.2	Growing	Faster	28
Cement	50.0	64.3	14.3	Growing	From No Change	1
Chemical & pharmaceutical products	65.7	51.6	-14.1	Growing	Slower	4
Electrical equipment	66.7	50.0	-16.7	No Change	From Expansion	1
Fabricated metal products	43.2	57.9	14.7	Growing	From Contraction	1
Food, beverage & tobacco products	53.9	59.0	5.1	Growing	Faster	34
Furniture & related products	46.7	37.9	-8.8	Declining	Faster	3
Nonmetallic mineral products	60.0	47.6	-12.4	Declining	From Expansion	1
Paper products	56.3	60.0	3.7	Growing	Faster	2
Petroleum & coal products	83.3	100.0	16.7	Growing	Faster	2
Plastics & rubber products	63.2	64.6	1.4	Growing	Faster	12
Primary metal	50.0	53.8	3.8	Growing	From No Change	1
Printing & related support activities	55.8	68.0	12.2	Growing	Faster	3
Textile, apparel, leather & footwear	52.2	44.0	-8.2	Declining	From Expansion	1
Transportation equipment	83.3	100.0	16.7	Growing	Faster	4

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

Index	June	July	Difference	Direction	Rate of Change	Trend (Months)
	2019	2019				
	Index	Index				
Composite PMI \1	58.6	58.7	0.1	Growing	Faster	27
Business Activity	58.2	57.6	-0.6	Growing	Slower	28
Level of new orders/customers/incoming business	59.2	60.1	0.9	Growing	Faster	28
Employment Level	58.3	58.0	-0.3	Growing	Slower	27
Inventory	58.8	58.9	0.1	Growing	Faster	27
Average price of Inputs (volume weighted)	52.1	51.7	-0.4	Growing	Slower	45
Level of outstanding business/ Backlog of work	40.3	41.4	1.1	Declining	Slower	61
New Exports orders	43.0	42.0	-1.0	Declining	Faster	61
Imports	45.3	43.9	-1.4	Declining	Faster	61
Inventory (sentiments)	46.1	46.6	0.5	Declining	Slower	61
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	57.0	58.7	1.7	Growing	Faster	13
Agriculture	55.4	59.3	3.9	Growing	Faster	38
Arts, Entertainment & Recreation	69.6	62.5	-7.1	Growing	Slower	4
Construction	59.6	59.7	0.1	Growing	Faster	10
Educational services	53.6	54.4	0.8	Growing	Faster	13
Electricity, gas, steam & air conditioning supply	66.4	55.3	-11.1	Growing	Slower	9
Finance & insurance	58.6	61.5	2.9	Growing	Faster	29
Health care & social assistance	59.0	59.3	0.3	Growing	Faster	27
Information & communication	62.0	58.9	-3.1	Growing	Slower	28
Management of companies	45.8	70.8	25.0	Growing	From Contraction	1
Professional, scientific, & technical services	52.3	55.1	2.8	Growing	Faster	9
Real estate rental & leasing	61.1	59.4	-1.7	Growing	Slower	17
Repair, Maintenance/Washing Of Motor Vehicles...	67.9	60.4	-7.5	Growing	Slower	14
Transportation & warehousing	61.4	56.1	-5.3	Growing	Slower	2
Utilities	65.6	53.1	-12.5	Growing	Slower	8
Water supply, sewage & waste management	70.5	56.8	-13.7	Growing	Slower	9
Wholesale/Retail trade	58.6	58.0	-0.6	Growing	Slower	26

\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	June	July	Difference	Direction	Rate of Change	Trend (Months)
	2019	2019				
	Index	Index				
BUSINESS ACTIVITY PMI	58.2	57.6	-0.6	Growing	Slower	28
Accommodation & food services	55.4	57.7	2.3	Growing	Faster	13
Agriculture	50.0	54.4	4.4	Growing	From No Change	1
Arts, Entertainment & Recreation	71.4	70.0	-1.4	Growing	Slower	3
Construction	60.9	54.4	-6.5	Growing	Slower	9
Educational services	54.3	53.3	-1.0	Growing	Slower	23
Electricity, gas, steam & air conditioning supply	76.5	59.4	-17.1	Growing	Slower	3
Finance & insurance	57.8	59.8	2.0	Growing	Faster	28
Health care & social assistance	57.2	55.4	-1.8	Growing	Slower	10
Information & communication	65.0	54.8	-10.2	Growing	Slower	3
Management of companies	66.7	66.7	0.0	Growing	Flat	4
Professional, scientific, & technical services	43.8	54.0	10.2	Growing	From Contraction	1
Real estate rental & leasing	60.5	63.6	3.1	Growing	Faster	15
Repair, Maintenance/Washing Of Motor Vehicles.	73.3	69.2	-4.1	Growing	Slower	10
Transportation & warehousing	71.9	61.8	-10.1	Growing	Slower	2
Utilities	50.0	50.0	0.0	No Change	Flat	2
Water supply, sewage & waste management	72.7	54.5	-18.2	Growing	Slower	4
Wholesale/Retail trade	58.0	58.1	0.1	Growing	Faster	13

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

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	59.2	60.1	0.9	Growing	Faster	28
Accommodation & food services	59.8	59.6	-0.2	Growing	Slower	13
Agriculture	54.3	54.4	0.1	Growing	Faster	5
Arts, Entertainment & Recreation	78.6	60.0	-18.6	Growing	Slower	3
Construction	64.1	63.2	-0.9	Growing	Slower	9
Educational services	53.3	57.6	4.3	Growing	Faster	13
Electricity, gas, steam & air conditioning supply	65.6	62.5	-3.1	Growing	Slower	4
Finance & insurance	58.8	65.6	6.8	Growing	Faster	29
Health care & social assistance	56.5	61.6	5.1	Growing	Faster	10
Information & communication	67.7	62.9	-4.8	Growing	Slower	28
Management of companies	16.7	83.3	66.6	Growing	From Contraction	1
Professional, scientific, & technical services	65.2	52.1	-13.1	Growing	Slower	9
Real estate rental & leasing	64.0	52.3	-11.7	Growing	Slower	9
Repair, Maintenance/Washing Of Motor Vehicles..	70.0	65.4	-4.6	Growing	Slower	10
Transportation & warehousing	58.8	62.5	3.7	Growing	Faster	4
Utilities	75.0	62.5	-12.5	Growing	Slower	3
Water supply, sewage & waste management	77.3	54.5	-22.8	Growing	Slower	5
Wholesale/Retail trade	51.7	60.0	8.3	Growing	Faster	26

**Table 10: Employment at a Glance**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	58.3	58.0	-0.3	Growing	Slower	27
Accommodation & food services	54.7	56.0	1.3	Growing	Faster	11
Agriculture	59.7	60.3	0.6	Growing	Faster	27
Arts, Entertainment & Recreation	57.1	50.0	-7.1	No Change	From Expansion	1
Construction	60.0	57.4	-2.6	Growing	Slower	10
Educational services	54.3	54.3	0.0	Growing	Flat	13
Electricity, gas, steam & air conditioning supply	61.8	59.4	-2.4	Growing	Slower	5
Finance & insurance	61.7	62.2	0.5	Growing	Faster	26
Health care & social assistance	59.4	60.1	0.7	Growing	Faster	26
Information & communication	53.2	58.3	5.1	Growing	Faster	10
Management of companies	83.3	66.7	-16.6	Growing	Slower	4
Professional, scientific, & technical services	41.7	56.3	14.6	Growing	From Contraction	1
Real estate rental & leasing	64.0	59.1	-4.9	Growing	Slower	14
Repair, Maintenance/Washing Of Motor Vehicles..	66.7	65.4	-1.3	Growing	Slower	3
Transportation & warehousing	53.1	40.6	-12.5	Declining	From Expansion	1
Utilities	62.5	37.5	-25.0	Declining	From Expansion	1
Water supply, sewage & waste management	68.2	63.6	-4.6	Growing	Slower	2
Wholesale/Retail trade	60.9	58.8	-2.1	Growing	Slower	14

**Table 11: Inventory at a Glance**

Index	June 2019 Index	July 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	58.8	58.9	0.1	Growing	Faster	27
Accommodation & food services	58.0	61.7	3.7	Growing	Faster	13
Agriculture	57.6	68.2	10.6	Growing	Faster	10
Arts, Entertainment & Recreation	71.4	70.0	-1.4	Growing	Slower	4
Construction	53.2	63.6	10.4	Growing	Faster	13
Educational services	52.3	52.3	0.0	Growing	Flat	5
Electricity, gas, steam & air conditioning supply	61.8	40.0	-21.8	Declining	From Expansion	1
Finance & insurance	56.2	58.4	2.2	Growing	Faster	18
Health care & social assistance	62.9	59.9	-3.0	Growing	Slower	27
Information & communication	62.1	59.6	-2.5	Growing	Slower	15
Management of companies	16.7	66.7	50.0	Growing	From Contraction	1
Professional, scientific, & technical services	58.7	58.0	-0.7	Growing	Slower	2
Real estate rental & leasing	56.0	62.5	6.5	Growing	Faster	17
Repair, Maintenance/Washing Of Motor Vehicles	61.5	41.7	-19.8	Declining	From Expansion	1
Transportation & warehousing	61.8	59.4	-2.4	Growing	Slower	2
Utilities	75.0	62.5	-12.5	Growing	Slower	2
Water supply, sewage & waste management	63.6	54.5	-9.1	Growing	Slower	2
Wholesale/Retail trade	63.5	55.1	-8.4	Growing	Slower	24

**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
Oct '18	56.8	58.9	56.8	56.4	54.8	56.2	39.9	51.2	56.7	50.9	39.6	51.5
Nov '18	57.9	59.9	58.1	56.9	55.4	58.7	41.2	51.9	57.8	52.2	40.0	53.8
Dec '18	61.1	63.6	62.3	58.4	57.0	63.2	42.1	51.6	61.3	56.1	41.7	50.6
Jan '19	58.5	59.3	58.9	58.3	56.4	59.9	41.4	52.5	62.2	52.5	42.1	52.3
Feb '19	57.1	57.5	56.9	58.2	56.3	56.2	39.7	53.7	60.9	52.1	44.1	55.4
Mar '19	57.4	58.3	56.7	58.4	56.9	57.1	47.9	62.3	57.6	51.8	47.6	60.7
Apr '19	57.7	58.8	57.2	58.1	57.0	57.5	37.4	52.4	60.2	57.3	44.5	54.4
May '19	57.8	59.1	56.9	58.4	57.3	56.8	37.7	52.3	62.2	51.5	40.8	51.5
June '19	57.4	59.3	55.9	58.7	57.5	55.0	38.0	52.4	62.7	52.1	43.8	51.1
July '19	57.6	58.9	57.2	57.5	57.3	56.2	41.1	52.2	59.5	52.5	41.8	51.5

**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
Oct '18	57.0	58.3	56.4	55.7	57.6	50.7	42.8	39.7	42.2	45.5
Nov '18	58.4	60.4	57.5	56.2	59.6	52.6	42.0	38.7	39.4	45.9
Dec '18	62.3	65.2	63.1	57.9	62.8	52.4	42.7	42.0	41.3	45.8
Jan '19	60.1	61.7	60.2	57.7	60.6	52.2	40.1	38.1	40.4	45.5
Feb '19	58.4	59.7	58.6	57.3	58.2	50.3	38.8	36.2	42.2	44.6
Mar '19	58.5	57.8	58.9	57.8	59.5	50.5	40.3	39.4	38.7	44.2
Apr '19	58.7	58.4	59.0	58.7	58.5	52.1	43.5	38.8	40.8	45.0
May '19	58.9	59.2	58.6	58.5	59.3	51.3	42.3	39.8	43.2	44.5
June '19	58.6	58.2	59.2	58.3	58.8	52.1	40.3	43.0	45.3	46.1
July '19	58.7	57.6	60.1	58.0	58.9	51.7	41.4	42.0	43.9	46.6