

Central Bank of Nigeria



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

Statistics Department

July 2017

PURCHASING MANAGERS' INDEX (PMI) JULY 2017 REPORT

1.0 Introduction

The July 2017 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria, during the period July 10 - 14, 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 1,791 responses were received from a sample of 1,950 respondents, representing a response rate of 91.8 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.

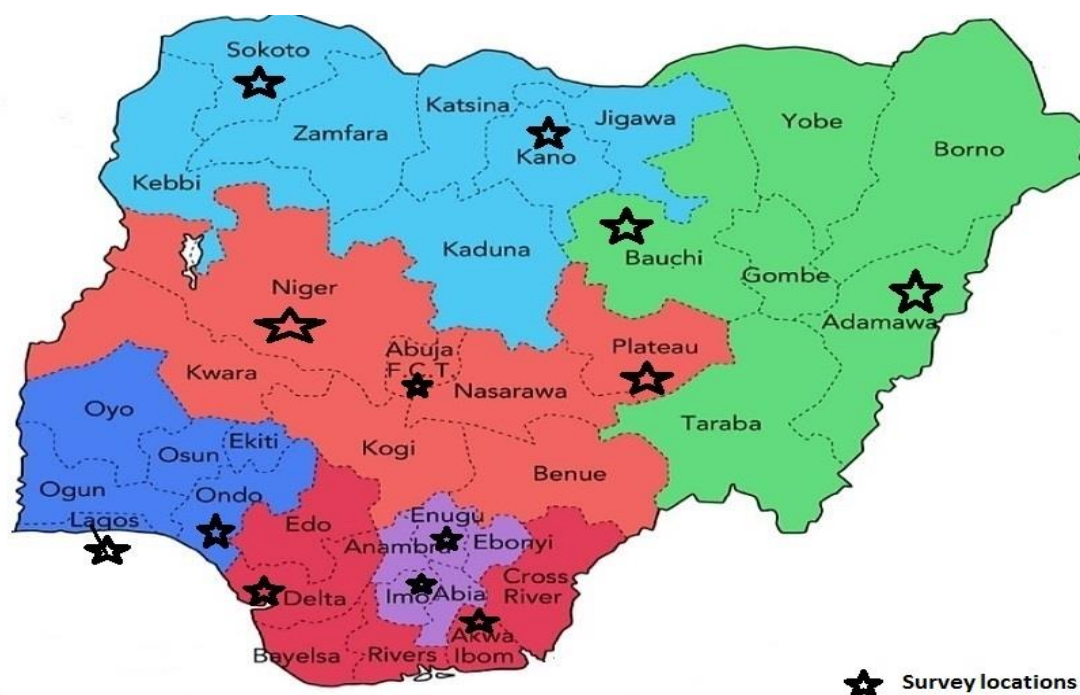


Fig. 1: Map of Nigeria showing the survey locations

1.1 Data and Method of Presentation

The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on data compiled from purchasing and supply executive responses. Survey responses indicate whether there is *change* or *no change* in the level of business activities in the *current month* compared with the *previous 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 *positive responses plus one-half* of the percentage of those reporting *no change*. The composite PMI is then computed as the *weighted average* of five diffusion indices for manufacturing sector: 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 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. For the subsectors reporting contraction/decline, they are listed in the order of the highest to the lowest decline.

2.0 Manufacturing PMI Report

Production level, new orders, supplier delivery time, employment level and raw materials inventory growing at a faster rate

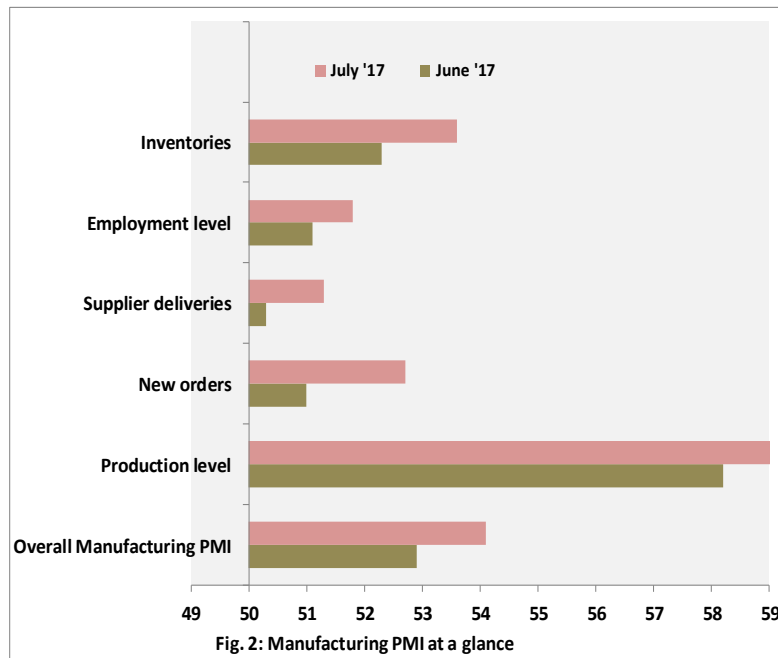


Fig. 2: Manufacturing PMI at a glance

The *Manufacturing PMI* stood at 54.1 index points in July 2017, indicating expansion in the manufacturing sector for the fourth consecutive month (Fig. 3 and Table 1). Eleven of the 16 subsectors reported growth in the review month in the following order: appliances & components; computer & electronic products; cement; primary metal; chemical & pharmaceutical products; food, beverage & tobacco products; textile, apparel, leather & footwear; printing & related support activities; paper products; electrical equipment and transportation equipment. The remaining 5 subsectors declined in the order: petroleum & coal products; fabricated metal products; furniture & related products; nonmetallic mineral products and plastics & rubber products.

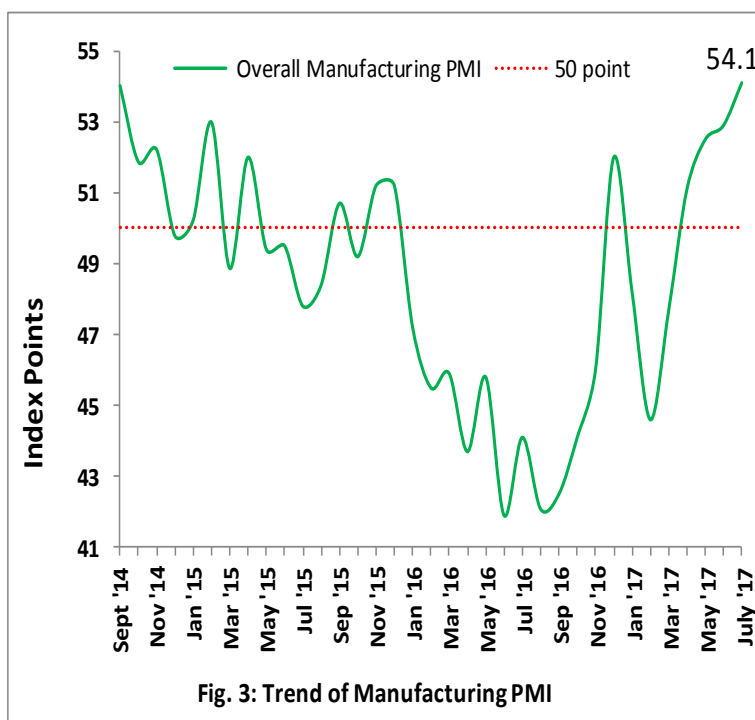
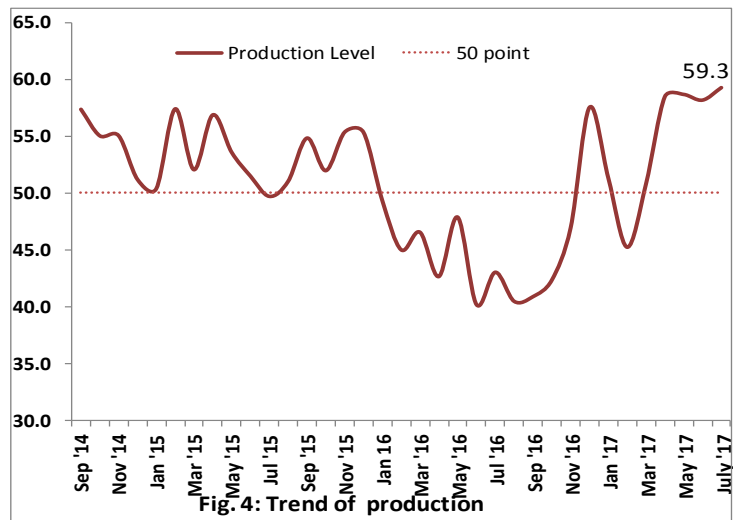


Fig. 3: Trend of Manufacturing PMI

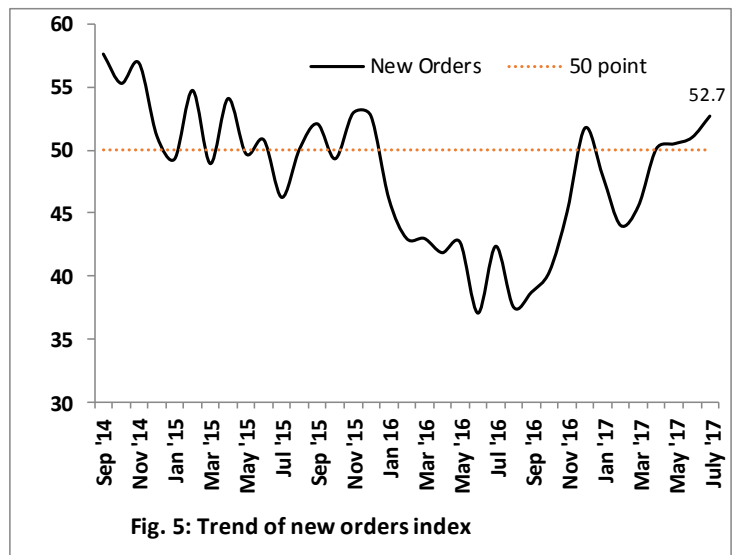
2.1 Production Level

The production level index for the manufacturing sector grew for the fifth consecutive month in July 2017. The index at 59.3 points indicated an expansion in production at a faster rate, when compared to the level recorded in the previous month. Fourteen of the sixteen manufacturing subsectors recorded expansion in production level during the review month (Table 2).



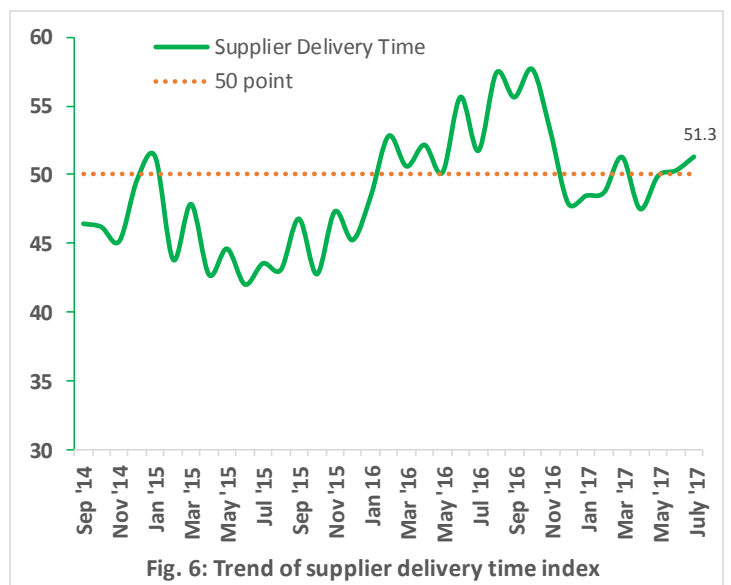
2.2 New Orders

At 52.7 points, new orders index grew for the fourth consecutive month. Eight subsectors reported growth, one remained unchanged while the remaining seven declined in the review month (Table 3).



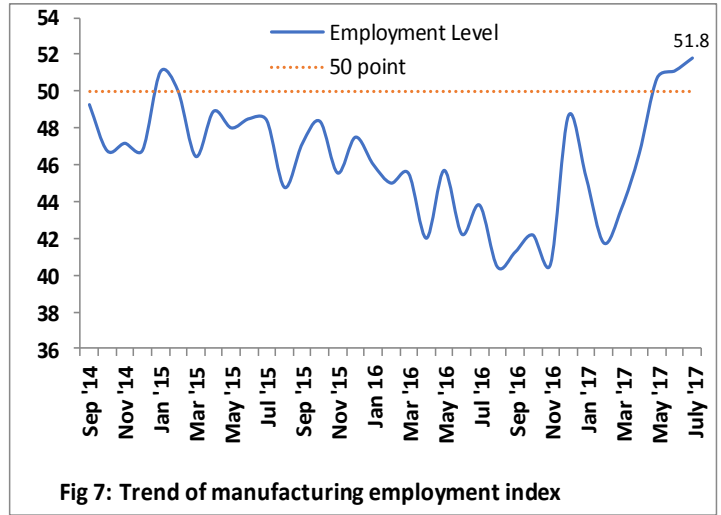
2.3 Supplier Delivery Time

The supplier delivery time index for the manufacturing sector, at 51.3 points in July 2017, rose for the second consecutive month. Ten subsectors recorded improved suppliers' delivery time while the remaining 6 subsectors recorded delayed delivery time (Table 4).



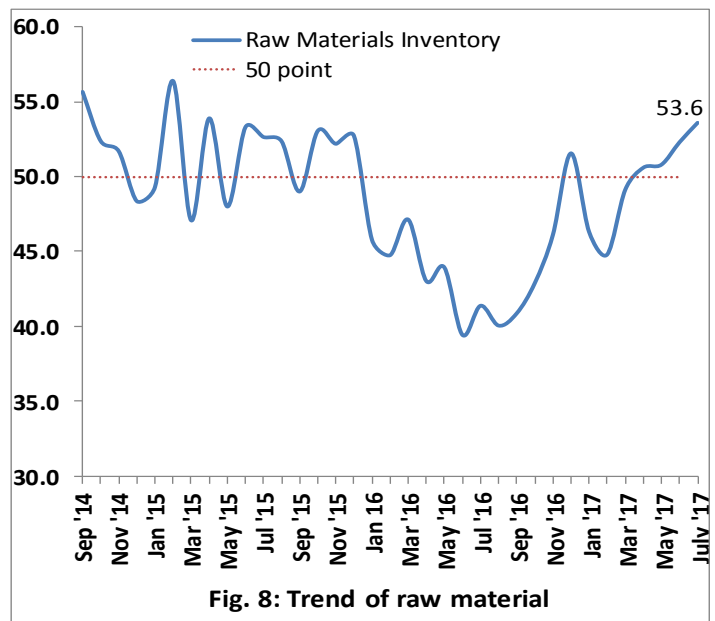
2.4 Employment Level

Manufacturing employment level index in July 2017 stood at 51.8 points, indicating growth in employment level for the third consecutive month. Of the sixteen subsectors, eight recorded growth, three subsectors remained unchanged while the remaining five subsectors recorded decline in employment level (Table 5).



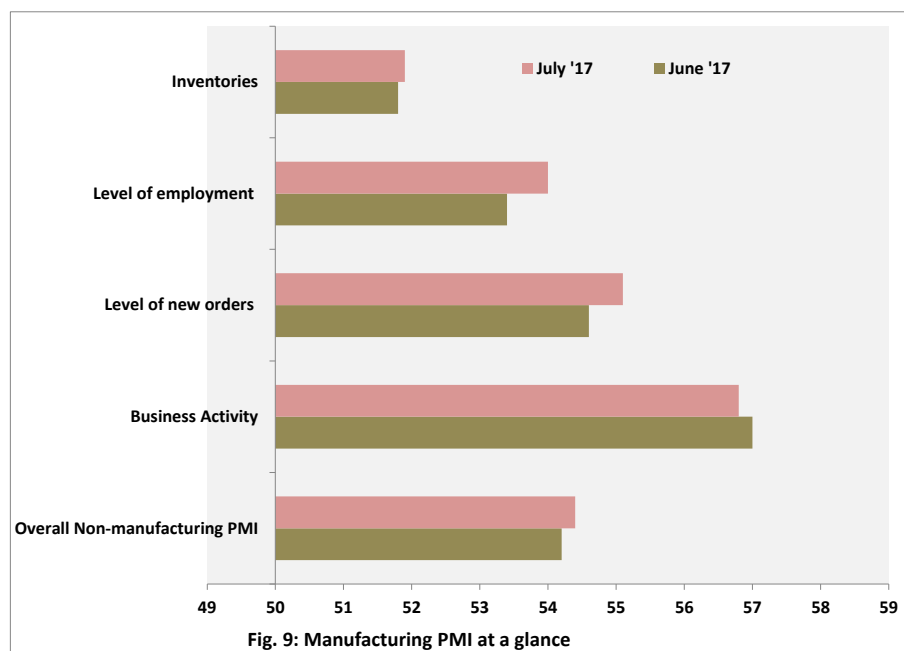
2.5 Raw Materials Inventory

At 53.6 points, the raw materials inventory index grew for the fourth consecutive month, and at a faster rate compared to its level in June 2017. Eleven of the sixteen subsectors recorded growth, two recorded no change while three subsectors recorded decline in raw materials inventory (Table 6).

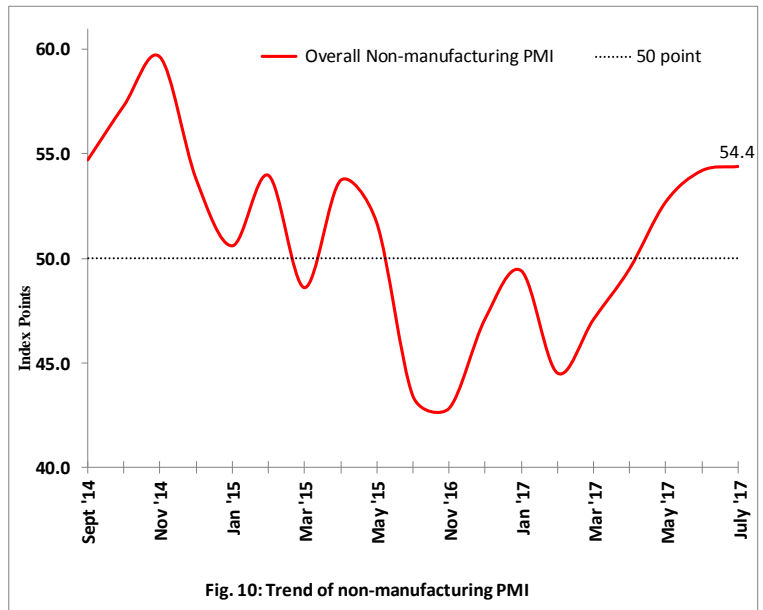


3.0 Non-Manufacturing PMI Report

New orders, employment level and inventory growing at a faster rate; business activity growing at a slower rate in July 2017

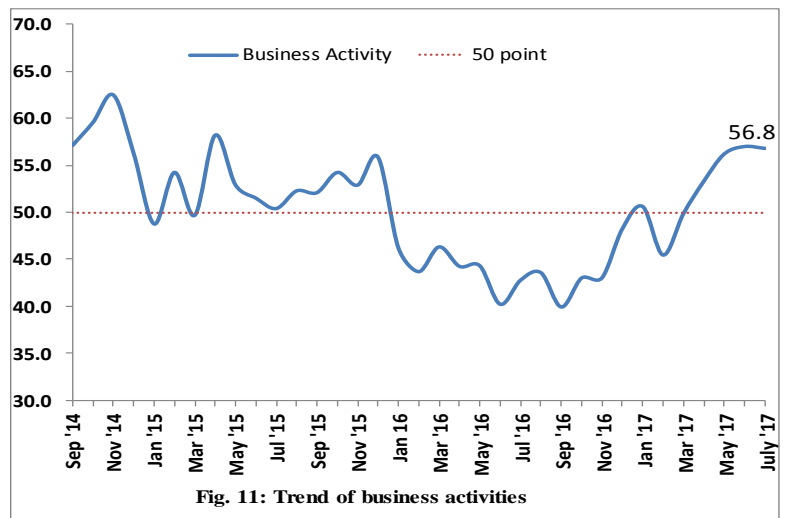


The *composite PMI* for the *non-manufacturing* sector grew to 54.4 points in July 2017, indicating growth in Non-manufacturing PMI for the third consecutive month. Of the eighteen non-manufacturing subsectors, sixteen recorded growth in the following order: agriculture; public administration; utilities; information & communication; finance & insurance; transportation & warehousing; educational services; management of companies; repair, maintenance/ washing of motor vehicles; health care & social assistance; electricity, gas, steam & air conditioning supply; real estate, rental & leasing; wholesale trade; professional, scientific, & technical services; water supply, sewage & waste management and accommodation & food services. The construction and arts, entertainment & recreation sub sectors recorded contraction in the Non-manufacturing PMI (Fig. 10, Table 7).



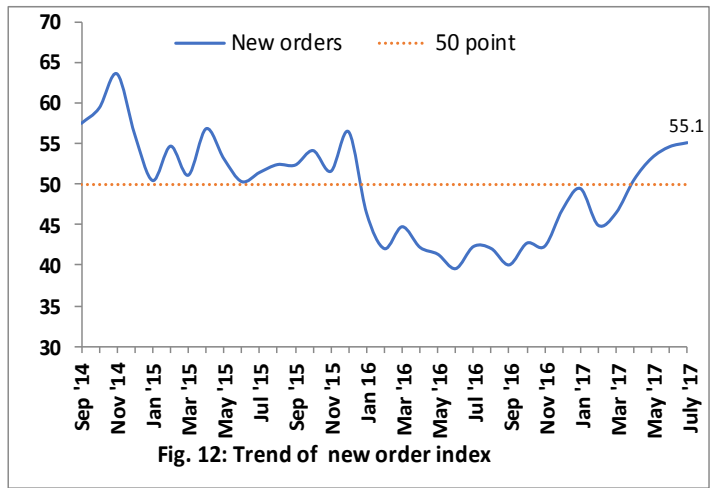
3.1 Business Activity

The business activity index rose to 56.8 points in July 2017 for the fourth consecutive month. The index grew at a slower rate, when compared to its level in the previous month. Fourteen subsectors recorded growth in business activity, one remained unchanged while the remaining three declined in the review month (Table 8).



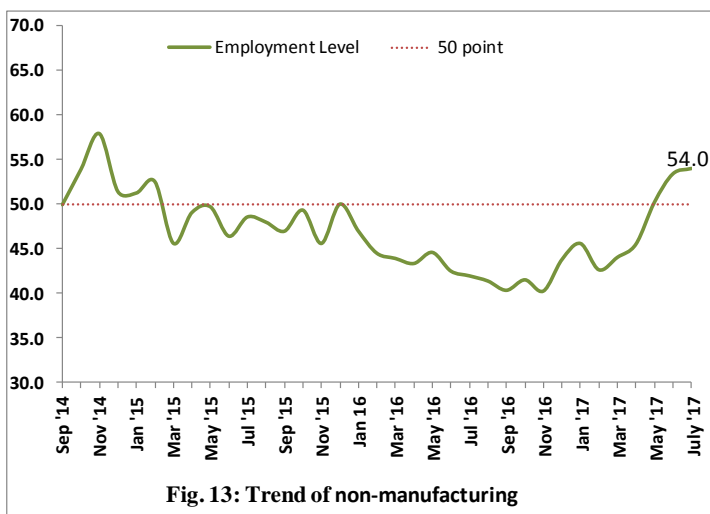
3.2 New Orders

New orders index at 55.1 points grew in July 2017 for the fourth consecutive month. Of the eighteen subsectors, fifteen reported growth, one remained unchanged while the remaining two recorded declines (Table 9).



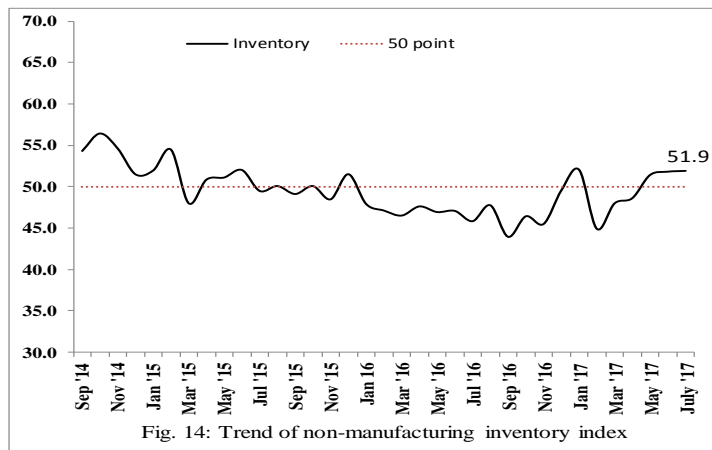
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 54.0 points, indicating growth in employment for the third consecutive month. Fourteen subsectors recorded growth in the review month, one remained unchanged while the remaining three recorded declines (Table 10).



3.4 Non-manufacturing Inventory

At 51.9 points, non-manufacturing inventory index grew for the third consecutive month, indicating growth in inventories in the review period. Twelve subsectors recorded higher inventories, two remained unchanged while the remaining four subsectors recorded lower inventory in July, 2017 (Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index*	Series Index*	Change	Direction	Rate of	Trend** (Months)
	June	July			Change	
Composite PMI \1	52.9	54.1	1.2	Growing	Faster	4
Production level	58.2	59.3	1.1	Growing	Faster	5
New orders	51.0	52.7	1.7	Growing	Faster	4
Supplier delivery time	50.3	51.3	1.0	Growing	Faster	2
Employment level	51.1	51.8	0.7	Growing	Faster	3
Raw materials/WIP Inventory	52.3	53.6	1.3	Growing	Faster	4
New Export Orders	32.6	37.5	4.9	Declining	Slower	29
Output Prices	62.7	60.4	-2.3	Growing	Slower	19
Input Prices	66.6	64.1	-2.5	Growing	Slower	37
Quantity of Purchases	46.2	48.0	1.8	Declining	Slower	4
Outstanding Business/Backlog of Work	43.9	42.1	-1.8	Declining	Faster	29
Stock of Finished Goods	49.1	48.5	-0.6	Declining	Faster	2
Manufacturing Sub-Sectors						
Appliances & components	57.1	66.0	8.9	Growing	Faster	8
Cement	42.4	64.1	21.7	Growing	From Contraction	1
Chemical & pharmaceutical products	48.1	60.9	12.8	Growing	From Contraction	1
Computer & electronic products	66.7	65.5	-1.2	Growing	Slower	2
Electrical equipment	53.4	53.3	-0.1	Growing	Slower	4
Fabricated metal products	52.4	47.1	-5.3	Declining	From Expansion	1
Food, beverage & tobacco products	53.4	56.5	3.1	Growing	Faster	10
Furniture & related products	53.5	48.2	-5.3	Declining	From Expansion	1
Nonmetallic mineral products	40.9	48.9	8.0	Declining	Slower	3
Paper products	61.8	53.5	-8.3	Growing	Slower	3
Petroleum & coal products	58.1	45.2	-12.9	Declining	From Expansion	1
Plastics & rubber products	61.2	49.8	-11.4	Declining	From Expansion	1
Primary metal	60.3	61.8	1.5	Growing	Faster	3
Printing & related support activities	48.1	54.8	6.7	Growing	From Contraction	1
Textile, apparel, leather & footwear	54.9	56.5	1.6	Growing	Faster	5
Transportation equipment	58.8	51.1	-7.7	Growing	Slower	2

\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)
	June	July			Change	
PRODUCTION PMI	58.2	59.3	1.1	Growing	Faster	5
Appliances & components	66.7	90.0	23.3	Growing	Faster	7
Cement	52.8	75.0	22.2	Growing	Faster	5
Chemical & pharmaceutical products	48.3	68.1	19.8	Growing	From Contraction	1
Computer & electronic products	76.9	71.4	-5.5	Growing	Slower	5
Electrical equipment	61.8	57.5	-4.3	Growing	Slower	4
Fabricated metal products	59.0	45.7	-13.3	Declining	From Expansion	1
Food, beverage & tobacco products	57.1	61.5	4.4	Growing	Faster	10
Furniture & related products	58.3	54.0	-4.3	Growing	Slower	5
Nonmetallic mineral products	42.6	55.0	12.4	Growing	From Contraction	1
Paper products	65.0	56.9	-8.1	Growing	Slower	3
Petroleum & coal products	61.5	46.4	-15.1	Declining	From Expansion	1
Plastics & rubber products	69.1	58.8	-10.3	Growing	Slower	4
Primary metal	68.4	66.7	-1.7	Growing	Slower	3
Printing & related support activities	52.1	62.2	10.1	Growing	Faster	4
Textile, apparel, leather & footwear	62.1	61.5	-0.6	Growing	Slower	5
Transportation equipment	68.8	64.3	-4.5	Growing	Slower	2

Table 3: New Orders at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	51.0	52.7	1.7	Growing	Faster	4
Appliances & components	45.8	65.0	19.2	Growing	From Contraction	1
Cement	34.7	62.5	27.8	Growing	From Contraction	1
Chemical & pharmaceutical products	44.9	60.3	15.4	Growing	From Contraction	1
Computer & electronic products	57.7	50.0	-7.7	No Change	From Expansion	1
Electrical equipment	47.1	42.5	-4.6	Declining	Faster	2
Fabricated metal products	50.0	44.2	-5.8	Declining	From No Change	1
Food, beverage & tobacco products	52.5	59.8	7.3	Growing	Faster	10
Furniture & related products	56.1	44.9	-11.2	Declining	From Expansion	1
Nonmetallic mineral products	31.5	41.7	10.2	Declining	Slower	3
Paper products	68.3	52.8	-15.5	Growing	Slower	3
Petroleum & coal products	57.7	35.7	-22.0	Declining	From Expansion	1
Plastics & rubber products	60.3	47.1	-13.2	Declining	From Expansion	1
Primary metal	60.5	61.1	0.6	Growing	Faster	3
Printing & related support activities	45.9	57.4	11.5	Growing	From Contraction	1
Textile, apparel, leather & footwear	53.7	57.3	3.6	Growing	Faster	5
Transportation equipment	50.0	42.9	-7.1	Declining	From No Change	1

Table 4: Supplier Delivery Time at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	50.3	51.3	1.0	Growing	Faster	2
Appliances & components	41.7	40.0	-1.7	Declining	Faster	3
Cement	52.8	51.6	-1.2	Growing	Slower	2
Chemical & pharmaceutical products	51.7	50.9	-0.8	Growing	Slower	2
Computer & electronic products	65.4	75.0	9.6	Growing	Faster	6
Electrical equipment	64.7	67.5	2.8	Growing	Faster	7
Fabricated metal products	46.2	51.4	5.2	Growing	From Contraction	1
Food, beverage & tobacco products	52.1	47.4	-4.7	Declining	From Expansion	1
Furniture & related products	54.4	54.0	-0.4	Growing	Slower	2
Nonmetallic mineral products	50.0	53.3	3.3	Growing	From No Change	1
Paper products	48.3	47.2	-1.1	Declining	Faster	2
Petroleum & coal products	46.2	64.3	18.1	Growing	From Contraction	1
Plastics & rubber products	39.7	45.5	5.8	Declining	Slower	2
Primary metal	52.6	58.3	5.7	Growing	Faster	5
Printing & related support activities	47.3	50.7	3.4	Growing	From Contraction	1
Textile, apparel, leather & footwear	50.0	49.0	-1.0	Declining	From No Change	1
Transportation equipment	50.0	42.9	-7.1	Declining	From No Change	1

Table 5: Employment Level at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	51.1	51.8	0.7	Growing	Faster	3
Appliances & components	62.5	50.0	-12.5	No Change	From Expansion	1
Cement	34.7	64.1	29.4	Growing	From Contraction	1
Chemical & pharmaceutical products	48.3	59.5	11.2	Growing	From Contraction	1
Computer & electronic products	69.2	71.4	2.2	Growing	Faster	2
Electrical equipment	44.1	50.0	5.9	No Change	From Contraction	1
Fabricated metal products	53.3	51.0	-2.3	Growing	Slower	3
Food, beverage & tobacco products	50.8	51.3	0.5	Growing	Faster	2
Furniture & related products	46.7	46.0	-0.7	Declining	Faster	3
Nonmetallic mineral products	42.6	48.3	5.7	Declining	Slower	19
Paper products	61.7	51.4	-10.3	Growing	Slower	3
Petroleum & coal products	57.7	46.4	-11.3	Declining	From Expansion	1
Plastics & rubber products	66.2	45.6	-20.6	Declining	From Expansion	1
Primary metal	55.3	61.1	5.8	Growing	Faster	4
Printing & related support activities	47.9	45.9	-2.0	Declining	Faster	24
Textile, apparel, leather & footwear	51.9	54.7	2.8	Growing	Faster	2
Transportation equipment	64.3	50.0	-14.3	No Change	From Expansion	1

Table 6: Raw Materials Inventory at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	52.3	53.6	1.3	Growing	Faster	4
Appliances & components	79.2	80.0	0.8	Growing	Faster	8
Cement	38.9	60.9	22.0	Growing	From Contraction	1
Chemical & pharmaceutical products	50.8	62.3	11.5	Growing	Faster	2
Computer & electronic products	65.4	71.4	6.0	Growing	Faster	2
Electrical equipment	52.9	60.0	7.1	Growing	Faster	4
Fabricated metal products	50.9	45.0	-5.9	Declining	From Expansion	1
Food, beverage & tobacco products	53.8	58.2	4.4	Growing	Faster	10
Furniture & related products	46.2	39.8	-6.4	Declining	Faster	3
Nonmetallic mineral products	48.1	50.0	1.9	No Change	From Contraction	1
Paper products	55.0	61.1	6.1	Growing	Faster	3
Petroleum & coal products	69.2	39.3	-29.9	Declining	From Expansion	1
Plastics & rubber products	66.2	50.0	-16.2	No Change	From Expansion	1
Primary metal	60.5	58.3	-2.2	Growing	Slower	3
Printing & related support activities	46.6	52.7	6.1	Growing	From Contraction	1
Textile, apparel, leather & footwear	53.3	56.5	3.2	Growing	Faster	2
Transportation equipment	62.5	57.1	-5.4	Growing	Slower	3

Table 7: Non-Manufacturing at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
Composite PMI \2	54.2	54.4	0.2	Growing	Faster	3
Business Activity	57.0	56.8	-0.2	Growing	Slower	4
Level of new orders/customers/incoming business	54.6	55.1	0.5	Growing	Faster	4
Level of employment	53.4	54.0	0.6	Growing	Faster	3
Inventory	51.8	51.9	0.1	Growing	Faster	3
Average price of Inputs (volume weighted)	58.6	58.1	-0.5	Growing	Slower	21
Level of outstanding business/ Backlog of work	40.5	42.9	2.4	Declining	Slower	37
New Exports orders	30.3	32.0	1.7	Declining	Slower	37
Imports	33.5	36.8	3.3	Declining	Slower	37
Inventory (sentiments)	42.7	41.5	-1.2	Declining	Faster	37
Non-manufacturing sub-sectors						
Accommodation & food services	51.5	51.3	-0.2	Growing	Slower	3
Agriculture	56.3	63.1	6.8	Growing	Faster	14
Arts, entertainment & recreation	51.1	48.6	-2.5	Declining	From Expansion	1
Construction	49.4	44.7	-4.7	Declining	Faster	26
Educational services	57.6	57.1	-0.5	Growing	Slower	8
Electricity, gas, steam & air conditioning supply	54.0	53.3	-0.7	Growing	Slower	5
Finance & insurance	62.3	58.4	-3.9	Growing	Slower	5
Health care & social assistance	56.1	54.9	-1.2	Growing	Slower	3
Information & communication	54.8	59.8	5.0	Growing	Faster	4
Management of companies	47.2	56.3	9.1	Growing	From Contraction	1
Professional, scientific, & technical services	53.4	52.0	-1.4	Growing	Slower	2
Public administration	45.8	62.5	16.7	Growing	From Contraction	1
Real estate rental & leasing	54.0	52.6	-1.4	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	56.3	55.7	-0.6	Growing	Slower	2
Transportation & warehousing	53.1	57.6	4.5	Growing	Faster	5
Utilities	64.4	62.0	-2.4	Growing	Slower	4
Water supply, sewage & waste management	63.2	51.9	-11.3	Growing	Slower	5
Wholesale/Retail trade	53.8	52.5	-1.3	Growing	Slower	2

\2 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 June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	57.0	56.8	-0.2	Growing	Slower	4
Accommodation & food services	55.0	56.4	1.4	Growing	Faster	3
Agriculture	60.0	72.7	12.7	Growing	Faster	14
Arts, entertainment & recreation	50.0	50.0	0.0	No Change	Flat	2
Construction	47.6	47.8	0.2	Declining	Slower	17
Educational services	60.0	64.0	4.0	Growing	Faster	8
Electricity, gas, steam & air conditioning supply	60.6	52.2	-8.4	Growing	Slower	5
Finance & insurance	68.9	61.5	-7.4	Growing	Slower	4
Health care & social assistance	60.8	53.3	-7.5	Growing	Slower	5
Information & communication	63.5	56.7	-6.8	Growing	Slower	4
Management of companies	44.4	56.3	11.9	Growing	From Contraction	1
Professional, scientific, & technical services	48.5	47.3	-1.2	Declining	Faster	3
Public administration	50.0	70.0	20.0	Growing	From No Change	1
Real estate rental & leasing	59.1	52.4	-6.7	Growing	Slower	4
Repair, maintenance/washing of motor vehicles	61.5	63.6	2.1	Growing	Faster	4
Transportation & warehousing	52.1	56.5	4.4	Growing	Faster	4
Utilities	69.2	72.7	3.5	Growing	Faster	4
Water supply, sewage & waste management	60.5	42.5	-18.0	Declining	From Expansion	1
Wholesale/Retail trade	57.5	50.3	-7.2	Growing	Slower	3

Table 9: New Orders at a Glance

Index	Series	Series	Change	Direction	Rate	Trend (Months)
	Index	Index			of	
	June	July			Change	
NEW ORDERS PMI	54.6	55.1	0.5	Growing	Faster	4
Accommodation & food services	52.9	53.2	0.3	Growing	Faster	3
Agriculture	49.2	59.1	9.9	Growing	From Contraction	1
Arts, entertainment & recreation	51.5	47.3	-4.2	Declining	From Expansion	1
Construction	45.1	47.8	2.7	Declining	Slower	26
Educational services	55.0	54.4	-0.6	Growing	Slower	8
Electricity, gas, steam & air conditioning supply	55.3	55.4	0.1	Growing	Faster	5
Finance & insurance	63.2	57.3	-5.9	Growing	Slower	5
Health care & social assistance	54.0	57.8	3.8	Growing	Faster	2
Information & communication	56.3	61.7	5.4	Growing	Faster	4
Management of companies	55.6	50.0	-5.6	No Change	From Expansion	1
Professional, scientific, & technical services	53.8	58.0	4.2	Growing	Faster	2
Public administration	29.2	60.0	30.8	Growing	From Contraction	1
Real estate rental & leasing	56.0	56.3	0.3	Growing	Faster	4
Repair, maintenance/washing of motor vehicles	63.1	53.0	-10.1	Growing	Slower	2
Transportation & warehousing	51.0	62.0	11.0	Growing	Faster	5
Utilities	73.1	61.4	-11.7	Growing	Slower	4
Water supply, sewage & waste management	65.8	55.0	-10.8	Growing	Slower	4
Wholesale/Retail trade	54.8	54.3	-0.5	Growing	Slower	2

Table 10: Employment at a Glance

Index	Series	Series	Change	Direction	Rate	Trend (Months)
	Index	Index			of	
	June	July			Change	
EMPLOYMENT LEVEL PMI	53.4	54.0	0.6	Growing	Faster	3
Accommodation & food services	47.9	47.7	-0.2	Declining	Faster	2
Agriculture	51.7	59.8	8.1	Growing	Faster	3
Arts, entertainment & recreation	55.9	51.4	-4.5	Growing	Slower	3
Construction	54.9	43.3	-11.6	Declining	From Expansion	1
Educational services	53.8	52.6	-1.2	Growing	Slower	7
Electricity, gas, steam & air conditioning supply	54.3	50.0	-4.3	No Change	From Expansion	1
Finance & insurance	61.3	61.5	0.2	Growing	Faster	2
Health care & social assistance	54.5	55.6	1.1	Growing	Faster	2
Information & communication	50.8	63.3	12.5	Growing	Faster	3
Management of companies	44.4	56.3	11.9	Growing	From Contraction	1
Professional, scientific, & technical services	59.8	51.8	-8.0	Growing	Slower	2
Public administration	54.2	60.0	5.8	Growing	Faster	2
Real estate rental & leasing	53.0	51.6	-1.4	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	54.6	53.8	-0.8	Growing	Slower	2
Transportation & warehousing	59.4	64.1	4.7	Growing	Faster	5
Utilities	61.5	59.1	-2.4	Growing	Slower	4
Water supply, sewage & waste management	60.5	47.5	-13.0	Declining	From Expansion	1
Wholesale/Retail trade	52.7	55.6	2.9	Growing	Faster	2

Table 11: Inventory at a Glance

Index	Series Index June	Series Index July	Change	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	51.8	51.9	0.1	Growing	Faster	3
Accommodation & food services	50.0	48.1	-1.9	Declining	From No Change	1
Agriculture	64.2	60.6	-3.6	Growing	Slower	4
Arts, entertainment & recreation	47.1	45.9	-1.2	Declining	Faster	2
Construction	50.0	40.0	-10.0	Declining	From No Change	1
Educational services	61.5	57.5	-4.0	Growing	Slower	5
Electricity, gas, steam & air conditioning supply	45.7	55.7	10.0	Growing	From Contraction	1
Finance & insurance	55.7	53.3	-2.4	Growing	Slower	2
Health care & social assistance	55.1	52.9	-2.2	Growing	Slower	3
Information & communication	48.4	57.5	9.1	Growing	From Contraction	1
Management of companies	44.4	62.5	18.1	Growing	From Contraction	1
Professional, scientific, & technical services	51.5	50.9	-0.6	Growing	Slower	2
Public administration	50.0	60.0	10.0	Growing	From No Change	1
Real estate rental & leasing	47.8	50.0	2.2	No Change	From Contraction	1
Repair, maintenance/washing of motor vehicles	46.1	52.3	6.2	Growing	From Contraction	1
Transportation & warehousing	50.0	47.8	-2.2	Declining	From No Change	1
Utilities	53.8	55.0	1.2	Growing	Faster	2
Water supply, sewage & waste management	65.8	62.5	-3.3	Growing	Slower	3
Wholesale/Retail trade	50.3	50.0	-0.3	No Change	From Expansion	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	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	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	42.1	48.5

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	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	51.9	58.1	42.9	32	36.8	41.5