

# **PURCHASING MANAGERS' INDEX**

**A MONTHLY PUBLICATION**

**MAY 2017 REPORT**



**SURVEY MANAGEMENT DIVISION  
STATISTICS DEPARTMENT  
CENTRAL BANK OF NIGERIA, ABUJA**

# PURCHASING MANAGERS' INDEX (PMI) MAY 2017 REPORT

## 1.0 Introduction

The May 2017 PMI, conducted by the Statistics Department of the Central Bank of Nigeria, was carried out during the period May 8-12, 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 1,740 responses were received from a sample of 1,950 respondents, representing a response rate of 89.2 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.

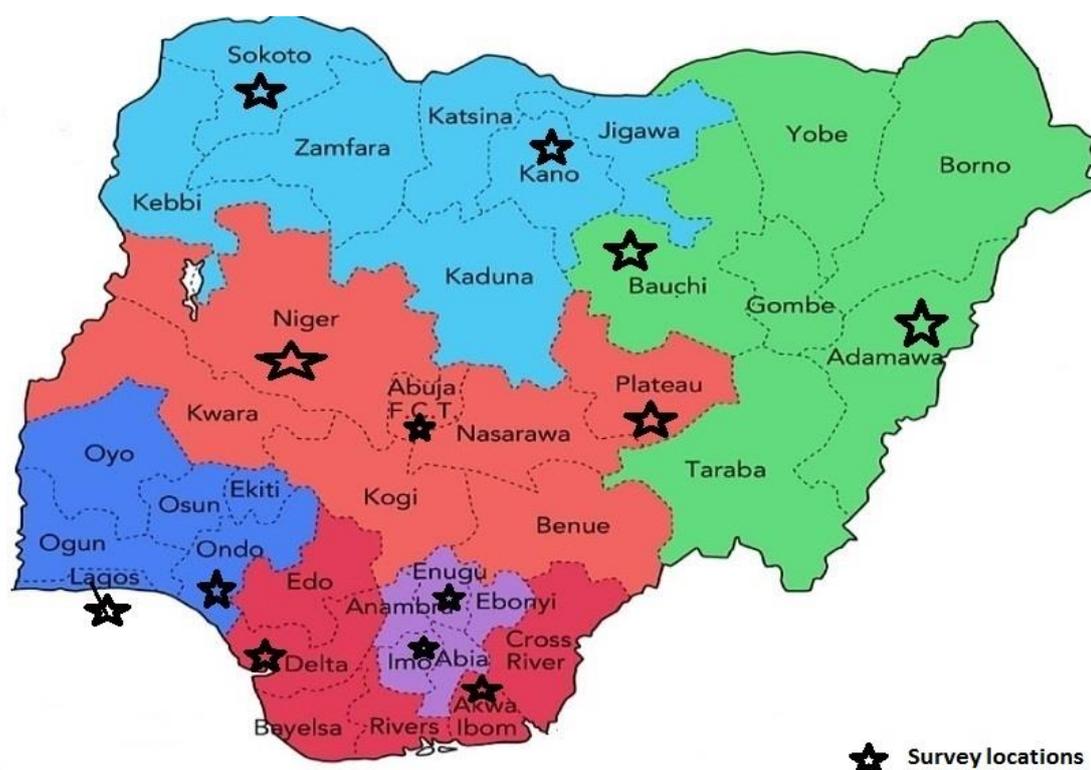


Fig. 1: Map of Nigeria showing the survey locations

## 1.1 Data and Method of Presentation

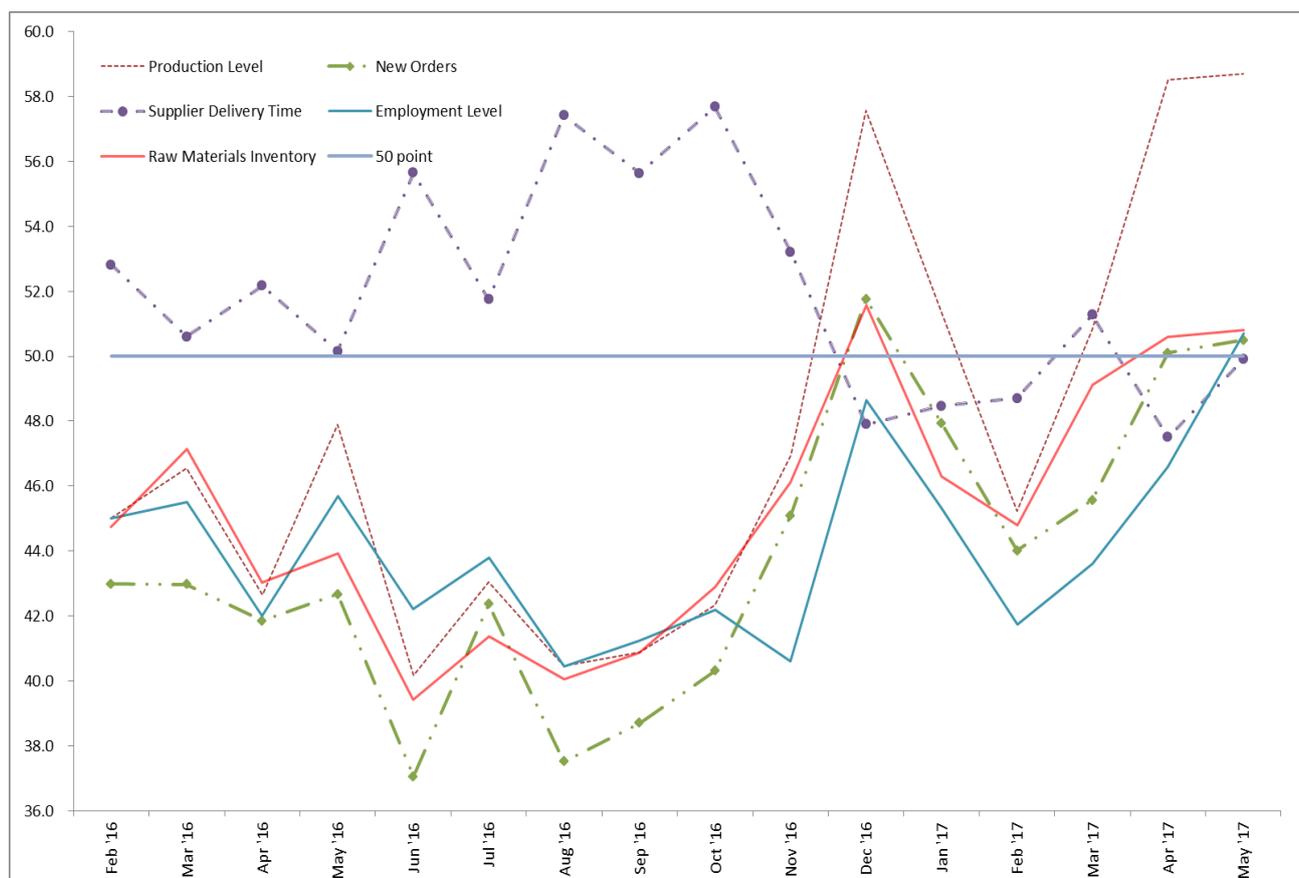
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on data compiled from purchasing and supply executives. Survey responses indicate whether there is *change* or *no change* in the level of business activities in the *current month* compared with the *previous month*. For each 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 declining. The sub-sectors reporting growth are listed in the order of highest to lowest growth. For the sub-sectors 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 and raw materials inventories growing at a faster rate; employment level recovering from contraction; and supplier delivery time moderating*



**Fig 2: Trends of the five major manufacturing sub-indices**

The *Manufacturing PMI* stood at 52.5 index points in May 2017, indicating expansion in the manufacturing sector for the second consecutive month (Fig. 3 and Table 1). Ten of the 16 sub-sectors reported growth in the review month in the following order: primary metal; petroleum & coal products; plastics & rubber products; paper products; electrical equipment; appliances & components; textile, apparel, leather & footwear; cement; food, beverage & tobacco products and chemical & pharmaceutical products. The remaining 6 sub-sectors declined in the order: transportation equipment; nonmetallic mineral products; fabricated metal products; printing & related support activities; furniture & related products and computer & electronic products.

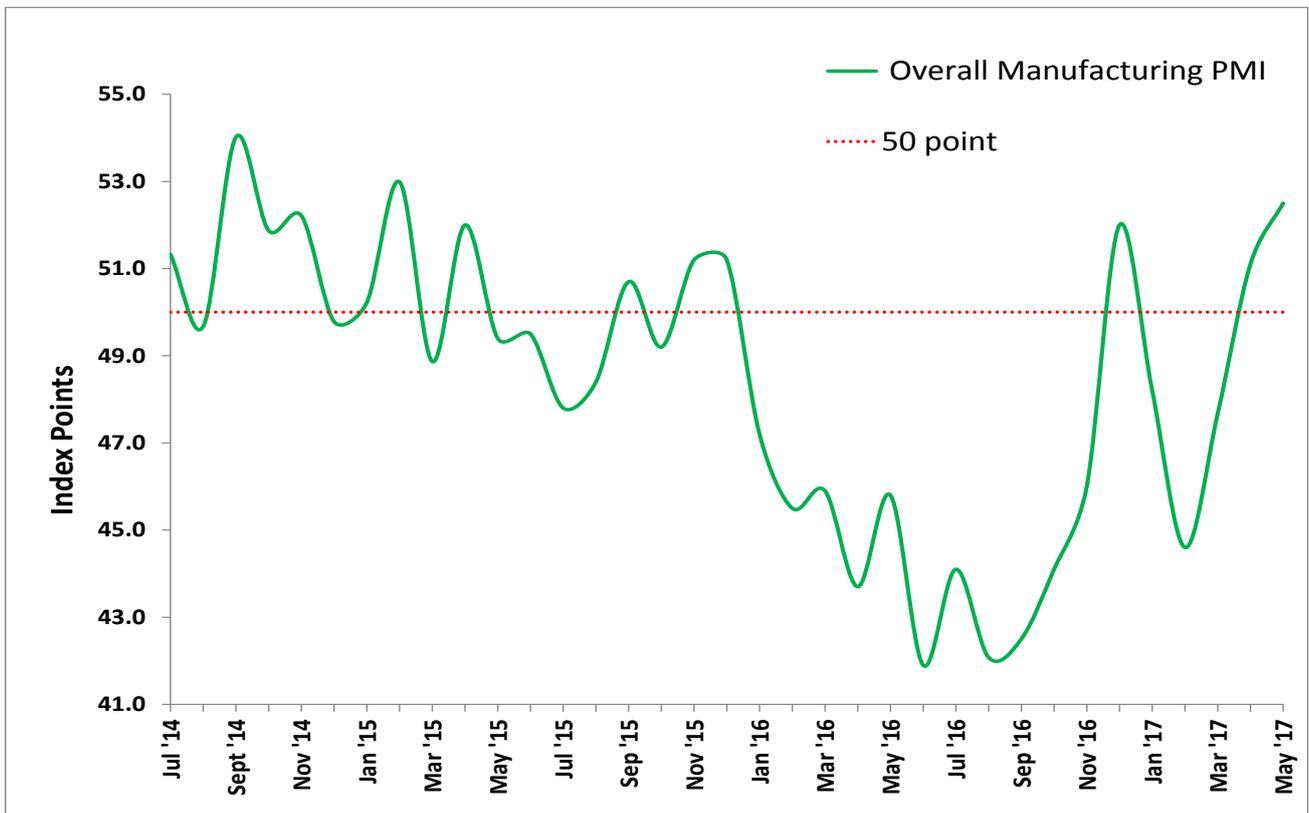


Fig. 3: Trend of Manufacturing PMI

Table 1: Manufacturing at a Glance

Index	Series Index* April	Series Index* May	Percentage Point Change	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	51.1	52.5	1.4	Growing	Faster	2
Production level	58.5	58.7	0.2	Growing	Faster	3
New orders	50.1	50.5	0.4	Growing	Faster	5
Supplier delivery time	47.5	49.9	2.4	Declining	Slower	2
Employment level	46.6	50.7	4.1	Growing	From Contraction	1
Raw materials/WIP Inventory	50.6	50.8	0.2	Growing	Faster	2
New Export Orders	37.7	37.6	-0.1	Declining	Faster	27
Output Prices	65.1	61.3	-3.8	Growing	Slower	17
Input Prices	69.2	68.4	-0.8	Growing	Slower	35
Quantity of Purchases	45.1	46.1	1.0	Declining	Slower	2
Outstanding Business/Backlog of Work	40.0	42.3	2.3	Declining	Slower	27
Stock of Finished Goods	46.4	51.8	5.4	Growing	From Contraction	1
<b>Manufacturing Sub-Sectors</b>						
Appliances & components	63.4	56.1	-7.3	Growing	Slower	6
Cement	52.1	54.7	2.6	Growing	Faster	2
Chemical & pharmaceutical products	53.1	53.0	-0.1	Growing	Slower	2
Computer & electronic products	42.8	49.7	6.9	Declining	Slower	4
Electrical equipment	51.0	56.3	5.3	Growing	Faster	2
Fabricated metal products	48.0	48.8	0.8	Declining	Slower	5
Food, beverage & tobacco products	55.9	54.4	-1.5	Growing	Slower	8
Furniture & related products	51.0	49.0	-2.0	Declining	From Expansion	1
Nonmetallic mineral products	52.1	48.1	-4.0	Declining	From Expansion	1
Paper products	39.8	57.7	17.9	Growing	From Contraction	1
Petroleum & coal products	48.9	62.1	13.2	Growing	From Contraction	1
Plastics & rubber products	50.6	60.7	10.1	Growing	Faster	2
Primary metal	42.7	64.5	21.8	Growing	From Contraction	1
Printing & related support activities	51.2	48.9	-2.3	Declining	From Expansion	1
Textile, apparel, leather & footwear	54.1	54.9	0.8	Growing	Faster	3
Transportation equipment	49.3	45.0	-4.3	Declining	Faster	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

## 2.1 Production Level

The production level index for manufacturing sector expanded for the third consecutive month in May 2017. The index at 58.7 points indicated an increase in production at a faster rate, when compared to the 58.5 points in the previous month. Fifteen manufacturing sub-sectors recorded increase in production level during the review month in the following order: primary metal; electrical equipment; petroleum & coal products; cement; chemical & pharmaceutical products; plastics & rubber products; computer & electronic products; food, beverage & tobacco products; textile, apparel, leather & footwear; appliances & components; paper products; nonmetallic mineral products; furniture & related products; printing & related support activities and fabricated metal products, while the transportation equipment sub-sector recorded decline in production (Table 2).

**Table 2: Production at a Glance**

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
PRODUCTION PMI	58.5	58.7	0.2	Growing	Faster	3
Appliances & components	63.6	57.1	-6.5	Growing	Slower	5
Cement	61.5	67.3	5.8	Growing	Faster	3
Chemical & pharmaceutical products	68.0	64.7	-3.3	Growing	Slower	2
Computer & electronic products	55.6	62.5	6.9	Growing	Faster	3
Electrical equipment	65.4	71.9	6.5	Growing	Faster	2
Fabricated metal products	51.6	51.5	-0.1	Growing	Slower	2
Food, beverage & tobacco products	64.2	62.4	-1.8	Growing	Slower	8
Furniture & related products	56.8	54.5	-2.3	Growing	Slower	3
Nonmetallic mineral products	61.4	55.8	-5.6	Growing	Slower	2
Paper products	41.7	56.7	15.0	Growing	From Contraction	1
Petroleum & coal products	50.0	69.2	19.2	Growing	From No Change	1
Plastics & rubber products	56.6	63.9	7.3	Growing	Faster	2
Primary metal	28.6	76.7	48.1	Growing	From Contraction	1
Printing & related support activities	59.3	51.8	-7.5	Growing	Slower	2
Textile, apparel, leather & footwear	62.0	62.4	0.4	Growing	Faster	3
Transportation equipment	64.3	45.5	-18.8	Declining	From Expansion	1

## 2.2 New Orders

New orders index for the month of May stood at 50.5 points, indicating a faster growth in new orders for the second consecutive month. Eight sub-sectors reported growth in new orders in the following order: appliances & components; plastics & rubber products; textile, apparel, leather & footwear; paper products; chemical & pharmaceutical products; food, beverage & tobacco products; petroleum & coal products and primary metal. The cement and electrical equipment sub-sectors remained unchanged, while the printing & related support activities; nonmetallic mineral products; computer & electronic products; transportation equipment; fabricated metal products and furniture & related products sub-sectors recorded declines (Table 3).

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

Index	Series Index April	Series Index May	Percentage Point Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	50.1	50.5	0.4	Growing	Faster	2
Appliances & components	81.8	64.3	-17.5	Growing	Slower	5
Cement	55.8	50.0	-5.8	No Change	From Expansion	2
Chemical & pharmaceutical products	49.0	54.9	5.9	Growing	From Contraction	1
Computer & electronic products	33.3	43.8	10.5	Declining	Slower	4
Electrical equipment	42.3	50.0	7.7	No Change	From Contraction	6
Fabricated metal products	48.4	47.1	-1.3	Declining	Faster	5
Food, beverage & tobacco products	57.5	54.3	-3.2	Growing	Slower	8
Furniture & related products	47.4	48.0	0.6	Declining	Slower	17
Nonmetallic mineral products	51.1	43.0	-8.1	Declining	From Expansion	1
Paper products	28.3	55.0	26.7	Growing	From Contraction	1
Petroleum & coal products	38.9	53.8	14.9	Growing	From Contraction	1
Plastics & rubber products	50.0	59.7	9.7	Growing	From No Change	1
Primary metal	39.3	53.3	14.0	Growing	From Contraction	1
Printing & related support activities	52.0	42.4	-9.6	Declining	From Expansion	1
Textile, apparel, leather & footwear	58.5	55.9	-2.6	Growing	Slower	3
Transportation equipment	50.0	45.5	-4.5	Declining	From No Change	1

### 2.3 Supplier Delivery Time

At 49.9 index points, the supplier delivery time index for the manufacturing sector declined for the second consecutive month, though at a slower rate, when compared to the previous month. Eight sub-sectors recorded delayed suppliers' delivery time in the following order: appliances & components; transportation equipment; fabricated metal products; nonmetallic mineral products; cement; furniture & related products; chemical & pharmaceutical products and food, beverage & tobacco products. The remaining 8 sub-sectors recorded improvement in delivery time in May 2017 in the following order: primary metal; petroleum & coal products; paper products; printing & related support activities; computer & electronic products; textile, apparel, leather & footwear; electrical equipment and plastics & rubber products (Table 4).

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

Index	Series Index April	Series Index May	Percentage Point Change	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	47.5	49.9	2.4	Declining	Slower	2
Appliances & components	50.0	35.7	-14.3	Declining	From No Change	1
Cement	46.2	46.2	0.0	Declining	Flat	6
Chemical & pharmaceutical products	49.0	47.1	-1.9	Declining	Faster	2
Computer & electronic products	55.6	56.3	0.7	Growing	Faster	4
Electrical equipment	61.5	53.1	-8.4	Growing	Slower	5
Fabricated metal products	46.9	42.2	-4.7	Declining	Faster	2
Food, beverage & tobacco products	49.1	48.1	-1.0	Declining	Faster	2
Furniture & related products	46.8	46.4	-0.4	Declining	Faster	3
Nonmetallic mineral products	48.9	44.2	-4.7	Declining	Faster	6
Paper products	48.3	60.0	11.7	Growing	From Contraction	1
Petroleum & coal products	61.1	65.4	4.3	Growing	Faster	2
Plastics & rubber products	50.0	52.8	2.8	Growing	From No Change	1
Primary metal	53.6	73.3	19.7	Growing	Faster	3
Printing & related support activities	45.3	56.5	11.2	Growing	From Contraction	1
Textile, apparel, leather & footwear	43.5	53.8	10.3	Growing	From Contraction	1
Transportation equipment	21.4	40.9	19.5	Declining	Slower	2

## 2.4 Employment Level

Employment level index in May 2017 stood at 50.7 points, indicating growth in employment level after twenty-six consecutive month of contraction in employment. Of the 16 sub-sectors, 7 recorded growth in employment in the following order: primary metal; plastics & rubber products; petroleum & coal products; paper products; appliances & components; cement and fabricated metal products. The electrical equipment and textile, apparel, leather & footwear remained unchanged, while the remaining 7 sub sectors recorded contraction in employment in the following order: computer & electronic products; transportation equipment; chemical & pharmaceutical products; nonmetallic mineral products; food, beverage & tobacco products; printing & related support activities and furniture & related products (Table 5).

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

Index	Series Index	Series Index	Percentage		Rate	Trend (Months)
	April	May	Point Change	Direction	of Change	
EMPLOYMENT LEVEL PMI	46.6	50.7	4.1	Growing	From Contraction	1
Appliances & components	50.0	57.1	7.1	Growing	From No Change	1
Cement	44.2	53.8	9.6	Growing	From Contraction	1
Chemical & pharmaceutical products	47.0	44.1	-2.9	Declining	Faster	19
Computer & electronic products	27.8	37.5	9.7	Declining	Slower	10
Electrical equipment	34.6	50.0	15.4	No Change	From Contraction	2
Fabricated metal products	44.3	52.5	8.2	Growing	From Contraction	1
Food, beverage & tobacco products	48.2	48.6	0.4	Declining	Slower	3
Furniture & related products	50.5	49.0	-1.5	Declining	From Expansion	1
Nonmetallic mineral products	45.5	46.5	1.0	Declining	Slower	17
Paper products	48.3	60.0	11.7	Growing	From Contraction	1
Petroleum & coal products	44.4	61.5	17.1	Growing	From Contraction	1
Plastics & rubber products	47.4	62.5	15.1	Growing	From Contraction	1
Primary metal	53.6	63.3	9.7	Growing	Faster	2
Printing & related support activities	45.9	48.8	2.9	Declining	Slower	22
Textile, apparel, leather & footwear	46.0	50.0	4.0	No Change	From Contraction	5
Transportation equipment	50.0	40.0	-10.0	Declining	From No Change	1

## 2.5 Raw Materials Inventory

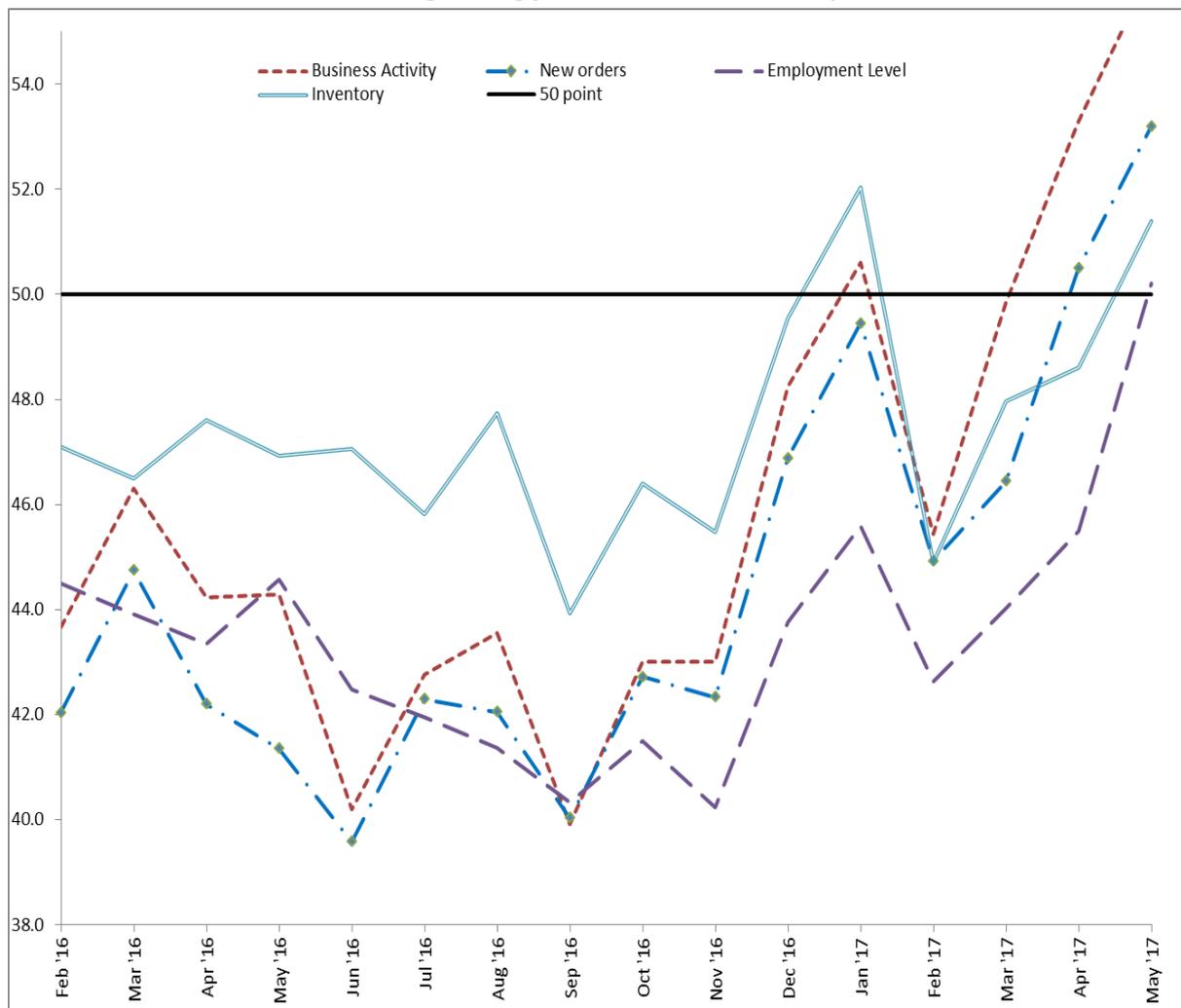
At 50.8 points, the raw materials inventory index grew for the second consecutive month. The index grew at a faster rate relative to its level in April 2017. Of the 16 sub-sectors, 10 recorded growth in raw materials inventories in the order: petroleum & coal products; plastics & rubber products; paper products; transportation equipment; appliances & components; primary metal; food, beverage & tobacco products; nonmetallic mineral products; electrical equipment and cement. The computer & electronic products, fabricated metal products, and printing & related support activities sub-sectors remained unchanged, while the furniture & related products; chemical & pharmaceutical products and textile, apparel, leather & footwear recorded lower inventories in May 2017 (Table 6).

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

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
RAW MATERIALS INVENTORIES PMI	50.6	50.8	0.2	Growing	Faster	2
Appliances & components	54.5	57.1	2.6	Growing	Faster	6
Cement	42.3	51.9	9.6	Growing	From Contraction	1
Chemical & pharmaceutical products	47.0	45.1	-1.9	Declining	Faster	4
Computer & electronic products	50.0	50.0	0.0	No Change	Flat	2
Electrical equipment	57.7	53.1	-4.6	Growing	Slower	2
Fabricated metal products	47.4	50.0	2.6	No Change	From Contraction	2
Food, beverage & tobacco products	56.2	55.8	-0.4	Growing	Slower	8
Furniture & related products	54.7	41.9	-12.8	Declining	From Expansion	1
Nonmetallic mineral products	50.0	53.5	3.5	Growing	From No Change	1
Paper products	40.0	60.0	20.0	Growing	From Contraction	1
Petroleum & coal products	66.7	65.4	-1.3	Growing	Slower	2
Plastics & rubber products	44.7	63.9	19.2	Growing	From Contraction	1
Primary metal	50.0	56.7	6.7	Growing	From No Change	1
Printing & related support activities	47.3	50.0	2.7	No Change	From Contraction	18
Textile, apparel, leather & footwear	53.0	45.1	-7.9	Declining	From Expansion	1
Transportation equipment	50.0	59.1	9.1	Growing	From No Change	1

**3.0 Non-Manufacturing PMI Report**

*Business activity and new orders growing at a faster rate; employment level and raw materials inventories growing from contraction in May 2017*



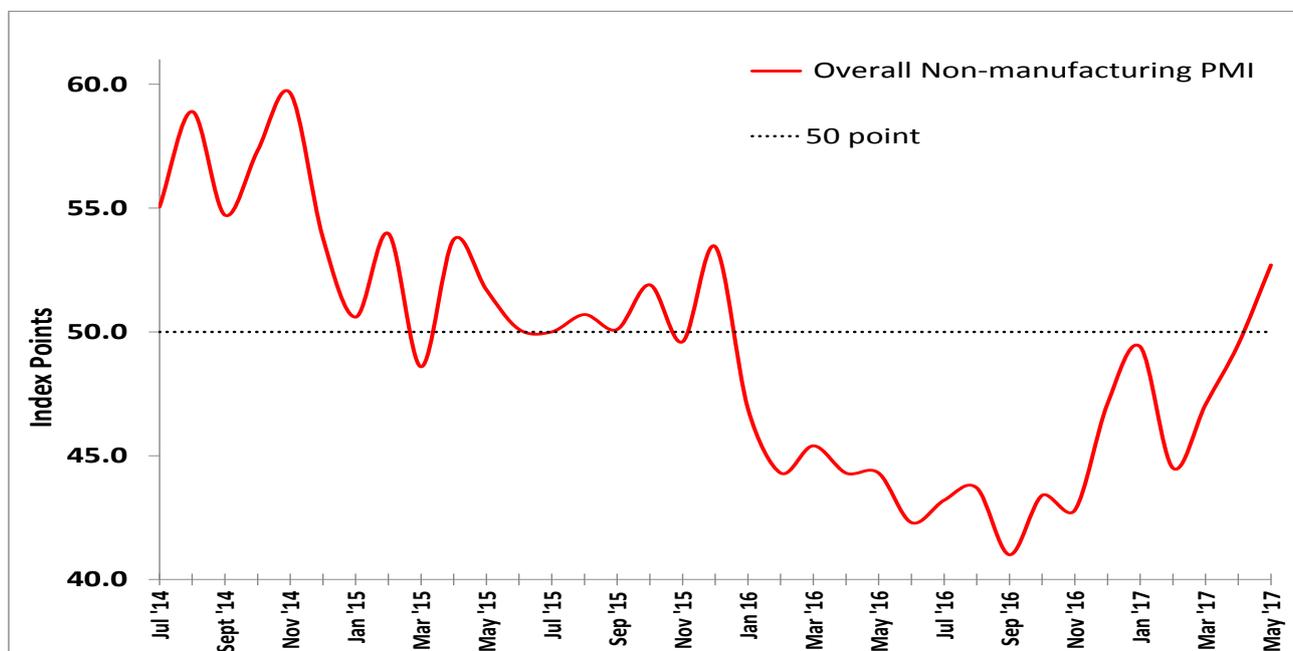
**Fig 4: Trends of the major non-manufacturing sub-indices**

The *composite PMI* for the *non-manufacturing sector* grew to 52.7 in May 2017 after 16 consecutive months of contraction. Of the 18 non-manufacturing sub-sectors, 10 recorded growth in the following order: agriculture; transportation & warehousing; educational services; electricity, gas, steam & air conditioning supply; utilities; information & communication; water supply, sewage & waste management; accommodation & food services; health care & social assistance; and finance & insurance. The remaining 8 sub-sectors recorded contraction in the order: construction; professional, scientific, & technical services; public administration; management of companies; arts, entertainment & recreation; real estate rental & leasing; repair, maintenance/washing of motor vehicles; and wholesale/retail trade (Table 7 and Fig. 4).

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

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
Composite PMI <sup>\2</sup>	49.5	52.7	3.2	Growing	From Contraction	1
Business Activity	53.3	56.2	2.9	Growing	Faster	2
Level of new orders/customers/incoming business	50.5	53.2	2.7	Growing	Faster	2
Level of employment	45.5	50.2	4.7	Growing	From Contraction	1
Inventory	48.6	51.4	2.8	Growing	From Contraction	1
Average price of Inputs (volume weighted)	63.1	62.7	-0.4	Growing	Slower	19
Level of outstanding business/ Backlog of work	41.6	45.3	3.7	Declining	Slower	35
New Exports orders	29.2	31.6	2.4	Declining	Slower	35
Imports	33.2	34.1	0.9	Declining	Slower	35
Inventory (sentiments)	41.1	43.6	2.5	Declining	Slower	35
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	48.3	52.7	4.4	Growing	From Contraction	1
Agriculture	61.6	66.7	5.1	Growing	Faster	12
Arts, entertainment & recreation	43.2	48.2	5.0	Declining	Slower	4
Construction	38.0	42.3	4.3	Declining	Slower	24
Educational services	58.1	59.8	1.7	Growing	Faster	6
Electricity, gas, steam & air conditioning supply	53.4	59.1	5.7	Growing	Faster	3
Finance & insurance	55.1	50.2	-4.9	Growing	Slower	3
Health care & social assistance	46.7	52.7	6.0	Growing	From Contraction	1
Information & communication	52.4	56.3	3.9	Growing	Faster	2
Management of companies	33.3	47.9	14.6	Declining	Slower	3
Professional, scientific, & technical services	42.9	44.2	1.3	Declining	Slower	27
Public administration	52.1	47.5	-4.6	Declining	From Expansion	1
Real estate rental & leasing	52.9	48.8	-4.1	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	47.2	49.1	1.9	Declining	Slower	17
Transportation & warehousing	55.4	64.4	9.0	Growing	Faster	3
Utilities	60.1	57.5	-2.6	Growing	Slower	2
Water supply, sewage & waste management	51.7	55.0	3.3	Growing	Faster	3
Wholesale/Retail trade	45.8	49.4	3.6	Declining	Slower	17

<sup>\2</sup> The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories



**Fig. 5: Trend of Non-Manufacturing PMI**

### 3.1 Business Activity

The business activity index rose to 56.2 points in May 2017 for the second consecutive month. The index grew at a faster rate, when compared to its level in the previous month. Fourteen sub-sectors recorded growth in the following order: agriculture; transportation & warehousing; electricity, gas, steam & air conditioning supply; utilities; educational services; information & communication; health care & social assistance; water supply, sewage & waste management; accommodation & food services; public administration; finance & insurance; real estate rental & leasing; wholesale/retail trade; and repair, maintenance/washing of motor vehicles. The management of companies sub-sector remained unchanged, while the remaining 3 sub-sectors recorded growth in the order: arts, entertainment & recreation; professional, scientific, & technical services; and construction (Table 8).

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

Index	Series Index April	Series Index May	Percentage Point Change	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	53.3	56.2	2.9	Growing	Faster	2
Accommodation & food services	48.6	55.3	6.7	Growing	From Contraction	1
Agriculture	70.4	73.2	2.8	Growing	Faster	12
Arts, entertainment & recreation	39.4	44.1	4.7	Declining	Slower	4
Construction	41.0	47.1	6.1	Declining	Slower	15
Educational services	61.3	60.2	-1.1	Growing	Slower	6
Electricity, gas, steam & air conditioning supply	57.8	69.5	11.7	Growing	Faster	3
Finance & insurance	60.0	53.9	-6.1	Growing	Slower	2
Health care & social assistance	53.1	58.9	5.8	Growing	Faster	3
Information & communication	56.0	60.2	4.2	Growing	Faster	2
Management of companies	33.3	50.0	16.7	No Change	From Contraction	1
Professional, scientific, & technical services	50.0	46.6	-3.4	Declining	From No Change	1
Public administration	58.3	55.0	-3.3	Growing	Slower	3
Real estate rental & leasing	57.8	53.1	-4.7	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	51.5	50.7	-0.8	Growing	Slower	2
Transportation & warehousing	61.3	71.7	10.4	Growing	Faster	2
Utilities	64.0	64.0	0.0	Growing	Flat	2
Water supply, sewage & waste management	59.1	57.5	-1.6	Growing	Slower	3
Wholesale/Retail trade	47.8	50.8	3.0	Growing	From Contraction	1

### 3.2 New Orders

At 53.2 points, the new orders index grew in May 2017 for the second consecutive month. Of the 18 sub-sectors, 11 subsectors reported growth in new orders in the following order: agriculture; electricity, gas, steam & air conditioning supply; transportation & warehousing; utilities; water supply, sewage & waste management; educational services; management of companies; finance & insurance; accommodation & food services; real estate rental & leasing; and information & communication. The repair, maintenance/washing of motor vehicles sub sector remained unchanged, while the remaining 6 sub-sectors recorded decline in the order: professional, scientific, & technical services; construction; arts, entertainment & recreation; public administration; wholesale/retail trade; and health care & social assistance (Table 9).

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

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
NEW ORDERS PMI	50.5	53.2	2.7	Growing	Faster	2
Accommodation & food services	46.3	52.2	5.9	Growing	From Contraction	1
Agriculture	68.5	72.3	3.8	Growing	Faster	12
Arts, entertainment & recreation	47.0	44.1	-2.9	Declining	Faster	4
Construction	32.1	43.1	11.0	Declining	Slower	24
Educational services	55.1	60.2	5.1	Growing	Faster	6
Electricity, gas, steam & air conditioning supply	59.8	67.1	7.3	Growing	Faster	3
Finance & insurance	58.0	53.9	-4.1	Growing	Slower	3
Health care & social assistance	44.4	49.4	5.0	Declining	Slower	2
Information & communication	56.0	50.9	-5.1	Growing	Slower	2
Management of companies	41.7	58.3	16.6	Growing	From Contraction	1
Professional, scientific, & technical services	43.5	42.4	-1.1	Declining	Faster	19
Public administration	54.2	45.0	-9.2	Declining	From Expansion	1
Real estate rental & leasing	53.1	51.6	-1.5	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	51.5	50.0	-1.5	No Change	From Expansion	1
Transportation & warehousing	55.7	66.3	10.6	Growing	Faster	3
Utilities	68.0	66.0	-2.0	Growing	Slower	2
Water supply, sewage & waste management	56.8	62.5	5.7	Growing	Faster	2
Wholesale/Retail trade	45.7	48.0	2.3	Declining	Slower	5

### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 50.2 points, indicating growth in employment in May 2017 after sixteen consecutive months of contraction. Eight sub-sectors recorded growth in employment level in the following order: transportation & warehousing; management of companies; agriculture; educational services; information & communication; utilities; accommodation & food services; and arts, entertainment & recreation. The real estate rental & leasing sub-sector remained unchanged, while the remaining 9 subsectors recorded decline in employment in the following order: construction; public administration; professional, scientific, & technical services; water supply, sewage & waste management; electricity, gas, steam & air conditioning supply; finance & insurance; repair, maintenance/washing of motor vehicles; wholesale/retail trade; and health care & social assistance (Table 10).

**Table 10: Employment at a Glance**

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
EMPLOYMENT LEVEL PMI	45.5	50.2	4.7	Growing	From Contraction	1
Accommodation & food services	47.2	51.8	4.6	Growing	From Contraction	1
Agriculture	50.0	58.0	8.0	Growing	From No Change	1
Arts, entertainment & recreation	42.4	51.5	9.1	Growing	From Contraction	1
Construction	37.2	38.9	1.7	Declining	Slower	24
Educational services	51.3	57.4	6.1	Growing	Faster	5
Electricity, gas, steam & air conditioning supply	46.1	46.3	0.2	Declining	Slower	12
Finance & insurance	49.0	47.1	-1.9	Declining	Faster	16
Health care & social assistance	42.6	49.4	6.8	Declining	Slower	17
Information & communication	47.4	53.7	6.3	Growing	From Contraction	1
Management of companies	33.3	58.3	25.0	Growing	From Contraction	1
Professional, scientific, & technical services	37.9	42.4	4.5	Declining	Slower	16
Public administration	50.0	40.0	-10.0	Declining	From No Change	1
Real estate rental & leasing	49.2	50.0	0.8	No Change	From Contraction	18
Repair, maintenance/washing of motor vehicles	41.9	48.6	6.7	Declining	Slower	14
Transportation & warehousing	52.8	59.8	7.0	Growing	Faster	3
Utilities	54.0	52.0	-2.0	Growing	Slower	2
Water supply, sewage & waste management	40.9	45.0	4.1	Declining	Slower	2
Wholesale/Retail trade	44.3	48.9	4.6	Declining	Slower	18

### 3.4 Inventory

Non-manufacturing inventory index in May 2017 stood at 51.4 points indicating growth in inventories in the review period. The non-manufacturing sector recorded growth in inventory after 3 consecutive months of low inventories. Nine sub-sectors recorded higher inventories in the following order: agriculture; educational services; information & communication; transportation & warehousing; water supply, sewage & waste management; electricity, gas, steam & air conditioning supply; health care & social assistance; arts, entertainment & recreation; and accommodation & food services. The public administration subsectors remain unchanged, while the management of companies; construction; real estate rental & leasing; professional, scientific, & technical services; finance & insurance; repair, maintenance/washing of motor vehicles; utilities; and wholesale/retail trade subsectors recorded lower inventory (Table 11).

**Table 11: Inventory at a Glance**

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index April	Index May	Point Change	Direction	of Change	
INVENTORY PMI	48.6	51.4	2.8	Growing	From Contraction	1
Accommodation & food services	50.9	51.8	0.9	Growing	Faster	2
Agriculture	57.4	63.4	6.0	Growing	Faster	2
Arts, entertainment & recreation	43.9	52.9	9.0	Growing	From Contraction	1
Construction	41.9	40.3	-1.6	Declining	Faster	27
Educational services	64.9	61.5	-3.4	Growing	Slower	3
Electricity, gas, steam & air conditioning supply	50.0	53.7	3.7	Growing	From No Change	1
Finance & insurance	53.3	45.8	-7.5	Declining	From Expansion	1
Health care & social assistance	46.9	53.2	6.3	Growing	From Contraction	1
Information & communication	50.0	60.2	10.2	Growing	From No Change	1
Management of companies	25.0	25.0	0.0	Declining	Flat	2
Professional, scientific, & technical services	40.2	45.5	5.3	Declining	Slower	6
Public administration	45.8	50.0	4.2	No Change	From Contraction	1
Real estate rental & leasing	51.6	40.7	-10.9	Declining	From Expansion	1
Repair, maintenance/washing of motor vehicles	43.8	47.2	3.4	Declining	Slower	7
Transportation & warehousing	51.9	59.8	7.9	Growing	Faster	6
Utilities	54.5	47.9	-6.6	Declining	From Expansion	1
Water supply, sewage & waste management	50.0	55.0	5.0	Growing	From No Change	1
Wholesale/Retail trade	45.6	49.7	4.1	Declining	Slower	4

## APPENDICES: HISTORICAL DATA

### 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

### 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