

# **PURCHASING MANAGERS' INDEX**

**A MONTHLY PUBLICATION**

**OCTOBER 2016 REPORT**



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

# PURCHASING MANAGERS' INDEX (PMI) OCTOBER 2016 REPORT

## 1.0 Introduction

The Statistics Department, Central Bank of Nigeria conducts a monthly survey of purchasing and supply executives of manufacturing and non-manufacturing organizations in 13 locations in Nigeria: - two states in each of the six geo-political zones, and the FCT (Fig. 1). The survey results are used to compute the monthly Purchasing Managers' Index (PMI). The survey for this month was conducted October 12<sup>th</sup> to 20<sup>th</sup>, 2016 with a total of 1,582 responses received from a sample of 1,950 respondents, representing a response rate of 81.1 per cent. The Bank makes no representation regarding the individual companies, other than that stated by the respondents. The data contained herein further provides input for policy decisions.

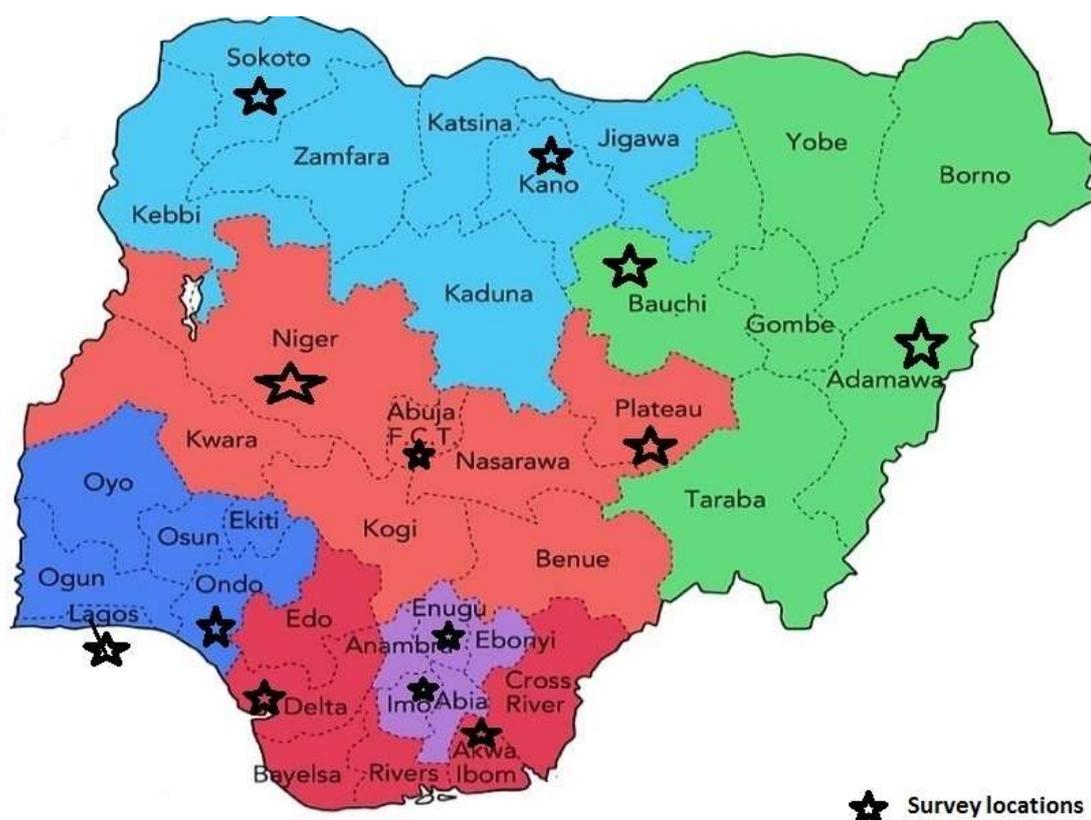


Fig. 1: Map of Nigeria showing the survey locations

## 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 percent of positive responses plus one-half of the percent 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, employment level and raw material inventories declining at a slower rate; supplier delivery time improving at a faster rate in October 2016*

The *Manufacturing PMI* stood at 44.1 index points in October 2016, compared to 42.5 in the preceding month (Fig. 2 and Table 1), indicating a slowing decline in the manufacturing sector during the review period. Fourteen of the sixteen sub-sectors surveyed recorded declines in the review month in the following order: electrical equipment; primary metal; fabricated metal products; petroleum & coal products; transportation equipment; computer & electronic products; printing & related support activities; nonmetallic mineral products; plastics & rubber products; furniture & related products; paper products; textile, apparel, leather & footwear; cement and chemical & pharmaceutical products. The remaining two subsectors grew in the order: appliances & components and food, beverage & tobacco products.

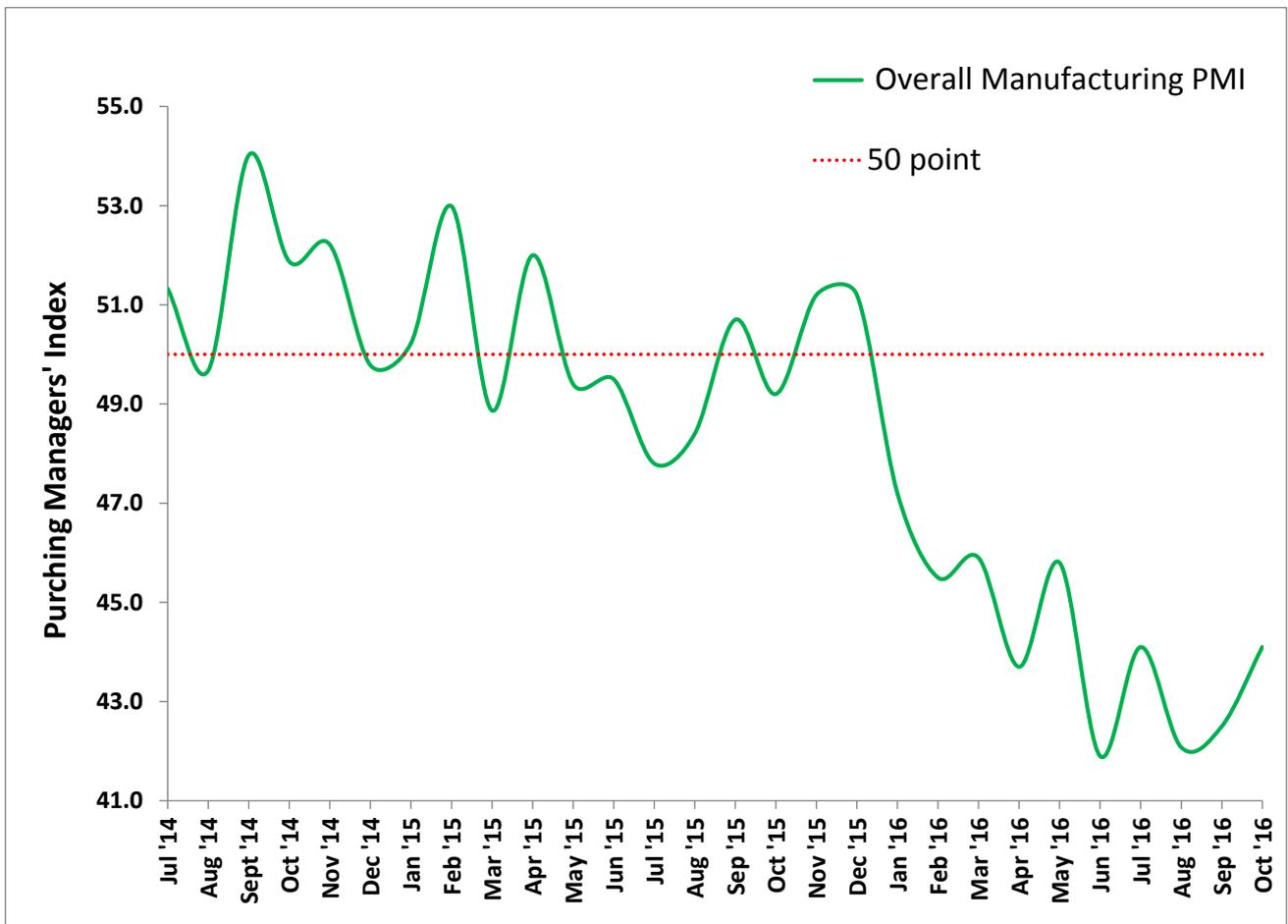


Fig. 2: Trend of Manufacturing PMI

**Table 1: Manufacturing at a Glance**

Index	Series Index*	Series Index*	Percentage	Direction	Rate of Change	Trend** (Months)
	September	October	Point Change			
Composite PMI \1	42.5	44.1	1.6	Declining	Slower	10
Production level	40.9	42.3	1.5	Declining	Slower	10
New orders	38.7	40.3	1.6	Declining	Slower	10
Supplier delivery time	55.6	57.7	2.0	Improving	Faster	8
Employment level	41.2	42.2	0.9	Declining	Slower	20
Raw materials/WIP Inventories	40.9	42.9	2.0	Declining	Slower	10
New Export Orders	26.3	37.3	11.0	Declining	Slower	20
Output Prices	66.5	65.2	-1.2	Growing	Slower	10
Input Prices	74.0	71.8	-2.3	Growing	Slower	28
Quantity of Purchases	42.8	43.5	0.7	Declining	Slower	10
Business Outstanding/ Backlog of Work	37.1	39.2	2.1	Declining	Slower	20
Stocks of Finished Goods	42.4	39.9	-2.6	Declining	Faster	20
<b>Manufacturing Sub-Sectors</b>						
Appliances & components	47.1	56.0	8.9	Growing	From Contraction	1
Cement	41.8	48.1	6.3	Declining	Slower	3
Chemical & pharmaceutical products	43.4	48.2	4.8	Declining	Slower	7
Computer & electronic products	43.9	39.3	-4.6	Declining	Faster	3
Electrical equipment	38.2	34.9	-3.4	Declining	Faster	2
Fabricated metal products	40.9	38.3	-2.6	Declining	Faster	11
Food, beverage & tobacco products	45.5	52.9	7.4	Growing	From Contraction	1
Furniture & related products	42.4	43.2	0.8	Declining	Slower	10
Nonmetallic mineral products	36.1	40.6	4.4	Declining	Slower	6
Paper products	43.9	43.3	-0.6	Declining	Faster	9
Petroleum & coal products	47.7	38.5	-9.3	Declining	Faster	7
Plastics & rubber products	41.3	42.8	1.5	Declining	Slower	5
Primary metal	26.8	37.2	10.4	Declining	Slower	10
Printing & related support activities	42.9	40.2	-2.7	Declining	Faster	13
Textile, apparel, leather & footwear	45.0	46.9	1.9	Declining	Slower	10
Transportation equipment	27.1	39.2	12.1	Declining	Slower	4

\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

At 42.3 index points, the production level index for manufacturing sector declined for the tenth consecutive month, but at a slower rate than the index recorded in September 2016. Thirteen manufacturing sub-sectors recorded declining production level during the review month in the following order: transportation equipment; petroleum & coal products; electrical equipment; primary metal; computer & electronic products; fabricated metal products; plastics & rubber products; furniture & related products; nonmetallic mineral products; printing & related support activities; paper products; textile, apparel, leather & footwear and chemical & pharmaceutical products. The appliances & components and cement sub-sectors remained unchanged, while the food, beverage & tobacco products sub-sector grew in the review period (Table 2).

**Table 2: Production at a Glance**

Index	Series Index		Percentage			Trend (Months)
	September	October	Point Change	Direction	Rate of Change	
PRODUCTION PMI	40.9	42.3	1.4	Declining	Slower	10
Appliances & components	42.9	50.0	7.1	No Change	From Contraction	1
Cement	47.7	50.0	2.3	No Change	From Contraction	1
Chemical & pharmaceutical products	39.3	48.6	9.3	Declining	Slower	3
Computer & electronic products	44.4	30.0	-14.4	Declining	Faster	3
Electrical equipment	35.3	26.3	-9.0	Declining	Faster	7
Fabricated metal products	37.9	31.0	-6.9	Declining	Faster	9
Food, beverage & tobacco products	48.5	60.3	11.7	Growing	From Contraction	1
Furniture & related products	39.0	39.5	0.4	Declining	Slower	9
Nonmetallic mineral products	30.3	39.8	9.5	Declining	Slower	6
Paper products	39.5	40.7	1.3	Declining	Slower	9
Petroleum & coal products	38.5	23.1	-15.4	Declining	Faster	3
Plastics & rubber products	29.2	35.7	6.5	Declining	Slower	5
Primary metal	20.0	26.7	6.7	Declining	Slower	8
Printing & related support activities	46.8	40.7	-6.1	Declining	Faster	10
Textile, apparel, leather & footwear	43.8	46.8	3.0	Declining	Slower	10
Transportation equipment	0.0	16.7	16.7	Declining	Slower	4

## 2.2 New Orders

The new orders index declined for the tenth consecutive month. At 40.3 points, the index declined at a slower rate when compared to the 38.7 index points in September 2016. The fourteen sub-sectors that recorded declines in new orders were: computer & electronic products; transportation equipment; primary metal; fabricated metal products; electrical equipment; nonmetallic mineral products; printing & related support activities; plastics & rubber products; furniture & related products; paper products; petroleum & coal products; textile, apparel, leather & footwear; chemical & pharmaceutical products and cement. The remaining two sub-sectors grew in the order: appliances & components and food, beverage & tobacco products (Table 3).

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

Index	Series Index		Percentage			Trend (Months)
	September	October	Point Change	Direction	Rate of Change	
NEW ORDERS PMI	38.7	40.3	1.6	Declining	Slower	10
Appliances & components	35.7	60.0	24.3	Growing	From Contraction	1
Cement	34.1	46.2	12.1	Declining	Slower	3
Chemical & pharmaceutical products	44.0	44.3	0.2	Declining	Slower	2
Computer & electronic products	44.4	25.0	-19.4	Declining	Faster	3
Electrical equipment	38.9	34.2	-4.7	Declining	Faster	2
Fabricated metal products	34.1	31.0	-3.1	Declining	Faster	11
Food, beverage & tobacco products	42.7	52.8	10.1	Growing	From Contraction	1
Furniture & related products	35.6	39.5	3.8	Declining	Slower	10
Nonmetallic mineral products	26.3	35.2	8.9	Declining	Slower	6
Paper products	47.4	40.7	-6.6	Declining	Faster	10
Petroleum & coal products	58.3	42.3	-16.0	Declining	From Expansion	1
Plastics & rubber products	36.5	37.0	0.5	Declining	Slower	4
Primary metal	15.0	30.0	15.0	Declining	Slower	8
Printing & related support activities	41.6	35.3	-6.2	Declining	Faster	10
Textile, apparel, leather & footwear	41.6	44.1	2.6	Declining	Slower	10
Transportation equipment	16.7	25.0	8.3	Declining	Slower	3

### 2.3 Supplier Delivery Time

At 57.7 index points, the supplier delivery time index for manufacturing sub-sectors improved at a faster rate in the month of October 2016. The index recorded improvements for the eighth consecutive month. Thirteen sub-sectors recorded improving suppliers' delivery time in the following order: petroleum & coal products; chemical & pharmaceutical products; plastics & rubber products; computer & electronic products; primary metal; furniture & related products; electrical equipment; paper products; fabricated metal products; printing & related support activities; textile, apparel, leather & footwear; cement and nonmetallic mineral products. The appliances & components and transportation equipment sub-sectors remained unchanged, while the food, beverage & tobacco products sub-sector recorded worsening delivery time in October (Table 4).

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

Index	Series	Series	Percentage			Trend (Months)
	Index	Index	Point	Direction	Rate of Change	
	September	October	Change			
SUPPLIER DELIVERY PMI	55.6	57.7	2.1	Improving	Faster	8
Appliances & components	57.1	50.0	-7.1	No Change	From Improving	1
Cement	61.4	57.7	-3.7	Improving	Slower	3
Chemical & pharmaceutical products	55.8	67.1	11.3	Improving	Faster	7
Computer & electronic products	44.4	65.0	20.6	Improving	From Worsening	1
Electrical equipment	69.0	60.5	-8.5	Improving	Slower	3
Fabricated metal products	59.8	58.8	-1.1	Improving	Slower	7
Food, beverage & tobacco products	49.5	44.9	-4.7	Worsening	Faster	2
Furniture & related products	60.6	63.2	2.5	Improving	Faster	5
Nonmetallic mineral products	56.6	55.7	-0.9	Improving	Slower	5
Paper products	44.7	59.3	14.5	Improving	From Worsening	1
Petroleum & coal products	62.5	69.2	6.7	Improving	Faster	3
Plastics & rubber products	53.7	66.1	12.4	Improving	Faster	8
Primary metal	55.0	63.3	8.3	Improving	Faster	3
Printing & related support activities	51.3	58.0	6.7	Improving	Faster	3
Textile, apparel, leather & footwear	55.6	58.0	2.4	Improving	Faster	6
Transportation equipment	75.0	50.0	-25.0	No Change	From Improving	1

### 2.4 Employment Level

Employment level index in the month of October 2016 stood at 42.2 points, indicating declines in employment level for the twentieth consecutive month. However, the index declined at a slower rate when compared with the level in the preceding month. Of the sixteen sub-sectors, fourteen recorded declines in the following order: electrical equipment; printing & related support activities; nonmetallic mineral products; petroleum & coal products; chemical & pharmaceutical products; primary metal; paper products; plastics & rubber products; fabricated metal products; furniture & related products; cement; textile, apparel, leather & footwear; computer & electronic products and food, beverage & tobacco products. The remaining two sub-sectors recorded growth during the review period in the order: transportation equipment and appliances & components (Table 5).

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

Index	Series Index	Series Index	Percentage			Trend
	September	October	Point Change	Direction	Rate of Change	(Months)
EMPLOYMENT LEVEL PMI	41.2	42.2	1.0	Declining	Slower	20
Appliances & components	57.1	60.0	2.9	Growing	Faster	7
Cement	34.1	44.2	10.1	Declining	Slower	3
Chemical & pharmaceutical products	39.0	40.0	1.0	Declining	Slower	12
Computer & electronic products	44.4	45.0	0.6	Declining	Slower	3
Electrical equipment	26.2	26.3	0.1	Declining	Slower	5
Fabricated metal products	40.9	42.3	1.4	Declining	Slower	15
Food, beverage & tobacco products	42.7	48.6	5.9	Declining	Slower	5
Furniture & related products	43.8	42.8	-1.1	Declining	Faster	12
Nonmetallic mineral products	40.5	36.4	-4.2	Declining	Faster	10
Paper products	44.7	40.7	-4.0	Declining	Faster	3
Petroleum & coal products	37.5	38.5	1.0	Declining	Slower	3
Plastics & rubber products	50.0	41.1	-8.9	Declining	From No Change	1
Primary metal	35.0	40.0	5.0	Declining	Slower	3
Printing & related support activities	36.5	35.3	-1.2	Declining	Faster	15
Textile, apparel, leather & footwear	44.9	44.7	-0.3	Declining	Faster	11
Transportation equipment	33.3	66.7	33.3	Growing	From Contraction	1

## 2.5 Raw Materials Inventory

At 42.9 index points, the raw materials inventory index declined for the tenth consecutive month in the review period. The index declined at a slower rate when compared with the previous month. Of the sixteen sub-sectors, twelve recorded declines in raw materials inventories in the order: petroleum & coal products; furniture & related products; electrical equipment; printing & related support activities; paper products; fabricated metal products; primary metal; cement; textile, apparel, leather & footwear; nonmetallic mineral products; plastics & rubber products and chemical & pharmaceutical products. The remaining four sub-sectors recorded growth in inventories in the order: transportation equipment; appliances & components; food, beverage & tobacco products; and computer & electronic products (Table 6).

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

Index	Series Index	Series Index	Percentage			Trend*
	September	October	Point Change	Direction	Rate of Change	(Months)
INVENTORIES PMI	40.9	42.9	2.0	Declining	Slower	10
Appliances & components	57.1	60.0	2.9	Growing	Faster	6
Cement	36.4	42.3	5.9	Declining	Slower	2
Chemical & pharmaceutical products	41.7	47.1	5.5	Declining	Slower	9
Computer & electronic products	38.9	55.0	16.1	Growing	From Contraction	1
Electrical equipment	21.4	36.8	15.4	Declining	Slower	6
Fabricated metal products	40.0	39.6	-0.4	Declining	Faster	6
Food, beverage & tobacco products	46.1	55.2	9.2	Growing	From Contraction	1
Furniture & related products	40.7	34.2	-6.5	Declining	Faster	9
Nonmetallic mineral products	40.8	44.3	3.5	Declining	Slower	11
Paper products	42.1	38.9	-3.2	Declining	Faster	3
Petroleum & coal products	37.5	19.2	-18.3	Declining	Faster	8
Plastics & rubber products	50.0	46.4	-3.6	Declining	From No Change	1
Primary metal	20.0	40.0	20.0	Declining	Slower	4
Printing & related support activities	37.5	37.2	-0.3	Declining	Faster	11
Textile, apparel, leather & footwear	42.5	43.1	0.6	Declining	Slower	9
Transportation equipment	41.7	66.7	25.0	Growing	From Contraction	1

### 3.0 Non-Manufacturing PMI Report

*Business activity, new orders, employment level and raw materials inventories declining at slower rate in October 2016*

The *composite PMI* for the *non-manufacturing sector* recorded decline for the tenth consecutive month. The index stood at 43.4 points, indicating a slower decline when compared to the index in September 2016. Of the eighteen non-manufacturing sub-sectors, sixteen recorded declines in the following order: construction; management of companies; public administration; professional, scientific, & technical services; accommodation & food services; wholesale trade; utilities; repair, maintenance/washing of motor vehicles; real estate, rental & leasing; electricity, gas, steam & air conditioning supply; finance & insurance; transportation & warehousing; arts, entertainment & recreation; health care & social assistance; water supply, sewage & waste management and information & communication. The remaining two subsectors recorded growth in the order: educational services and agriculture (Table 7 and Fig. 3).

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

Index	Series Index	Series Index	Percentage			Trend (Months)
	September	October	Point Change	Direction	Rate of Change	
Composite PMI <sup>\2</sup>	41.0	43.4	2.4	Declining	Slower	10
Business Activity	39.9	43.0	3.1	Declining	Slower	10
Level of new orders/customers/incoming business received	40.0	42.7	2.7	Declining	Slower	10
Level of employment in your organisation	40.3	41.5	1.2	Declining	Slower	10
Raw materials/WIP Inventories	43.9	46.4	2.5	Declining	Slower	10
Average price of yourInputs (volume weighted)	63.1	65.3	2.1	Growing	Faster	12
Level of outstanding business/ Backlog of work in your organisation	39.6	40.9	1.3	Declining	Slower	28
New Exports orders	28.6	32.8	4.2	Declining	Slower	28
Imports	30.2	33.8	3.6	Declining	Slower	28
Finished goods Inventories (sentiments)	37.9	38.7	0.9	Declining	Slower	28
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	39.6	38.5	-1.0	Declining	Faster	10
Agriculture	51.2	55.0	3.8	Growing	Faster	5
Arts, entertainment & recreation	43.1	47.1	4.0	Declining	Slower	5
Construction	33.2	26.2	-7.0	Declining	Faster	17
Educational services	61.2	60.9	-0.4	Growing	Slower	2
Electricity, gas, steam & air conditioning supply	35.4	44.6	9.2	Declining	Slower	9
Finance & insurance	40.5	46.0	5.5	Declining	Slower	9
Health care & social assistance	46.2	47.5	1.3	Declining	Slower	5
Information & communication	40.9	48.4	7.5	Declining	Slower	10
Management of companies	38.8	30.7	-8.1	Declining	Faster	12
Professional, scientific, & technical services	36.2	37.9	1.8	Declining	Slower	20
Public administration	26.6	32.1	5.6	Declining	Slower	10
Real estate, rental & leasing	34.1	43.4	9.2	Declining	Slower	14
Repair, maintenance/washing of motor vehicles...	39.5	41.1	1.6	Declining	Slower	10
Transportation & warehousing	51.3	46.7	-4.6	Declining	From Expansion	1
Utilities	41.9	39.7	-2.2	Declining	Faster	13
Water supply, sewage & waste management	33.8	47.8	14.0	Declining	Slower	4
Wholesale trade	38.7	38.6	-0.1	Declining	Faster	10

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

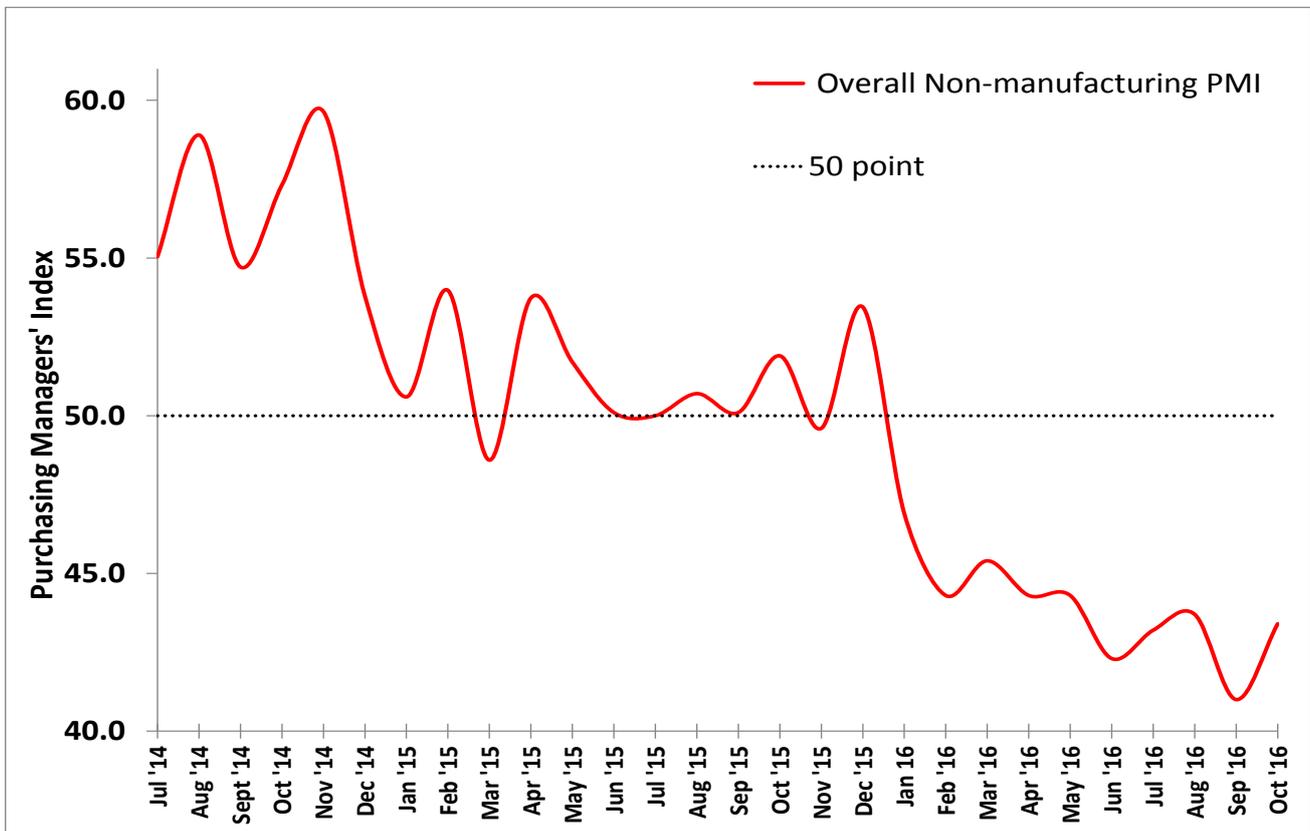


Fig. 3: Trend of Non-Manufacturing PMI

### 3.1 Business Activity

At 43.0 index points, business activity declined for the tenth consecutive month in October 2016. Fourteen of the eighteen sub-sectors recorded declines in the following order: management of companies; construction; repair, maintenance/washing of motor vehicles; professional, scientific, & technical services; wholesale trade; utilities; public administration; accommodation & food services; information & communication; real estate, rental & leasing; arts, entertainment & recreation; water supply, sewage & waste management; electricity, gas, steam & air conditioning supply and health care & social assistance. The remaining four sub-sectors recorded growth in the review month in the order: educational services; agriculture; finance & insurance and transportation & warehousing (Table 8).

Table 8: Business Activity at a Glance

Index	Series Index	Series Index	Percentage			Trend (Months)
	September	October	Point Change	Direction	Rate of Change	
BUSINESS ACTIVITY PMI	39.9	43.0	3.1	Declining	Slower	10
Accommodation & food services	37.4	40.4	3.0	Declining	Slower	10
Agriculture	56.5	55.0	-1.5	Growing	Slower	5
Arts, entertainment & recreation	39.7	47.1	7.4	Declining	Slower	5
Construction	30.3	19.4	-10.9	Declining	Faster	8
Educational services	64.3	64.9	0.6	Growing	Faster	2
Electricity, gas, steam & air conditioning supply	31.7	47.6	16.0	Declining	Slower	7
Finance & insurance	37.9	51.1	13.2	Growing	From Contraction	1
Health care & social assistance	42.6	48.7	6.1	Declining	Slower	4
Information & communication	38.8	45.5	6.7	Declining	Slower	2
Management of companies	40.0	18.2	-21.8	Declining	Faster	10
Professional, scientific, & technical services	27.5	34.7	7.3	Declining	Slower	9
Public administration	12.5	39.3	26.8	Declining	Slower	3
Real estate, rental & leasing	34.8	45.9	11.1	Declining	Slower	10
Repair, maintenance/washing of motor vehicles...	37.5	33.3	-4.2	Declining	Faster	10
Transportation & warehousing	50.0	51.1	1.1	Growing	From No Change	1
Utilities	50.0	38.2	-11.8	Declining	From No Change	1
Water supply, sewage & waste management	26.5	47.1	20.6	Declining	Slower	4
Wholesale trade	40.2	36.0	-4.1	Declining	Faster	10

### 3.2 New Orders

At 42.7 index points, new orders declined at a slower rate in the month of October 2016 when compared with the index of the preceding month. The new orders index has recorded declines for ten consecutive months. Of the eighteen sub-sectors, fifteen recorded declines in the following order: construction; public administration; management of companies; accommodation & food services; professional, scientific, & technical services; wholesale trade; utilities; real estate, rental & leasing; repair, maintenance/washing of motor vehicles; electricity, gas, steam & air conditioning supply; arts, entertainment & recreation; finance & insurance; water supply, sewage & waste management; health care & social assistance and transportation & warehousing. The remaining three sub-sectors recorded growth in the order: educational services; agriculture and information & communication (Table 9).

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

Index	Series Index		Percentage			Trend (Months)
	September	October	Point Change	Direction	Rate of Change	
NEW ORDERS PMI	40.0	42.7	2.7	Declining	Slower	10
Accommodation & food services	39.5	37.2	-2.3	Declining	Faster	10
Agriculture	52.8	54.3	1.5	Growing	Faster	5
Arts, entertainment & recreation	41.4	45.6	4.2	Declining	Slower	5
Construction	23.7	21.0	-2.7	Declining	Faster	17
Educational services	65.7	59.5	-6.3	Growing	Slower	3
Electricity, gas, steam & air conditioning supply	38.3	44.0	5.7	Declining	Slower	5
Finance & insurance	40.9	46.7	5.8	Declining	Slower	3
Health care & social assistance	43.9	47.4	3.4	Declining	Slower	4
Information & communication	41.3	53.6	12.4	Growing	From Contraction	1
Management of companies	50.0	31.8	-18.2	Declining	From No Change	1
Professional, scientific, & technical services	32.4	37.3	4.9	Declining	Slower	12
Public administration	25.0	28.6	3.6	Declining	Slower	10
Real estate, rental & leasing	28.6	38.8	10.2	Declining	Slower	14
Repair, maintenance/washing of motor vehicles...	40.2	40.5	0.3	Declining	Slower	4
Transportation & warehousing	46.3	48.9	2.7	Declining	Slower	8
Utilities	50.0	38.2	-11.8	Declining	From No Change	1
Water supply, sewage & waste management	38.2	47.1	8.8	Declining	Slower	4
Wholesale trade	37.3	37.4	0.1	Declining	Slower	10

### 3.3 Employment Level

The employment level index declined for the tenth consecutive month in October 2016. At 41.5 points, the index declined at a slower rate when compared with the 40.3 points recorded in September 2016. Fifteen sub-sectors recorded declines in employment level in the following order: construction; management of companies; public administration; utilities; accommodation & food services; wholesale trade; repair, maintenance/washing of motor vehicles; real estate, rental & leasing; professional, scientific, & technical services; transportation & warehousing; arts, entertainment & recreation; information & communication; finance & insurance; health care & social assistance and electricity, gas, steam & air conditioning supply. The agriculture and water supply, sewage & waste management sub-sectors remained unchanged, while the educational services sub-sector grew in the review month (Table 10).

**Table 10: Employment at a Glance**

Index	Series Index		Percentage			Trend
	September	October	Point Change	Direction	Rate of Change	(Months)
EMPLOYMENT PMI	40.3	41.5	1.2	Declining	Slower	10
Accommodation & food services	43.2	36.7	-6.4	Declining	Faster	5
Agriculture	42.6	50.0	7.4	No Change	From Contraction	1
Arts, entertainment & recreation	36.2	41.2	5.0	Declining	Slower	9
Construction	40.8	29.0	-11.8	Declining	Faster	17
Educational services	47.1	60.8	13.7	Growing	From Contraction	1
Electricity, gas, steam & air conditioning supply	35.0	47.6	12.6	Declining	Slower	5
Finance & insurance	42.4	43.3	0.9	Declining	Slower	9
Health care & social assistance	41.2	44.7	3.5	Declining	Slower	10
Information & communication	42.5	41.8	-0.7	Declining	Faster	20
Management of companies	35.0	31.8	-3.2	Declining	Faster	8
Professional, scientific, & technical services	47.1	39.8	-7.2	Declining	Faster	9
Public administration	37.5	32.1	-5.4	Declining	Faster	5
Real estate, rental & leasing	31.7	39.8	8.0	Declining	Slower	11
Repair, maintenance/washing of motor vehicles...	39.4	39.3	-0.1	Declining	Faster	7
Transportation & warehousing	47.5	40.2	-7.3	Declining	Faster	9
Utilities	34.4	35.3	0.9	Declining	Slower	8
Water supply, sewage & waste management	35.3	50.0	14.7	No Change	From Contraction	1
Wholesale trade	38.1	38.2	0.1	Declining	Slower	11

### 3.4 Inventories/Work in Progress

Non-manufacturing inventories/work in progress index stood at 46.4 index points in the review month, indicating a slower decline when compared with the 43.9 points recorded in September 2016. Thirteen sub-sectors recorded lower inventories in the following order: public administration; construction; electricity, gas, steam & air conditioning supply; professional, scientific, & technical services; accommodation & food services; management of companies; finance & insurance; wholesale trade; transportation & warehousing; utilities; water supply, sewage & waste management; real estate, rental & leasing and health care & social assistance. The remaining five sub-sectors recorded higher inventory in the following order: agriculture; educational services; arts, entertainment & recreation; information & communication and repair, maintenance/washing of motor vehicles (Table 11).

**Table 11: Raw Materials Inventories at a Glance**

Index	Series Index		Percentage			Trend
	September	October	Point Change	Direction	Rate of Change	(Months)
INVENTORY PMI	43.9	46.4	2.5	Declining	Slower	10
Accommodation & food services	38.3	39.9	1.6	Declining	Slower	17
Agriculture	52.8	60.7	7.9	Growing	Faster	5
Arts, entertainment & recreation	55.2	54.4	-0.8	Growing	Slower	6
Construction	38.2	35.5	-2.7	Declining	Faster	20
Educational services	67.7	58.3	-9.4	Growing	Slower	3
Electricity, gas, steam & air conditioning supply	36.7	39.3	2.6	Declining	Slower	5
Finance & insurance	40.6	42.9	2.2	Declining	Slower	10
Health care & social assistance	57.0	49.3	-7.7	Declining	From Expansion	1
Information & communication	41.3	52.8	11.5	Growing	From Contraction	1
Management of companies	30.0	40.9	10.9	Declining	Slower	6
Professional, scientific, & technical services	37.8	39.8	2.1	Declining	Slower	7
Public administration	31.3	28.6	-2.7	Declining	Faster	4
Real estate, rental & leasing	41.4	49.0	7.6	Declining	Slower	10
Repair, maintenance/washing of motor vehicles...	41.0	51.3	10.3	Growing	From Contraction	1
Transportation & warehousing	61.5	46.7	-14.8	Declining	From Expansion	1
Utilities	33.3	47.1	13.7	Declining	Slower	2
Water supply, sewage & waste management	35.3	47.1	11.8	Declining	Slower	3
Wholesale trade	39.3	42.9	3.6	Declining	Slower	10

**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
Sept '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

**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
Sept '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