

PURCHASING MANAGERS' INDEX

A MONTHLY PUBLICATION



STATISTICS DEPARTMENT
CENTRAL BANK OF NIGERIA, ABUJA

DECEMBER 2016 REPORT

PURCHASING MANAGERS' INDEX (PMI) DECEMBER 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 December 13th to 20th, 2016 with a total of 1,740 responses 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 that stated by the respondents. The data contained herein further provides input for policy decisions.

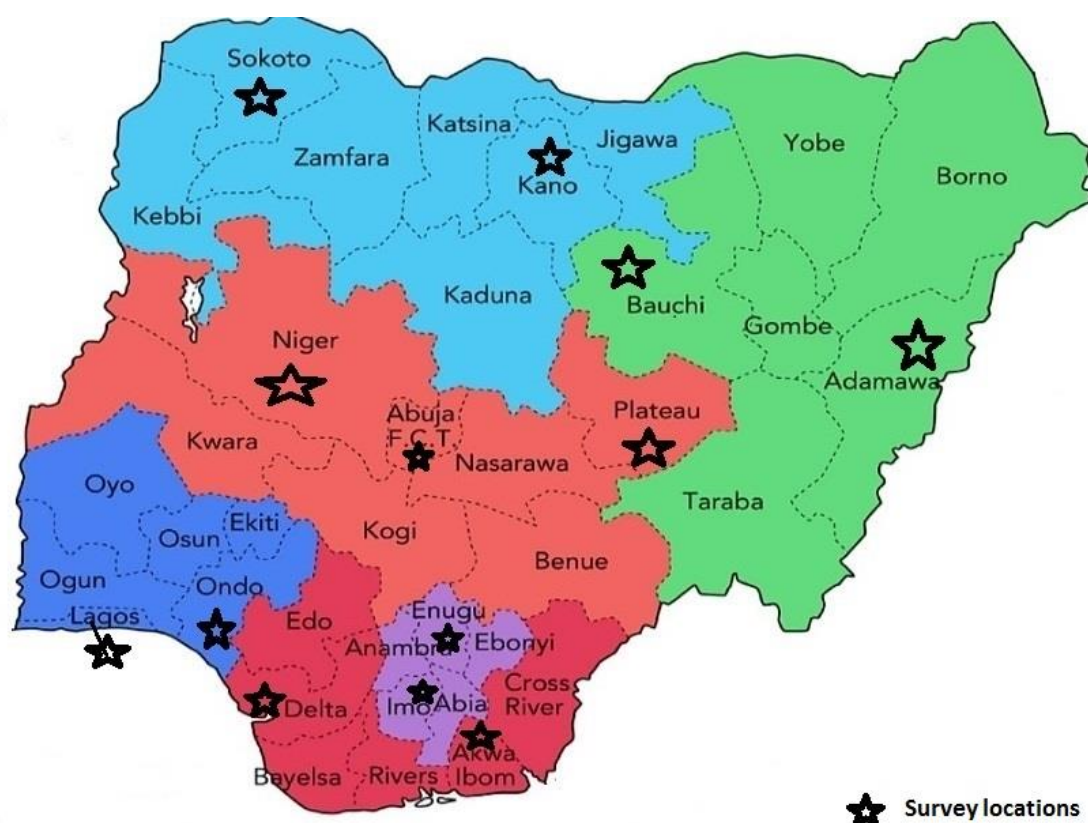


Fig. 1: Map of Nigeria showing the survey locations

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, and raw material inventories expanding from contraction; employment level declining slower; and supplier delivery time worsening from improving December 2016

The *Manufacturing PMI* stood at 52.0 index points in December 2016, indicating expansion in the manufacturing sector during the review period. The index had recorded declining in the preceding eleven months (Fig. 2 and Table 1). Eight of the sixteen sub-sectors surveyed recorded expansion in the review month in the following order: cement; food, beverage & tobacco products; textile, apparel, leather & footwear; plastics & rubber products; paper products; appliances & components; chemical & pharmaceutical products; and furniture & related products. The fabricated metal products sub-sector remained unchanged, while the remaining seven subsectors declined in the order: computer & electronic products; electrical equipment; primary metal; transportation equipment; petroleum & coal products; printing & related support activities; and nonmetallic mineral products.

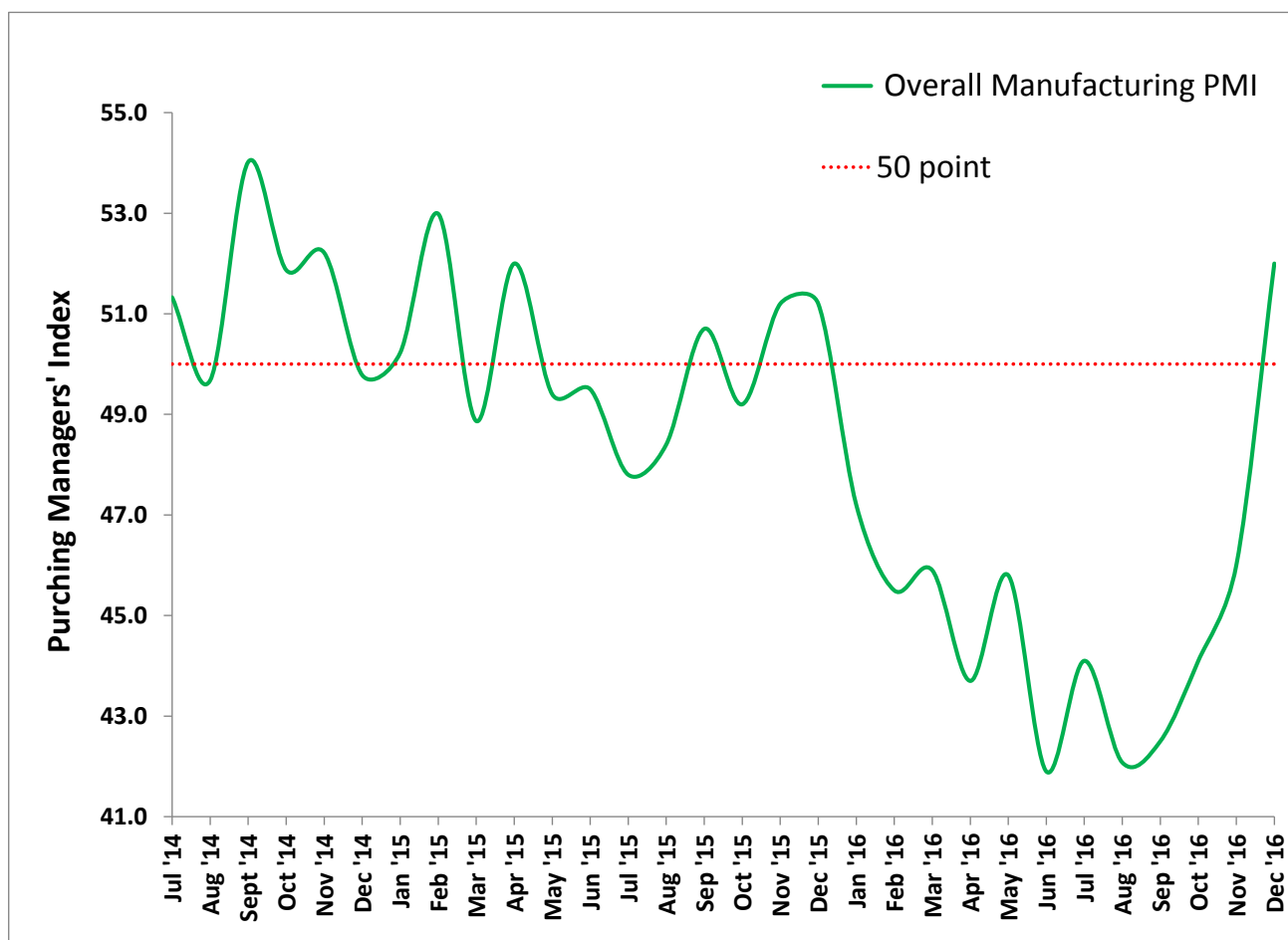


Fig. 2: Trend of Manufacturing PMI

Table 1: Manufacturing at a Glance

Index	Series Index*	Series Index*	Percentage Point	Direction	Rate of Change	Trend** (Months)
	November	December	Change		Change	
Composite PMI \1	46.0	52.0	6.0	Growing	From Contraction	1
Production level	46.9	57.6	10.6	Growing	From Contraction	1
New orders	45.1	51.8	6.7	Growing	From Contraction	1
Supplier delivery time	53.2	47.9	-5.3	Worsening	From Improving	1
Employment level	40.6	48.6	8.0	Declining	Slower	22
Raw materials/WIP Inventories	46.1	51.6	5.4	Growing	From Contraction	1
New Export Orders	39.6	37.2	-2.4	Declining	Faster	22
Output Prices	65.7	70.4	4.7	Growing	Faster	12
Input Prices	71.2	73.2	2.0	Growing	Faster	30
Quantity of Purchases	48.1	52.7	4.6	Growing	From Contraction	1
Business Outstanding/ Backlog of Work	45.2	45.3	0.0	Declining	Slower	22
Stocks of Finished Goods	42.0	48.5	6.5	Declining	Slower	22
Manufacturing Sub-Sectors						
Appliances & components	48.1	50.4	2.2	Growing	From Contraction	1
Cement	57.4	62.4	5.0	Growing	Faster	2
Chemical & pharmaceutical products	44.4	50.2	5.8	Growing	From Contraction	1
Computer & electronic products	30.0	39.6	9.6	Declining	Slower	5
Electrical equipment	51.9	40.8	-11.1	Declining	From Expansion	1
Fabricated metal products	43.8	50.0	6.2	No Change	From Contraction	1
Food, beverage & tobacco products	53.4	59.9	6.4	Growing	Faster	3
Furniture & related products	41.2	50.2	9.0	Growing	From Contraction	1
Nonmetallic mineral products	43.5	48.1	4.6	Declining	Slower	8
Paper products	47.9	51.1	3.2	Growing	From Contraction	1
Petroleum & coal products	38.3	46.4	8.1	Declining	Slower	9
Plastics & rubber products	52.7	52.8	0.1	Growing	Faster	2
Primary metal	35.9	43.0	7.1	Declining	Slower	12
Printing & related support activities	42.0	46.8	4.8	Declining	Slower	15
Textile, apparel, leather & footwear	47.3	56.8	9.5	Growing	From Contraction	1
Transportation equipment	40.8	43.6	2.8	Declining	Slower	6

\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 Manufacturing Production Level

At 57.6 index points, the production level index for manufacturing sector indicated the sector expanded in the review period, compared to the decline recorded in the preceding eleven months. Five manufacturing sub-sectors recorded growth in production level during the review month in the following order: cement; food, beverage & tobacco products; electrical equipment; plastics & rubber products; and textile, apparel, leather & footwear. The appliances & components sub-sector remained unchanged, while the remaining ten sub-sectors declined in the review period in the order: primary metal; petroleum & coal products; computer & electronic products; transportation equipment; furniture & related products; fabricated metal products; nonmetallic mineral products; paper products; chemical & pharmaceutical products; and printing & related support activities (Table 2).

Table 2: Production at a Glance

Index	Series Index	Series Index	Percentage Point	Direction	Rate of Change	Trend (Months)
	November	December	Change		Change	
PRODUCTION PMI	46.9	57.6	10.7	Growing	From Contraction	1
Appliances & components	53.3	50.0	-3.3	No Change	From Expansion	1
Cement	72.2	66.1	-6.2	Growing	Slower	2
Chemical & pharmaceutical products	56.1	46.8	-9.3	Declining	From Expansion	1
Computer & electronic products	37.5	30.0	-7.5	Declining	Faster	5
Electrical equipment	42.3	56.3	13.9	Growing	From Contraction	1
Fabricated metal products	52.6	40.2	-12.3	Declining	From Expansion	1
Food, beverage & tobacco products	69.2	57.3	-11.9	Growing	Slower	3
Furniture & related products	56.5	38.0	-18.6	Declining	From Expansion	1
Nonmetallic mineral products	51.8	42.4	-9.4	Declining	From Expansion	1
Paper products	51.8	46.4	-5.4	Declining	From Expansion	1
Petroleum & coal products	46.9	26.9	-20.0	Declining	Faster	5
Plastics & rubber products	55.8	54.2	-1.6	Growing	Slower	2
Primary metal	42.9	22.7	-20.1	Declining	Faster	10
Printing & related support activities	53.6	47.3	-6.3	Declining	From Expansion	1
Textile, apparel, leather & footwear	65.9	52.2	-13.7	Growing	Slower	2
Transportation equipment	40.0	35.0	-5.0	Declining	Faster	6

2.2 Manufacturing New Orders

At 51.8 points, the new orders index showed expansion in new orders after eleven months of contraction. It stood at 45.1 in November 2016. The five sub-sectors that recorded expansion in new orders were: cement; food, beverage & tobacco products; textile, apparel, leather & footwear; paper products; and fabricated metal products. The plastics & rubber products sub-sector remained unchanged, while the remaining ten sub-sectors declined in the order: primary metal; electrical equipment; transportation equipment; appliances & components; petroleum & coal products; printing & related support activities; computer & electronic products; nonmetallic mineral products; furniture & related products; and chemical & pharmaceutical products (Table 3).

Table 3: New Orders at a Glance

Index	Series Index	Series Index	Percentage Point	Direction	Rate of Change	Trend (Months)
	November	December	Change		Change	
NEW ORDERS PMI	45.1	51.8	6.7	Growing	From Contraction	1
Appliances & components	56.3	43.3	-12.9	Declining	From Expansion	1
Cement	57.1	66.7	9.5	Growing	Faster	2
Chemical & pharmaceutical products	46.8	49.0	2.2	Declining	Slower	4
Computer & electronic products	15.0	45.8	30.8	Declining	Slower	5
Electrical equipment	56.3	38.5	-17.8	Declining	From Expansion	1
Fabricated metal products	44.3	52.6	8.3	Growing	From Contraction	1
Food, beverage & tobacco products	55.8	62.5	6.7	Growing	Faster	3
Furniture & related products	39.8	47.6	7.9	Declining	Slower	12
Nonmetallic mineral products	43.5	46.4	2.9	Declining	Slower	8
Paper products	50.0	53.6	3.6	Growing	From No Change	1
Petroleum & coal products	42.3	43.8	1.4	Declining	Slower	3
Plastics & rubber products	43.8	50.0	6.3	No Change	From Contraction	1
Primary metal	31.8	35.7	3.9	Declining	Slower	10
Printing & related support activities	35.1	44.2	9.1	Declining	Slower	12
Textile, apparel, leather & footwear	46.2	57.0	10.8	Growing	From Contraction	1
Transportation equipment	35.0	40.0	5.0	Declining	Slower	5

2.3 Manufacturing Supplier Delivery Time

At 47.9 index points, the supplier delivery time for manufacturing sub-sectors contracted in the month of December 2016, after nine consecutive periods of expansion. Nine sub-sectors recorded worsening suppliers' delivery time in the following order: transportation equipment; food, beverage & tobacco products; cement; textile, apparel, leather & footwear; paper products; printing & related support activities; chemical & pharmaceutical products; plastics & rubber products; and nonmetallic mineral products. The computer & electronic products and electrical equipment sub-sectors remained unchanged, while the appliances & components; primary metal; furniture & related products; petroleum & coal products; and fabricated metal products sub-sectors recorded improving delivery time in December (Table 4).

Table 4: Supplier Delivery Time at a Glance

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index November	Index December	Point Change	Direction	of Change	
SUPPLIER DELIVERY PMI	53.2	47.9	-5.3	Worsening	From Improving	1
Appliances & components	50.0	66.7	16.7	Improving	From No Change	1
Cement	50.0	42.6	-7.4	Worsening	From No Change	1
Chemical & pharmaceutical products	47.9	45.9	-2.0	Worsening	Faster	2
Computer & electronic products	80.0	50.0	-30.0	No Change	From Improving	1
Electrical equipment	43.8	50.0	6.3	No Change	From Worsening	1
Fabricated metal products	50.6	50.5	-0.1	Improving	Slower	9
Food, beverage & tobacco products	48.1	42.4	-5.6	Worsening	Faster	4
Furniture & related products	56.0	56.5	0.5	Improving	Faster	7
Nonmetallic mineral products	52.2	49.1	-3.1	Worsening	From Improving	1
Paper products	57.1	44.6	-12.5	Worsening	From Improving	1
Petroleum & coal products	76.9	56.3	-20.7	Improving	Slower	5
Plastics & rubber products	62.5	46.2	-16.3	Worsening	From Improving	1
Primary metal	50.0	59.5	9.5	Improving	From No Change	1
Printing & related support activities	54.8	44.8	-10.0	Worsening	From Improving	1
Textile, apparel, leather & footwear	52.7	43.3	-9.4	Worsening	From Improving	1
Transportation equipment	60.0	40.0	-20.0	Worsening	From Improving	1

2.4 Manufacturing Employment Level

Employment level index in the month of December 2016 stood at 48.6 points, indicating declines in employment level for the twenty-second consecutive month. However, the index shows a slowing contraction in manufacturing employment when compared with the level in the preceding month. Of the sixteen sub-sectors, nine recorded contraction in employment in the following order: computer & electronic products; electrical equipment; appliances & components; printing & related support activities; furniture & related products; chemical & pharmaceutical products; primary metal; fabricated metal products; and nonmetallic mineral products. The paper products; petroleum & coal products; and transportation equipment sub-sectors remained unchanged, while the cement; plastics & rubber products; food, beverage & tobacco products; and textile, apparel, leather & footwear sub-sectors recorded expansion during the review period (Table 5).

Table 5: Employment Level at a Glance

Index	Series Index	Series Index	Percentage Point		Rate of Change	Trend (Months)
	November	December	Change	Direction		
EMPLOYMENT LEVEL PMI	40.6	48.6	8.0	Declining	Slower	22
Appliances & components	31.3	43.3	12.1	Declining	Slower	2
Cement	50.0	57.4	7.4	Growing	From No Change	1
Chemical & pharmaceutical products	36.2	44.9	8.7	Declining	Slower	14
Computer & electronic products	10.0	29.2	19.2	Declining	Slower	5
Electrical equipment	43.8	38.5	-5.3	Declining	Faster	7
Fabricated metal products	44.2	45.4	1.2	Declining	Slower	17
Food, beverage & tobacco products	47.5	54.9	7.4	Growing	From Contraction	1
Furniture & related products	37.3	44.0	6.6	Declining	Slower	14
Nonmetallic mineral products	40.2	49.1	8.9	Declining	Slower	12
Paper products	39.3	50.0	10.7	No Change	From Contraction	1
Petroleum & coal products	26.9	50.0	23.1	No Change	From Contraction	1
Plastics & rubber products	54.2	55.8	1.6	Growing	Faster	2
Primary metal	45.5	45.2	-0.2	Declining	Faster	5
Printing & related support activities	35.8	43.5	7.7	Declining	Slower	17
Textile, apparel, leather & footwear	38.6	53.8	15.2	Growing	From Contraction	1
Transportation equipment	35.0	50.0	15.0	No Change	From Contraction	1

2.5 Manufacturing Raw Materials Inventory

At 51.6 index points, the index shows an expansion in raw materials inventory in the review month, after declining for eleven consecutive months. Of the sixteen sub-sectors, eight recorded expansion in raw materials inventories in the order: cement; food, beverage & tobacco products; textile, apparel, leather & footwear; plastics & rubber products; chemical & pharmaceutical products; transportation equipment; appliances & components; and paper products. The remaining eight sub-sectors recorded decline in inventories in the order: petroleum & coal products; computer & electronic products; electrical equipment; primary metal; nonmetallic mineral products; furniture & related products; fabricated metal products; and printing & related support activities (Table 6).

Table 6: Raw Materials Inventories at a Glance

Index	Series Index	Series Index	Percentage Point		Rate of Change	Trend (Months)
	November	December	Change	Direction		
INVENTORIES PMI	46.1	51.6	5.5	Growing	From Contraction	1
Appliances & components	50.0	53.6	3.6	Growing	From No Change	1
Cement	62.5	64.8	2.3	Growing	Faster	2
Chemical & pharmaceutical products	42.6	56.1	13.6	Growing	From Contraction	1
Computer & electronic products	40.0	31.8	-8.2	Declining	Faster	2
Electrical equipment	56.3	34.6	-21.6	Declining	From Expansion	1
Fabricated metal products	40.7	44.8	4.1	Declining	Slower	8
Food, beverage & tobacco products	56.3	64.7	8.4	Growing	Faster	3
Furniture & related products	39.0	44.6	5.6	Declining	Slower	11
Nonmetallic mineral products	40.2	40.9	0.7	Declining	Slower	13
Paper products	48.2	53.6	5.4	Growing	From Contraction	1
Petroleum & coal products	19.2	31.3	12.0	Declining	Slower	10
Plastics & rubber products	58.3	57.7	-0.6	Growing	Slower	2
Primary metal	40.9	35.7	-5.2	Declining	Faster	6
Printing & related support activities	42.6	47.1	4.5	Declining	Slower	13
Textile, apparel, leather & footwear	47.8	59.8	12.0	Growing	From Contraction	1
Transportation equipment	55.6	55.6	0.0	Growing	Flat	3

3.0 Non-Manufacturing PMI Report

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

The *composite PMI* for the *non-manufacturing sector* declined for the twelfth consecutive month. The index stood at 47.1 points, indicating a slowing contraction when compared to that in November 2016. Of the eighteen non-manufacturing sub-sectors, ten recorded contraction in the following order: construction; public administration; professional, scientific, & technical services; information & communication; repair, maintenance/washing of motor vehicles; accommodation & food services; health care & social assistance; finance & insurance; wholesale/retail trade; and electricity, gas, steam & air conditioning supply. The remaining eight subsectors recorded expansion in the order: utilities; educational services; agriculture; transportation & warehousing; management of companies; arts, entertainment & recreation; water supply, sewage & waste management; and real estate, rental & leasing (Table 7 and Fig. 3).

Table 7: Non-Manufacturing at a Glance

Index	Series	Series	Percentage		Rate of Change	Trend (Months)
	Index November	Index December	Point Change	Direction		
Composite PMI \2	42.8	47.1	4.3	Declining	Slower	12
Business Activity	43.0	48.2	5.2	Declining	Slower	12
Level of new orders/customers/incoming business	42.3	46.9	4.5	Declining	Slower	12
Level of employment in your organisation	40.2	43.8	3.5	Declining	Slower	12
Raw materials/WIP Inventories	45.5	49.5	4.1	Declining	Slower	12
Average price of yourInputs (volume weighted)	66.8	64.0	-2.7	Growing	Slower	14
Level of outstanding business/ Backlog of work	42.4	41.5	-0.9	Declining	Faster	30
New Exports orders	30.8	33.8	3.0	Declining	Slower	30
Imports	34.0	35.5	1.5	Declining	Slower	30
Finished goods Inventories (sentiments)	41.1	41.6	0.6	Declining	Slower	30
Non-manufacturing sub-sectors						
Accommodation & food services	40.0	45.3	5.4	Declining	Slower	12
Agriculture	52.7	55.9	3.3	Growing	Faster	7
Arts, entertainment & recreation	46.9	52.2	5.3	Growing	From Contraction	1
Construction	34.7	25.2	-9.5	Declining	Faster	19
Educational services	48.2	57.1	8.9	Growing	From Contraction	1
Electricity, gas, steam & air conditioning supply	39.0	49.2	10.3	Declining	Slower	11
Finance & insurance	50.8	47.1	-3.7	Declining	From Expansion	1
Health care & social assistance	48.1	46.8	-1.3	Declining	Faster	7
Information & communication	35.1	39.5	4.3	Declining	Slower	12
Management of companies	42.0	53.8	11.7	Growing	From Contraction	1
Professional, scientific, & technical services	38.9	36.4	-2.5	Declining	Faster	22
Public administration	31.3	34.1	2.8	Declining	Slower	12
Real estate, rental & leasing	41.1	50.1	9.0	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	44.0	45.1	1.1	Declining	Slower	12
Transportation & warehousing	47.2	54.6	7.4	Growing	From Contraction	1
Utilities	42.2	61.8	19.6	Growing	From Contraction	1
Water supply, sewage & waste management	32.5	52.0	19.5	Growing	From Contraction	1
Wholesale/Retail trade	42.1	48.0	5.9	Declining	Slower	12

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

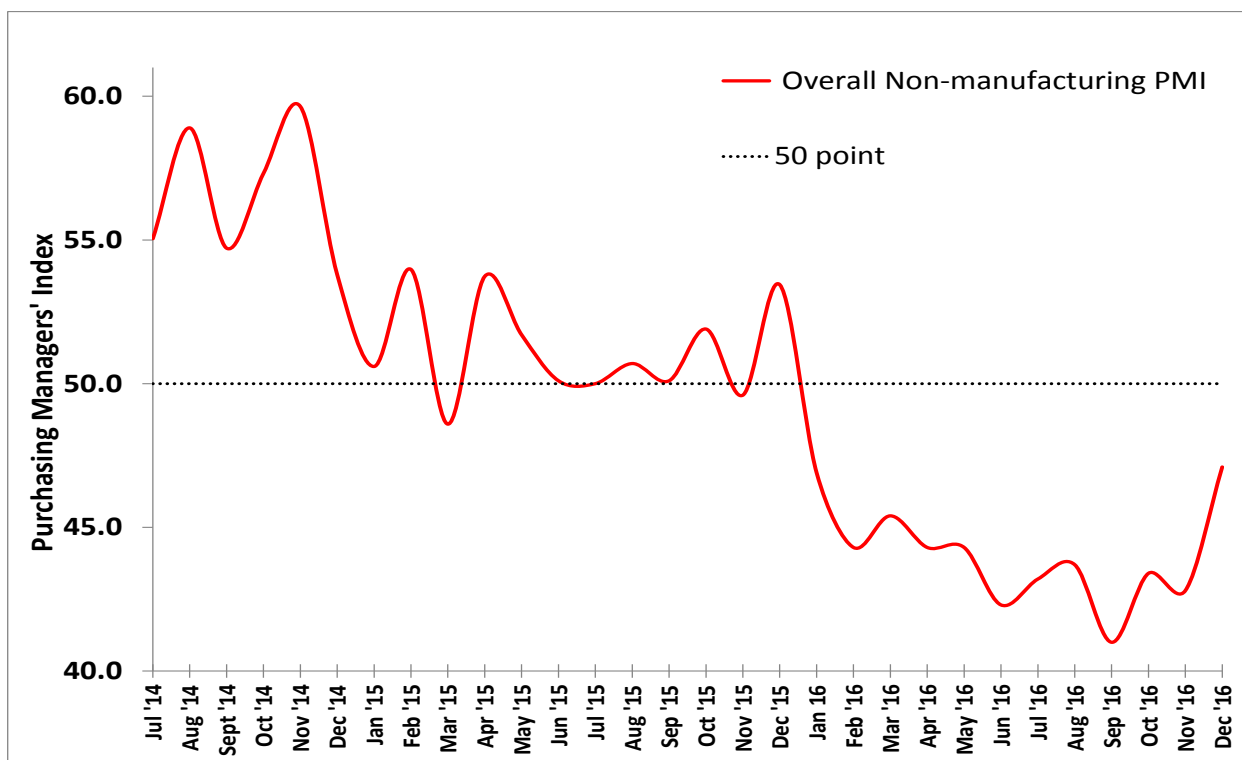


Fig. 3: Trend of Non-Manufacturing PMI

3.1 Non-Manufacturing Business Activity

At 48.2 index points, business activity declined for the twelfth consecutive month but at a slower rate in December 2016. Nine sub-sectors recorded contraction in the following order: construction; public administration; information & communication; professional, scientific, & technical services; repair, maintenance/washing of motor vehicles; finance & insurance; accommodation & food services; electricity, gas, steam & air conditioning supply; and health care & social assistance. The remaining nine sub-sectors recorded expansion in the order: utilities; educational services; agriculture; transportation & warehousing; management of companies; water supply, sewage & waste management; real estate, rental & leasing; arts, entertainment & recreation; and wholesale/retail trade (Table 8).

Table 8: Business Activity at a Glance

Index	Series Index November	Series Index December	Percentage Point Change	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	43.0	48.2	5.2	Declining	Slower	12
Accommodation & food services	40.5	46.7	6.2	Declining	Slower	12
Agriculture	54.9	60.7	5.7	Growing	Faster	7
Arts, entertainment & recreation	44.4	51.3	6.8	Growing	From Contraction	1
Construction	35.4	19.5	-15.9	Declining	Faster	10
Educational services	45.3	61.6	16.3	Growing	From Contraction	1
Electricity, gas, steam & air conditioning supply	44.9	46.7	1.9	Declining	Slower	9
Finance & insurance	58.1	46.7	-11.5	Declining	From Expansion	1
Health care & social assistance	50.0	49.3	-0.7	Declining	From No Change	1
Information & communication	33.6	34.2	0.6	Declining	Slower	4
Management of companies	50.0	55.0	5.0	Growing	From No Change	1
Professional, scientific, & technical services	35.2	38.3	3.1	Declining	Slower	11
Public administration	40.0	31.8	-8.2	Declining	Faster	5
Real estate, rental & leasing	40.9	52.5	11.6	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	36.5	46.0	9.4	Declining	Slower	12
Transportation & warehousing	53.3	55.1	1.8	Growing	Faster	3
Utilities	40.4	69.0	28.6	Growing	From Contraction	1
Water supply, sewage & waste management	40.0	52.6	12.6	Growing	From Contraction	1
Wholesale/Retail trade	40.7	50.8	10.1	Growing	From Contraction	1

3.2 Non-Manufacturing New Orders

At 46.9 index points, new orders for non-manufacturing show a slowing contraction in December 2016. Of the eighteen sub-sectors, ten contracted in the following order: construction; public administration; professional, scientific, & technical services; information & communication; accommodation & food services; real estate, rental & leasing; electricity, gas, steam & air conditioning supply; health care & social assistance; transportation & warehousing; and repair, maintenance/washing of motor vehicles. The wholesale/retail trade sub-sector remained unchanged, while the remaining seven sub-sectors recorded expansion in the order: arts, entertainment & recreation; management of companies; utilities; agriculture; educational services; finance & insurance; and water supply, sewage & waste management (Table 9).

Table 9: New Orders at a Glance

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index	Index	Point	Direction	of Change	
	November	December	Change			
NEW ORDERS PMI	42.3	46.9	4.6	Declining	Slower	12
Accommodation & food services	36.9	42.9	6.0	Declining	Slower	12
Agriculture	50.8	56.6	5.7	Growing	Faster	7
Arts, entertainment & recreation	47.8	61.5	13.8	Growing	From Contraction	1
Construction	29.3	25.6	-3.7	Declining	Faster	19
Educational services	50.0	53.5	3.5	Growing	From No Change	1
Electricity, gas, steam & air conditioning supply	38.8	45.7	6.9	Declining	Slower	7
Finance & insurance	57.0	53.3	-3.6	Growing	Slower	2
Health care & social assistance	50.0	45.9	-4.1	Declining	From No Change	1
Information & communication	34.1	39.5	5.4	Declining	Slower	2
Management of companies	40.9	60.0	19.1	Growing	From Contraction	1
Professional, scientific, & technical services	31.5	35.2	3.7	Declining	Slower	14
Public administration	15.0	31.8	16.8	Declining	Slower	12
Real estate, rental & leasing	42.0	43.2	1.3	Declining	Slower	16
Repair, maintenance/washing of motor vehicles	47.1	48.4	1.3	Declining	Slower	6
Transportation & warehousing	47.8	48.0	0.2	Declining	Slower	10
Utilities	44.2	58.6	14.4	Growing	From Contraction	1
Water supply, sewage & waste management	32.5	52.6	20.1	Growing	From Contraction	1
Wholesale/Retail trade	42.3	50.0	7.7	No Change	From Contraction	1

3.3 Non-Manufacturing Employment Level

The employment level Index for non-manufacturing declined for the twelfth consecutive month in December 2016. At 43.8 points, the index declined at a slower rate when compared with the 40.2 points recorded in November 2016. Fourteen sub-sectors recorded contraction in employment level in the following order: construction; professional, scientific, & technical services; public administration; arts, entertainment & recreation; wholesale/retail trade; information & communication; finance & insurance; repair, maintenance/washing of motor vehicles; health care & social assistance; accommodation & food services; agriculture; water supply, sewage & waste management; real estate, rental & leasing; and electricity, gas, steam & air conditioning supply. The educational services and utilities sub-sectors remained unchanged, while the management of companies; and transportation & warehousing sub-sectors employment level expanded in the review month (Table 10).

Table 10: Employment at a Glance

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index November	Index December	Point Change	Direction	of Change	
EMPLOYMENT PMI	40.2	43.8	3.6	Declining	Slower	12
Accommodation & food services	38.7	46.7	8.0	Declining	Slower	7
Agriculture	51.6	46.7	-4.9	Declining	From Expansion	1
Arts, entertainment & recreation	41.1	41.0	-0.1	Declining	Faster	11
Construction	34.1	26.8	-7.3	Declining	Faster	19
Educational services	50.0	50.0	0.0	No Change	Flat	2
Electricity, gas, steam & air conditioning supply	35.0	47.8	12.8	Declining	Slower	7
Finance & insurance	40.7	42.2	1.5	Declining	Slower	11
Health care & social assistance	42.5	43.9	1.4	Declining	Slower	12
Information & communication	35.6	42.1	6.5	Declining	Slower	22
Management of companies	40.9	55.0	14.1	Growing	From Contraction	1
Professional, scientific, & technical services	38.9	36.7	-2.2	Declining	Faster	11
Public administration	30.0	40.9	10.9	Declining	Slower	7
Real estate, rental & leasing	38.0	47.5	9.5	Declining	Slower	13
Repair, maintenance/washing of motor vehicles	45.2	43.5	-1.6	Declining	Faster	9
Transportation & warehousing	44.4	51.0	6.6	Growing	From Contraction	1
Utilities	38.0	50.0	12.0	No Change	From Contraction	1
Water supply, sewage & waste management	32.5	47.4	14.9	Declining	Slower	2
Wholesale/Retail trade	38.2	41.9	3.7	Declining	Slower	13

3.4 Non-Manufacturing Inventories/Work in Progress

Non-manufacturing inventories/work in progress index stood at 49.5 points in the review month, indicating a slower decline when compared with the 45.5 points recorded in November 2016. Ten sub-sectors recorded contraction in inventories in the following order: construction; public administration; professional, scientific, & technical services; information & communication; repair, maintenance/washing of motor vehicles; management of companies; accommodation & food services; finance & insurance; health care & social assistance; and wholesale/retail trade. The remaining eight sub-sectors recorded expansion in inventories in the following order: utilities; transportation & warehousing; educational services; agriculture; real estate, rental & leasing; electricity, gas, steam & air conditioning supply; water supply, sewage & waste management and arts, entertainment & recreation (Table 11).

Table 11: Raw Materials Inventories at a Glance

Index	Series	Series	Percentage		Rate	Trend (Months)
	Index November	Index December	Point Change	Direction	of Change	
INVENTORY PMI	45.5	49.5	4.0	Declining	Slower	12
Accommodation & food services	43.8	45.1	1.2	Declining	Slower	19
Agriculture	53.3	59.8	6.5	Growing	Faster	7
Arts, entertainment & recreation	54.4	55.1	0.7	Growing	Faster	8
Construction	40.0	28.8	-11.3	Declining	Faster	22
Educational services	47.6	63.4	15.8	Growing	From Contraction	1
Electricity, gas, steam & air conditioning supply	37.2	56.7	19.5	Growing	From Contraction	1
Finance & insurance	47.4	46.3	-1.1	Declining	Faster	12
Health care & social assistance	50.0	48.0	-2.0	Declining	From No Change	1
Information & communication	37.3	42.1	4.8	Declining	Slower	2
Management of companies	36.4	45.0	8.6	Declining	Slower	8
Professional, scientific, & technical services	50.0	35.5	-14.5	Declining	From No Change	1
Public administration	40.0	31.8	-8.2	Declining	Faster	6
Real estate, rental & leasing	43.5	57.0	13.5	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	47.1	42.6	-4.5	Declining	Faster	2
Transportation & warehousing	43.3	64.3	21.0	Growing	From Contraction	1
Utilities	46.2	69.6	23.5	Growing	From Contraction	1
Water supply, sewage & waste management	25.0	55.3	30.3	Growing	From Contraction	1
Wholesale/Retail trade	47.2	49.2	2.0	Declining	Slower	12

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

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