

Central Bank of Nigeria



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

Statistics Department

December 2017

PURCHASING MANAGERS' INDEX (PMI) DECEMBER 2017 REPORT

1.0 Introduction

The December 2017 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period December 13 - 17, 2017. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in 15 locations in Nigeria (Fig. 1).

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.

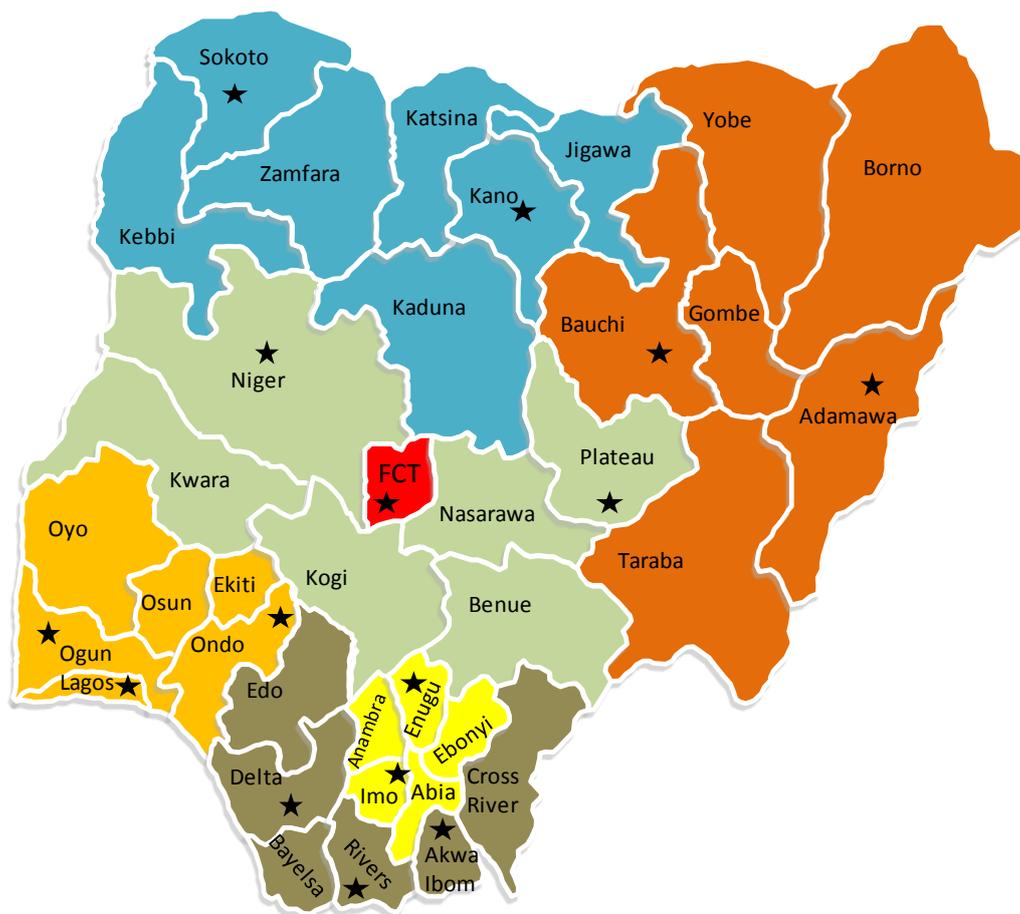


Fig. 1: Map of Nigeria with * showing the survey locations

1.1 Data and Method of Presentation

The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. The diffusion index is computed as the percentage of *responses with positive change plus half* of the percentage of those reporting *no change*, except for supplier delivery time, which is computed as the percentage of *responses with negative change plus half* of the percentage of those reporting *no change*. The composite PMI for the manufacturing sector is computed as the *weighted average* of five diffusion indices: production level, level of new orders, suppliers' delivery time, employment level and raw materials inventory/work in progress, with

assigned weights of 25%, 30%, 15%, 10% and 20%, respectively. The composite PMI for the non-manufacturing sector is computed from four diffusion indices: business activity, level of new orders, employment level and raw materials inventory, with equal weights of 25% each.

A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those reporting contraction are listed in the order of the highest to the lowest contraction.

2.0 Manufacturing PMI Report

Production level, new orders, supplier delivery time, employment level and inventories growing at a faster rate in December 2017

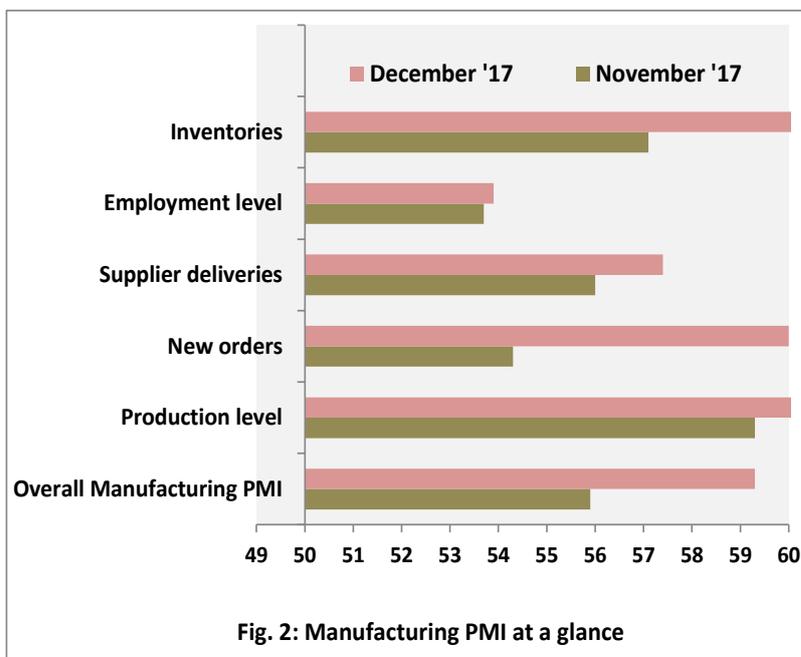
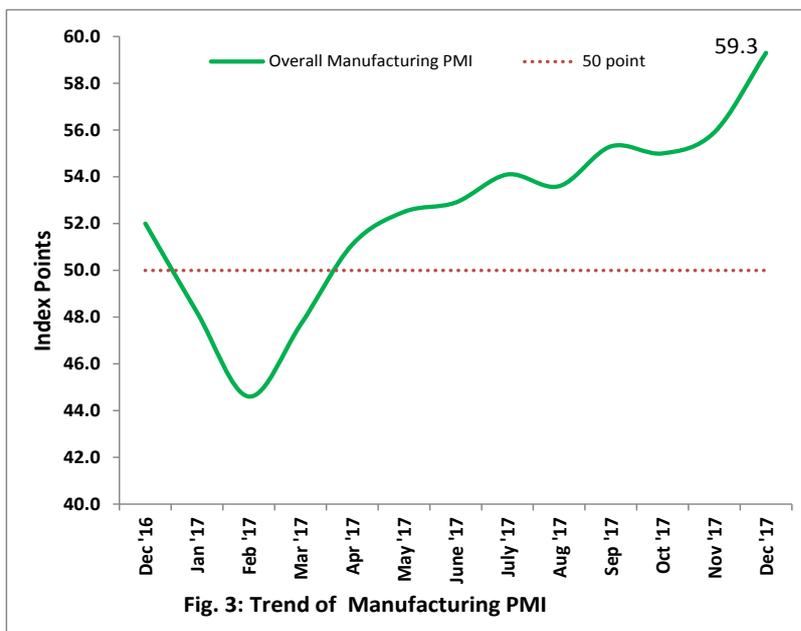


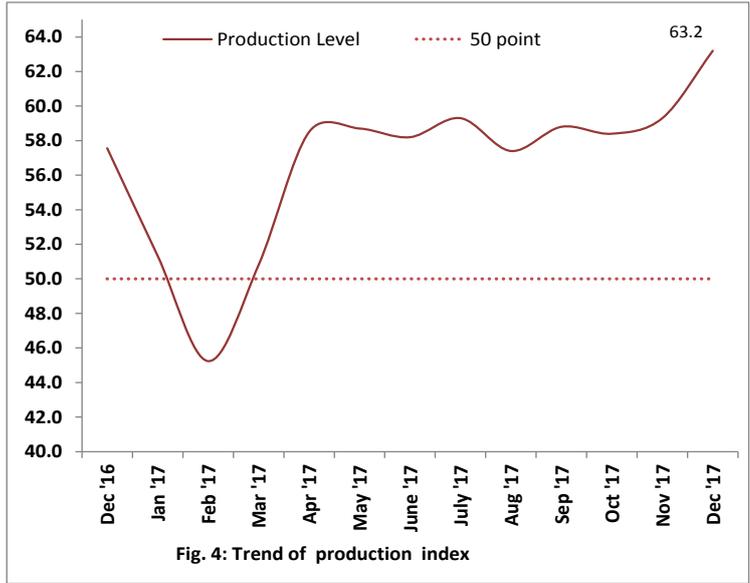
Fig. 2: Manufacturing PMI at a glance

The *Manufacturing PMI* in the month of December stood at 59.3 index points indicating expansion in the manufacturing sector for the ninth consecutive months. (Fig. 3 and Table 1). Fifteen of the 16 subsectors reported growth in the review month in the following order petroleum & coal products; textile, apparel, leather and footwear; cement; transportation equipment; paper products; food, beverage & tobacco products; furniture & related products; plastics & rubber products; nonmetallic mineral products; printing & related support activities; appliances and components; chemical & pharmaceutical products; fabricated metal products; primary metal and electrical equipment. The computer & electronic product sector contracted in the review month.



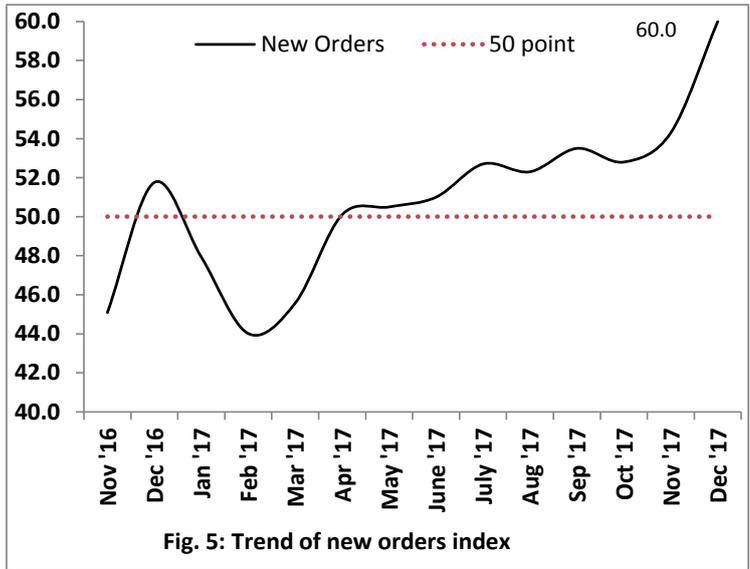
2.1 Production Level

At 63.2 points, the production level index for the manufacturing sector grew for the tenth consecutive month in December 2017. The index indicated an increase in production in the current month, when compared to its level in the preceding month. Eleven of the 16 manufacturing subsectors recorded increase in production level, 3 remained unchanged, while the remaining 2 recorded declines in production level during the review month (Fig. 4 and Table 2).



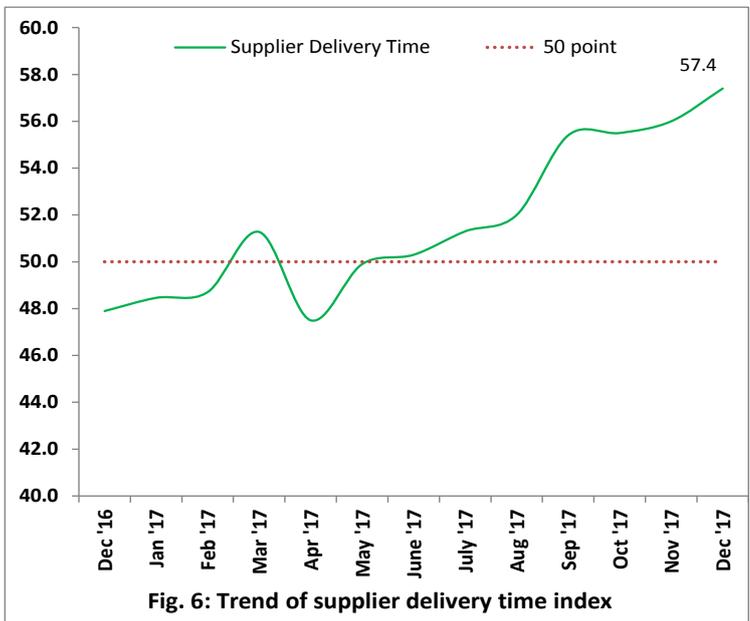
2.2 New Orders

At 60.0 points, the new orders index grew for the nine consecutive month, indicating increase in new orders in December 2017. Thirteen subsectors reported growth, 2 remained unchanged while 1 contracted in the review month (Fig. 5 and Table 3).



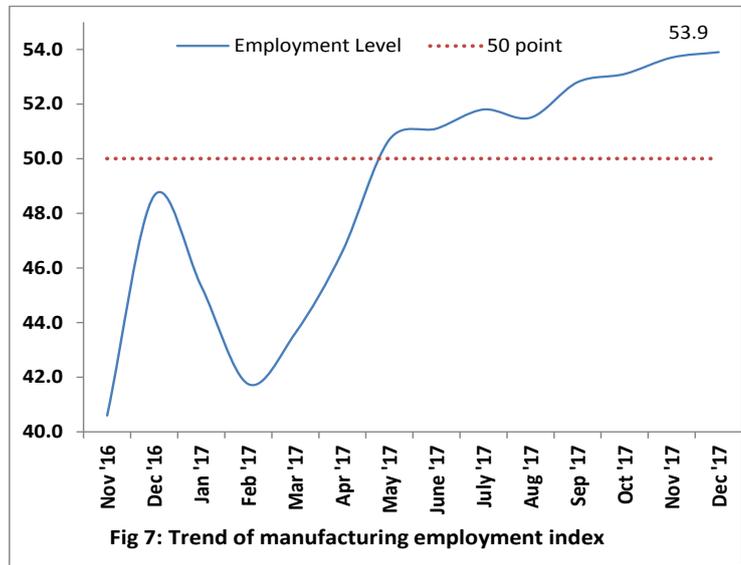
2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 57.4 points in December 2017, indicating faster supplier delivery time for the seventh consecutive month. Eleven subsectors recorded improved suppliers' delivery time, 1 remained unchanged while 4 subsectors recorded delayed delivery time (Fig. 6 and Table 4).



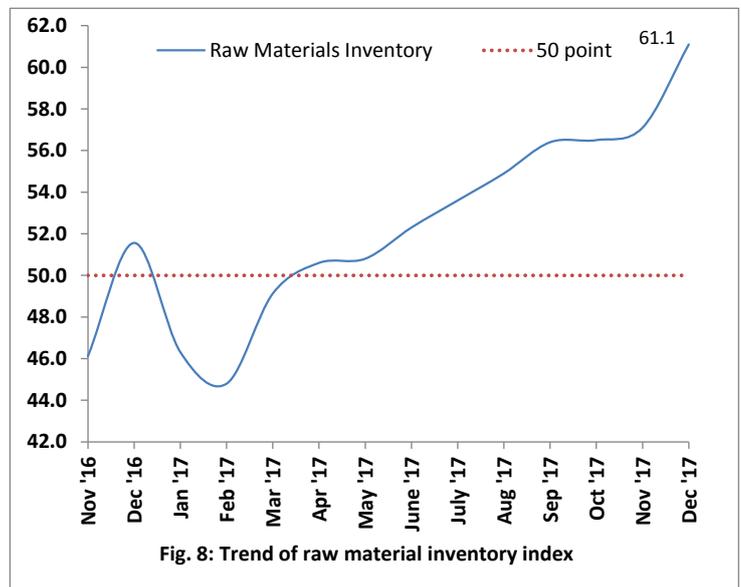
2.4 Employment Level

The employment level index in December 2017 stood at 53.9 points, indicating growth in employment level for the eighth consecutive month. Of the 16 subsectors, 9 subsectors increased their employment level, 3 remained unchanged while 4 subsectors reduced their employment level in the review month (Fig. 7 and Table 5).



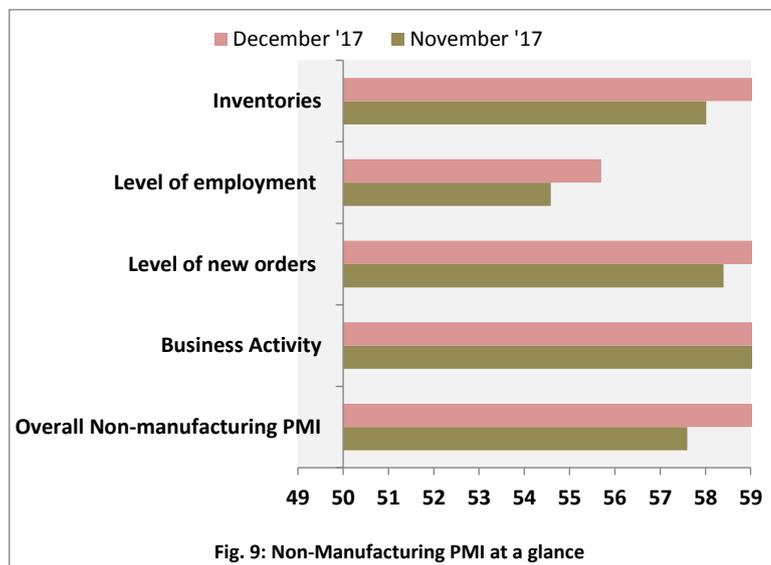
2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the ninth consecutive months in December 2017. At 61.1 points, the index grew at a faster rate when compared to its level in the previous months. Eleven of the 16 subsectors recorded growth, 3 remained unchanged while 2 subsectors recorded decline in raw material inventories (Fig. 8 and Table 6).



3.0 Non-Manufacturing PMI Report

Business activity, new orders, employment and inventories growing at a faster rate in December 2017



The *composite PMI* for the *non-manufacturing* sector stood at 62.1 points in December 2017, indicating expansion in the Non-manufacturing PMI for the eighth consecutive month. Fifteen of the 18 non-manufacturing subsectors recorded growth in the following order: arts, entertainment & recreation; agriculture; transportation & warehousing; utilities; water supply, sewage & waste management; finance & insurance; health care & social assistance; real estate, rental & leasing; wholesale trade; accommodation & food services; electricity, gas, steam & air conditioning supply; educational services; construction; information & communication and professional, scientific, & technical services. The management of companies remained unchanged, while the public administration and repair, maintenance/washing of motor vehicles... subsectors recorded contraction in the review period (Fig. 10 and Table 7).

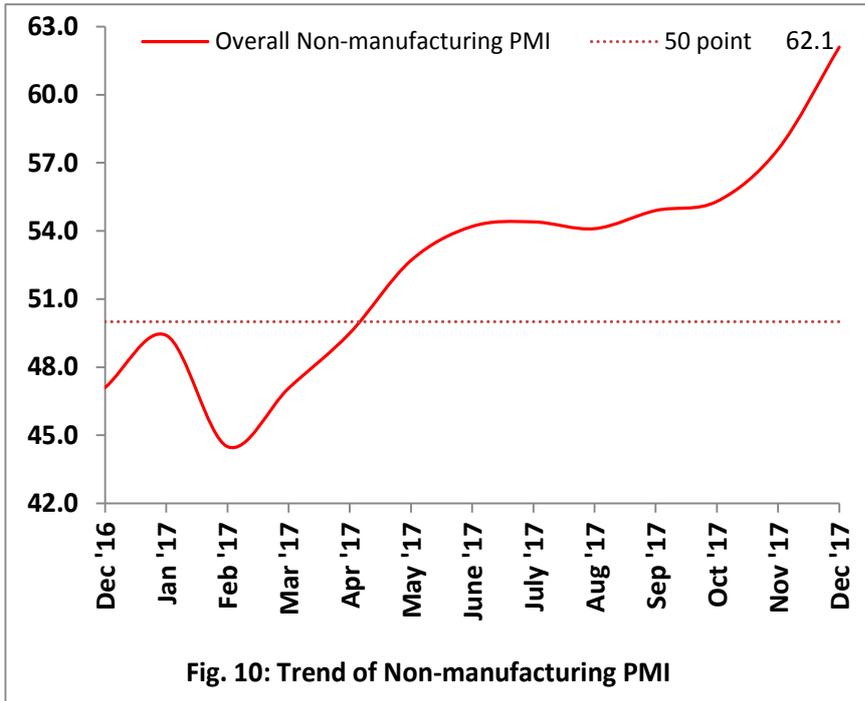


Fig. 10: Trend of Non-manufacturing PMI

3.1 Business Activity

At 67.4 points, the business activity index grew for the nine consecutive month, indicating expansion in business activity in December 2017. The index grew at a faster rate, when compared to its level in the previous month, indicating improvements in business activities in the current month. Sixteen subsectors recorded growth in business activity, one sector remain unchanged, while one declined in the review month (Table 8).

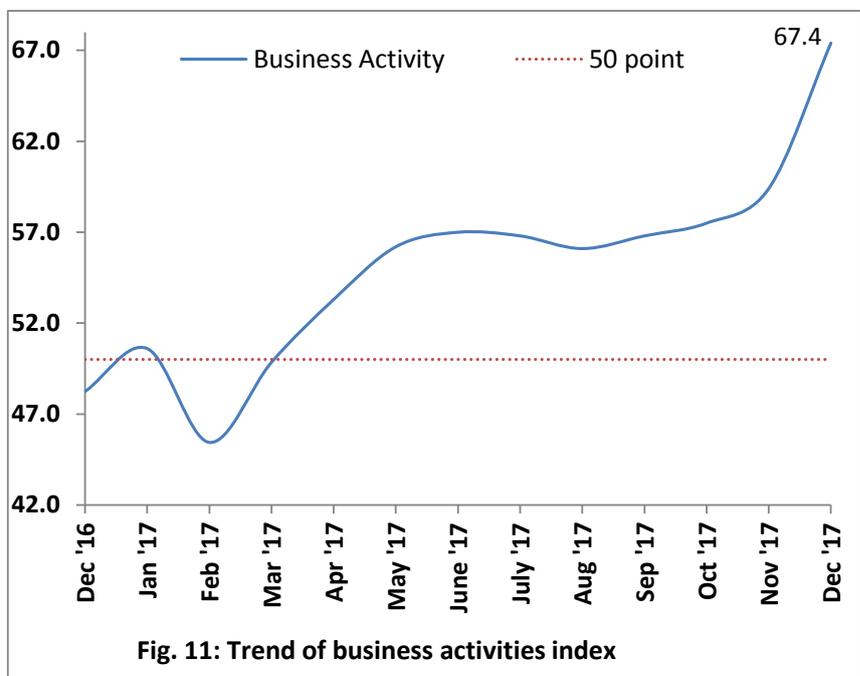
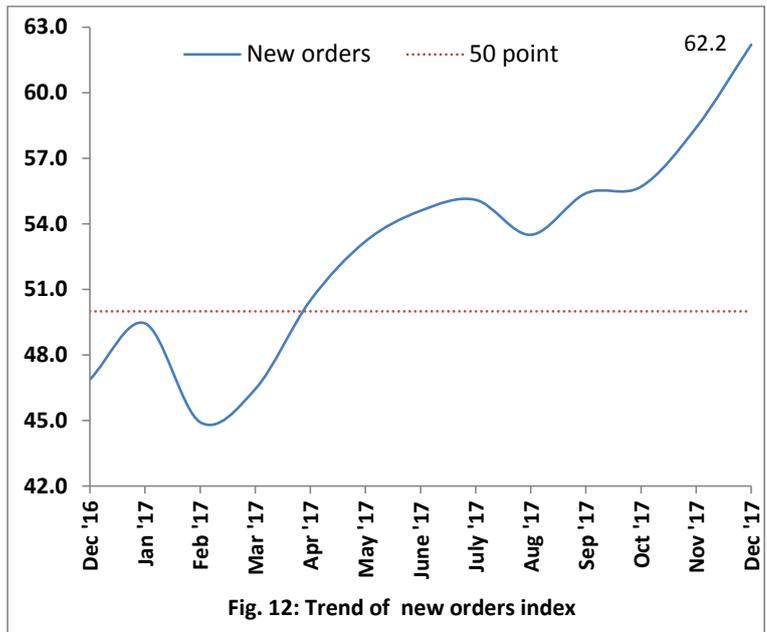


Fig. 11: Trend of business activities index

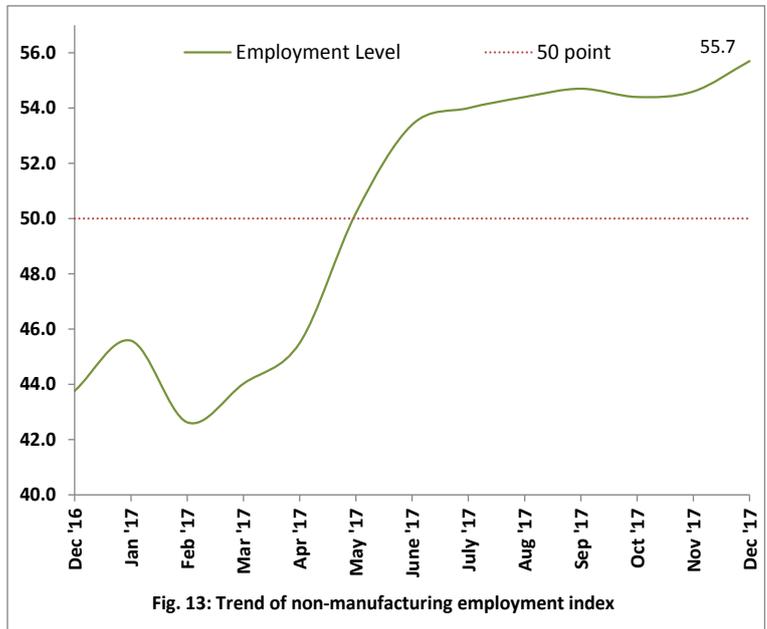
3.2 New Orders

At 62.2 points, new orders index grew in December 2017 for the ninth consecutive months. Of the 18 subsectors, 15 reported growth, 1 remained unchanged while 2 recorded declines (Table 9).



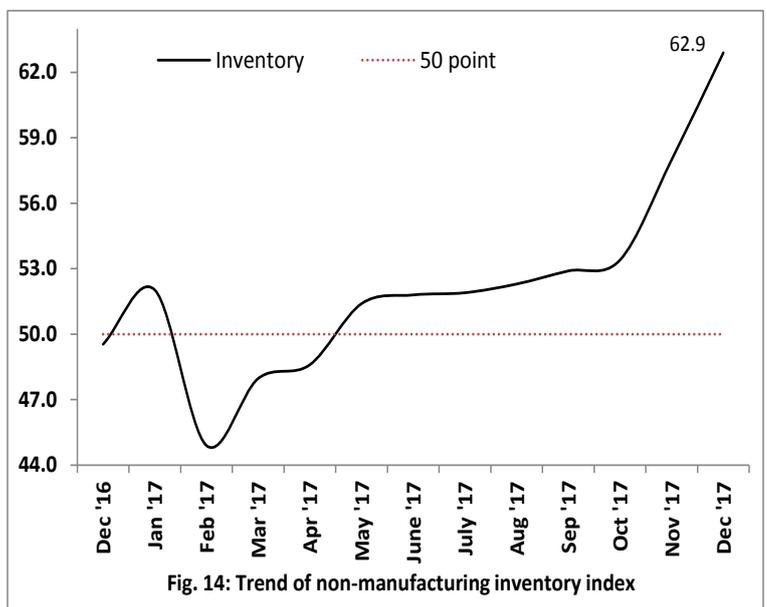
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.7 points, indicating growth in employment for the eighth consecutive month. Eleven subsectors recorded growth in the review month, 3 remained unchanged while 4 recorded declines (Table 10).



3.4 Non-manufacturing Inventory

At 62.9 points, non-manufacturing inventory index grew for the eighth consecutive month, indicating growth in inventories in the review period. Sixteen subsectors recorded higher inventories, while 2 subsectors recorded lower inventory in November, 2017 (Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index*	Series Index*	Change	Direction	Rate of Change	Trend** (Months)
	November	December				
Composite PMI \1	55.9	59.3	3.4	Growing	Faster	9
Production level	59.3	63.2	3.9	Growing	Faster	10
New orders	54.3	60.0	5.7	Growing	Faster	9
Supplier delivery time	56.0	57.4	1.4	Growing	Faster	7
Employment level	53.7	53.9	0.2	Growing	Faster	8
Raw materials/WIP Inventory	57.1	61.1	4.0	Growing	Faster	9
New Export Orders	37.6	40.2	2.6	Declining	Slower	34
Output Prices	54.0	54.3	0.3	Growing	Faster	24
Input Prices	64.3	63.4	-0.9	Growing	Slower	42
Quantity of Purchases	48.1	53.6	5.5	Growing	From Contraction	1
Outstanding Business/Backlog of Work	50.0	45.7	-4.3	Declining	From No Change	1
Stock of Finished Goods	48.8	47.4	-1.4	Declining	Faster	2
Manufacturing Sub-Sectors						
Appliances & components	43.8	57.5	13.7	Growing	From Contraction	1
Cement	52.5	63.3	10.8	Growing	Faster	2
Chemical & pharmaceutical products	56.1	56.6	0.5	Growing	Faster	6
Computer & electronic products	60.8	45.0	-15.8	Declining	From Expansion	1
Electrical equipment	50.0	50.8	0.8	Growing	From No Change	1
Fabricated metal products	45.2	55.7	10.5	Growing	From Contraction	1
Food, beverage & tobacco products	57.4	61.6	4.2	Growing	Faster	15
Furniture & related products	53.8	60.1	6.3	Growing	Faster	5
Nonmetallic mineral products	57.1	57.8	0.7	Growing	Faster	5
Paper products	52.7	61.9	9.2	Growing	Faster	8
Petroleum & coal products	65.0	75.0	10.0	Growing	Faster	2
Plastics & rubber products	58.4	58.5	0.1	Growing	Faster	5
Primary metal	50.7	52.2	1.5	Growing	Faster	3
Printing & related support activities	61.0	57.6	-3.4	Growing	Slower	6
Textile, apparel, leather & footwear	60.6	63.5	2.9	Growing	Faster	10
Transportation equipment	47.5	62.5	15.0	Growing	From Contraction	1

\1 The composite PMI is a weighted average of the following diffusion indices: production level, new orders, supplier deliveries, employment level and inventories. The weights assigned to these variables are 25%, 30%, 15%, 10% and 20% respectively.

*The series index is a diffusion index defined as a weighted percentage of high, same and low with 1.0, 0.5 and 0.0 as weights respectively.

** Number of month moving in current direction

Table 2: Production at a Glance

Index	Series Index	Series Index	Change	Direction	Rate of Change	Trend (Months)
	November	December				
PRODUCTION PMI	59.3	63.2	3.9	Growing	Faster	10
Appliances & components	50.0	50.0	0.0	No Change	Flat	2
Cement	50.0	66.7	16.7	Growing	From No Change	1
Chemical & pharmaceutical products	57.6	67.3	9.7	Growing	Faster	6
Computer & electronic products	66.7	25.0	-41.7	Declining	From Expansion	1
Electrical equipment	75.0	83.3	8.3	Growing	Faster	2
Fabricated metal products	41.2	59.2	18.0	Growing	From Contraction	1
Food, beverage & tobacco products	64.4	63.6	-0.8	Growing	Slower	15
Furniture & related products	56.4	62.8	6.4	Growing	Faster	10
Nonmetallic mineral products	58.8	50.0	-8.8	No Change	From Expansion	1
Paper products	63.6	75.0	11.4	Growing	Faster	4
Petroleum & coal products	50.0	83.3	33.3	Growing	From No Change	1
Plastics & rubber products	60.0	63.0	3.0	Growing	Faster	4
Primary metal	36.4	38.9	2.5	Declining	Slower	2
Printing & related support activities	67.8	61.1	-6.7	Growing	Slower	9
Textile, apparel, leather & footwear	66.0	71.4	5.4	Growing	Faster	10
Transportation equipment	50.0	50.0	0.0	No Change	Flat	3

Table 3: New Orders at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	54.3	60.0	5.7	Growing	Faster	9
Appliances & components	50.0	50.0	0.0	No Change	Flat	2
Cement	75.0	66.7	-8.3	Growing	Slower	2
Chemical & pharmaceutical products	59.1	55.8	-3.3	Growing	Slower	6
Computer & electronic products	50.0	50.0	0.0	No Change	Flat	2
Electrical equipment	37.5	33.3	-4.2	Declining	Faster	2
Fabricated metal products	39.7	55.3	15.6	Growing	From Contraction	1
Food, beverage & tobacco products	54.2	60.2	6.0	Growing	Faster	15
Furniture & related products	52.1	61.5	9.4	Growing	Faster	2
Nonmetallic mineral products	55.9	68.8	12.9	Growing	Faster	4
Paper products	45.5	62.5	17.0	Growing	From Contraction	1
Petroleum & coal products	50.0	83.3	33.3	Growing	From No Change	1
Plastics & rubber products	54.0	63.0	9.0	Growing	Faster	4
Primary metal	63.6	61.1	-2.5	Growing	Slower	3
Printing & related support activities	57.8	56.9	-0.9	Growing	Slower	2
Textile, apparel, leather & footwear	62.8	64.3	1.5	Growing	Faster	3
Transportation equipment	33.3	75.0	41.7	Growing	From Contraction	1

Table 4: Supplier Delivery Time at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	56.0	57.4	1.4	Growing	Faster	7
Appliances & components	25.0	100.0	75.0	Growing	From Contraction	1
Cement	50.0	33.3	-16.7	Declining	From No Change	1
Chemical & pharmaceutical products	50.0	61.5	11.5	Growing	From No Change	1
Computer & electronic products	50.0	75.0	25.0	Growing	From No Change	1
Electrical equipment	50.0	33.3	-16.7	Declining	From No Change	1
Fabricated metal products	54.4	56.6	2.2	Growing	Faster	6
Food, beverage & tobacco products	57.6	60.2	2.6	Growing	Faster	4
Furniture & related products	61.7	60.3	-1.4	Growing	Slower	4
Nonmetallic mineral products	58.8	68.8	10.0	Growing	Faster	6
Paper products	54.5	37.5	-17.0	Declining	From Expansion	1
Petroleum & coal products	100.0	83.3	-16.7	Growing	Slower	2
Plastics & rubber products	52.0	51.9	-0.1	Growing	Slower	4
Primary metal	59.1	61.1	2.0	Growing	Faster	2
Printing & related support activities	54.4	48.6	-5.8	Declining	From Expansion	1
Textile, apparel, leather & footwear	53.2	57.1	3.9	Growing	Faster	4
Transportation equipment	66.7	50.0	-16.7	No Change	From Expansion	1

Table 5: Employment Level at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	53.7	53.9	0.2	Growing	Faster	8
Appliances & components	25.0	50.0	25.0	No Change	From Contraction	1
Cement	25.0	66.7	41.7	Growing	From Contraction	1
Chemical & pharmaceutical products	51.5	44.2	-7.3	Declining	From Expansion	1
Computer & electronic products	66.7	25.0	-41.7	Declining	From Expansion	1
Electrical equipment	37.5	33.3	-4.2	Declining	Faster	2
Fabricated metal products	50.0	51.3	1.3	Growing	From No Change	1
Food, beverage & tobacco products	53.4	59.3	5.9	Growing	Faster	3
Furniture & related products	50.0	52.6	2.6	Growing	From No Change	1
Nonmetallic mineral products	52.9	37.5	-15.4	Declining	From Expansion	1
Paper products	50.0	50.0	0.0	No Change	Flat	2
Petroleum & coal products	75.0	66.7	-8.3	Growing	Slower	2
Plastics & rubber products	64.0	55.6	-8.4	Growing	Slower	4
Primary metal	31.8	55.6	23.8	Growing	From Contraction	1
Printing & related support activities	62.2	59.7	-2.5	Growing	Slower	5
Textile, apparel, leather & footwear	59.6	55.1	-4.5	Growing	Slower	3
Transportation equipment	33.3	50.0	16.7	No Change	From Contraction	1

Table 6: Raw Materials Inventory at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	57.1	61.1	4.0	Growing	Faster	9
Appliances & components	75.0	50.0	-25.0	No Change	From Expansion	1
Cement	50.0	83.3	33.3	Growing	From No Change	1
Chemical & pharmaceutical products	62.1	50.0	-12.1	No Change	From Expansion	1
Computer & electronic products	83.3	75.0	-8.3	Growing	Slower	2
Electrical equipment	50.0	83.3	33.3	Growing	From No Change	1
Fabricated metal products	48.5	55.3	6.8	Growing	From Contraction	1
Food, beverage & tobacco products	56.8	67.2	10.4	Growing	Faster	15
Furniture & related products	47.9	64.1	16.2	Growing	From Contraction	1
Nonmetallic mineral products	61.8	68.8	7.0	Growing	Faster	5
Paper products	50.0	87.5	37.5	Growing	From No Change	1
Petroleum & coal products	75.0	33.3	-41.7	Declining	From Expansion	1
Plastics & rubber products	66.0	50.0	-16.0	No Change	From Expansion	1
Primary metal	72.7	38.9	-33.8	Declining	From Expansion	1
Printing & related support activities	61.1	59.7	-1.4	Growing	Slower	6
Textile, apparel, leather & footwear	54.3	67.8	13.5	Growing	Faster	3
Transportation equipment	83.3	100.0	16.7	Growing	Faster	3

Table 7: Non-Manufacturing at a Glance

Index	Series	Series	Change	Direction	Rate	Trend (Months)
	Index	Index			of	
	November	December			Change	
Composite PMI \1	57.6	62.1	4.5	Growing	Faster	8
Business Activity	59.4	67.4	8.0	Growing	Faster	9
Level of new orders/customers/incoming business	58.4	62.2	3.8	Growing	Faster	9
Level of employment	54.6	55.7	1.1	Growing	Faster	8
Inventory	58.0	62.9	4.9	Growing	Faster	8
Average price of Inputs (volume weighted)	55.7	56.1	0.4	Growing	Faster	26
Level of outstanding business/ Backlog of work	43.6	44.6	1.0	Declining	Slower	42
New Exports orders	28.8	34.6	5.8	Declining	Slower	42
Imports	33.3	39.1	5.8	Declining	Slower	42
Inventory (sentiments)	40.6	40.3	-0.3	Declining	Faster	42
Non-manufacturing sub-sectors						
Accommodation & food services	52.9	60.7	7.8	Growing	Faster	8
Agriculture	78.3	73.3	-5.0	Growing	Slower	19
Arts, entertainment & recreation	56.3	74.2	18.0	Growing	Faster	5
Construction	41.7	56.9	15.2	Growing	From Contraction	1
Educational services	60.8	57.3	-3.5	Growing	Slower	13
Electricity, gas, steam & air conditioning supply	51.0	60.0	9.0	Growing	Faster	10
Finance & insurance	62.0	64.8	2.8	Growing	Faster	10
Health care & social assistance	67.9	63.7	-4.2	Growing	Slower	8
Information & communication	57.3	56.9	-0.4	Growing	Slower	9
Management of companies	25.0	50.0	25.0	No Change	From Contraction	1
Professional, scientific, & technical services	45.4	53.5	8.1	Growing	From Contraction	1
Public administration	75.0	41.7	-33.3	Declining	From Expansion	1
Real estate rental & leasing	54.7	63.0	8.3	Growing	Faster	4
Repair, maintenance/washing of motor vehicles	57.7	48.1	-9.6	Declining	From Expansion	1
Transportation & warehousing	57.4	73.2	15.8	Growing	Faster	10
Utilities	73.8	70.0	-3.8	Growing	Slower	9
Water supply, sewage & waste management	59.4	67.2	7.8	Growing	Faster	10
Wholesale/Retail trade	54.5	62.4	7.9	Growing	Faster	7

\1 The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories

Table 8: Business activity at a Glance

Index	Series	Series	Change	Direction	Rate	Trend (Months)
	Index	Index			of	
	November	December			Change	
BUSINESS ACTIVITY PMI	59.4	67.4	8.0	Growing	Faster	9
Accommodation & food services	52.3	58.1	5.8	Growing	Faster	8
Agriculture	83.3	77.6	-5.7	Growing	Slower	19
Arts, entertainment & recreation	56.8	83.3	26.5	Growing	Faster	2
Construction	40.5	72.2	31.7	Growing	From Contraction	1
Educational services	61.1	57.1	-4.0	Growing	Slower	4
Electricity, gas, steam & air conditioning supply	58.3	60.0	1.7	Growing	Faster	10
Finance & insurance	60.0	72.7	12.7	Growing	Faster	9
Health care & social assistance	65.3	69.2	3.9	Growing	Faster	10
Information & communication	58.3	57.5	-0.8	Growing	Slower	9
Management of companies	0.0	50.0	50.0	No Change	From Contraction	1
Professional, scientific, & technical services	44.4	62.0	17.6	Growing	From Contraction	1
Public administration	90.0	66.7	-23.3	Growing	Slower	3
Real estate rental & leasing	60.3	62.5	2.2	Growing	Faster	4
Repair, maintenance/washing of motor vehicles	65.4	48.1	-17.3	Declining	From Expansion	1
Transportation & warehousing	63.0	85.7	22.7	Growing	Faster	9
Utilities	80.0	75.0	-5.0	Growing	Slower	9
Water supply, sewage & waste management	66.7	75.0	8.3	Growing	Faster	4
Wholesale/Retail trade	55.7	71.7	16.0	Growing	Faster	8

Table 9: New Orders at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	58.4	62.2	3.8	Growing	Faster	9
Accommodation & food services	53.1	65.3	12.2	Growing	Faster	2
Agriculture	81.7	75.9	-5.8	Growing	Slower	6
Arts, entertainment & recreation	50.0	63.3	13.3	Growing	From No Change	1
Construction	38.1	52.8	14.7	Growing	From Contraction	1
Educational services	62.5	53.6	-8.9	Growing	Slower	2
Electricity, gas, steam & air conditioning supply	54.2	65.0	10.8	Growing	Faster	2
Finance & insurance	63.3	62.5	-0.8	Growing	Slower	10
Health care & social assistance	69.4	64.4	-5.0	Growing	Slower	7
Information & communication	54.2	57.5	3.3	Growing	Faster	9
Management of companies	0.0	75.0	75.0	Growing	From Contraction	1
Professional, scientific, & technical services	42.6	50.0	7.4	No Change	From Contraction	1
Public administration	70.0	33.3	-36.7	Declining	From Expansion	1
Real estate rental & leasing	58.6	70.8	12.2	Growing	Faster	3
Repair, maintenance/washing of motor vehicles	57.7	46.2	-11.5	Declining	From Expansion	1
Transportation & warehousing	57.4	76.2	18.8	Growing	Faster	10
Utilities	80.0	70.0	-10.0	Growing	Slower	9
Water supply, sewage & waste management	70.8	75.0	4.2	Growing	Faster	2
Wholesale/Retail trade	54.8	60.8	6.0	Growing	Faster	7

Table 10: Employment at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	54.6	55.7	1.1	Growing	Faster	8
Accommodation & food services	53.1	56.5	3.4	Growing	Faster	5
Agriculture	70.0	70.7	0.7	Growing	Faster	8
Arts, entertainment & recreation	56.8	56.7	-0.1	Growing	Slower	8
Construction	47.6	50.0	2.4	No Change	From Contraction	1
Educational services	56.9	55.4	-1.5	Growing	Slower	12
Electricity, gas, steam & air conditioning supply	33.3	50.0	16.7	No Change	From Contraction	1
Finance & insurance	63.3	61.4	-1.9	Growing	Slower	7
Health care & social assistance	63.3	57.7	-5.6	Growing	Slower	7
Information & communication	52.1	50.0	-2.1	No Change	From Expansion	1
Management of companies	100.0	37.5	-62.5	Declining	From Expansion	1
Professional, scientific, & technical services	50.0	40.0	-10.0	Declining	From No Change	1
Public administration	60.0	33.3	-26.7	Declining	From Expansion	1
Real estate rental & leasing	41.4	58.3	16.9	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	42.3	46.2	3.9	Declining	Slower	2
Transportation & warehousing	59.3	64.3	5.0	Growing	Faster	10
Utilities	70.0	60.0	-10.0	Growing	Slower	2
Water supply, sewage & waste management	54.2	56.3	2.1	Growing	Faster	4
Wholesale/Retail trade	51.3	55.0	3.7	Growing	Faster	7

Table 11: Inventory at a Glance

Index	Series Index November	Series Index December	Change	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	58.0	62.9	4.9	Growing	Faster	8
Accommodation & food services	51.5	62.9	11.4	Growing	Faster	5
Agriculture	75.0	69.0	-6.0	Growing	Slower	2
Arts, entertainment & recreation	61.4	93.3	31.9	Growing	Faster	3
Construction	40.5	52.8	12.3	Growing	From Contraction	1
Educational services	62.5	63.0	0.5	Growing	Faster	2
Electricity, gas, steam & air conditioning supply	58.3	65.0	6.7	Growing	Faster	3
Finance & insurance	59.1	62.5	3.4	Growing	Faster	7
Health care & social assistance	73.5	63.5	-10.0	Growing	Slower	8
Information & communication	60.4	62.5	2.1	Growing	Faster	6
Management of companies	0.0	37.5	37.5	Declining	Slower	2
Professional, scientific, & technical services	44.4	62.0	17.6	Growing	From Contraction	1
Public administration	80.0	33.3	-46.7	Declining	From Expansion	1
Real estate rental & leasing	56.9	60.4	3.5	Growing	Faster	3
Repair, maintenance/washing of motor vehicles	61.5	51.9	-9.6	Growing	Slower	2
Transportation & warehousing	50.0	66.7	16.7	Growing	From No Change	1
Utilities	65.0	75.0	10.0	Growing	Faster	4
Water supply, sewage & waste management	45.8	62.5	16.7	Growing	From Contraction	1
Wholesale/Retail trade	55.7	62.1	6.4	Growing	Faster	5

Table 12: Manufacturing PMI Data Series

Month	COMPOSITE PMI	Production Level	New Orders	Supplier Delivery Time	Employment Level	Raw Materials Inventory	New Export Orders	Output Prices	Input Prices	Quantity of Purchases	Backlog of Work	Stock of Finished Goods
Jul '14	51.3	55.2	53.0	46.4	46.9	52.9	43.6	50.6	54.2	53.3	46.4	47.2
Aug '14	49.7	49.7	51.2	49.9	45.9	52.2	40.8	48.6	52.7	50.8	45.4	48.6
Sep '14	54.0	57.4	57.6	46.4	49.3	55.7	45.4	49.3	52.9	55.1	46.9	49.8
Oct '14	51.9	55.1	55.3	46.2	46.8	52.4	45.9	49.7	56.7	57.1	50.5	51.7
Nov '14	52.2	55.1	56.9	45.1	47.2	51.7	46.0	53.3	60.9	56.0	50.0	47.6
Dec '14	49.8	51.2	51.1	49.7	46.8	48.4	44.6	53.6	56.3	51.4	47.5	51.1
Jan '15	50.2	50.4	49.3	51.3	51.1	49.3	47.7	48.7	55.6	52.5	48.8	45.5
Feb '15	53.0	57.4	54.7	43.8	50.0	56.4	50.1	54.0	60.9	58.0	50.7	53.7
Mar '15	48.9	52.1	48.9	47.8	46.4	47.1	38.1	50.1	56.4	48.7	44.5	46.5
Apr '15	52.0	56.9	54.1	42.7	48.9	53.9	43.0	50.2	54.4	53.0	48.3	48.7
May '15	49.4	53.6	49.7	44.6	48.0	48.0	36.9	51.6	59.0	50.5	44.9	45.6
Jun '15	49.5	51.5	50.8	42.0	48.5	53.3	40.0	49.2	56.7	53.0	45.3	49.3
Jul '15	47.8	49.7	46.2	43.5	48.4	52.6	40.1	47.9	55.0	51.7	45.2	45.3
Aug '15	48.4	51.0	50.1	43.1	44.8	52.4	37.6	49.0	53.1	50.2	43.7	46.1
Sep '15	50.7	54.9	52.1	46.8	47.1	49.0	40.3	47.5	52.8	51.0	42.5	43.2
Oct '15	49.2	52.0	49.3	42.7	48.4	53.1	39.8	49.1	53.8	48.3	45.6	46.8
Nov '15	51.2	55.4	52.9	47.3	45.5	52.2	38.7	46.2	52.8	51.0	46.0	46.9
Dec '15	51.2	55.4	52.7	45.2	47.5	52.7	38.0	48.6	56.5	54.5	45.1	46.4
Jan 16	47.2	49.3	46.2	48.4	46.0	45.8	38.3	52.6	56.7	49.9	44.2	46.3
Feb '16	45.5	45.0	43.0	52.8	45.0	44.7	39.2	53.0	57.0	42.8	38.5	44.4
Mar '16	45.9	46.6	43.0	50.6	45.5	47.1	37.8	56.4	60.9	41.6	41.2	43.8
Apr '16	43.7	42.7	41.8	52.2	42.0	43.0	36.3	63.9	67.8	43.6	42.6	41.6
May '16	45.8	47.9	42.7	50.2	45.7	43.9	38.7	59.6	68.4	42.7	37.0	40.1
Jun '16	41.9	40.2	37.0	55.6	42.2	39.4	35.3	61.4	70.0	39.0	40.2	36.0
Jul '16	44.1	43.0	42.4	51.7	43.8	41.4	38.5	60.8	64.2	41.6	41.9	39.0
Aug '16	42.1	40.5	37.5	57.4	40.4	40.0	31.2	64.1	69.8	39.9	38.3	38.3
Sep '16	42.5	40.9	38.7	55.6	41.2	40.9	26.3	66.5	74.0	42.8	37.1	42.4
Oct '16	44.1	42.3	40.3	57.7	42.2	42.9	37.3	65.2	71.8	43.5	39.2	39.9
Nov '16	46.0	46.9	45.1	53.2	40.6	46.1	39.6	65.7	71.2	48.1	45.2	42.0
Dec '16	52.0	57.6	51.8	47.9	48.6	51.6	37.2	70.4	73.2	52.7	45.3	48.5
Jan '17	48.2	51.3	47.9	48.5	45.3	46.3	33.1	67.9	71.4	48.4	43.6	46.9
Feb '17	44.6	45.2	44.0	48.7	41.7	44.8	38.4	69.9	70.9	47.7	43.2	43.9
Mar '17	47.7	50.8	45.6	51.3	43.6	49.1	38.5	65.0	68.3	50.1	43.6	45.1
Apr '17	51.1	58.5	50.1	47.5	46.6	50.6	37.7	65.1	69.2	45.1	40.0	46.4
May '17	52.5	58.7	50.5	49.9	50.7	50.8	37.6	61.3	68.4	46.1	42.3	51.8
June '17	52.9	58.2	51.0	50.3	51.1	52.3	32.6	62.7	66.6	46.2	43.9	49.1
July '17	54.1	59.3	52.7	51.3	51.8	53.6	37.5	60.4	64.1	48.0	42.1	48.5
Aug '17	53.6	57.4	52.3	52.0	51.5	54.9	36.7	58.8	64.9	49.0	47.9	51.6
Sep '17	55.3	58.8	53.5	55.4	52.8	56.4	30.4	58.2	65.7	49.4	51.9	50.4
Oct '17	55.0	58.4	52.8	55.5	53.1	56.5	35.5	55.4	62.7	49.6	50.8	50.0
Nov '17	55.9	59.3	54.3	56.0	53.7	57.1	37.6	54.0	64.3	48.1	50.0	48.8
Dec '17	59.3	63.2	60.0	57.4	53.9	61.1	40.2	54.3	63.4	53.6	45.7	47.4

Table 13: Non-Manufacturing PMI Data Series

Month	COMPOSITE PMI	Business Activity	New orders	Employment Level	Inventory	Average Input Price	Backlog of Work	New Exports Orders	Imports	Inventories (sentiment)
Jul '14	55.0	58.9	55.9	50.2	55.2	54.0	46.2	44.0	47.3	47.8
Aug '14	58.9	60.6	59.8	58.3	57.0	56.1	47.0	46.1	46.4	48.1
Sep '14	54.7	57.1	57.5	49.9	54.3	52.8	46.2	40.7	45.2	47.6
Oct '14	57.3	59.6	59.4	53.9	56.4	53.3	46.4	40.8	44.9	43.8
Nov '14	59.6	62.5	63.6	57.9	54.6	57.3	49.6	45.2	47.5	48.1
Dec '14	53.8	56.2	56.0	51.4	51.5	54.5	45.6	43.6	46.5	43.8
Jan '15	50.6	48.8	50.4	51.2	51.9	48.8	43.2	41.1	44.3	47.0
Feb '15	54.0	54.2	54.7	52.5	54.5	54.1	46.0	43.0	44.6	46.1
Mar '15	48.6	49.7	51.1	45.6	48.0	49.8	46.5	39.9	44.2	40.2
Apr '15	53.7	58.2	56.8	49.1	50.8	51.5	46.6	41.1	44.5	43.0
May '15	51.7	52.9	53.1	49.7	51.1	51.3	44.1	37.2	39.1	44.3
Jun '15	50.1	51.5	50.3	46.4	52.0	48.5	44.4	36.9	40.4	42.7
Jul '15	50.0	50.4	51.4	48.6	49.5	50.3	43.8	39.1	39.2	44.0
Aug '15	50.7	52.3	52.4	48.0	50.1	50.7	43.0	39.8	38.3	44.0
Sep '15	50.1	52.1	52.3	47.0	49.1	48.7	44.5	42.9	41.4	45.9
Oct '15	51.9	54.2	54.1	49.3	50.1	49.9	43.9	40.3	42.4	45.2
Nov '15	49.6	52.9	51.6	45.6	48.5	51.8	42.8	37.7	39.0	41.8
Dec '15	53.4	55.9	56.4	50.0	51.5	54.7	47.0	41.9	42.7	47.2
Jan 16	46.9	46.2	46.4	47.0	47.9	57.3	44.3	36.2	39.0	41.6
Feb '16	44.3	43.7	42.0	44.5	47.1	53.6	39.6	37.5	36.6	43.6
Mar '16	45.4	46.3	44.7	43.9	46.5	58.5	43.8	34.3	35.0	41.1
Apr '16	44.3	44.2	42.2	43.3	47.6	62.2	43.1	31.8	33.1	39.8
May '16	44.3	44.3	41.3	44.6	46.9	62.9	38.1	33.2	35.0	40.3
Jun '16	42.3	40.2	39.6	42.5	47.1	60.7	39.6	33.2	34.7	38.5
Jul '16	43.2	42.8	42.3	41.9	45.8	60.4	38.6	30.0	32.7	38.0
Aug '16	43.7	43.6	42.0	41.4	47.7	60.8	39.4	32.9	34.2	39.4
Sep '16	41.0	39.9	40.0	40.3	43.9	63.1	39.6	28.6	30.2	37.9
Oct '16	43.4	43.0	42.7	41.5	46.4	65.3	40.9	32.8	33.8	38.7
Nov '16	42.8	43.0	42.3	40.2	45.5	66.8	42.4	30.8	34.0	41.1
Dec '16	47.1	48.2	46.9	43.8	49.5	64.0	41.5	33.8	35.5	41.6
Jan '17	49.4	50.6	49.4	45.6	52.0	65.6	43.6	32.5	36.1	45.5
Feb '17	44.5	45.4	44.9	42.6	44.9	65.4	42.9	33.4	34.5	38.7
Mar '17	47.1	49.8	46.4	44.0	48.0	62.1	42.7	33.1	34.5	40.6
Apr '17	49.5	53.3	50.5	45.5	48.6	63.1	41.6	29.2	33.2	41.1
May '17	52.7	56.2	53.2	50.2	51.4	62.7	45.3	31.6	34.1	43.6
June '17	54.2	57.0	54.6	53.4	51.8	58.6	40.5	30.3	33.5	42.7
July '17	54.4	56.8	55.1	54.0	51.9	58.1	42.9	32.0	36.8	41.5
Aug '17	54.1	56.1	53.5	54.4	52.3	54.5	42.8	34.5	34.8	42.0
Sep '17	54.9	56.8	55.4	54.7	52.9	56.9	42.2	31.2	35.9	44.2
Oct '17	55.3	57.5	55.7	54.4	53.4	56.4	41.4	29.6	35.4	38.9
Nov '17	57.6	59.4	58.4	54.6	58.0	55.7	43.6	28.8	33.3	40.6
Dec '17	62.1	67.4	62.2	55.7	62.9	56.1	44.6	34.6	39.1	40.3