

Central Bank of Nigeria



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

Statistics Department

October 2017

PURCHASING MANAGERS' INDEX (PMI) OCTOBER 2017 REPORT

1.0 Introduction

The October 2017 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period October 9 - 13, 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.

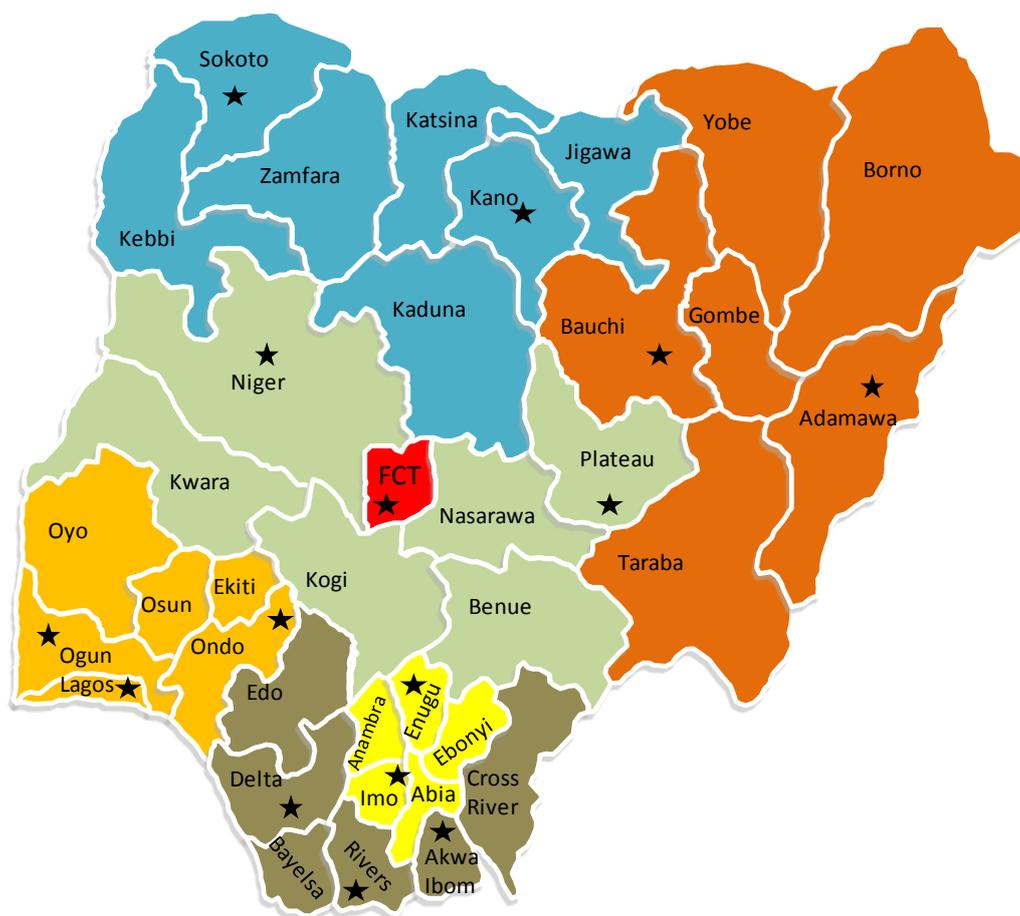


Fig. 1: Map of Nigeria with * showing the survey locations

1.1 Data and Method of Presentation

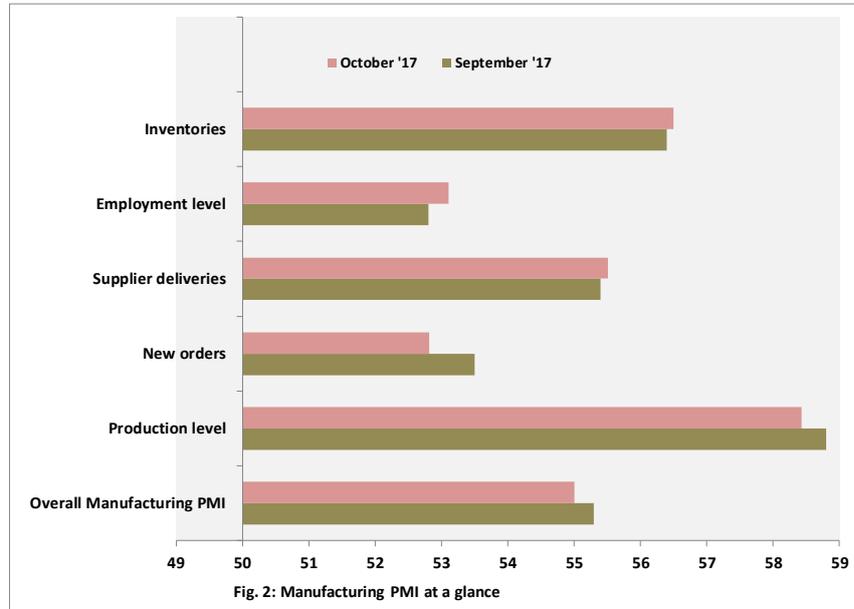
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. 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.

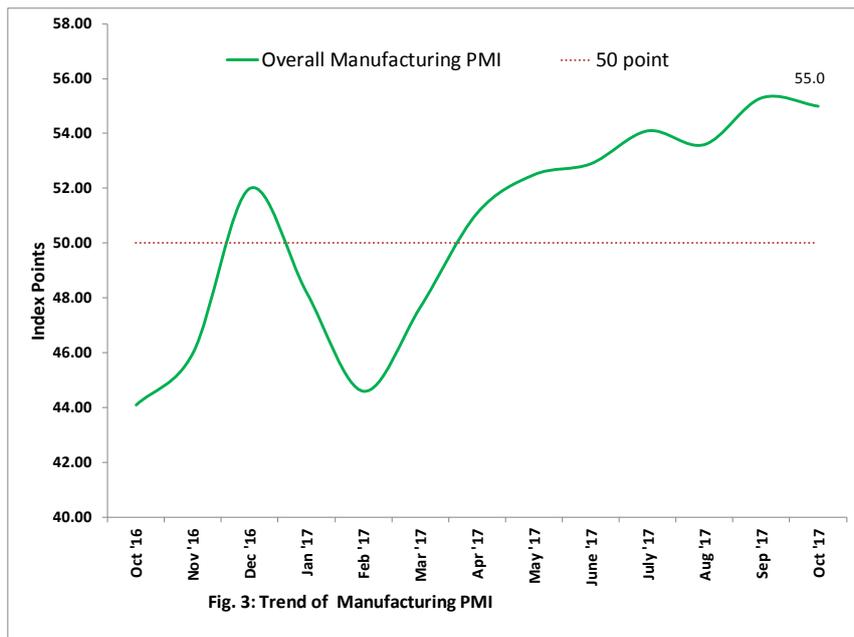
2.0 Manufacturing PMI Report

Production level and new orders growing at a slower rate; while supplier delivery time, employment level and inventories growing at a faster rate in October 2017



The *Manufacturing PMI* stood at 55.0 index points in October 2017, indicating expansion in the manufacturing sector for the seventh consecutive month (Fig. 3 and Table 1). Eleven of the 16 subsectors reported growth in the review month in the following order: plastics & rubber products;

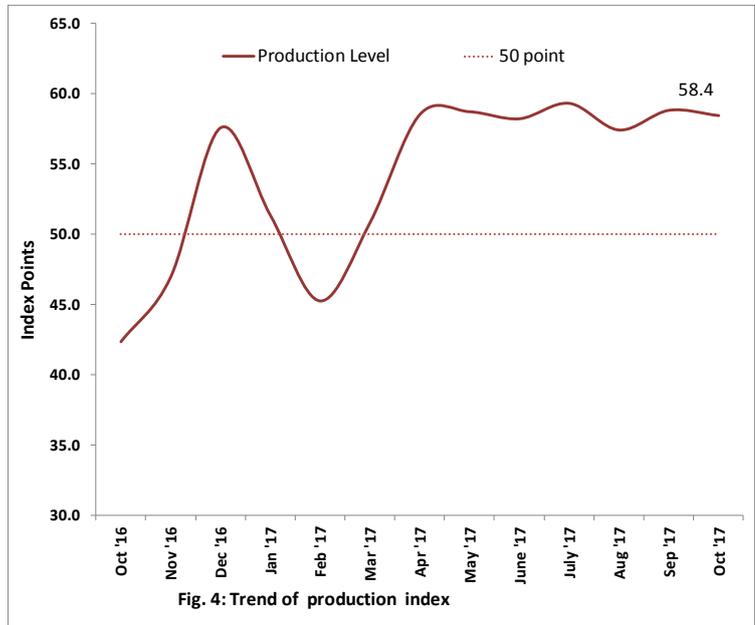
paper products; nonmetallic mineral products; chemical & pharmaceutical products; textile, apparel, leather & footwear; food, beverage & tobacco products; furniture & related products; primary metal; electrical equipment; printing & related support activities; and fabricated metal products. The appliances & components subsector remained unchanged, while remaining 4 subsectors contracted in the order:



computer & electronic products; petroleum & coal products; cement; and transportation equipment.

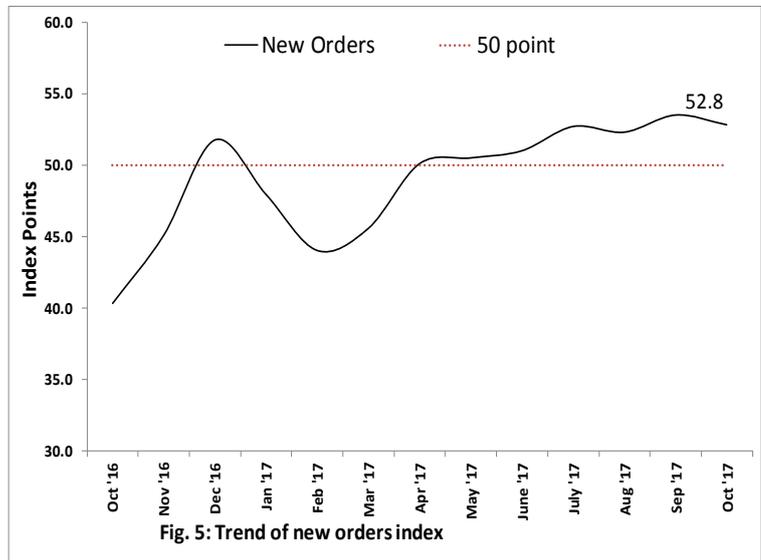
2.1 Production Level

The production level index for manufacturing sector grew for the eighth consecutive month in October 2017. At 58.4 points, the index indicated an increase in production at a slower rate, when compared to its level in the preceding month. Eleven of the 16 manufacturing subsectors recorded increase in production level, while 5 remained unchanged during the review month (Fig. 4 and Table 2).



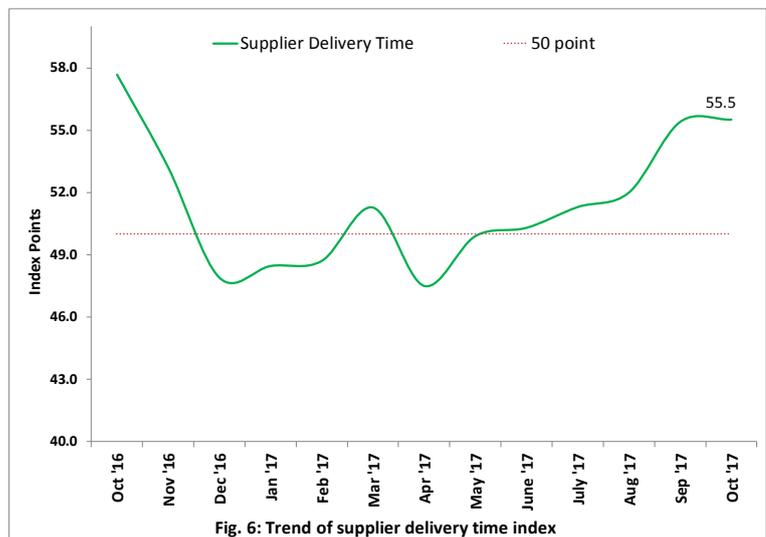
2.2 New Orders

At 52.8 points, the new orders index grew for the seventh consecutive month. Seven subsectors reported growth, 2 remained unchanged while 7 contracted in the review month (Fig. 5 and Table 3).



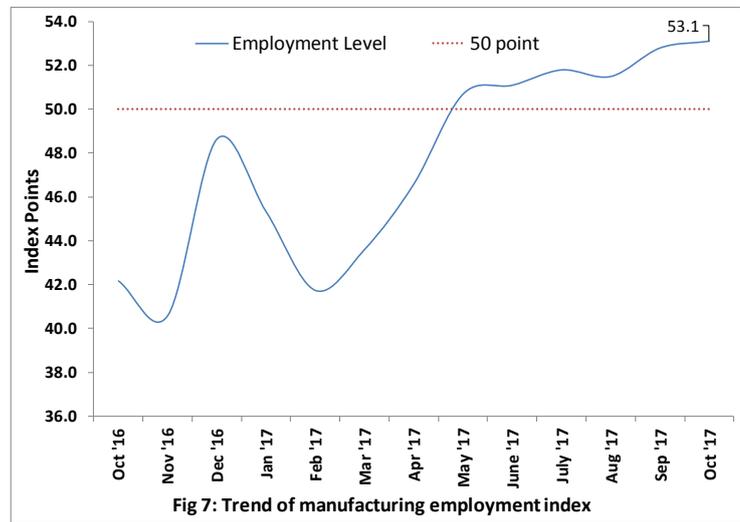
2.3 Supplier Delivery Time

The supplier delivery time index for the manufacturing sector, at 55.5 points in October 2017, rose for the fifth consecutive month. Eleven subsectors recorded improved suppliers' delivery time, 3 remained unchanged while 2 subsectors recorded delayed delivery time (Fig. 6 and Table 4).



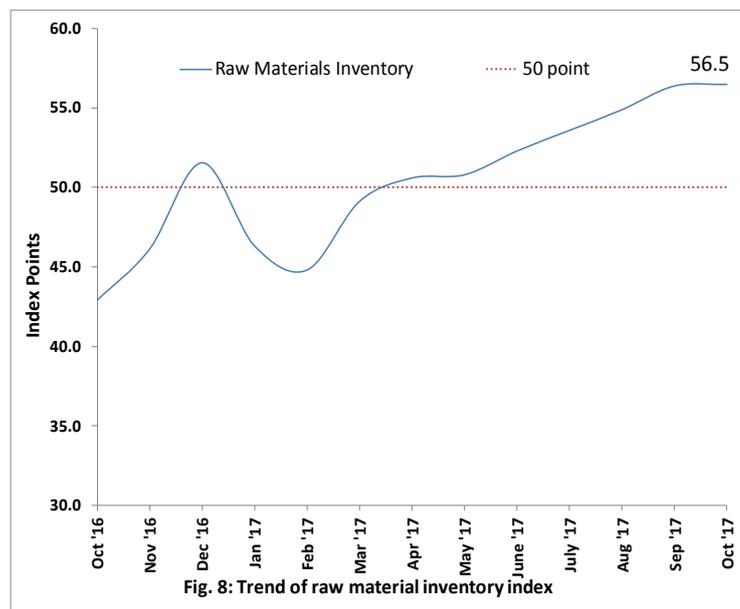
2.4 Employment Level

The employment level index in October 2017 stood at 53.1 points, indicating growth in employment level for the sixth consecutive month. Of the 16 subsectors, 7 recorded growth, 4 remained unchanged while 5 subsectors reduced their employment level in the review month (Fig. 7 and Table 5).



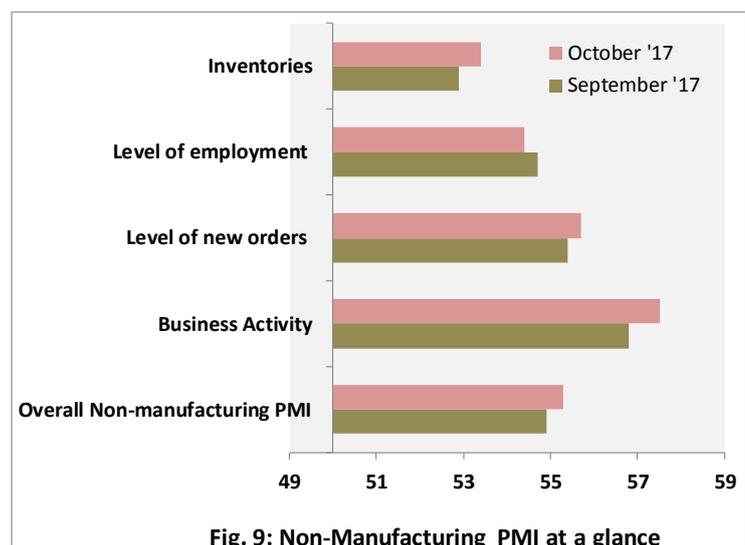
2.5 Raw material Inventories

At 56.5 points, inventories index grew for the seventh consecutive month, and at a faster rate when compared to its level in September 2017. Ten of the 16 subsectors recorded growth, 2 remained unchanged while 4 subsectors recorded decline in raw material inventories (Fig. 8 and Table 6).



3.0 Non-Manufacturing PMI Report

Business activity, new orders and inventories growing at a faster rate; employment level growing at a slower rate in October 2017



The *composite PMI* for the *non-manufacturing sector* stood at 55.3 points in October 2017, indicating growth in the Non-manufacturing PMI for the sixth consecutive month. Of the 18 non-manufacturing subsectors, 15 recorded growth in the following order: agriculture; utilities; finance & insurance; health care & social assistance; public administration; real estate rental & leasing; information & communication; transportation & warehousing; wholesale/retail trade; water supply, sewage & waste management; accommodation & food services; management of companies; arts, entertainment & recreation; electricity, gas, steam & air conditioning supply; and educational services. The

construction; professional, scientific, & technical services; and repair, maintenance/washing of motor vehicles sub sectors recorded contraction in the review period (Fig. 10 and Table 7).

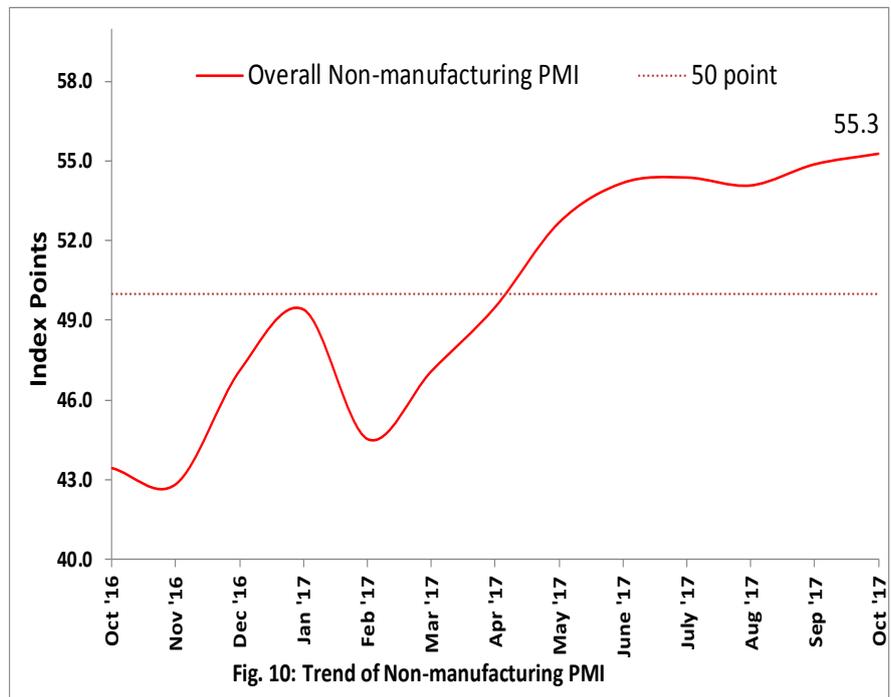


Fig. 10: Trend of Non-manufacturing PMI

The construction; professional, scientific, & technical services; and repair, maintenance/washing of motor vehicles sub sectors recorded contraction in the review period (Fig. 10 and Table 7).

3.1 Business Activity

The business activity index grew to 57.5 points in October 2017, indicating growth for the seventh consecutive month. The index grew at a faster rate, when compared to its level in the previous month. Fourteen subsectors recorded growth in business activity, while 4 declined in the review month (Table 8).

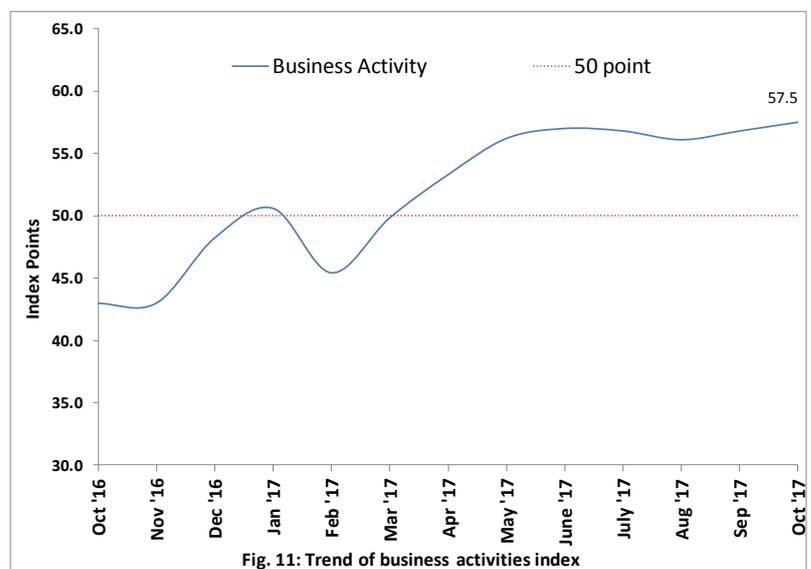
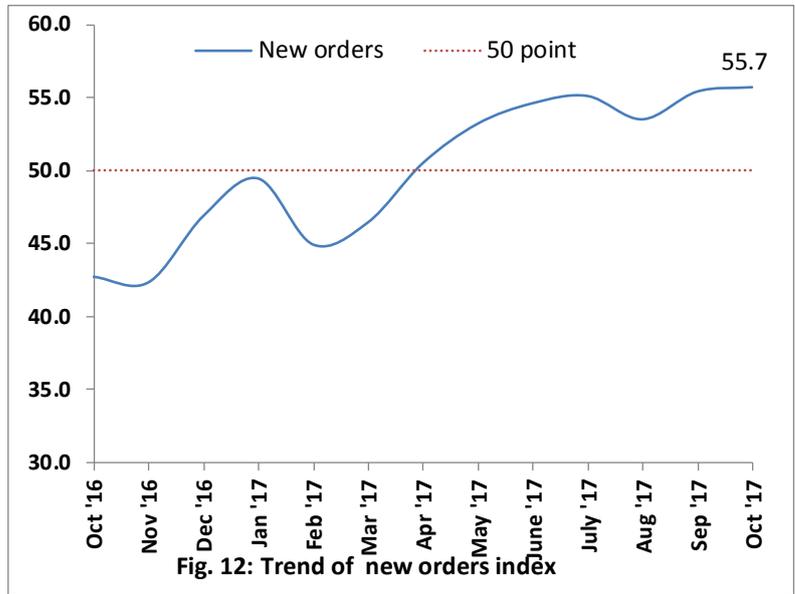


Fig. 11: Trend of business activities index

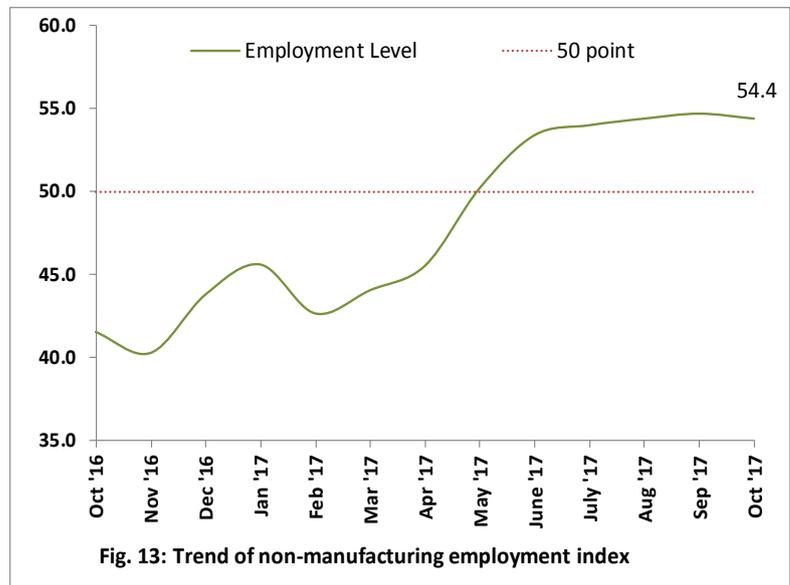
3.2 New Orders

New orders index at 55.7 points grew in October 2017 for the seventh consecutive month. Of the 18 subsectors, 11 reported growth, 3 remained unchanged while 4 recorded declines (Table 9).



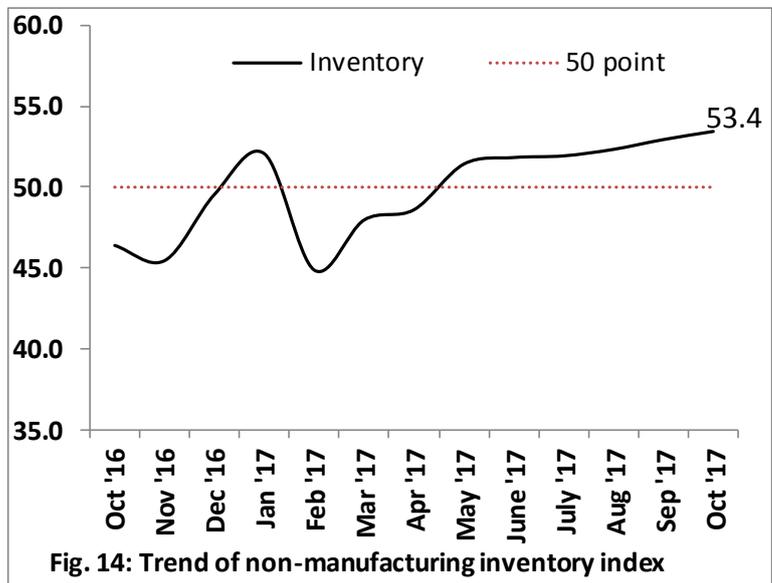
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 54.4 points, indicating growth in employment for the sixth consecutive month. Fifteen subsectors recorded growth in the review month, 1 remained unchanged while 2 recorded declines (Table 10).



3.4 Non-manufacturing Inventory

At 53.4 points, non-manufacturing inventory index grew for the sixth consecutive month, indicating growth in inventories in the review period. Fifteen subsectors recorded higher inventories, while 3 subsectors recorded lower inventory in October, 2017 (Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index* September	Series Index* October	Change	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	55.3	55.0	-0.3	Growing	Slower	7
Production level	58.8	58.4	-0.4	Growing	Slower	8
New orders	53.5	52.8	-0.7	Growing	Slower	7
Supplier delivery time	55.4	55.5	0.1	Growing	Faster	5
Employment level	52.8	53.1	0.3	Growing	Faster	6
Raw materials/WIP Inventory	56.4	56.5	0.1	Growing	Faster	7
New Export Orders	30.4	35.5	5.1	Declining	Slower	32
Output Prices	58.2	55.4	-2.8	Growing	Slower	22
Input Prices	65.7	62.7	-3.0	Growing	Slower	40
Quantity of Purchases	49.4	49.6	0.2	Declining	Slower	7
Outstanding Business/Backlog of Work	51.9	50.8	-1.1	Growing	Slower	2
Stock of Finished Goods	50.4	50.0	-0.4	No Change	From Expansion	1
Manufacturing Sub-Sectors						
Appliances & components	73.0	50.0	-23.0	No Change	From Expansion	1
Cement	54.1	46.7	-7.4	Declining	From Expansion	1
Chemical & pharmaceutical products	61.6	57.7	-3.9	Growing	Slower	4
Computer & electronic products	52.5	30.0	-22.5	Declining	From Expansion	1
Electrical equipment	62.7	53.1	-9.6	Growing	Slower	7
Fabricated metal products	50.4	50.6	0.2	Growing	Faster	2
Food, beverage & tobacco products	56.8	55.3	-1.5	Growing	Slower	13
Furniture & related products	55.5	54.4	-1.1	Growing	Slower	3
Nonmetallic mineral products	59.8	58.0	-1.8	Growing	Slower	3
Paper products	53.7	59.8	6.1	Growing	Faster	6
Petroleum & coal products	45.6	43.3	-2.3	Declining	Faster	4
Plastics & rubber products	58.6	60.2	1.6	Growing	Faster	3
Primary metal	42.7	53.6	10.9	Growing	From Contraction	1
Printing & related support activities	58.8	52.6	-6.2	Growing	Slower	4
Textile, apparel, leather & footwear	51.4	57.6	6.2	Growing	Faster	8
Transportation equipment	55.0	48.8	-6.3	Declining	From Expansion	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 September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	58.8	58.4	-0.4	Growing	Slower	8
Appliances & components	70.0	100.0	30.0	Growing	Faster	10
Cement	60.0	50.0	-10.0	No Change	From Expansion	1
Chemical & pharmaceutical products	66.3	56.9	-9.4	Growing	Slower	4
Computer & electronic products	58.3	50.0	-8.3	No Change	From Expansion	1
Electrical equipment	71.4	50.0	-21.4	No Change	From Expansion	1
Fabricated metal products	48.9	60.7	11.8	Growing	From Contraction	1
Food, beverage & tobacco products	57.9	53.6	-4.3	Growing	Slower	13
Furniture & related products	62.7	59.2	-3.5	Growing	Slower	8
Nonmetallic mineral products	65.3	60.0	-5.3	Growing	Slower	4
Paper products	53.8	60.0	6.2	Growing	Faster	2
Petroleum & coal products	41.7	50.0	8.3	No Change	From Contraction	1
Plastics & rubber products	64.3	68.0	3.7	Growing	Faster	2
Primary metal	31.8	57.1	25.3	Growing	From Contraction	1
Printing & related support activities	60.7	56.7	-4.0	Growing	Slower	7
Textile, apparel, leather & footwear	60.1	62.2	2.1	Growing	Faster	8
Transportation equipment	100.0	50.0	-50.0	No Change	From Expansion	1

Table 3: New Orders at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	53.5	52.8	-0.7	Growing	Slower	7
Appliances & components	100.0	0.0	-100.0	Declining	From Expansion	1
Cement	51.7	33.3	-18.4	Declining	From Expansion	1
Chemical & pharmaceutical products	63.5	61.1	-2.4	Growing	Slower	4
Computer & electronic products	58.3	0.0	-58.3	Declining	From Expansion	1
Electrical equipment	67.9	50.0	-17.9	No Change	From Expansion	1
Fabricated metal products	47.9	45.2	-2.7	Declining	Faster	4
Food, beverage & tobacco products	62.4	55.0	-7.4	Growing	Slower	13
Furniture & related products	51.8	48.0	-3.8	Declining	From Expansion	1
Nonmetallic mineral products	55.6	60.0	4.4	Growing	Faster	2
Paper products	48.1	63.3	15.2	Growing	From Contraction	1
Petroleum & coal products	37.5	33.3	-4.2	Declining	Faster	4
Plastics & rubber products	53.6	56.0	2.4	Growing	Faster	2
Primary metal	40.9	71.4	30.5	Growing	From Contraction	1
Printing & related support activities	53.3	50.0	-3.3	No Change	From Expansion	1
Textile, apparel, leather & footwear	46.5	53.7	7.2	Growing	From Contraction	1
Transportation equipment	0.0	37.5	37.5	Declining	Slower	4

Table 4: Supplier Delivery Time at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	55.4	55.5	0.1	Growing	Faster	5
Appliances & components	50.0	100.0	50.0	Growing	From No Change	1
Cement	51.7	83.3	31.6	Growing	Faster	5
Chemical & pharmaceutical products	58.7	55.6	-3.1	Growing	Slower	5
Computer & electronic products	50.0	50.0	0.0	No Change	Flat	2
Electrical equipment	53.6	37.5	-16.1	Declining	From Expansion	1
Fabricated metal products	55.8	54.9	-0.9	Growing	Slower	4
Food, beverage & tobacco products	51.5	57.1	5.6	Growing	Faster	2
Furniture & related products	56.1	60.2	4.1	Growing	Faster	2
Nonmetallic mineral products	55.6	60.0	4.4	Growing	Faster	4
Paper products	57.7	63.3	5.6	Growing	Faster	3
Petroleum & coal products	45.8	50.0	4.2	No Change	From Contraction	1
Plastics & rubber products	60.7	52.0	-8.7	Growing	Slower	2
Primary metal	40.9	42.9	2.0	Declining	Slower	2
Printing & related support activities	63.3	52.2	-11.1	Growing	Slower	2
Textile, apparel, leather & footwear	53.5	51.2	-2.3	Growing	Slower	2
Transportation equipment	100.0	50.0	-50.0	No Change	From Expansion	1

Table 5: Employment Level at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	52.8	53.1	0.3	Growing	Faster	6
Appliances & components	40.0	0.0	-40.0	Declining	Faster	2
Cement	50.0	33.3	-16.7	Declining	From No Change	1
Chemical & pharmaceutical products	55.8	55.6	-0.2	Growing	Slower	4
Computer & electronic products	41.7	50.0	8.3	No Change	From Contraction	1
Electrical equipment	50.0	75.0	25.0	Growing	From No Change	1
Fabricated metal products	49.5	44.0	-5.5	Declining	Faster	3
Food, beverage & tobacco products	49.5	55.1	5.6	Growing	From Contraction	1
Furniture & related products	50.0	50.0	0.0	No Change	Flat	2
Nonmetallic mineral products	66.7	45.0	-21.7	Declining	From Expansion	1
Paper products	57.7	53.3	-4.4	Growing	Slower	6
Petroleum & coal products	41.7	50.0	8.3	No Change	From Contraction	1
Plastics & rubber products	57.1	62.0	4.9	Growing	Faster	2
Primary metal	59.1	42.9	-16.2	Declining	From Expansion	1
Printing & related support activities	64.0	52.2	-11.8	Growing	Slower	3
Textile, apparel, leather & footwear	48.0	61.0	13.0	Growing	From Contraction	1
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 6: Raw Materials Inventory at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	56.4	56.5	0.1	Growing	Faster	7
Appliances & components	100.0	100.0	0.0	Growing	Flat	11
Cement	58.3	50.0	-8.3	No Change	From Expansion	1
Chemical & pharmaceutical products	60.6	56.9	-3.7	Growing	Slower	5
Computer & electronic products	45.8	0.0	-45.8	Declining	Faster	2
Electrical equipment	64.3	50.0	-14.3	No Change	From Expansion	1
Fabricated metal products	55.8	47.6	-8.2	Declining	From Expansion	1
Food, beverage & tobacco products	59.9	58.0	-1.9	Growing	Slower	13
Furniture & related products	58.4	62.2	3.8	Growing	Faster	2
Nonmetallic mineral products	51.4	70.0	18.6	Growing	Faster	3
Paper products	55.8	56.7	0.9	Growing	Faster	6
Petroleum & coal products	87.5	33.3	-54.2	Declining	From Expansion	1
Plastics & rubber products	58.9	62.0	3.1	Growing	Faster	3
Primary metal	45.5	28.6	-16.9	Declining	Faster	2
Printing & related support activities	53.3	51.1	-2.2	Growing	Slower	4
Textile, apparel, leather & footwear	48.5	61.0	12.5	Growing	From Contraction	1
Transportation equipment	50.0	75.0	25.0	Growing	From No Change	1

Table 7: Non-Manufacturing at a Glance

Index	Series	Series	Change	Direction	Rate	Trend (Months)
	Index	Index			of	
	September	October			Change	
Composite PMI \1	54.9	55.3	0.4	Growing	Faster	6
Business Activity	56.8	57.5	0.7	Growing	Faster	7
Level of new orders/customers/incoming business	55.4	55.7	0.3	Growing	Faster	7
Level of employment	54.7	54.4	-0.3	Growing	Slower	6
Inventory	52.9	53.4	0.5	Growing	Faster	6
Average price of Inputs (volume weighted)	56.9	56.4	-0.5	Growing	Slower	24
Level of outstanding business/ Backlog of work	42.2	41.4	-0.8	Declining	Faster	40
New Exports orders	31.2	29.6	-1.6	Declining	Faster	40
Imports	35.9	35.4	-0.5	Declining	Faster	40
Inventory (sentiments)	44.2	38.9	-5.3	Declining	Faster	40
Non-manufacturing sub-sectors						
Accommodation & food services	52.3	54.5	2.2	Growing	Faster	6
Agriculture	60.6	64.6	4.0	Growing	Faster	17
Arts, entertainment & recreation	53.9	53.7	-0.2	Growing	Slower	3
Construction	44.9	35.1	-9.8	Declining	Faster	29
Educational services	54.8	50.4	-4.4	Growing	Slower	11
Electricity, gas, steam & air conditioning supply	56.6	53.6	-3.0	Growing	Slower	8
Finance & insurance	57.3	60.1	2.8	Growing	Faster	8
Health care & social assistance	57.6	59.9	2.3	Growing	Faster	6
Information & communication	53.4	55.9	2.5	Growing	Faster	7
Management of companies	45.0	54.2	9.2	Growing	From Contraction	1
Professional, scientific, & technical services	49.3	48.5	-0.8	Declining	Faster	2
Public administration	55.6	58.3	2.7	Growing	Faster	4
Real estate rental & leasing	51.8	56.1	4.3	Growing	Faster	2
Repair, maintenance/washing of motor vehicles	55.7	49.6	-6.1	Declining	From Expansion	1
Transportation & warehousing	57.2	55.9	-1.3	Growing	Slower	8
Utilities	68.4	62.5	-5.9	Growing	Slower	7
Water supply, sewage & waste management	55.0	55.7	0.7	Growing	Faster	8
Wholesale/Retail trade	55.3	55.8	0.5	Growing	Faster	5

\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	
	September	October			Change	
BUSINESS ACTIVITY PMI	56.8	57.5	0.7	Growing	Faster	7
Accommodation & food services	52.2	60.4	8.2	Growing	Faster	6
Agriculture	59.2	74.4	15.2	Growing	Faster	17
Arts, entertainment & recreation	62.9	47.1	-15.8	Declining	From Expansion	1
Construction	50.0	35.7	-14.3	Declining	From No Change	1
Educational services	52.4	51.6	-0.8	Growing	Slower	2
Electricity, gas, steam & air conditioning supply	60.2	53.6	-6.6	Growing	Slower	8
Finance & insurance	62.8	58.2	-4.6	Growing	Slower	7
Health care & social assistance	61.1	62.8	1.7	Growing	Faster	8
Information & communication	53.4	54.7	1.3	Growing	Faster	7
Management of companies	30.0	83.3	53.3	Growing	From Contraction	1
Professional, scientific, & technical services	50.0	48.5	-1.5	Declining	From No Change	1
Public administration	44.4	83.3	38.9	Growing	From Contraction	1
Real estate rental & leasing	55.5	51.9	-3.6	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	58.1	46.6	-11.5	Declining	From Expansion	1
Transportation & warehousing	62.2	59.4	-2.8	Growing	Slower	7
Utilities	81.6	75.0	-6.6	Growing	Slower	7
Water supply, sewage & waste management	60.0	54.5	-5.5	Growing	Slower	2
Wholesale/Retail trade	55.1	59.1	4.0	Growing	Faster	6

Table 9: New Orders at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.4	55.7	0.3	Growing	Faster	7
Accommodation & food services	50.0	49.3	-0.7	Declining	From No Change	1
Agriculture	63.1	67.1	4.0	Growing	Faster	4
Arts, entertainment & recreation	54.3	52.9	-1.4	Growing	Slower	2
Construction	46.9	38.1	-8.8	Declining	Faster	29
Educational services	52.4	46.8	-5.6	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	62.2	50.0	-12.2	No Change	From Expansion	1
Finance & insurance	53.2	64.5	11.3	Growing	Faster	8
Health care & social assistance	59.7	58.5	-1.2	Growing	Slower	5
Information & communication	54.3	54.7	0.4	Growing	Faster	7
Management of companies	50.0	16.7	-33.3	Declining	From No Change	1
Professional, scientific, & technical services	50.0	51.5	1.5	Growing	From No Change	1
Public administration	61.1	50.0	-11.1	No Change	From Expansion	1
Real estate rental & leasing	47.3	64.8	17.5	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	55.1	51.7	-3.4	Growing	Slower	5
Transportation & warehousing	60.0	54.7	-5.3	Growing	Slower	8
Utilities	78.9	68.8	-10.1	Growing	Slower	7
Water supply, sewage & waste management	52.5	50.0	-2.5	No Change	From Expansion	1
Wholesale/Retail trade	56.2	57.7	1.5	Growing	Faster	5

Table 10: Employment at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	54.7	54.4	-0.3	Growing	Slower	6
Accommodation & food services	55.1	53.0	-2.1	Growing	Slower	3
Agriculture	64.6	67.1	2.5	Growing	Faster	6
Arts, entertainment & recreation	54.3	55.9	1.6	Growing	Faster	6
Construction	48.4	35.7	-12.7	Declining	Faster	2
Educational services	57.1	56.5	-0.6	Growing	Slower	10
Electricity, gas, steam & air conditioning supply	54.1	53.6	-0.5	Growing	Slower	3
Finance & insurance	53.2	60.9	7.7	Growing	Faster	5
Health care & social assistance	56.9	56.4	-0.5	Growing	Slower	5
Information & communication	50.9	51.6	0.7	Growing	Faster	6
Management of companies	30.0	66.7	36.7	Growing	From Contraction	1
Professional, scientific, & technical services	50.9	43.9	-7.0	Declining	From Expansion	1
Public administration	44.4	66.7	22.3	Growing	From Contraction	1
Real estate rental & leasing	54.5	53.7	-0.8	Growing	Slower	2
Repair, maintenance/washing of motor vehicles	53.0	56.9	3.9	Growing	Faster	5
Transportation & warehousing	54.4	51.6	-2.8	Growing	Slower	8
Utilities	57.9	43.8	-14.1	Declining	From Expansion	1
Water supply, sewage & waste management	57.5	59.1	1.6	Growing	Faster	2
Wholesale/Retail trade	54.8	53.6	-1.2	Growing	Slower	5

Table 11: Inventory at a Glance

Index	Series Index September	Series Index October	Change	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	52.9	53.4	0.5	Growing	Faster	6
Accommodation & food services	51.7	55.2	3.5	Growing	Faster	3
Agriculture	55.4	50.0	-5.4	No Change	From Expansion	1
Arts, entertainment & recreation	44.3	58.8	14.5	Growing	From Contraction	1
Construction	34.4	31.0	-3.4	Declining	Faster	4
Educational services	57.3	46.8	-10.5	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	50.0	57.1	7.1	Growing	From No Change	1
Finance & insurance	60.0	56.6	-3.4	Growing	Slower	5
Health care & social assistance	52.8	62.0	9.2	Growing	Faster	6
Information & communication	55.2	62.5	7.3	Growing	Faster	4
Management of companies	70.0	50.0	-20.0	No Change	From Expansion	1
Professional, scientific, & technical services	46.5	50.0	3.5	No Change	From Contraction	1
Public administration	72.2	33.3	-38.9	Declining	From Expansion	1
Real estate rental & leasing	50.0	53.8	3.8	Growing	From No Change	1
Repair, maintenance/washing of motor vehicles	56.6	43.1	-13.5	Declining	From Expansion	1
Transportation & warehousing	52.2	57.8	5.6	Growing	Faster	2
Utilities	55.3	62.5	7.2	Growing	Faster	2
Water supply, sewage & waste management	50.0	59.1	9.1	Growing	From No Change	1
Wholesale/Retail trade	55.1	52.6	-2.5	Growing	Slower	3

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

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