

Central Bank of Nigeria



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

Statistics Department

June 2018

PURCHASING MANAGERS' INDEX (PMI) JUNE 2018 REPORT

1.0 Introduction

The June 2018 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period June 8 - 19, 2018. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in 31 locations in Nigeria (Fig. 1). The Bank makes no representation regarding the individual companies, other than the information they have provided. The data contained herein further provides input for policy decisions.

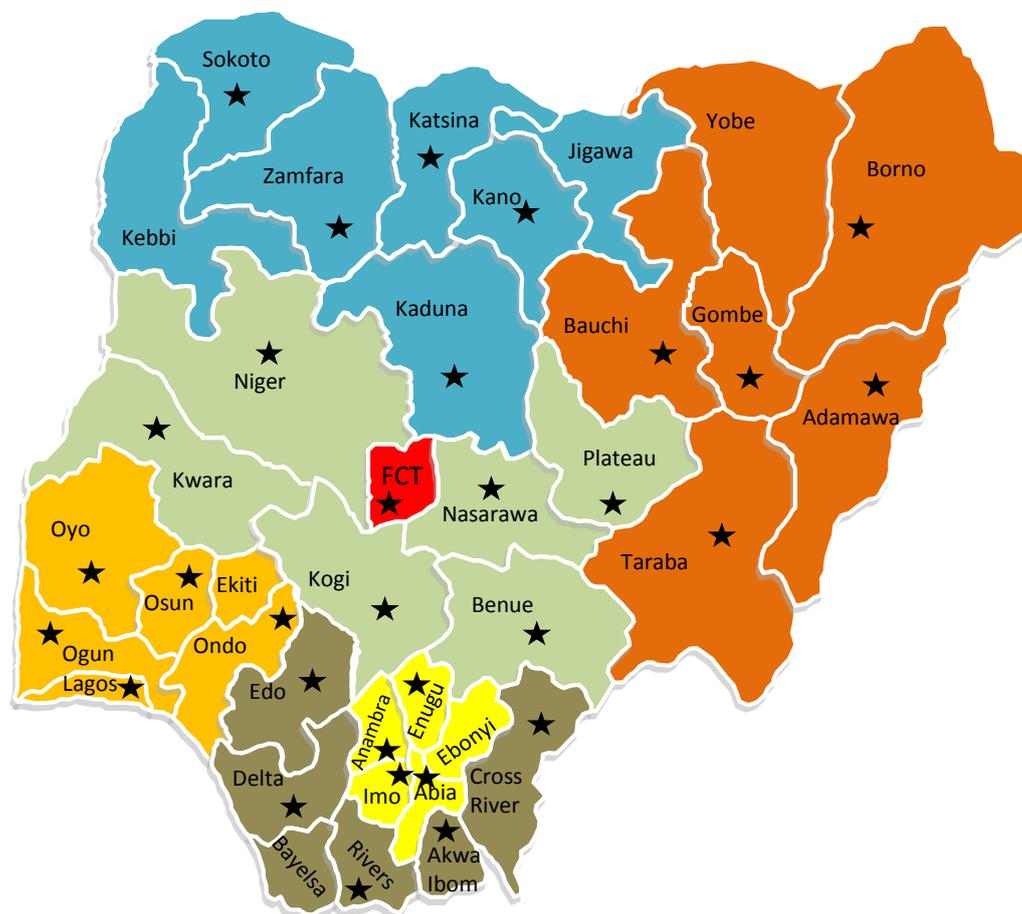


Fig. 1: Map of Nigeria with★showing the survey locations

1.1 Data and Method of Presentation

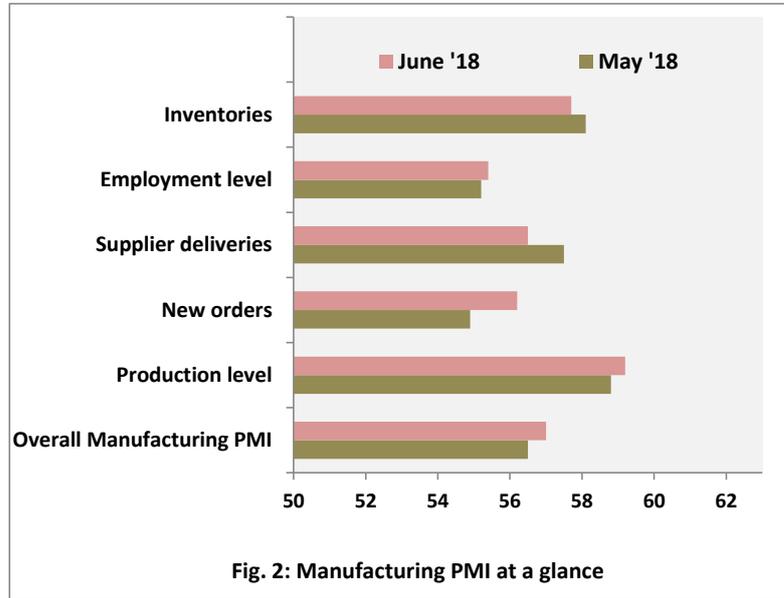
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses, indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. 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, namely: 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, namely: business activity, level of new orders, employment level and raw materials inventory, with equal weights of *25% each*.

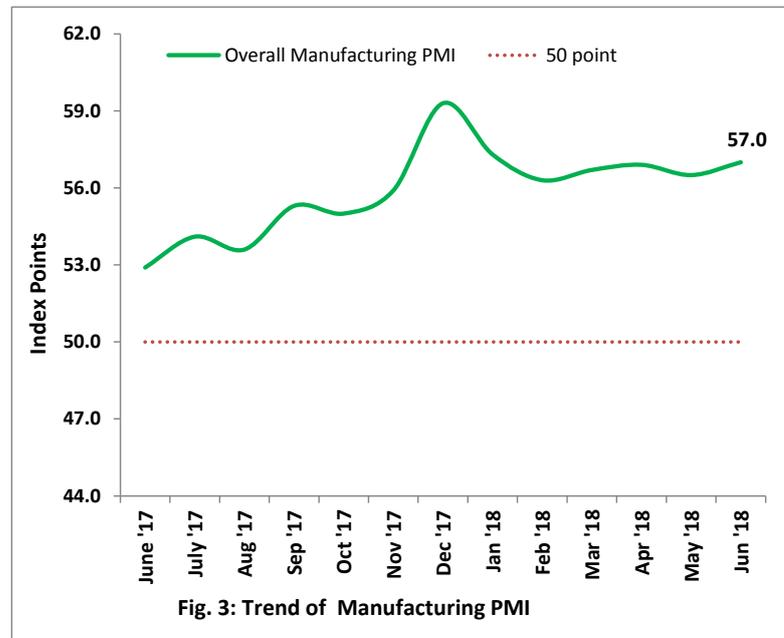
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those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

2.0 Manufacturing PMI Report

New orders and inventories grew at a slower rate; production level, supplier delivery time and employment level grew at a faster rate in June 2018

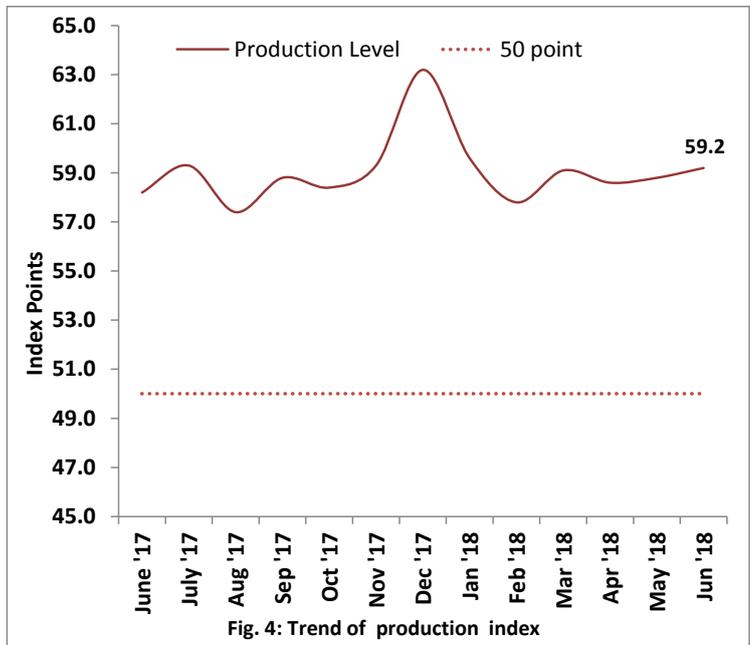


The *Manufacturing PMI* in the month of June stood at 57.0 index points, indicating expansion in the manufacturing sector for the fifteenth consecutive month. (Fig. 3 and Table 1). The index however grew at a faster rate when compared to the index in the previous month. Of the 14 subsectors surveyed, 10 reported growth in the review month in the following order: paper products; furniture & related products; printing & related support activities; food, beverage & tobacco products; plastics & rubber products; electrical equipment; textile, apparel, leather & footwear; chemical & pharmaceutical products; petroleum & coal products and nonmetallic mineral products. The transportation equipment; fabricated metal products; primary metal; and cement subsectors declined in the review month.



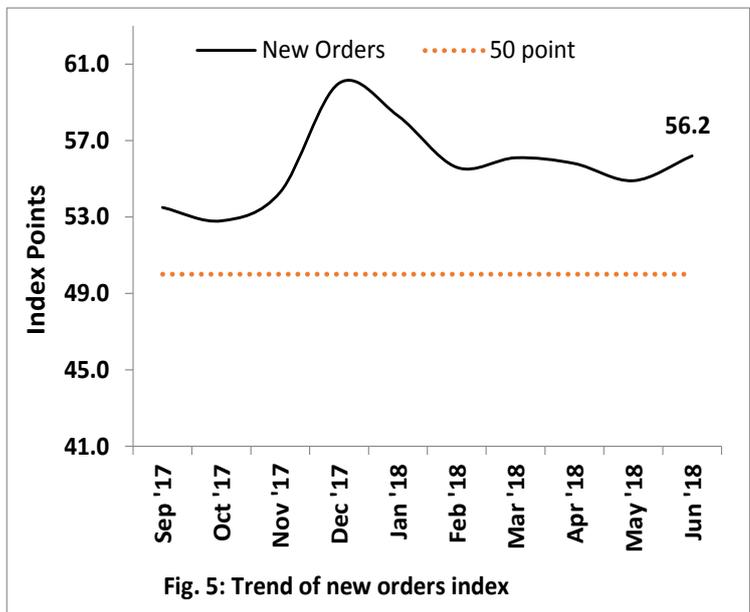
2.1 Production Level

At 59.2 points, the production level index for the manufacturing sector grew for the sixteenth consecutive month in June 2018. The index indicated a faster growth in the current month, when compared to its level in the preceding month. Ten of the 14 manufacturing subsectors recorded increase in production level, 1 remained unchanged, while the remaining 3 recorded declines in production level during the review month (Fig. 4 and Table 2).



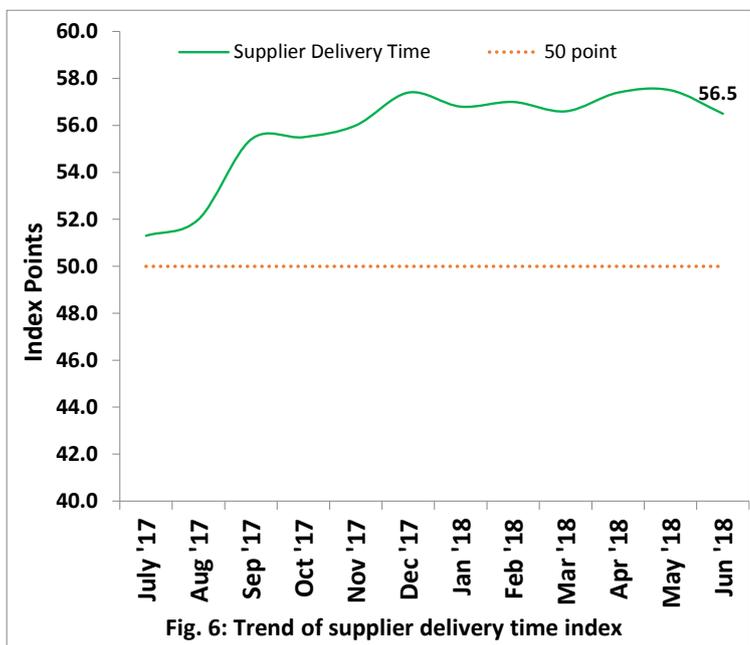
2.2 New Orders

At 56.2 points, the new orders index grew for the fifteenth consecutive month, indicating increase in new orders in June 2018. Eight subsectors reported growth, 2 remained unchanged while 4 contracted in the review month (Fig. 5 and Table 3).



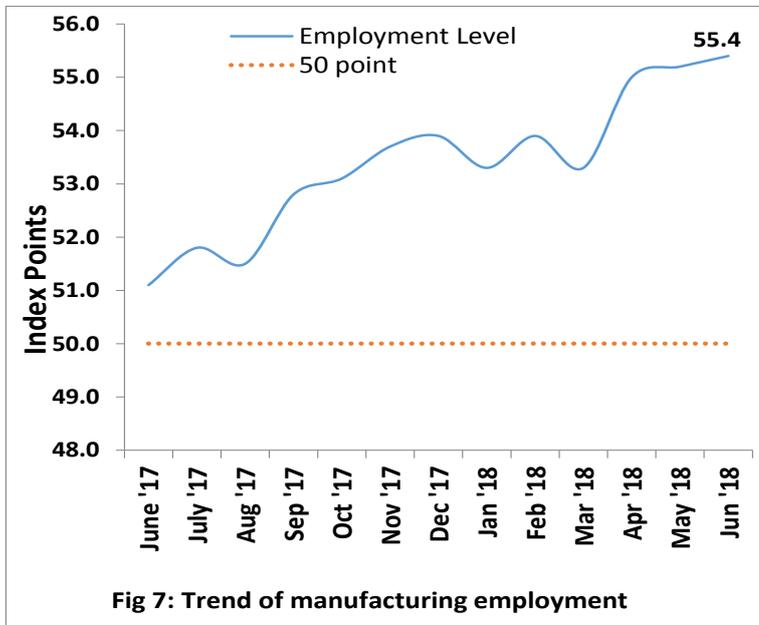
2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 56.5 points in June 2018, indicating slower supplier delivery time for the thirteenth consecutive month. Eight subsectors recorded improved suppliers' delivery time, while 6 remained unchanged (Fig. 6 and Table 4).



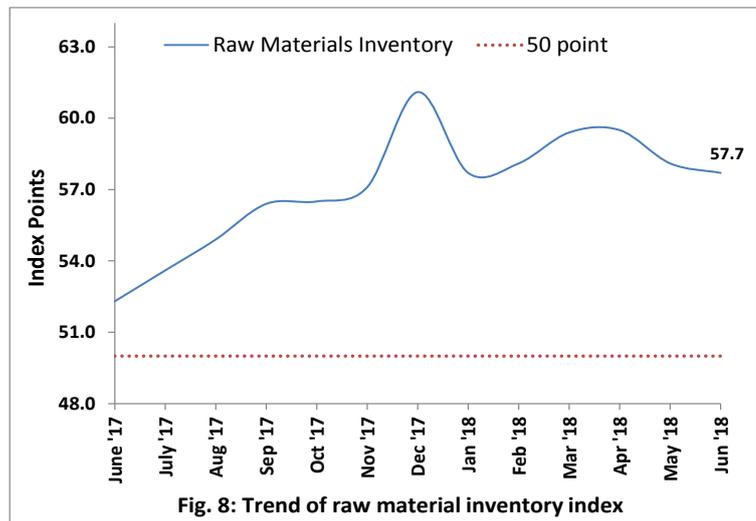
2.4 Employment Level

The employment level index in June 2018 stood at 55.4 points, indicating growth in employment level for the fourteenth consecutive month. Of the 14 subsectors, 7 reported increased employment level, 4 remained unchanged while 3 reported reduced employment level in the review month (Fig. 7 and Table 5).



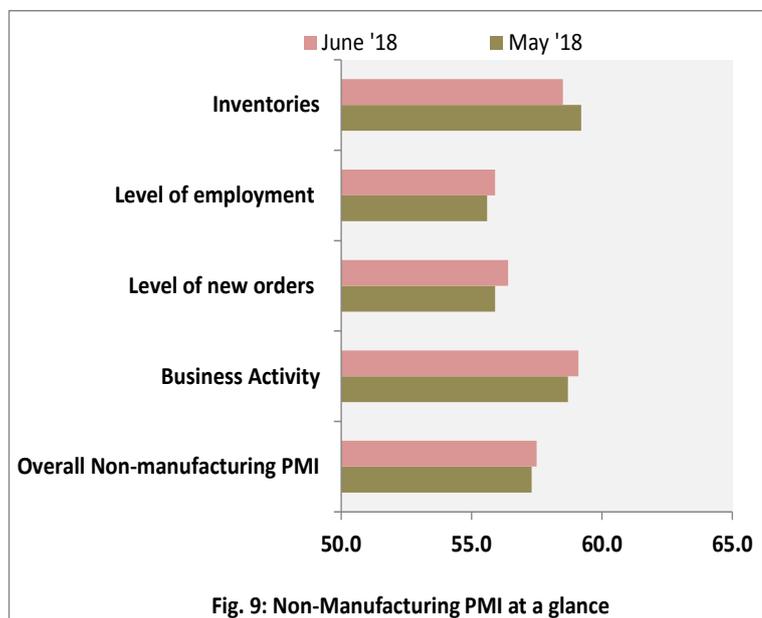
2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the fifteenth consecutive month in June 2018. At 57.7 points, the index grew at a slower rate when compared to its level in the previous month. Eleven of the 14 subsectors recorded growth, 2 remained unchanged while 1 recorded decline in raw material inventories (Fig. 8 and Table 6).

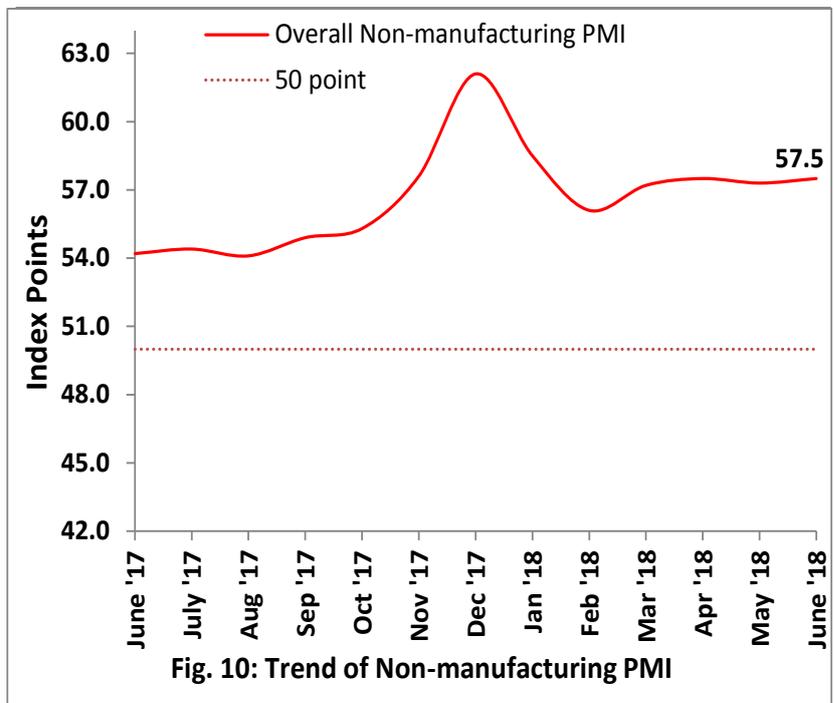


3.0 Non-Manufacturing PMI Report

Business activity, new orders, and inventories grew at a slower rate; while employment grew at a faster rate in June 2018



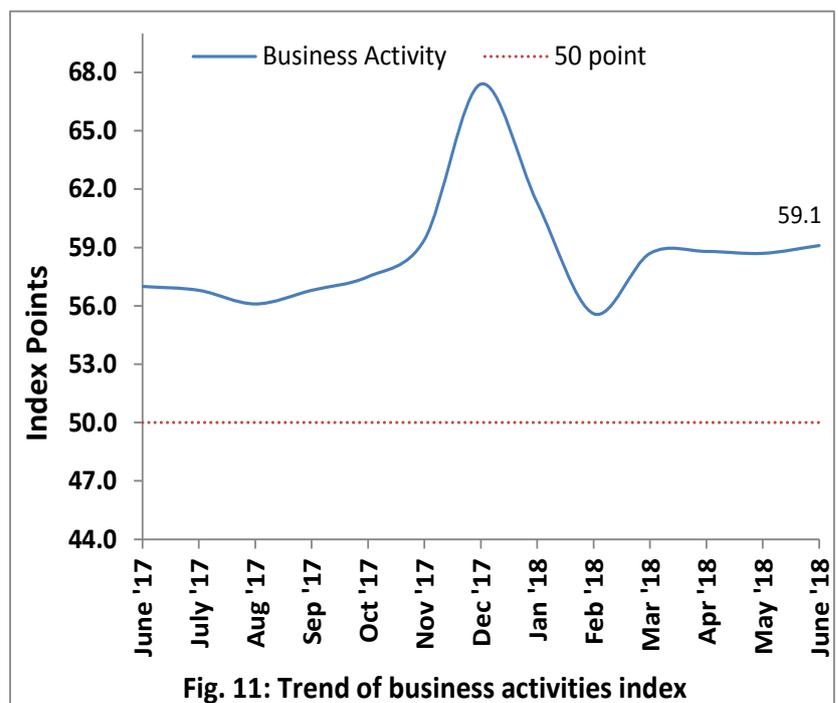
The *composite PMI* for the *non-manufacturing sector* stood at 57.5 points in June 2018, indicating expansion in the Non-manufacturing PMI for the fourteenth consecutive month. The index grew at a faster rate when compared to that in May 2018. Fourteen of the 17 subsectors recorded growth in the following order: repair, maintenance/ washing of motor vehicles; agriculture; information & communication; professional, scientific, & technical services; finance & insurance; utilities;



water supply, sewage & waste management; health care & social assistance; real estate rental & leasing; electricity, gas, steam & air conditioning supply; wholesale/retail trade; construction; management of companies; and transportation & warehousing. The arts, entertainment & recreation subsector remained unchanged, while the accommodation & food services; and educational services subsectors recorded contraction in the review period (Fig. 10 and Table 7).

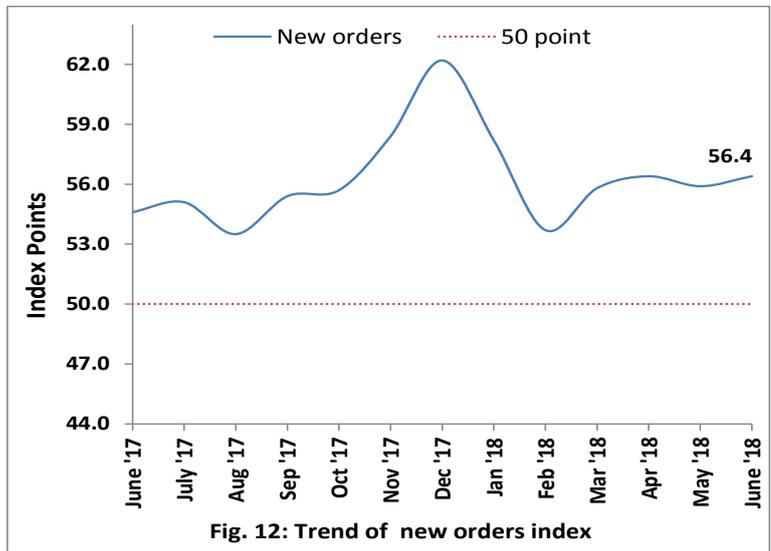
3.1 Business Activity

At 59.1 points, the business activity index grew for the fifteenth consecutive month, indicating expansion in non-manufacturing business activity in June 2018. The index grew at a faster rate when compared to its level in the previous month. Twelve subsectors recorded growth in business activity, 3 remained unchanged while 2 declined in the review month (Fig 11 Table 8).



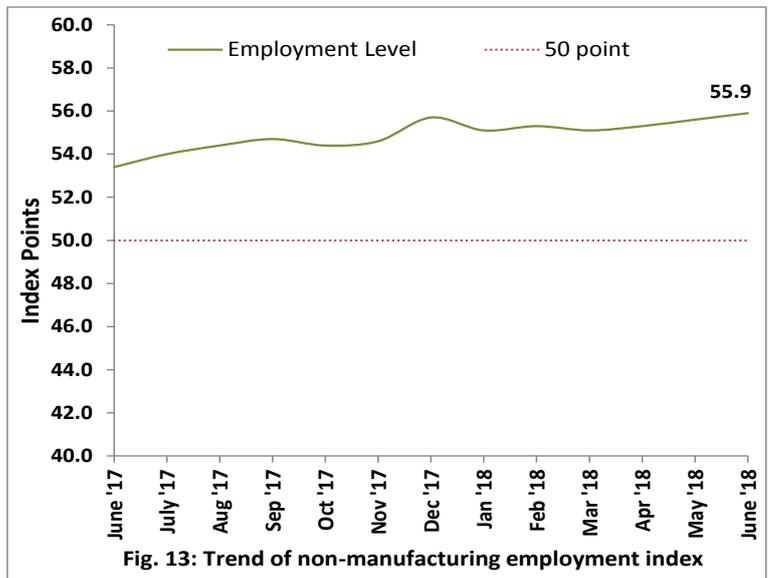
3.2 New Orders

At 56.4 points, new orders index grew for the fifteenth consecutive month in June 2018. Of the 18 subsectors, 12) reported growth, 1 remained unchanged and 4 recorded a decline (Fig 12 Table 9).



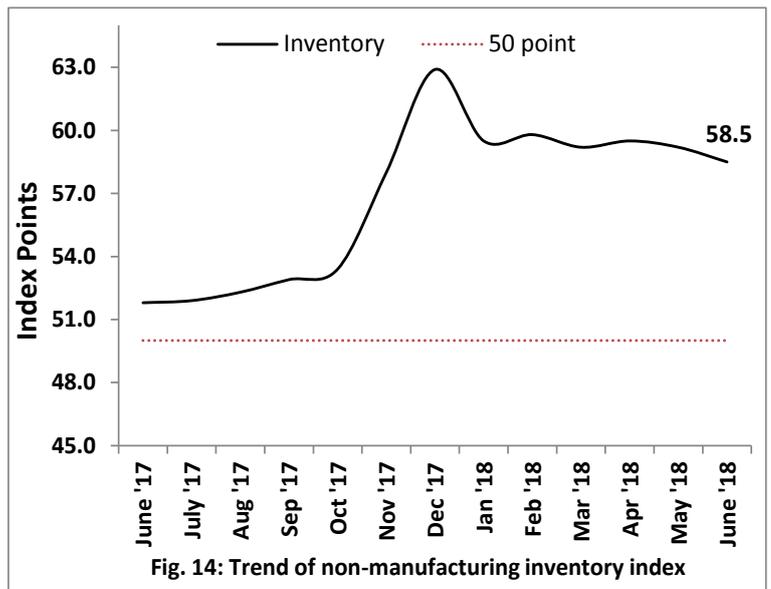
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.9 points, indicating growth in employment for the fourteenth consecutive month. Twelve subsectors recorded growth, 1 remained unchanged while 4 recorded declines in the review month (Fig 13 Table 10).



3.4 Non-manufacturing Inventory

At 58.5 points, non-manufacturing inventory index grew for the fourteenth consecutive month, indicating growth in inventories in the review period. Thirteen subsectors recorded higher inventories, 1 remained unchanged, while 3 subsectors recorded lower inventory in June 2018 (Fig 14 Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index*	Series Index*	Difference	Direction	Rate of Change	Trend** (Months)
	May	June				
Composite PMI \1	56.5	57.0	0.5	Growing	Faster	15
Production level	58.8	59.2	0.4	Growing	Faster	16
New orders	54.9	56.2	1.3	Growing	Faster	15
Supplier delivery time	57.5	56.5	-1.0	Growing	Slower	13
Employment level	55.2	55.4	0.2	Growing	Faster	14
Raw materials/WIP Inventory	58.1	57.7	-0.4	Growing	Slower	15
New Export Orders	40.1	37.6	-2.5	Declining	Faster	40
Output Prices	53.9	53.8	-0.1	Growing	Slower	30
Input Prices	61.8	61.9	0.1	Growing	Faster	48
Quantity of Purchases	50.8	47.6	-3.2	Declining	From Expansion	1
Outstanding Business/Backlog of Work	38.5	38.0	-0.5	Declining	Faster	7
Stock of Finished Goods	55.8	51.1	-4.7	Growing	Slower	3
Manufacturing Sub-Sectors						
Cement	58.8	48.3	-10.5	Declining	From Expansion	1
Chemical & pharmaceutical products	58.0	56.0	-2.0	Growing	Slower	5
Electrical equipment	60.5	60.5	0.0	Growing	Flat	5
Fabricated metal products	48.6	45.3	-3.3	Declining	Faster	2
Food, beverage & tobacco products	59.9	61.0	1.1	Growing	Faster	21
Furniture & related products	49.2	64.4	15.2	Growing	From Contraction	1
Nonmetallic mineral products	48.8	50.3	1.5	Growing	From Contraction	1
Paper products	62.1	65.4	3.3	Growing	Faster	14
Petroleum & coal products	62.5	55.0	-7.5	Growing	Slower	8
Plastics & rubber products	61.7	61.0	-0.7	Growing	Slower	11
Primary metal	56.1	45.4	-10.7	Declining	From Expansion	1
Printing & related support activities	51.4	61.2	9.8	Growing	Faster	3
Textile, apparel, leather & footwear	51.3	58.7	7.4	Growing	Faster	16
Transportation equipment	46.3	27.5	-18.8	Declining	Faster	2

\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	Difference	Direction	Rate of Change	Trend (Months)
	May	June				
PRODUCTION PMI	58.8	59.2	0.4	Growing	Faster	16
Cement	62.5	50.0	-12.5	No Change	From Expansion	1
Chemical & pharmaceutical products	62.5	52.9	-9.6	Growing	Slower	5
Electrical equipment	60.0	80.0	20.0	Growing	Faster	5
Fabricated metal products	43.8	26.7	-17.1	Declining	Faster	2
Food, beverage & tobacco products	65.0	70.6	5.6	Growing	Faster	21
Furniture & related products	37.5	72.2	34.7	Growing	From Contraction	1
Nonmetallic mineral products	43.8	37.5	-6.3	Declining	Faster	4
Paper products	75.0	64.3	-10.7	Growing	Slower	3
Petroleum & coal products	75.0	83.3	8.3	Growing	Faster	3
Plastics & rubber products	60.0	61.5	1.5	Growing	Faster	3
Primary metal	50.0	57.1	7.1	Growing	From No Change	1
Printing & related support activities	57.1	59.1	2.0	Growing	Faster	3
Textile, apparel, leather & footwear	60.7	63.3	2.6	Growing	Faster	3
Transportation equipment	50.0	33.3	-16.7	Declining	From No Change	1

Table 3: New Orders at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	54.9	56.2	1.3	Growing	Faster	15
Cement	50.0	50.0	0.0	No Change	Flat	4
Chemical & pharmaceutical products	54.7	58.8	4.1	Growing	Faster	4
Electrical equipment	70.0	60.0	-10.0	Growing	Slower	5
Fabricated metal products	46.9	40.0	-6.9	Declining	Faster	2
Food, beverage & tobacco products	59.2	59.8	0.6	Growing	Faster	21
Furniture & related products	41.7	61.1	19.4	Growing	From Contraction	1
Nonmetallic mineral products	43.8	50.0	6.2	No Change	From Contraction	1
Paper products	58.3	78.6	20.3	Growing	Faster	2
Petroleum & coal products	50.0	33.3	-16.7	Declining	From No Change	1
Plastics & rubber products	70.0	69.2	-0.8	Growing	Slower	2
Primary metal	57.1	28.6	-28.5	Declining	From Expansion	1
Printing & related support activities	57.1	63.6	6.5	Growing	Faster	2
Textile, apparel, leather & footwear	42.3	56.7	14.4	Growing	From Contraction	1
Transportation equipment	25.0	0.0	-25.0	Declining	Faster	4

Table 4: Supplier Delivery Time at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	57.5	56.5	-1.0	Growing	Slower	13
Cement	62.5	50.0	-12.5	No Change	From Expansion	1
Chemical & pharmaceutical products	60.9	50.0	-10.9	No Change	From Expansion	1
Electrical equipment	50.0	50.0	0.0	No Change	Flat	3
Fabricated metal products	59.4	73.3	13.9	Growing	Faster	4
Food, beverage & tobacco products	56.7	50.0	-6.7	No Change	From Expansion	1
Furniture & related products	70.8	61.1	-9.7	Growing	Slower	3
Nonmetallic mineral products	68.8	68.8	0.0	Growing	Flat	2
Paper products	50.0	57.1	7.1	Growing	From No Change	1
Petroleum & coal products	50.0	50.0	0.0	No Change	Flat	2
Plastics & rubber products	46.7	57.7	11.0	Growing	From Contraction	1
Primary metal	57.1	64.3	7.2	Growing	Faster	3
Printing & related support activities	42.9	63.6	20.7	Growing	From Contraction	1
Textile, apparel, leather & footwear	53.6	63.3	9.7	Growing	Faster	10
Transportation equipment	75.0	50.0	-25.0	No Change	From Expansion	1

Table 5: Employment Level at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.2	55.4	0.2	Growing	Faster	14
Cement	62.5	33.3	-29.2	Declining	From Expansion	1
Chemical & pharmaceutical products	59.4	58.8	-0.6	Growing	Slower	5
Electrical equipment	40.0	40.0	0.0	Declining	Flat	2
Fabricated metal products	46.9	53.3	6.4	Growing	From Contraction	1
Food, beverage & tobacco products	57.5	59.8	2.3	Growing	Faster	2
Furniture & related products	54.5	61.1	6.6	Growing	Faster	2
Nonmetallic mineral products	50.0	50.0	0.0	No Change	Flat	4
Paper products	58.3	50.0	-8.3	No Change	From Expansion	1
Petroleum & coal products	62.5	50.0	-12.5	No Change	From Expansion	1
Plastics & rubber products	60.0	53.8	-6.2	Growing	Slower	10
Primary metal	57.1	50.0	-7.1	No Change	From Expansion	1
Printing & related support activities	50.0	59.1	9.1	Growing	From No Change	1
Textile, apparel, leather & footwear	46.4	53.3	6.9	Growing	From Contraction	1
Transportation equipment	50.0	33.3	-16.7	Declining	From No Change	1

Table 6: Raw Materials Inventory at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	58.1	57.7	-0.4	Growing	Slower	15
Cement	62.5	66.7	4.2	Growing	Faster	2
Chemical & pharmaceutical products	50.0	58.8	8.8	Growing	From No Change	1
Electrical equipment	90.0	70.0	-20.0	Growing	Slower	7
Fabricated metal products	53.1	50.0	-3.1	No Change	From Expansion	1
Food, beverage & tobacco products	59.5	59.2	-0.3	Growing	Slower	21
Furniture & related products	58.3	66.7	8.4	Growing	Faster	4
Nonmetallic mineral products	43.8	56.3	12.5	Growing	From Contraction	1
Paper products	66.7	71.4	4.7	Growing	Faster	3
Petroleum & coal products	87.5	66.7	-20.8	Growing	Slower	5
Plastics & rubber products	66.7	53.8	-12.9	Growing	Slower	6
Primary metal	64.3	28.6	-35.7	Declining	From Expansion	1
Printing & related support activities	35.7	60.0	24.3	Growing	From Contraction	1
Textile, apparel, leather & footwear	60.7	56.7	-4.0	Growing	Slower	9
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 7: Non-Manufacturing at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
Composite PMI \1	57.3	57.5	0.2	Growing	Faster	14
Business Activity	58.7	59.1	0.4	Growing	Faster	15
Level of new orders/customers/incoming business	55.9	56.4	0.5	Growing	Faster	15
Level of employment	55.6	55.9	0.3	Growing	Faster	14
Inventory	59.2	58.5	-0.7	Growing	Slower	14
Average price of Inputs (volume weighted)	50.8	52.2	1.4	Growing	Faster	32
Level of outstanding business/ Backlog of work	40.6	44.0	3.4	Declining	Slower	48
New Exports orders	36.4	33.2	-3.2	Declining	Faster	48
Imports	38.4	40.1	1.7	Declining	Slower	48
Inventory (sentiments)	46.2	42.4	-3.8	Declining	Faster	48
Non-manufacturing sub-sectors						
Accommodation & food services	48.7	43.9	-4.8	Declining	Faster	2
Agriculture	66.7	69.2	2.5	Growing	Faster	25
Arts, Entertainment & Recreation	60.9	50.0	-10.9	No Change	From Expansion	1
Construction	49.6	54.6	5.0	Growing	From Contraction	1
Educational services	58.9	45.5	-13.4	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	58.5	55.1	-3.4	Growing	Slower	2
Finance & insurance	60.6	64.3	3.7	Growing	Faster	16
Health care & social assistance	60.6	61.8	1.2	Growing	Faster	14
Information & communication	59.9	68.2	8.3	Growing	Faster	15
Management of companies	52.5	51.9	-0.6	Growing	Slower	2
Professional, scientific, & technical services	65.4	64.5	-0.9	Growing	Slower	7
Real estate rental & leasing	59.7	61.3	1.6	Growing	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles...	50.0	87.5	37.5	Growing	From No Change	1
Transportation & warehousing	51.4	50.8	-0.6	Growing	Slower	2
Utilities	70.8	62.5	-8.3	Growing	Slower	15
Water supply, sewage & waste management	56.3	62.5	6.2	Growing	Faster	4
Wholesale/Retail trade	56.9	54.8	-2.1	Growing	Slower	13

\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 Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	58.7	59.1	0.4	Growing	Faster	15
Accommodation & food services	44.4	41.9	-2.5	Declining	Faster	2
Agriculture	68.8	77.5	8.7	Growing	Faster	25
Arts, Entertainment & Recreation	68.8	50.0	-18.8	No Change	From Expansion	1
Construction	51.6	63.3	11.7	Growing	Faster	3
Educational services	57.1	59.1	2.0	Growing	Faster	10
Electricity, gas, steam & air conditioning supply	53.3	55.9	2.6	Growing	Faster	4
Finance & insurance	61.6	63.1	1.5	Growing	Faster	15
Health care & social assistance	66.7	56.9	-9.8	Growing	Slower	3
Information & communication	61.8	68.4	6.6	Growing	Faster	15
Management of companies	40.0	61.5	21.5	Growing	From Contraction	1
Professional, scientific, & technical services	64.7	76.3	11.6	Growing	Faster	4
Real estate rental & leasing	65.9	70.0	4.1	Growing	Faster	2
Repair, Maintenance/Washing Of Motor Vehicles.	62.5	100.0	37.5	Growing	Faster	2
Transportation & warehousing	50.0	40.6	-9.4	Declining	From No Change	1
Utilities	66.7	50.0	-16.7	No Change	From Expansion	1
Water supply, sewage & waste management	62.5	60.0	-2.5	Growing	Slower	2
Wholesale/Retail trade	61.3	50.0	-11.3	No Change	From Expansion	1

Table 9: New Orders at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.9	56.4	0.5	Growing	Faster	15
Accommodation & food services	43.5	37.8	-5.7	Declining	Faster	2
Agriculture	66.7	65.0	-1.7	Growing	Slower	2
Arts, Entertainment & Recreation	62.5	48.3	-14.2	Declining	From Expansion	1
Construction	50.0	51.7	1.7	Growing	From No Change	1
Educational services	54.8	45.5	-9.3	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	50.0	52.9	2.9	Growing	From No Change	1
Finance & insurance	58.0	69.0	11.0	Growing	Faster	16
Health care & social assistance	58.3	58.6	0.3	Growing	Faster	3
Information & communication	60.3	71.1	10.8	Growing	Faster	15
Management of companies	50.0	46.2	-3.8	Declining	From No Change	1
Professional, scientific, & technical services	64.7	55.3	-9.4	Growing	Slower	4
Real estate rental & leasing	63.6	55.0	-8.6	Growing	Slower	2
Repair, Maintenance/Washing Of Motor Vehicles..	50.0	100.0	50.0	Growing	From No Change	1
Transportation & warehousing	50.0	56.3	6.3	Growing	From No Change	1
Utilities	83.3	50.0	-33.3	No Change	From Expansion	1
Water supply, sewage & waste management	50.0	70.0	20.0	Growing	From No Change	1
Wholesale/Retail trade	59.7	59.6	-0.1	Growing	Slower	13

Table 10: Employment at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.6	55.9	0.3	Growing	Faster	14
Accommodation & food services	50.9	48.6	-2.3	Declining	From Expansion	1
Agriculture	64.6	65.0	0.4	Growing	Faster	14
Arts, Entertainment & Recreation	50.0	48.3	-1.7	Declining	From No Change	1
Construction	51.6	56.7	5.1	Growing	Faster	3
Educational services	59.5	40.9	-18.6	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	70.0	55.9	-14.1	Growing	Slower	2
Finance & insurance	56.3	59.5	3.3	Growing	Faster	13
Health care & social assistance	56.8	61.7	4.9	Growing	Faster	13
Information & communication	51.5	65.8	14.3	Growing	Faster	4
Management of companies	60.0	38.5	-21.5	Declining	From Expansion	1
Professional, scientific, & technical services	64.7	55.3	-9.4	Growing	Slower	2
Real estate rental & leasing	50.0	57.5	7.5	Growing	From No Change	1
Repair, Maintenance/Washing Of Motor Vehicles..	75.0	100.0	25.0	Growing	Faster	8
Transportation & warehousing	61.1	53.1	-8.0	Growing	Slower	3
Utilities	66.7	83.3	16.6	Growing	Faster	4
Water supply, sewage & waste management	56.3	50.0	-6.3	No Change	From Expansion	1
Wholesale/Retail trade	48.4	57.7	9.3	Growing	From Contraction	1

Table 11: Inventory at a Glance

Index	Series Index May	Series Index June	Difference	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	59.2	58.5	-0.7	Growing	Slower	14
Accommodation & food services	55.9	47.2	-8.7	Declining	From Expansion	1
Agriculture	66.7	69.4	2.7	Growing	Faster	8
Arts, Entertainment & Recreation	62.5	53.4	-9.1	Growing	Slower	9
Construction	45.2	46.7	1.5	Declining	Slower	2
Educational services	64.3	36.4	-27.9	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	60.7	55.9	-4.8	Growing	Slower	5
Finance & insurance	66.7	65.7	-1.0	Growing	Slower	5
Health care & social assistance	60.8	70.0	9.2	Growing	Faster	14
Information & communication	66.2	67.6	1.4	Growing	Faster	2
Management of companies	60.0	61.5	1.5	Growing	Faster	2
Professional, scientific, & technical services	67.6	71.1	3.5	Growing	Faster	7
Real estate rental & leasing	59.1	62.5	3.4	Growing	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles	12.5	50.0	37.5	No Change	From Contraction	1
Transportation & warehousing	44.4	53.1	8.7	Growing	From Contraction	1
Utilities	66.7	66.7	0.0	Growing	Flat	4
Water supply, sewage & waste management	56.3	70.0	13.7	Growing	Faster	7
Wholesale/Retail trade	58.1	51.9	-6.2	Growing	Slower	11

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
Jan '18	57.3	59.6	58.3	56.8	53.3	57.7	35.1	55.0	63.3	49.1	42.9	45.4
Feb '18	56.3	57.8	55.6	57.0	53.9	58.1	42.0	55.9	65.4	54.3	37.6	53.3
Mar '18	56.7	59.1	56.1	56.6	53.3	59.4	36.4	52.1	61.1	54.1	42.1	48.7
Apr '18	56.9	58.6	55.8	57.4	55.0	59.5	37.6	51.3	62.4	52.9	41.4	51.1
May '18	56.5	58.8	54.9	57.5	55.2	58.1	40.1	53.9	61.8	50.8	38.5	55.8
June '18	57.0	59.2	56.2	56.5	55.4	57.7	37.6	53.8	61.9	47.6	38.0	51.1

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
Jan '18	58.5	61.3	58.2	55.1	59.5	56.9	41.3	31.0	35.1	42.8
Feb '18	56.1	55.6	53.7	55.3	59.8	52.8	41.2	34.7	39.1	40.3
Mar '18	57.2	58.7	55.8	55.1	59.2	50.3	42.9	39.0	38.5	44.1
Apr '18	57.5	58.8	56.4	55.3	59.5	50.3	41.5	34.2	34.9	45.0
May '18	57.3	58.7	55.9	55.6	59.2	50.8	40.6	36.4	38.4	46.2
June '18	57.5	59.1	56.4	55.9	58.5	52.2	44.0	33.2	40.1	42.4