

Central Bank of Nigeria



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

Statistics Department

May 2018

PURCHASING MANAGERS' INDEX (PMI) MAY 2018 REPORT

1.0 Introduction

The May 2018 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period May 11 - 22, 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.

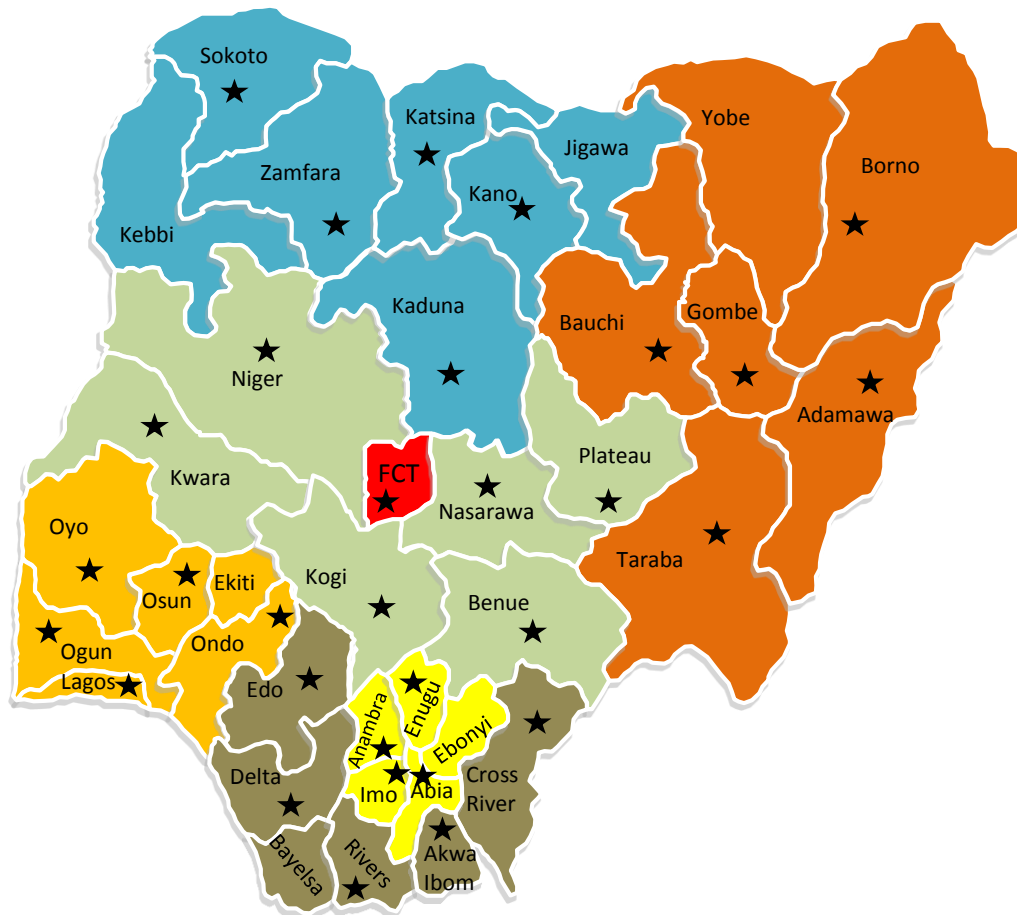


Fig. 1: Map of Nigeria with★showing the survey locations

1.1 Data and Method of Presentation

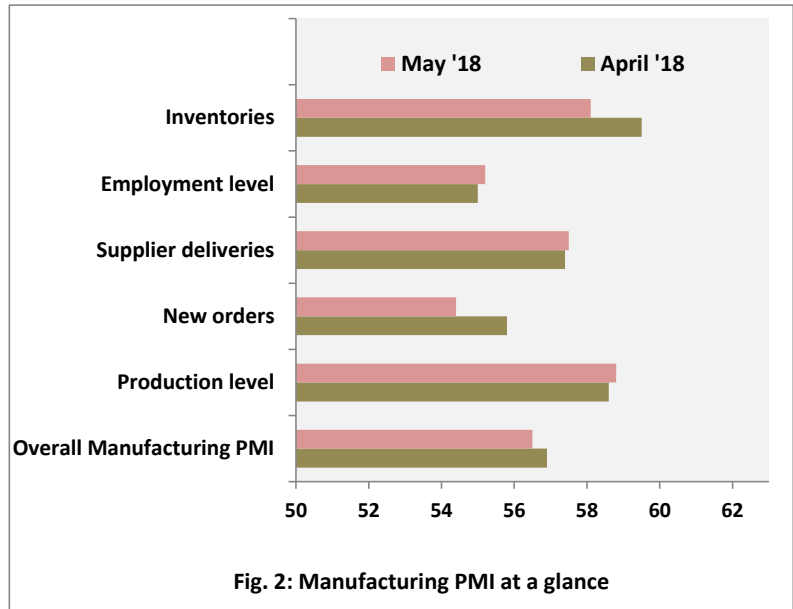
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses, indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses.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

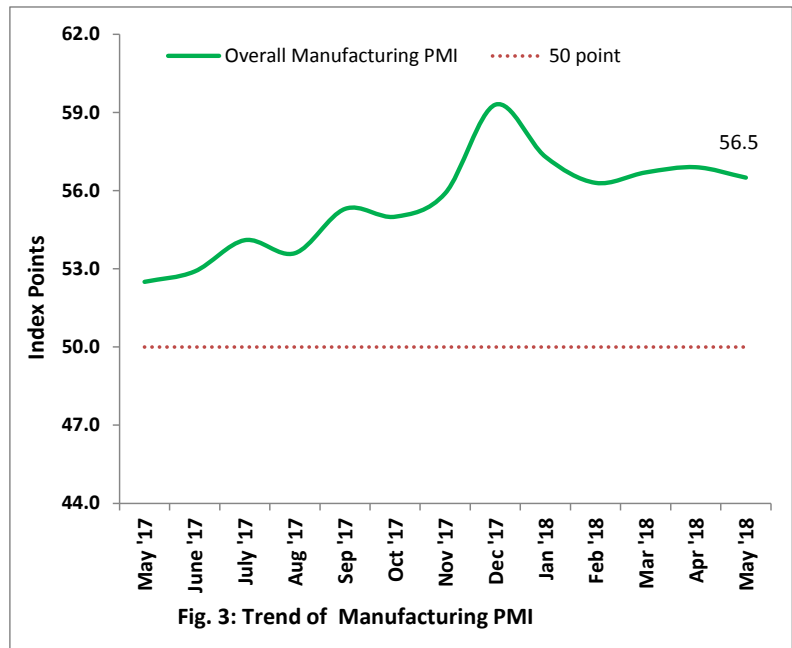
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those 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 May 2018

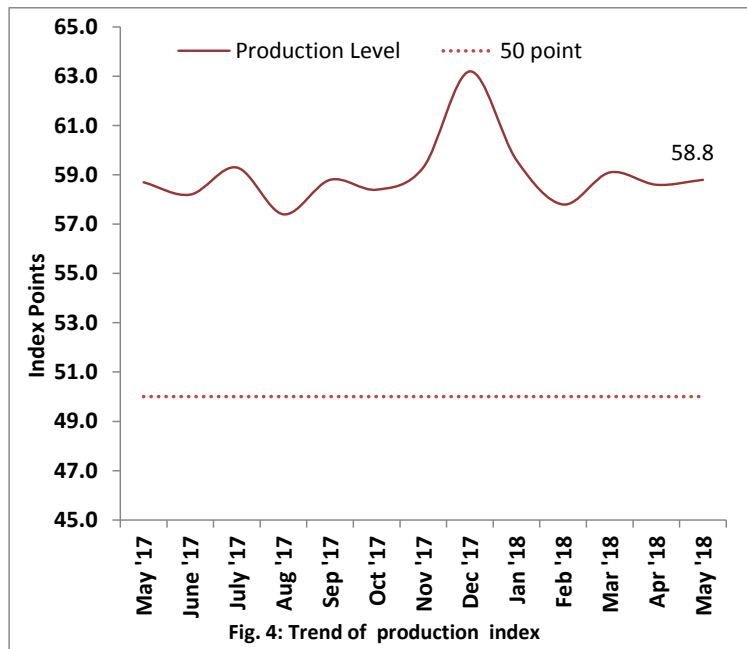


The *Manufacturing PMI* in the month of May stood at 56.5 index points, indicating expansion in the manufacturing sector for the fourteenth consecutive month. (Fig. 3 and Table 1). The index however grew at a slower rate when compared to the index in the previous month. Of the 14 subsectors surveyed, 10 reported growth in the review month in the following order: petroleum & coal products; paper products; plastics & rubber products; electrical equipment; food, beverage & tobacco products; cement; chemical & pharmaceutical products; primary metal; printing & related support activities; and textile, apparel, leather & footwear. The transportation equipment; fabricated metal products; nonmetallic mineral products; and furniture & related products subsectors declined in the review month.



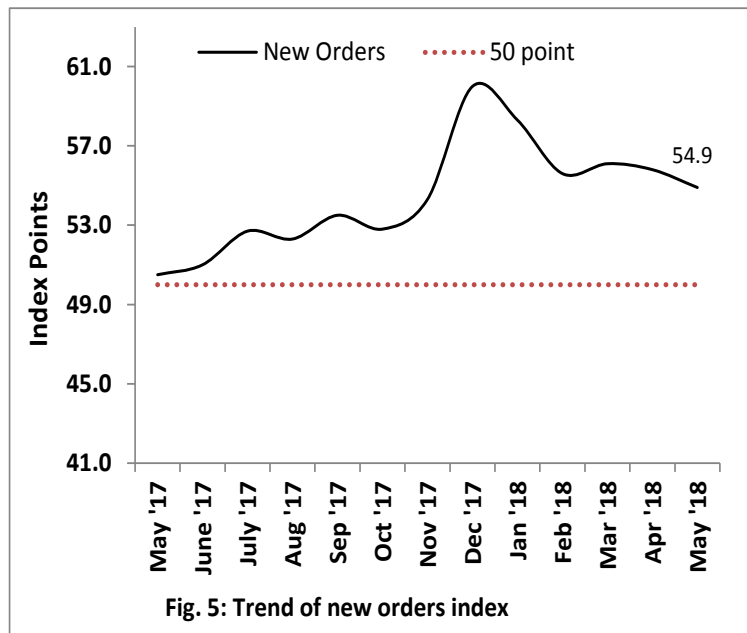
2.1 Production Level

At 58.8 points, the production level index for the manufacturing sector grew for the fifteenth consecutive month in May 2018. The index indicated a faster growth in the current month, when compared to its level in the preceding month. Nine (9) of the fourteen (14) manufacturing subsectors recorded increase in production level, two (2) remained unchanged, while the remaining three (3) recorded declines in production level during the review month (Fig. 4 and Table 2).



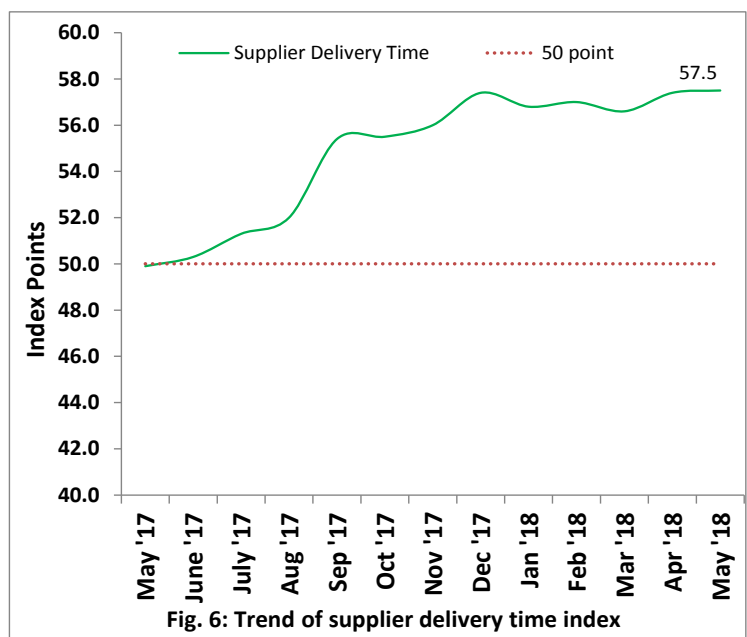
2.2 New Orders

At 54.9 points, the new orders index grew for the fourteenth consecutive month in May 2018, indicating increase in new orders in May 2018. Seven (7) subsectors reported growth, two (2) remained unchanged while five (5) contracted in the review month (Fig. 5 and Table 3).



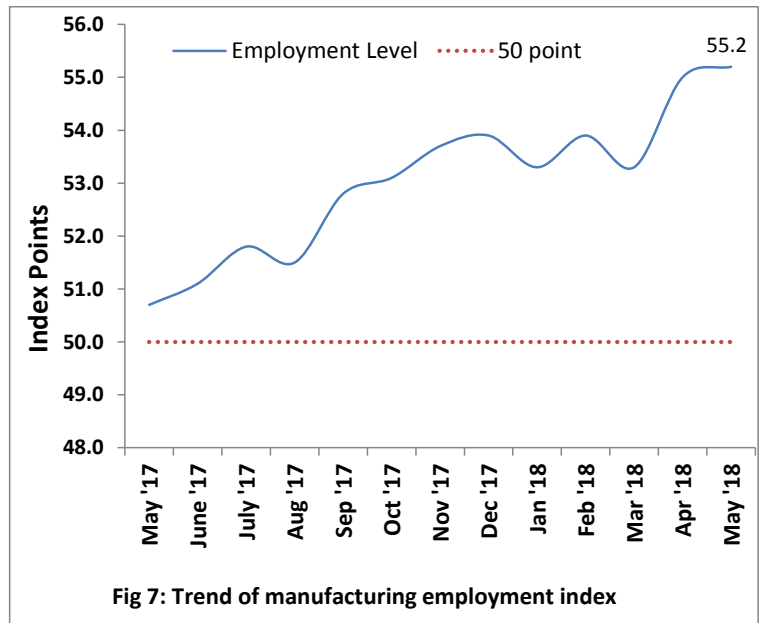
2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 57.5 points in May 2018, indicating faster supplier delivery time for the twelfth consecutive month. Nine (9) subsectors recorded improved suppliers' delivery time, three (3) remained unchanged while two (2) subsectors recorded delayed delivery time (Fig. 6 and Table 4).



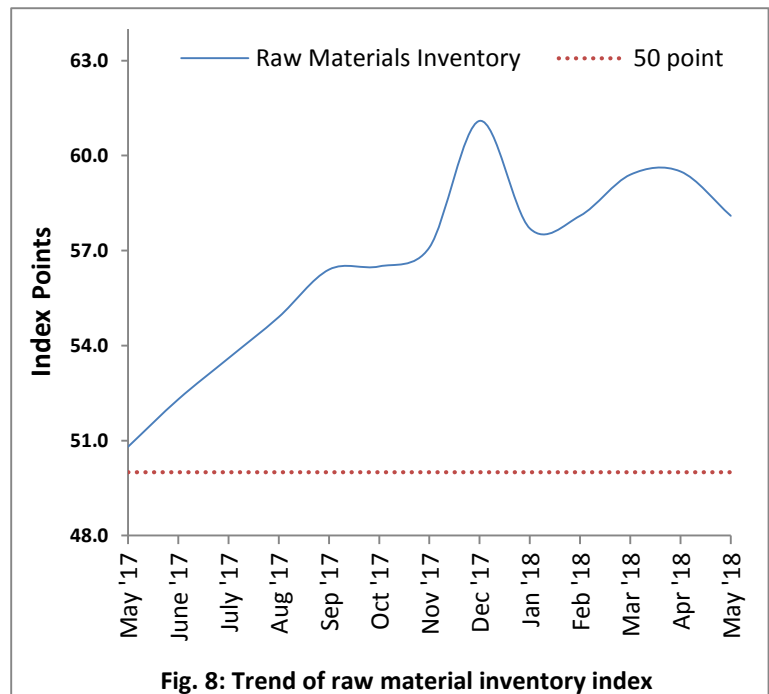
2.4 Employment Level

The employment level index in May 2018 stood at 55.2 points, indicating growth in employment level for the thirteenth consecutive month. Of the fourteen (14) subsectors, eight (8) subsectors increased their employment level, three (3) remained unchanged while three (3) reduced their employment level in the review month (Fig. 7 and Table 5).



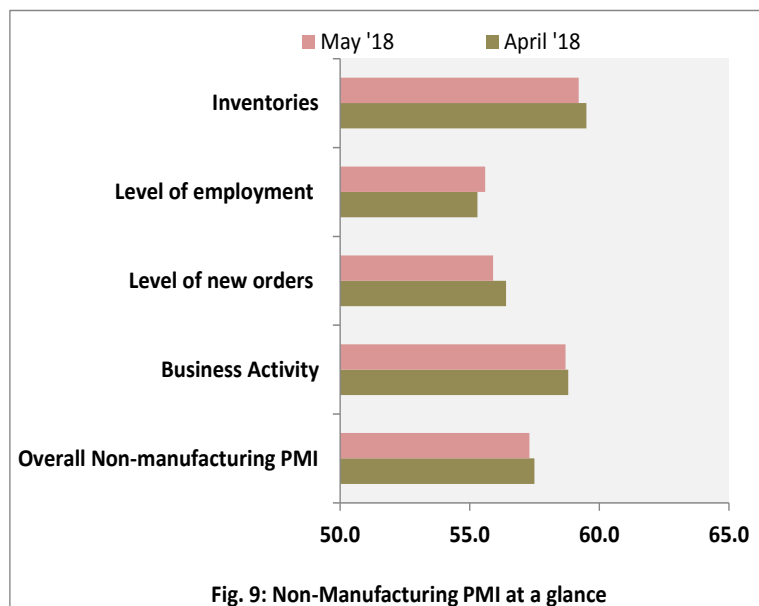
2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the fourteenth consecutive month in May 2018. At 58.1 points, the index grew at a slower rate when compared to its level in the previous month. Ten (10) of the 14 subsectors recorded growth, two (2) remained unchanged while two (2) recorded decline in raw material inventories (Fig. 8 and Table 6).

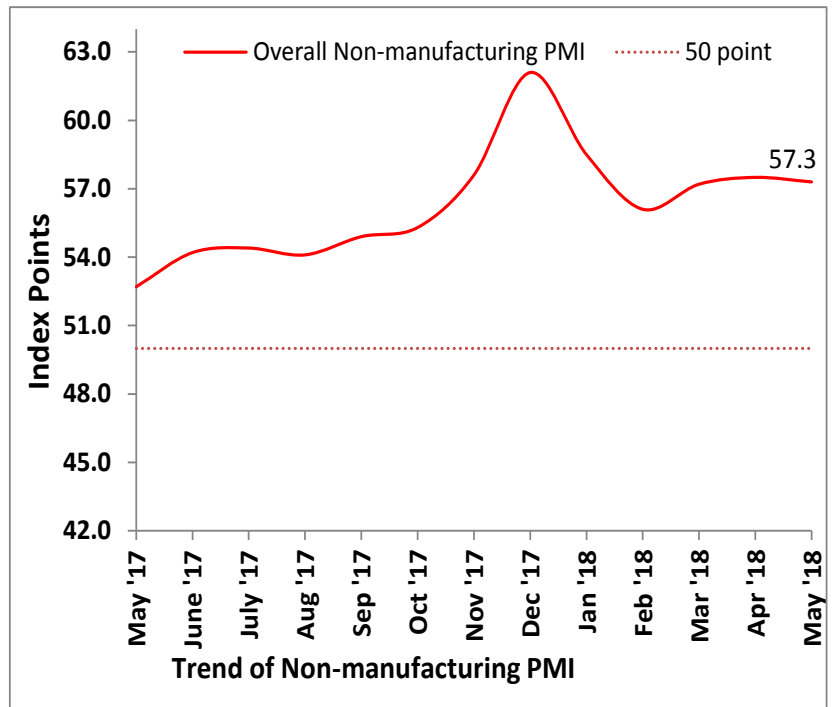


3.0 Non-Manufacturing PMI Report

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

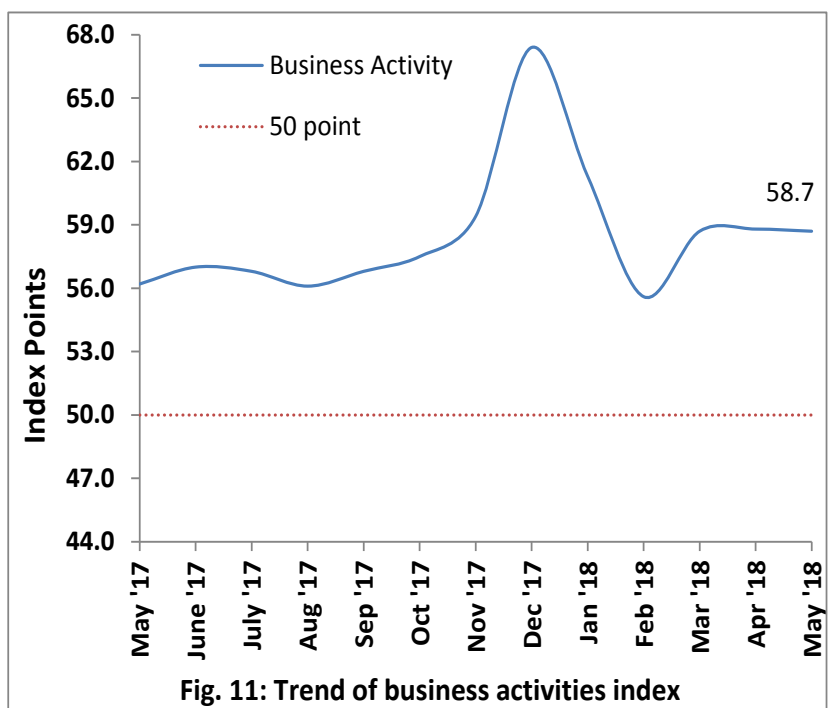


The *composite PMI* for the *non-manufacturing* sector stood at 57.3 points in May 2018, indicating expansion in the Non-manufacturing PMI for the thirteenth consecutive month. The index grew at a slower rate when compared to that in April 2018. Fourteen of the 18 subsectors recorded growth in the following order: utilities; agriculture; professional, scientific, & technical services; arts, entertainment & recreation; finance & insurance; health care & social assistance; information & communication; real estate rental & leasing; educational services; electricity, gas, steam & air conditioning supply; wholesale/retail trade; water supply, sewage & waste management; management of companies; transportation & warehousing. The public administration; and repair, maintenance/washing of motor vehicle subsectors remained unchanged, while the accommodation & food services; and construction subsectors recorded contraction in the review period (Fig. 10 and Table 7).



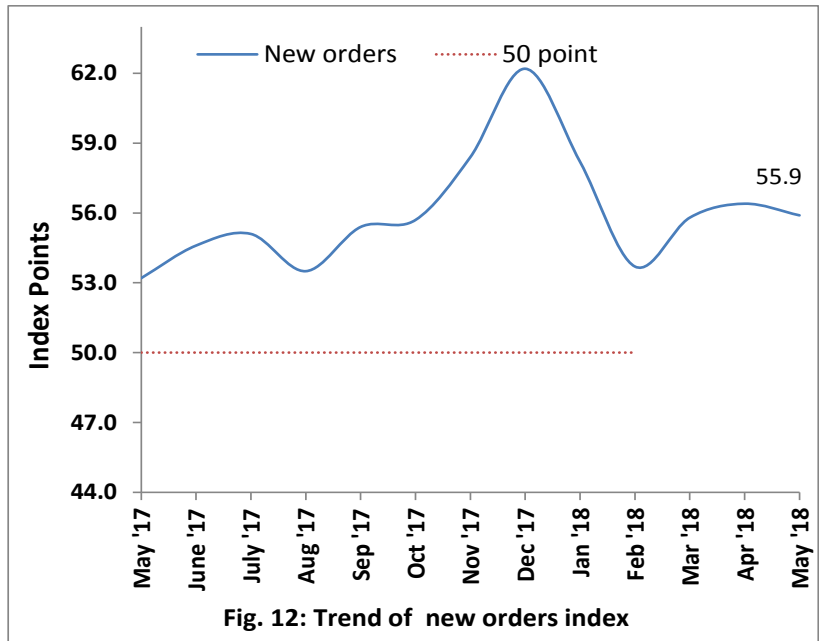
3.1 Business Activity

At 58.7 points, the business activity index grew for the fourteenth consecutive month, indicating expansion in business activity in May 2018. The index grew at a slower rate when compared to its level in the previous month. Fourteen (14) subsectors recorded growth in business activity, two (2) remained unchanged while two (2) declined in the review month (Fig 11 Table 8).



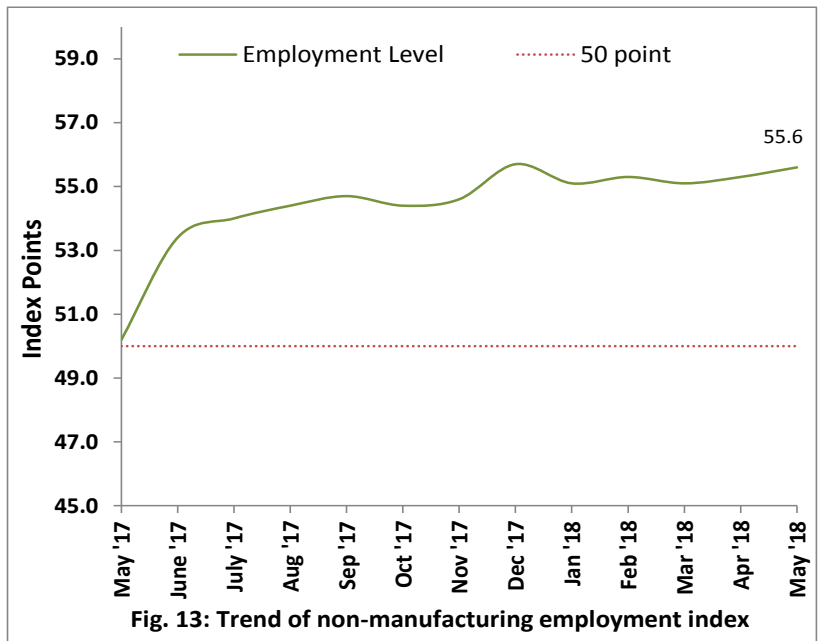
3.2 New Orders

At 55.9 points, new orders index grew for the fourteenth consecutive month in May 2018. Of the 18 subsectors, ten (10) reported growth, seven (7) remained unchanged and one (1) recorded a decline (Fig 12 Table 9).



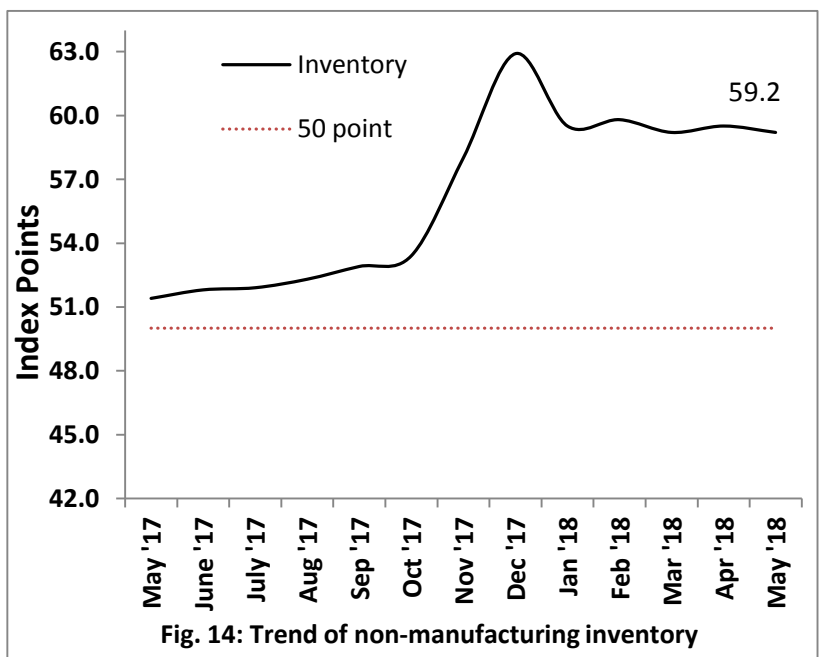
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.6 points, indicating growth in employment for the thirteenth consecutive month. Fourteen (14) subsectors recorded growth in the review month, three (3) remained unchanged while one (1) recorded declines (Fig 13 Table 10).



3.4 Non-manufacturing Inventory

At 59.2 points, non-manufacturing inventory index grew for the thirteenth consecutive month, indicating growth in inventories in the review period. Fourteen (14) subsectors recorded higher inventories, one (1) remained unchanged, while three (3) subsectors recorded lower inventory in May, 2018 (Fig 14 Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index* April	Series Index* May	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	56.9	56.5	-0.4	Growing	Slower	14
Production level	58.6	58.8	0.2	Growing	Faster	15
New orders	55.8	54.9	-0.9	Growing	Slower	14
Supplier delivery time	57.4	57.5	0.1	Growing	Faster	12
Employment level	55.0	55.2	0.2	Growing	Faster	13
Raw materials/WIP Inventory	59.5	58.1	-1.4	Growing	Slower	14
New Export Orders	37.6	40.1	2.5	Declining	Slower	39
Output Prices	51.3	53.9	2.6	Growing	Faster	29
Input Prices	62.4	61.8	-0.6	Growing	Slower	47
Quantity of Purchases	52.9	50.8	-2.1	Growing	Slower	4
Outstanding Business/Backlog of Work	41.4	38.5	-2.9	Declining	Faster	6
Stock of Finished Goods	51.1	55.8	4.7	Growing	Faster	2
Manufacturing Sub-Sectors						
Cement	50.0	58.8	8.8	Growing	From No Change	1
Chemical & pharmaceutical products	57.4	58.0	0.6	Growing	Faster	4
Electrical equipment	70.0	60.5	-9.5	Growing	Slower	4
Fabricated metal products	58.6	48.6	-10.0	Declining	From Expansion	1
Food, beverage & tobacco products	55.7	59.9	4.2	Growing	Faster	20
Furniture & related products	55.0	49.2	-5.8	Declining	From Expansion	1
Nonmetallic mineral products	35.0	48.8	13.8	Declining	Slower	4
Paper products	55.4	62.1	6.7	Growing	Faster	13
Petroleum & coal products	79.0	62.5	-16.5	Growing	Slower	7
Plastics & rubber products	54.8	61.7	6.9	Growing	Faster	10
Primary metal	47.0	56.1	9.1	Growing	From Contraction	1
Printing & related support activities	64.2	51.4	-12.8	Growing	Slower	2
Textile, apparel, leather & footwear	60.0	51.3	-8.7	Growing	Slower	15
Transportation equipment	52.5	46.3	-6.2	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 April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	58.6	58.8	0.2	Growing	Faster	15
Cement	50.0	62.5	12.5	Growing	From No Change	1
Chemical & pharmaceutical products	53.1	62.5	9.4	Growing	Faster	4
Electrical equipment	70.0	60.0	-10.0	Growing	Slower	4
Fabricated metal products	60.5	43.8	-16.7	Declining	From Expansion	1
Food, beverage & tobacco products	56.8	65.0	8.2	Growing	Faster	20
Furniture & related products	65.0	37.5	-27.5	Declining	From Expansion	1
Nonmetallic mineral products	25.0	43.8	18.8	Declining	Slower	3
Paper products	57.1	75.0	17.9	Growing	Faster	2
Petroleum & coal products	90.0	75.0	-15.0	Growing	Slower	2
Plastics & rubber products	57.7	60.0	2.3	Growing	Faster	2
Primary metal	40.0	50.0	10.0	No Change	From Contraction	1
Printing & related support activities	72.2	57.1	-15.1	Growing	Slower	2
Textile, apparel, leather & footwear	65.4	60.7	-4.7	Growing	Slower	2
Transportation equipment	62.5	50.0	-12.5	No Change	From Expansion	1

Table 3: New Orders at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.8	54.9	-0.9	Growing	Slower	14
Cement	50.0	50.0	0.0	No Change	Flat	3
Chemical & pharmaceutical products	59.4	54.7	-4.7	Growing	Slower	3
Electrical equipment	70.0	70.0	0.0	Growing	Flat	4
Fabricated metal products	60.5	46.9	-13.6	Declining	From Expansion	1
Food, beverage & tobacco products	59.3	59.2	-0.1	Growing	Slower	20
Furniture & related products	50.0	41.7	-8.3	Declining	From No Change	1
Nonmetallic mineral products	25.0	43.8	18.8	Declining	Slower	2
Paper products	50.0	58.3	8.3	Growing	From No Change	1
Petroleum & coal products	80.0	50.0	-30.0	No Change	From Expansion	1
Plastics & rubber products	46.2	70.0	23.8	Growing	From Contraction	1
Primary metal	40.0	57.1	17.1	Growing	From Contraction	1
Printing & related support activities	50.0	57.1	7.1	Growing	From No Change	1
Textile, apparel, leather & footwear	53.8	42.3	-11.5	Declining	From Expansion	1
Transportation equipment	37.5	25.0	-12.5	Declining	Faster	3

Table 4: Supplier Delivery Time at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	57.4	57.5	0.1	Growing	Faster	12
Cement	100.0	62.5	-37.5	Growing	Slower	2
Chemical & pharmaceutical products	54.7	60.9	6.2	Growing	Faster	6
Electrical equipment	50.0	50.0	0.0	No Change	Flat	2
Fabricated metal products	52.8	59.4	6.6	Growing	Faster	3
Food, beverage & tobacco products	55.1	56.7	1.6	Growing	Faster	9
Furniture & related products	55.0	70.8	15.8	Growing	Faster	2
Nonmetallic mineral products	41.7	68.8	27.1	Growing	From Contraction	1
Paper products	50.0	50.0	0.0	No Change	Flat	2
Petroleum & coal products	70.0	50.0	-20.0	No Change	From Expansion	1
Plastics & rubber products	61.5	46.7	-14.8	Declining	From Expansion	1
Primary metal	60.0	57.1	-2.9	Growing	Slower	2
Printing & related support activities	77.8	42.9	-34.9	Declining	From Expansion	1
Textile, apparel, leather & footwear	65.4	53.6	-11.8	Growing	Slower	9
Transportation equipment	62.5	75.0	12.5	Growing	Faster	4

Table 5: Employment Level at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.0	55.2	0.2	Growing	Faster	13
Cement	25.0	62.5	37.5	Growing	From Contraction	1
Chemical & pharmaceutical products	59.4	59.4	0.0	Growing	Flat	4
Electrical equipment	80.0	40.0	-40.0	Declining	From Expansion	1
Fabricated metal products	57.9	46.9	-11.0	Declining	From Expansion	1
Food, beverage & tobacco products	46.6	57.5	10.9	Growing	From Contraction	1
Furniture & related products	50.0	54.5	4.5	Growing	From No Change	1
Nonmetallic mineral products	50.0	50.0	0.0	No Change	Flat	3
Paper products	64.3	58.3	-6.0	Growing	Slower	2
Petroleum & coal products	70.0	62.5	-7.5	Growing	Slower	3
Plastics & rubber products	57.7	60.0	2.3	Growing	Faster	9
Primary metal	60.0	57.1	-2.9	Growing	Slower	2
Printing & related support activities	66.7	50.0	-16.7	No Change	From Expansion	1
Textile, apparel, leather & footwear	61.5	46.4	-15.1	Declining	From Expansion	1
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 6: Raw Materials Inventory at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	59.5	58.1	-1.4	Growing	Slower	14
Cement	25.0	62.5	37.5	Growing	From Contraction	1
Chemical & pharmaceutical products	62.5	50.0	-12.5	No Change	From Expansion	1
Electrical equipment	80.0	90.0	10.0	Growing	Faster	6
Fabricated metal products	57.9	53.1	-4.8	Growing	Slower	2
Food, beverage & tobacco products	61.2	59.5	-1.7	Growing	Slower	20
Furniture & related products	55.0	58.3	3.3	Growing	Faster	3
Nonmetallic mineral products	50.0	43.8	-6.2	Declining	From No Change	1
Paper products	57.1	66.7	9.6	Growing	Faster	2
Petroleum & coal products	80.0	87.5	7.5	Growing	Faster	4
Plastics & rubber products	57.7	66.7	9.0	Growing	Faster	5
Primary metal	40.0	64.3	24.3	Growing	From Contraction	1
Printing & related support activities	61.1	35.7	-25.4	Declining	From Expansion	1
Textile, apparel, leather & footwear	53.8	60.7	6.9	Growing	Faster	8
Transportation equipment	62.5	50.0	-12.5	No Change	From Expansion	1

Table 7: Non-Manufacturing at a Glance

Index	Series	Series	Difference	Direction	Rate of Change	Trend (Months)
	Index April	Index May				
Composite PMI \1	57.5	57.3	-0.2	Growing	Slower	13
Business Activity	58.8	58.7	-0.1	Growing	Slower	14
Level of new orders/customers/incoming business	56.4	55.9	-0.5	Growing	Slower	14
Level of employment	55.3	55.6	0.3	Growing	Faster	13
Inventory	59.5	59.2	-0.3	Growing	Slower	13
Average price of Inputs (volume weighted)	50.3	50.8	0.5	Growing	Faster	31
Level of outstanding business/ Backlog of work	41.5	40.6	-0.9	Declining	Faster	47
New Exports orders	34.2	36.4	2.2	Declining	Slower	47
Imports	34.9	38.4	3.5	Declining	Slower	47
Inventory (sentiments)	45.0	46.2	1.2	Declining	Slower	47
Non-manufacturing sub-sectors						
Accommodation & food services	53.8	48.7	-5.1	Declining	From Expansion	1
Agriculture	59.8	66.7	6.9	Growing	Faster	24
Arts, Entertainment & Recreation	66.3	60.9	-5.4	Growing	Slower	2
Construction	53.5	49.6	-3.9	Declining	From Expansion	1
Educational services	62.3	58.9	-3.4	Growing	Slower	18
Electricity, gas, steam & air conditioning supply	48.4	58.5	10.1	Growing	From Contraction	1
Finance & insurance	64.8	60.6	-4.2	Growing	Slower	15
Health care & social assistance	58.8	60.6	1.8	Growing	Faster	13
Information & communication	57.8	59.9	2.1	Growing	Faster	14
Management of companies	50.0	52.5	2.5	Growing	From No Change	1
Professional, scientific, & technical services	55.9	65.4	9.5	Growing	Faster	6
Public administration	62.5	50.0	-12.5	No Change	From Expansion	1
Real estate rental & leasing	50.7	59.7	9.0	Growing	Faster	3
Repair, Maintenance/Washing Of Motor Vehicles...	56.3	50.0	-6.3	No Change	From Expansion	1
Transportation & warehousing	47.0	51.4	4.4	Growing	From Contraction	1
Utilities	62.5	70.8	8.3	Growing	Faster	14
Water supply, sewage & waste management	57.8	56.3	-1.5	Growing	Slower	3
Wholesale/Retail trade	55.7	56.9	1.2	Growing	Faster	12

\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	Difference	Direction	Rate of Change	Trend (Months)
	Index April	Index May				
BUSINESS ACTIVITY PMI	58.8	58.7	-0.1	Growing	Slower	14
Accommodation & food services	55.4	44.4	-11.0	Declining	From Expansion	1
Agriculture	58.9	68.8	9.9	Growing	Faster	24
Arts, Entertainment & Recreation	75.0	68.8	-6.2	Growing	Slower	2
Construction	53.1	51.6	-1.5	Growing	Slower	2
Educational services	63.6	57.1	-6.5	Growing	Slower	9
Electricity, gas, steam & air conditioning supply	56.3	53.3	-3.0	Growing	Slower	3
Finance & insurance	73.0	61.6	-11.4	Growing	Slower	14
Health care & social assistance	56.8	66.7	9.9	Growing	Faster	2
Information & communication	56.3	61.8	5.5	Growing	Faster	14
Management of companies	50.0	40.0	-10.0	Declining	From No Change	1
Professional, scientific, & technical services	61.8	64.7	2.9	Growing	Faster	3
Public administration	50.0	50.0	0.0	No Change	Flat	2
Real estate rental & leasing	44.1	65.9	21.8	Growing	From Contraction	1
Repair, Maintenance/Washing Of Motor Vehicles.	50.0	62.5	12.5	Growing	From No Change	1
Transportation & warehousing	50.0	50.0	0.0	No Change	Flat	2
Utilities	64.3	66.7	2.4	Growing	Faster	14
Water supply, sewage & waste management	50.0	62.5	12.5	Growing	From No Change	1
Wholesale/Retail trade	56.3	61.3	5.0	Growing	Faster	13

Table 9: New Orders at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	56.4	55.9	-0.5	Growing	Slower	14
Accommodation & food services	52.3	43.5	-8.8	Declining	From Expansion	1
Agriculture	50.0	66.7	16.7	Growing	From No Change	1
Arts, Entertainment & Recreation	65.0	62.5	-2.5	Growing	Slower	2
Construction	54.7	50.0	-4.7	No Change	From Expansion	1
Educational services	67.5	54.8	-12.7	Growing	Slower	7
Electricity, gas, steam & air conditioning supply	43.8	50.0	6.2	No Change	From Contraction	1
Finance & insurance	68.1	58.0	-10.1	Growing	Slower	15
Health care & social assistance	59.5	58.3	-1.2	Growing	Slower	2
Information & communication	57.8	60.3	2.5	Growing	Faster	14
Management of companies	50.0	50.0	0.0	No Change	Flat	2
Professional, scientific, & technical services	55.9	64.7	8.8	Growing	Faster	3
Public administration	75.0	50.0	-25.0	No Change	From Expansion	1
Real estate rental & leasing	41.2	63.6	22.4	Growing	From Contraction	1
Repair, Maintenance/Washing Of Motor Vehicles..	50.0	50.0	0.0	No Change	Flat	2
Transportation & warehousing	38.5	50.0	11.5	No Change	From Contraction	1
Utilities	57.1	83.3	26.2	Growing	Faster	14
Water supply, sewage & waste management	56.3	50.0	-6.3	No Change	From Expansion	1
Wholesale/Retail trade	56.3	59.7	3.4	Growing	Faster	12

Table 10: Employment at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.3	55.6	0.3	Growing	Faster	13
Accommodation & food services	55.3	50.9	-4.4	Growing	Slower	10
Agriculture	60.7	64.6	3.9	Growing	Faster	13
Arts, Entertainment & Recreation	55.0	50.0	-5.0	No Change	From Expansion	1
Construction	53.1	51.6	-1.5	Growing	Slower	2
Educational services	56.8	59.5	2.7	Growing	Faster	17
Electricity, gas, steam & air conditioning supply	37.5	70.0	32.5	Growing	From Contraction	1
Finance & insurance	55.7	56.3	0.5	Growing	Faster	12
Health care & social assistance	55.4	56.8	1.4	Growing	Faster	12
Information & communication	53.1	51.5	-1.7	Growing	Slower	3
Management of companies	50.0	60.0	10.0	Growing	From No Change	1
Professional, scientific, & technical services	47.1	64.7	17.6	Growing	From Contraction	1
Public administration	50.0	50.0	0.0	No Change	Flat	2
Real estate rental & leasing	58.8	50.0	-8.8	No Change	From Expansion	1
Repair, Maintenance/Washing Of Motor Vehicles..	60.0	75.0	15.0	Growing	Faster	7
Transportation & warehousing	53.6	61.1	7.5	Growing	Faster	2
Utilities	64.3	66.7	2.4	Growing	Faster	3
Water supply, sewage & waste management	62.5	56.3	-6.3	Growing	Slower	3
Wholesale/Retail trade	54.2	48.4	-5.8	Declining	From Expansion	1

Table 11: Inventory at a Glance

Index	Series Index April	Series Index May	Difference	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	59.5	59.2	-0.3	Growing	Slower	13
Accommodation & food services	52.3	55.9	3.6	Growing	Faster	4
Agriculture	69.6	66.7	-2.9	Growing	Slower	7
Arts, Entertainment & Recreation	70.0	62.5	-7.5	Growing	Slower	8
Construction	53.1	45.2	-7.9	Declining	From Expansion	1
Educational services	61.4	64.3	2.9	Growing	Faster	7
Electricity, gas, steam & air conditioning supply	56.3	60.7	4.4	Growing	Faster	4
Finance & insurance	62.3	66.7	4.4	Growing	Faster	4
Health care & social assistance	63.5	60.8	-2.7	Growing	Slower	13
Information & communication	64.1	66.2	2.1	Growing	Faster	1
Management of companies	50.0	60.0	10.0	Growing	From No Change	1
Professional, scientific, & technical services	58.8	67.6	8.8	Growing	Faster	6
Public administration	75.0	50.0	-25.0	No Change	From Expansion	1
Real estate rental & leasing	58.8	59.1	0.3	Growing	Faster	3
Repair, Maintenance/Washing Of Motor Vehicles	65.0	12.5	-52.5	Declining	From Expansion	1
Transportation & warehousing	46.2	44.4	-1.8	Declining	Faster	1
Utilities	64.3	66.7	2.4	Growing	Faster	3
Water supply, sewage & waste management	62.5	56.3	-6.2	Growing	Slower	6
Wholesale/Retail trade	56.3	58.1	1.8	Growing	Faster	10

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

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