

Central Bank of Nigeria



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

Statistics Department

February 2019

PURCHASING MANAGERS' INDEX (PMI) FEBRUARY 2019 REPORT

1.0 Introduction

The February 2019 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period February 11-15, 2019. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in all 36 states in Nigeria and the Federal Capital Territory (FCT). 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.

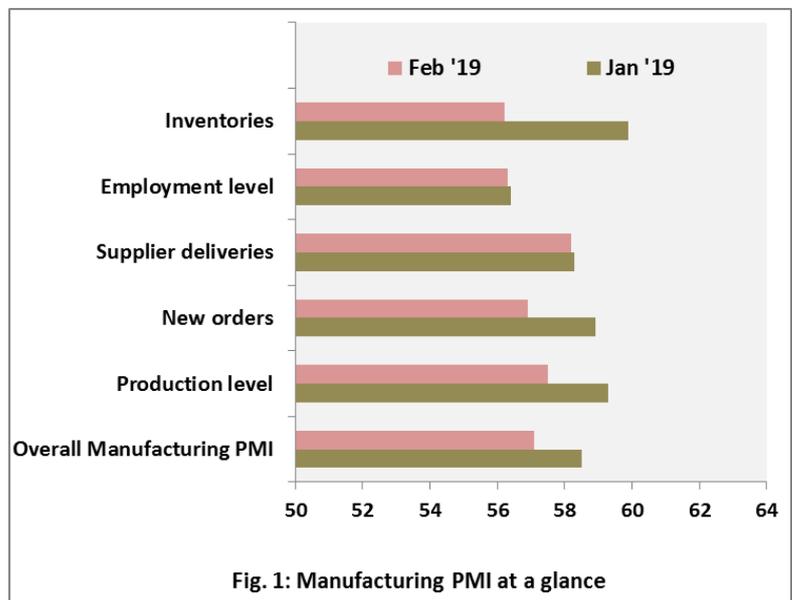
1.1 Data and Method of Presentation

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

Production level, new orders, supplier delivery time, employment level and inventories grew at a slower rate in February 2019



The *Manufacturing PMI* in the month of February stood at 57.1 index points, indicating expansion in the manufacturing sector for the twenty-third consecutive month (Fig. 2 and Table 1). The index grew at a slower rate when compared to the index in the previous month. Thirteen of the 14 subsectors surveyed reported growth in the review month in the following order: petroleum & coal products; electrical equipment; transportation equipment; plastics & rubber products; food, beverage & tobacco products; textile, apparel, leather & footwear; nonmetallic mineral products; chemical & pharmaceutical products; furniture & related products; printing & related support activities; cement; fabricated metal products; and paper products. The primary metal subsector recorded decline in the review period.

2.1 Production Level

At 57.5 points, the production level index for the manufacturing sector grew for the twenty-fourth consecutive month in February 2019. The index indicated a slower growth in the current month, when compared to its level in the preceding month. Nine of the 14 manufacturing subsectors recorded increased production level, 3 remained unchanged while 2 recorded decline (Fig. 3 and Table 2).

2.2 New Orders

At 56.9 points, the new orders index grew for the twenty-third consecutive month, indicating increase in new orders in February 2019. Twelve subsectors reported growth, 1 remained unchanged, while 1 contracted in the review month (Fig. 4 and Table 3).

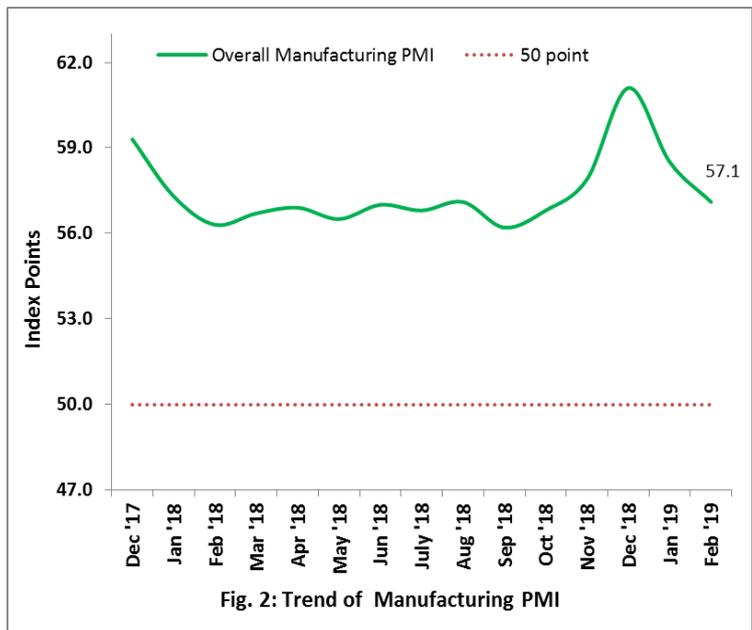


Fig. 2: Trend of Manufacturing PMI

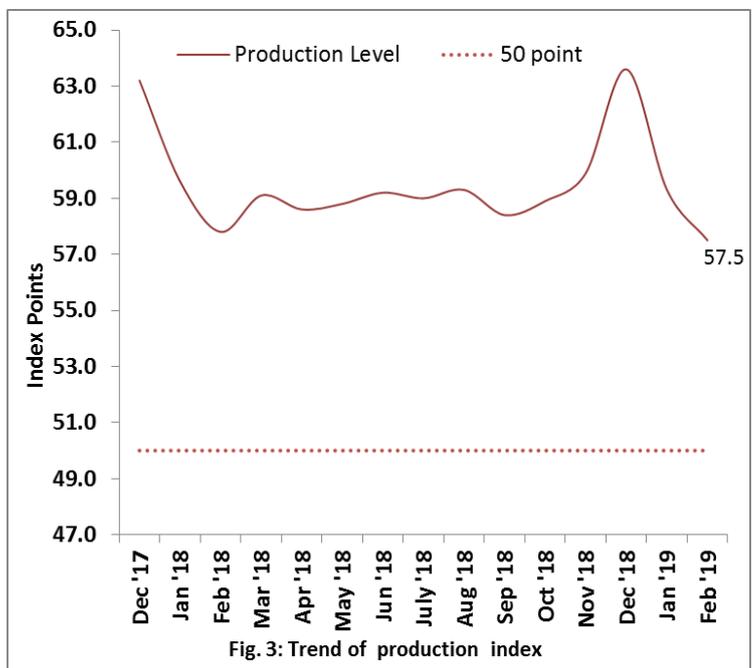


Fig. 3: Trend of production index

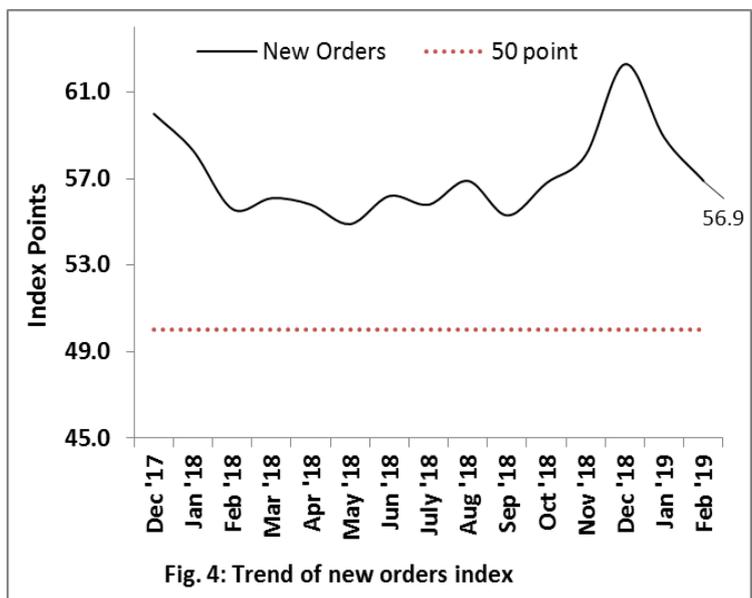
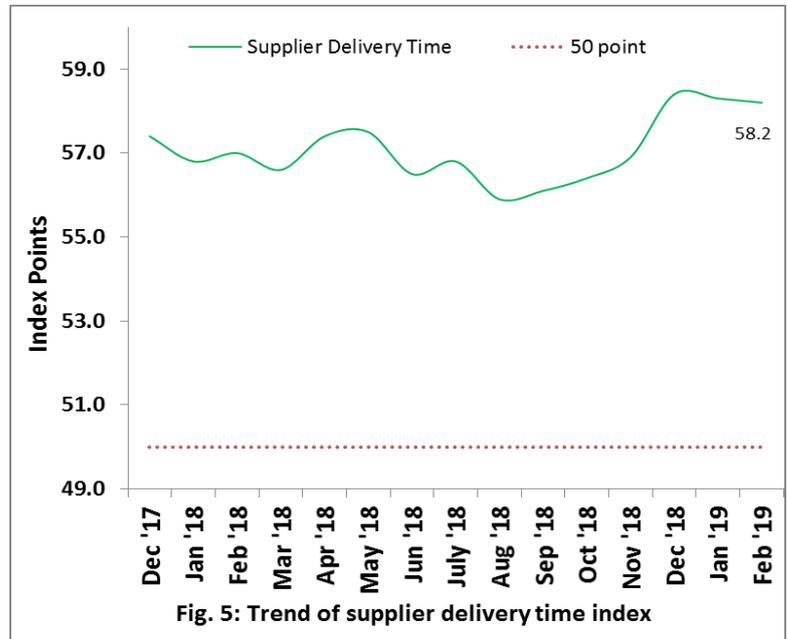


Fig. 4: Trend of new orders index

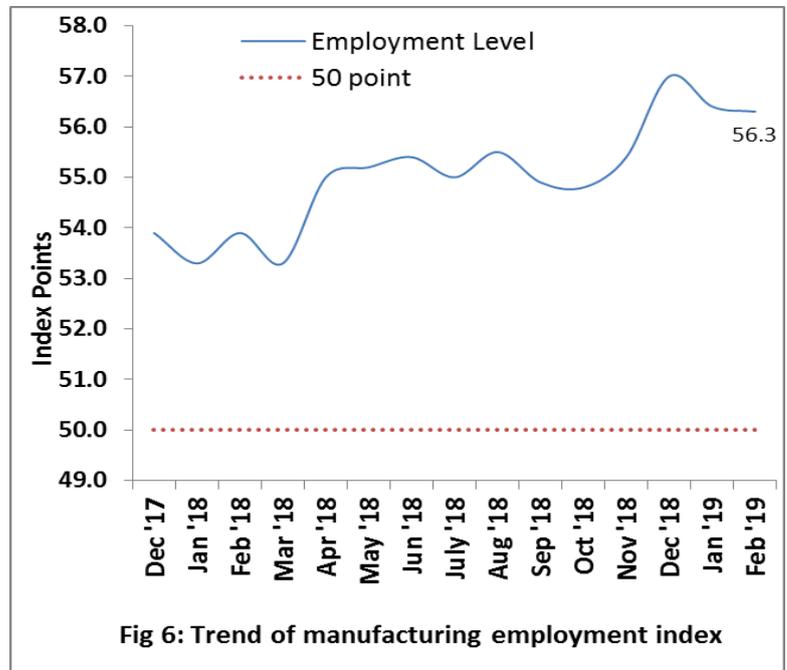
2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 58.2 points in February 2019, indicating slower supplier delivery time. The index has recorded growth for twenty-one consecutive months. All 14 subsectors recorded improved suppliers' delivery time in the review period (Fig. 5 and Table 4).



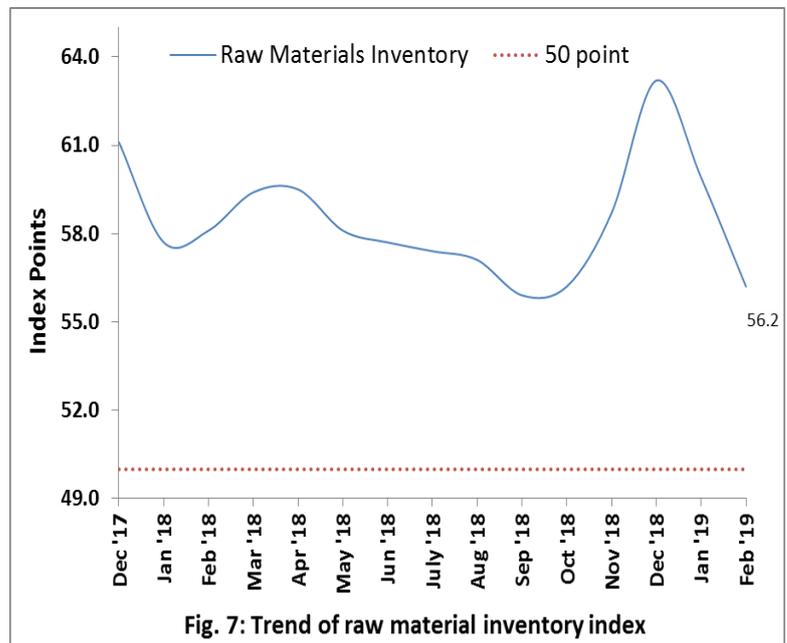
2.4 Employment Level

The employment level index for February 2019 stood at 56.3 points, indicating growth in employment level for the twenty-second consecutive month. Of the 14 subsectors, 8 reported increased employment level, 5 reported unchanged employment level while 1 reported decreased employment in the review month (Fig. 6 and Table 5).



2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the twenty-third consecutive month in February 2019. At 56.2 points, the index grew at a slower rate when compared to its level in January 2019. Nine of the 14 subsectors recorded growth, 1 recorded unchanged, while 4 reported declined raw material inventories in the review month (Fig. 7 and Table 6).



3.0 Non-Manufacturing PMI Report

Business activity, new orders, employment level and inventories grew at a slower rate in February 2019

The *composite PMI* for the *non-manufacturing sector* stood at 58.4 points in February 2019, indicating expansion in the Non-manufacturing PMI for the twenty-second consecutive month. The index grew at a slower rate when compared to that in January 2019. All 17 surveyed subsectors recorded growth in the following order: management of companies; arts, entertainment & recreation; utilities; information & communication; finance & insurance; repair, maintenance/washing of motor vehicles; educational services; real estate rental & leasing; wholesale/retail trade; transportation & warehousing; health care & social assistance; electricity, gas, steam & air conditioning supply; agriculture; accommodation & food services; construction; professional, scientific, & technical services; and water supply, sewage & waste management (Fig. 9 and Table 7).

3.1 Business Activity

At 59.7 points, the business activity index grew for the twenty-third consecutive month, indicating expansion in non-manufacturing business activity in February 2019. The index grew at a slower rate when compared to its level in the previous month. Fifteen subsectors recorded growth in business activity, 1 remained unchanged while one recorded decline in the review month (Fig 10 Table 8).

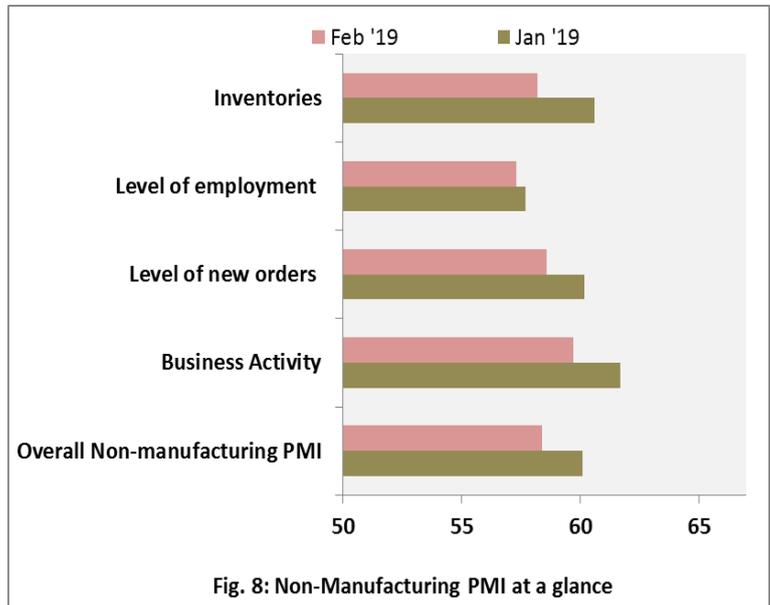


Fig. 8: Non-Manufacturing PMI at a glance

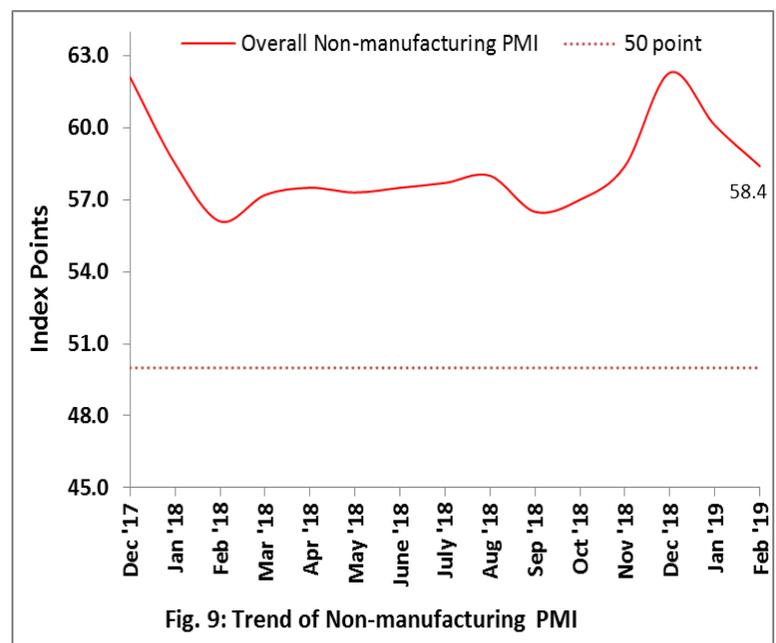


Fig. 9: Trend of Non-manufacturing PMI

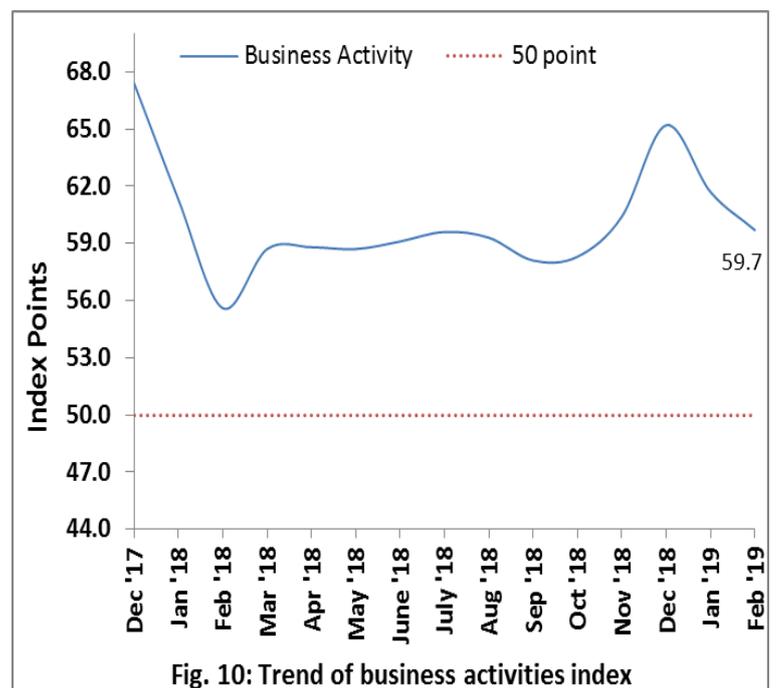
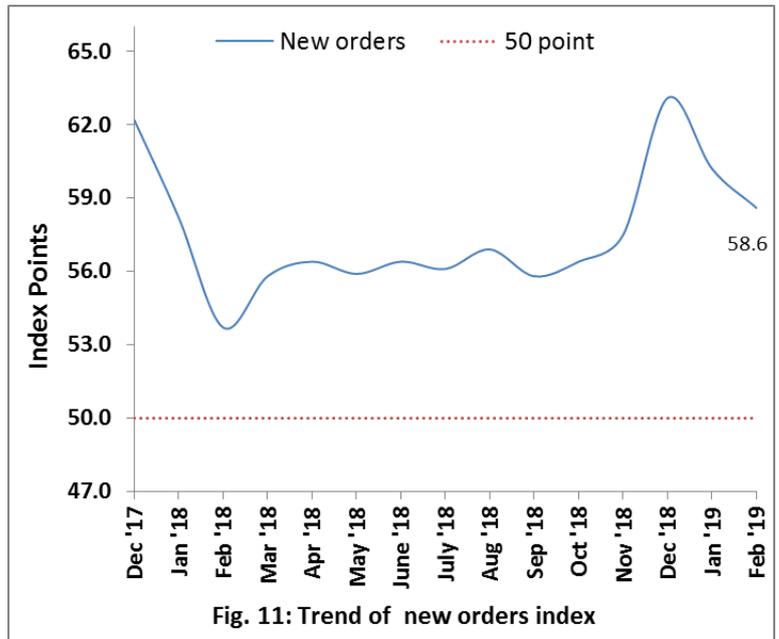


Fig. 10: Trend of business activities index

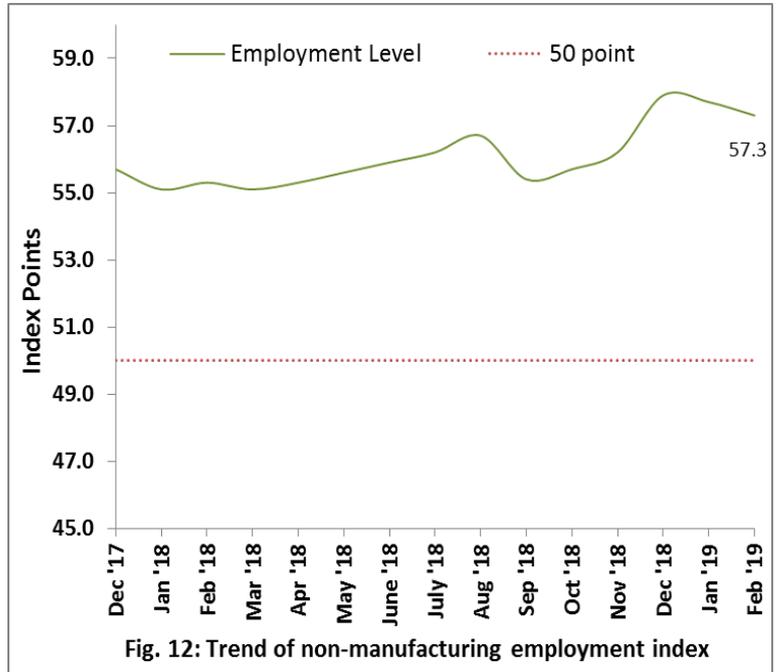
3.2 New Orders

At 58.6 points, new orders index grew for the twenty-third consecutive month in February 2019. Of the 17 subsectors, 15 recorded growth in new orders, while 2 recorded decline in the review month (Fig 11 Table 9).



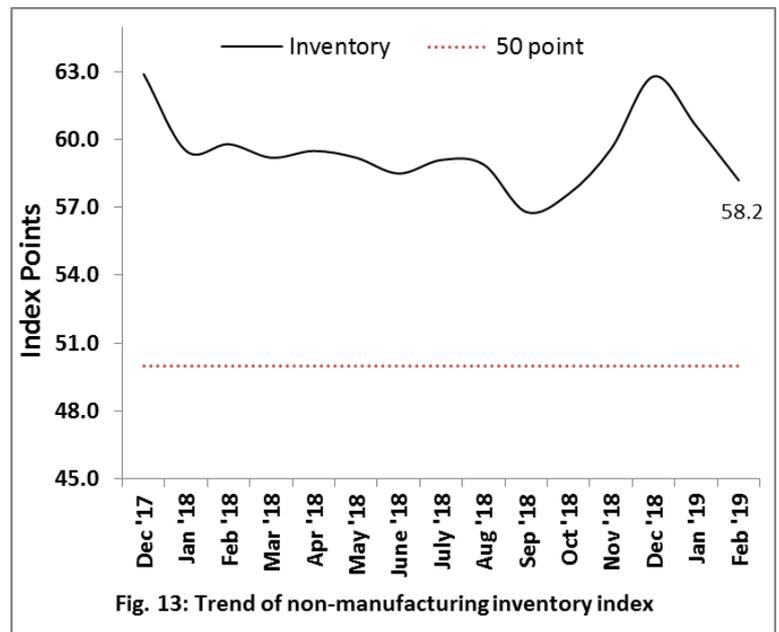
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 57.3 points, indicating growth in employment for the twenty-second consecutive month. Fifteen subsectors recorded growth in employment level while 2 remained unchanged in the review period (Fig 12 Table 10).



3.4 Non-manufacturing Inventory

At 58.2 points, non-manufacturing inventory index grew for the twenty-second consecutive month, indicating growth in inventories in the review period. Of the seventeen surveyed subsectors, 15 recorded higher inventories, while 2 recorded a declined inventories in February 2019 (Fig 13 Table 11).



APPENDICES

Table 1: Details of Overall Manufacturing PMI

Index	January 2019 Index*	February 2019 Index*	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	58.5	57.1	-1.4	Growing	Slower	23
Production level	59.3	57.5	-1.8	Growing	Slower	24
New orders	58.9	56.9	-2.0	Growing	Slower	23
Supplier delivery time	58.3	58.2	-0.1	Growing	Slower	21
Employment level	56.4	56.3	-0.1	Growing	Slower	22
Raw materials/WIP Inventory	59.9	56.2	-3.7	Growing	Slower	23
New Export Orders	41.4	39.7	-1.7	Declining	Faster	48
Output Prices	52.5	53.7	1.2	Growing	Faster	38
Input Prices	62.2	60.9	-1.3	Growing	Slower	56
Quantity of Purchases	52.5	52.1	-0.4	Growing	Slower	5
Outstanding Business/Backlog of Work	42.1	44.1	2.0	Declining	Slower	15
Stock of Finished Goods	52.3	55.4	3.1	Growing	Faster	11
Manufacturing Sub-Sectors						
Cement	61.0	54.2	-6.8	Growing	Slower	5
Chemical & pharmaceutical products	62.4	56.5	-5.9	Growing	Slower	13
Electrical equipment	58.5	70.4	11.9	Growing	Faster	13
Fabricated metal products	58.7	53.2	-5.5	Growing	Slower	8
Food, beverage & tobacco products	56.8	58.7	1.9	Growing	Faster	29
Furniture & related products	61.0	55.6	-5.4	Growing	Slower	9
Nonmetallic mineral products	56.7	56.7	0.0	Growing	Flat	9
Paper products	61.3	51.4	-9.9	Growing	Slower	5
Petroleum & coal products	78.8	74.2	-4.6	Growing	Slower	5
Plastics & rubber products	54.0	59.9	5.9	Growing	Faster	7
Primary metal	61.5	45.8	-15.7	Declining	From Expansion	1
Printing & related support activities	60.4	55.0	-5.4	Growing	Slower	11
Textile, apparel, leather & footwear	54.6	57.5	2.9	Growing	Faster	24
Transportation equipment	53.0	64.9	11.9	Growing	Faster	6

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

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

** Number of month moving in current direction

Table 2: Details of Production PMI

Index	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	59.3	57.5	-1.8	Growing	Slower	24
Cement	70.0	50.0	-20.0	No Change	From Expansion	1
Chemical & pharmaceutical products	60.3	56.9	-3.4	Growing	Slower	13
Electrical equipment	57.1	78.6	21.5	Growing	Faster	2
Fabricated metal products	56.6	50.0	-6.6	No Change	From Expansion	1
Food, beverage & tobacco products	57.9	61.6	3.7	Growing	Faster	29
Furniture & related products	66.7	57.4	-9.3	Growing	Slower	9
Nonmetallic mineral products	60.5	53.8	-6.7	Growing	Slower	8
Paper products	50.0	38.9	-11.1	Declining	From No Change	1
Petroleum & coal products	100.0	100.0	0.0	Growing	Flat	2
Plastics & rubber products	52.2	64.0	11.8	Growing	Faster	7
Primary metal	61.5	41.7	-19.8	Declining	From Expansion	1
Printing & related support activities	72.5	54.5	-18.0	Growing	Slower	11
Textile, apparel, leather & footwear	52.9	50.0	-2.9	No Change	From Expansion	1
Transportation equipment	50.0	70.0	20.0	Growing	From No Change	1

Table 3: Details of New Orders PMI

Index	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	58.9	56.9	-2.0	Growing	Slower	23
Cement	60.0	58.3	-1.7	Growing	Slower	5
Chemical & pharmaceutical products	66.2	52.8	-13.4	Growing	Slower	12
Electrical equipment	57.1	64.3	7.2	Growing	Faster	13
Fabricated metal products	61.8	51.5	-10.3	Growing	Slower	8
Food, beverage & tobacco products	57.0	60.4	3.4	Growing	Faster	29
Furniture & related products	62.5	59.3	-3.2	Growing	Slower	9
Nonmetallic mineral products	47.4	57.7	10.3	Growing	From Contraction	1
Paper products	65.0	55.6	-9.4	Growing	Slower	5
Petroleum & coal products	100.0	50.0	-50.0	No Change	From Expansion	1
Plastics & rubber products	52.2	56.0	3.8	Growing	Faster	4
Primary metal	50.0	41.7	-8.3	Declining	From No Change	1
Printing & related support activities	65.0	54.5	-10.5	Growing	Slower	10
Textile, apparel, leather & footwear	52.9	60.0	7.1	Growing	Faster	9
Transportation equipment	50.0	70.0	20.0	Growing	From No Change	1

Table 4: Details of Supplier Delivery Time PMI

Index	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	58.3	58.2	-0.1	Growing	Slower	21
Cement	50.0	66.7	16.7	Growing	From No Change	1
Chemical & pharmaceutical products	58.8	54.2	-4.6	Growing	Slower	8
Electrical equipment	50.0	71.4	21.4	Growing	From No Change	1
Fabricated metal products	59.2	58.8	-0.4	Growing	Slower	12
Food, beverage & tobacco products	52.3	52.7	0.4	Growing	Faster	8
Furniture & related products	58.3	63.0	4.7	Growing	Faster	3
Nonmetallic mineral products	66.7	65.4	-1.3	Growing	Slower	10
Paper products	65.0	66.7	1.7	Growing	Faster	9
Petroleum & coal products	50.0	83.3	33.3	Growing	From No Change	1
Plastics & rubber products	58.7	62.0	3.3	Growing	Faster	9
Primary metal	69.2	58.3	-10.9	Growing	Slower	3
Printing & related support activities	65.0	59.1	-5.9	Growing	Slower	5
Textile, apparel, leather & footwear	61.8	60.0	-1.8	Growing	Slower	18
Transportation equipment	70.0	62.5	-7.5	Growing	Slower	8

Table 5: Details of Employment Level PMI

Index	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	56.4	56.3	-0.1	Growing	Slower	22
Cement	50.0	50.0	0.0	No Change	Flat	4
Chemical & pharmaceutical products	64.7	63.9	-0.8	Growing	Slower	13
Electrical equipment	58.3	71.4	13.1	Growing	Faster	3
Fabricated metal products	55.3	54.4	-0.9	Growing	Slower	4
Food, beverage & tobacco products	58.3	56.7	-1.6	Growing	Slower	10
Furniture & related products	50.0	46.3	-3.7	Declining	From No Change	1
Nonmetallic mineral products	57.9	50.0	-7.9	No Change	From Expansion	1
Paper products	70.0	50.0	-20.0	No Change	From Expansion	1
Petroleum & coal products	50.0	66.7	16.7	Growing	From No Change	1
Plastics & rubber products	52.2	60.0	7.8	Growing	Faster	4
Primary metal	65.4	50.0	-15.4	No Change	From Expansion	1
Printing & related support activities	42.5	56.8	14.3	Growing	From Contraction	1
Textile, apparel, leather & footwear	50.0	60.0	10.0	Growing	From No Change	1
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 6: Details of Raw Materials Inventory PMI

Index	January 2019 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	59.9	56.2	-3.7	Growing	Slower	23
Cement	80.0	41.7	-38.3	Declining	From Expansion	1
Chemical & pharmaceutical products	57.4	55.6	-1.8	Growing	Slower	9
Electrical equipment	78.6	64.3	-14.3	Growing	Slower	2
Fabricated metal products	60.5	55.9	-4.6	Growing	Slower	5
Food, beverage & tobacco products	56.9	59.8	2.9	Growing	Faster	29
Furniture & related products	68.8	48.1	-20.7	Declining	From Expansion	1
Nonmetallic mineral products	57.9	61.5	3.6	Growing	Faster	5
Paper products	55.0	50.0	-5.0	No Change	From Expansion	1
Petroleum & coal products	62.5	83.3	20.8	Growing	Faster	13
Plastics & rubber products	60.9	58.3	-2.6	Growing	Slower	7
Primary metal	76.9	41.7	-35.2	Declining	From Expansion	1
Printing & related support activities	45.0	47.7	2.7	Declining	Slower	2
Textile, apparel, leather & footwear	61.8	60.0	-1.8	Growing	Slower	3
Transportation equipment	50.0	70.0	20.0	Growing	From No Change	1

Table 7: Non-Manufacturing at a Glance

Index	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
Composite PMI \1	60.1	58.4	-1.7	Growing	Slower	22
Business Activity	61.7	59.7	-2.0	Growing	Slower	23
Level of new orders/customers/incoming business	60.2	58.6	-1.6	Growing	Slower	23
Employment Level	57.7	57.3	-0.4	Growing	Slower	22
Inventory	60.6	58.2	-2.4	Growing	Slower	22
Average price of Inputs (volume weighted)	52.2	50.3	-1.9	Growing	Slower	40
Level of outstanding business/ Backlog of work	40.1	38.8	-1.3	Declining	Faster	56
New Exports orders	38.1	36.2	-1.9	Declining	Faster	56
Imports	40.4	42.2	1.8	Declining	Slower	56
Inventory (sentiments)	45.5	44.6	-0.9	Declining	Faster	56
Non-manufacturing sub-sectors						
Accommodation & food services	54.9	54.9	0.0	Growing	Flat	8
Agriculture	55.6	55.8	0.2	Growing	Faster	33
Arts, Entertainment & Recreation	66.1	68.5	2.4	Growing	Faster	5
Construction	58.7	54.1	-4.6	Growing	Slower	5
Educational services	66.2	60.1	-6.1	Growing	Slower	8
Electricity, gas, steam & air conditioning supply	65.6	55.9	-9.7	Growing	Slower	4
Finance & insurance	62.0	62.8	0.8	Growing	Faster	24
Health care & social assistance	57.6	57.2	-0.4	Growing	Slower	22
Information & communication	65.1	62.9	-2.2	Growing	Slower	23
Management of companies	50.0	70.8	20.8	Growing	From No Change	1
Professional, scientific, & technical services	66.7	53.1	-13.6	Growing	Slower	4
Real estate rental & leasing	61.1	59.8	-1.3	Growing	Slower	12
Repair, Maintenance/Washing Of Motor Vehicles...	67.9	60.7	-7.2	Growing	Slower	9
Transportation & warehousing	53.9	58.1	4.2	Growing	Faster	4
Utilities	78.1	63.5	-14.6	Growing	Slower	3
Water supply, sewage & waste management	52.2	53.0	0.8	Growing	Faster	4
Wholesale/Retail trade	61.4	59.3	-2.1	Growing	Slower	21

\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	January 2019 Index	February 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	61.7	59.7	-2.0	Growing	Slower	23
Accommodation & food services	53.6	53.9	0.3	Growing	Faster	8
Agriculture	55.7	59.1	3.4	Growing	Faster	33
Arts, Entertainment & Recreation	50.0	71.4	21.4	Growing	From No Change	1
Construction	59.7	55.0	-4.7	Growing	Slower	4
Educational services	61.6	65.9	4.3	Growing	Faster	18
Electricity, gas, steam & air conditioning supply	68.8	50.0	-18.8	No Change	From Expansion	1
Finance & insurance	70.8	68.2	-2.6	Growing	Slower	23
Health care & social assistance	54.9	52.8	-2.1	Growing	Slower	5
Information & communication	70.6	70.8	0.2	Growing	Faster	23
Management of companies	50.0	75.0	25.0	Growing	From No Change	1
Professional, scientific, & technical services	63.5	52.5	-11.0	Growing	Slower	4
Real estate rental & leasing	69.0	63.3	-5.7	Growing	Slower	10
Repair, Maintenance/Washing Of Motor Vehicles.	75.0	67.9	-7.1	Growing	Slower	5
Transportation & warehousing	55.3	64.7	9.4	Growing	Faster	4
Utilities	87.5	62.5	-25.0	Growing	Slower	3
Water supply, sewage & waste management	72.7	41.7	-31.0	Declining	From Expansion	1
Wholesale/Retail trade	61.5	57.9	-3.6	Growing	Slower	8

Table 9: New Orders at a Glance

Index	January	February	Difference	Direction	Rate of Change	Trend (Months)
	2019 Index	2019 Index				
NEW ORDERS PMI	60.2	58.6	-1.6	Growing	Slower	23
Accommodation & food services	52.8	56.6	3.8	Growing	Faster	8
Agriculture	52.9	47.0	-5.9	Declining	From Expansion	1
Arts, Entertainment & Recreation	78.6	78.6	0.0	Growing	Flat	5
Construction	59.4	51.3	-8.1	Growing	Slower	4
Educational services	73.1	60.2	-12.9	Growing	Slower	8
Electricity, gas, steam & air conditioning supply	62.5	55.9	-6.6	Growing	Slower	3
Finance & insurance	62.1	64.9	2.8	Growing	Faster	24
Health care & social assistance	59.2	58.5	-0.7	Growing	Slower	5
Information & communication	69.1	65.3	-3.8	Growing	Slower	23
Management of companies	50.0	75.0	25.0	Growing	From No Change	1
Professional, scientific, & technical services	72.0	60.0	-12.0	Growing	Slower	4
Real estate rental & leasing	59.5	51.1	-8.4	Growing	Slower	4
Repair, Maintenance/Washing Of Motor Vehicles..	64.3	60.7	-3.6	Growing	Slower	5
Transportation & warehousing	60.5	58.8	-1.7	Growing	Slower	3
Utilities	87.5	62.5	-25.0	Growing	Slower	3
Water supply, sewage & waste management	36.4	45.5	9.1	Declining	Slower	2
Wholesale/Retail trade	60.3	60.7	0.4	Growing	Faster	21

Table 10: Employment at a Glance

Index	January	February	Difference	Direction	Rate of Change	Trend (Months)
	2019 Index	2019 Index				
EMPLOYMENT LEVEL PMI	57.7	57.3	-0.4	Growing	Slower	22
Accommodation & food services	54.0	52.7	-1.3	Growing	Slower	6
Agriculture	52.9	62.1	9.2	Growing	Faster	22
Arts, Entertainment & Recreation	64.3	57.1	-7.2	Growing	Slower	8
Construction	57.8	55.0	-2.8	Growing	Slower	5
Educational services	70.9	71.6	0.7	Growing	Faster	8
Electricity, gas, steam & air conditioning supply	56.3	50.0	-6.3	No Change	From Expansion	1
Finance & insurance	57.8	58.9	1.1	Growing	Faster	21
Health care & social assistance	60.6	57.6	-3.0	Growing	Slower	21
Information & communication	57.4	56.9	-0.5	Growing	Slower	5
Management of companies	50.0	50.0	0.0	No Change	Flat	2
Professional, scientific, & technical services	60.4	52.6	-7.8	Growing	Slower	4
Real estate rental & leasing	56.0	56.7	0.7	Growing	Faster	9
Repair, Maintenance/Washing Of Motor Vehicles..	64.3	53.6	-10.7	Growing	Slower	16
Transportation & warehousing	50.0	55.9	5.9	Growing	From No Change	1
Utilities	62.5	62.5	0.0	Growing	Flat	2
Water supply, sewage & waste management	54.5	66.7	12.2	Growing	Faster	3
Wholesale/Retail trade	56.9	56.7	-0.2	Growing	Slower	9

Table 11: Inventory at a Glance

Index	January	February	Difference	Direction	Rate of Change	Trend (Months)
	2019 Index	2019 Index				
INVENTORY PMI	60.6	58.2	-2.4	Growing	Slower	22
Accommodation & food services	59.3	56.5	-2.8	Growing	Slower	8
Agriculture	60.9	54.8	-6.1	Growing	Slower	5
Arts, Entertainment & Recreation	71.4	66.7	-4.7	Growing	Slower	5
Construction	58.1	55.3	-2.8	Growing	Slower	8
Educational services	59.0	42.5	-16.5	Declining	From Expansion	1
Electricity, gas, steam & air conditioning supply	75.0	67.6	-7.4	Growing	Slower	5
Finance & insurance	57.4	59.1	1.7	Growing	Faster	13
Health care & social assistance	55.7	60.0	4.3	Growing	Faster	22
Information & communication	63.2	58.6	-4.6	Growing	Slower	10
Management of companies	50.0	83.3	33.3	Growing	From No Change	1
Professional, scientific, & technical services	70.8	47.4	-23.4	Declining	From Expansion	1
Real estate rental & leasing	60.0	68.2	8.2	Growing	Faster	12
Repair, Maintenance/Washing Of Motor Vehicles	67.9	60.7	-7.2	Growing	Slower	5
Transportation & warehousing	50.0	53.1	3.1	Growing	From No Change	1
Utilities	75.0	66.7	-8.3	Growing	Slower	7
Water supply, sewage & waste management	45.0	58.3	13.3	Growing	From Contraction	1
Wholesale/Retail trade	66.9	61.8	-5.1	Growing	Slower	19

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
July '18	56.8	59.0	55.8	56.8	55.0	57.4	39.4	52.3	60.7	51.1	40.7	51.3
Aug '18	57.1	59.3	56.9	55.9	55.5	57.1	39.7	50.1	59.3	50.1	43.1	50.7
Sep '18	56.2	58.4	55.3	56.1	54.9	55.9	37.1	52.4	57.5	49.4	42.2	50.5
Oct '18	56.8	58.9	56.8	56.4	54.8	56.2	39.9	51.2	56.7	50.9	39.6	51.5
Nov '18	57.9	59.9	58.1	56.9	55.4	58.7	41.2	51.9	57.8	52.2	40.0	53.8
Dec '18	61.1	63.6	62.3	58.4	57.0	63.2	42.1	51.6	61.3	56.1	41.7	50.6
Jan '19	58.5	59.3	58.9	58.3	56.4	59.9	41.4	52.5	62.2	52.5	42.1	52.3
Feb '19	57.1	57.5	56.9	58.2	56.3	56.2	39.7	53.7	60.9	52.1	44.1	55.4

Table 13: Non-Manufacturing PMI Data Series

Month	COMPOSITE PMI	Business Activity	New orders	Employment Level	Inventory	Average Input Price	Backlog of Work	New Exports Orders	Imports	Inventories (sentiment)
Jul '14	55.0	58.9	55.9	50.2	55.2	54.0	46.2	44.0	47.3	47.8
Aug '14	58.9	60.6	59.8	58.3	57.0	56.1	47.0	46.1	46.4	48.1
Sep '14	54.7	57.1	57.5	49.9	54.3	52.8	46.2	40.7	45.2	47.6
Oct '14	57.3	59.6	59.4	53.9	56.4	53.3	46.4	40.8	44.9	43.8
Nov '14	59.6	62.5	63.6	57.9	54.6	57.3	49.6	45.2	47.5	48.1
Dec '14	53.8	56.2	56.0	51.4	51.5	54.5	45.6	43.6	46.5	43.8
Jan '15	50.6	48.8	50.4	51.2	51.9	48.8	43.2	41.1	44.3	47.0
Feb '15	54.0	54.2	54.7	52.5	54.5	54.1	46.0	43.0	44.6	46.1
Mar '15	48.6	49.7	51.1	45.6	48.0	49.8	46.5	39.9	44.2	40.2
Apr '15	53.7	58.2	56.8	49.1	50.8	51.5	46.6	41.1	44.5	43.0
May '15	51.7	52.9	53.1	49.7	51.1	51.3	44.1	37.2	39.1	44.3
Jun '15	50.1	51.5	50.3	46.4	52.0	48.5	44.4	36.9	40.4	42.7
Jul '15	50.0	50.4	51.4	48.6	49.5	50.3	43.8	39.1	39.2	44.0
Aug '15	50.7	52.3	52.4	48.0	50.1	50.7	43.0	39.8	38.3	44.0
Sep '15	50.1	52.1	52.3	47.0	49.1	48.7	44.5	42.9	41.4	45.9
Oct '15	51.9	54.2	54.1	49.3	50.1	49.9	43.9	40.3	42.4	45.2
Nov '15	49.6	52.9	51.6	45.6	48.5	51.8	42.8	37.7	39.0	41.8
Dec '15	53.4	55.9	56.4	50.0	51.5	54.7	47.0	41.9	42.7	47.2
Jan 16	46.9	46.2	46.4	47.0	47.9	57.3	44.3	36.2	39.0	41.6
Feb '16	44.3	43.7	42.0	44.5	47.1	53.6	39.6	37.5	36.6	43.6
Mar '16	45.4	46.3	44.7	43.9	46.5	58.5	43.8	34.3	35.0	41.1
Apr '16	44.3	44.2	42.2	43.3	47.6	62.2	43.1	31.8	33.1	39.8
May '16	44.3	44.3	41.3	44.6	46.9	62.9	38.1	33.2	35.0	40.3
Jun '16	42.3	40.2	39.6	42.5	47.1	60.7	39.6	33.2	34.7	38.5
Jul '16	43.2	42.8	42.3	41.9	45.8	60.4	38.6	30.0	32.7	38.0
Aug '16	43.7	43.6	42.0	41.4	47.7	60.8	39.4	32.9	34.2	39.4
Sep '16	41.0	39.9	40.0	40.3	43.9	63.1	39.6	28.6	30.2	37.9
Oct '16	43.4	43.0	42.7	41.5	46.4	65.3	40.9	32.8	33.8	38.7
Nov '16	42.8	43.0	42.3	40.2	45.5	66.8	42.4	30.8	34.0	41.1
Dec '16	47.1	48.2	46.9	43.8	49.5	64.0	41.5	33.8	35.5	41.6
Jan '17	49.4	50.6	49.4	45.6	52.0	65.6	43.6	32.5	36.1	45.5
Feb '17	44.5	45.4	44.9	42.6	44.9	65.4	42.9	33.4	34.5	38.7
Mar '17	47.1	49.8	46.4	44.0	48.0	62.1	42.7	33.1	34.5	40.6
Apr '17	49.5	53.3	50.5	45.5	48.6	63.1	41.6	29.2	33.2	41.1
May '17	52.7	56.2	53.2	50.2	51.4	62.7	45.3	31.6	34.1	43.6
June '17	54.2	57.0	54.6	53.4	51.8	58.6	40.5	30.3	33.5	42.7
July '17	54.4	56.8	55.1	54.0	51.9	58.1	42.9	32.0	36.8	41.5
Aug '17	54.1	56.1	53.5	54.4	52.3	54.5	42.8	34.5	34.8	42.0
Sep '17	54.9	56.8	55.4	54.7	52.9	56.9	42.2	31.2	35.9	44.2
Oct '17	55.3	57.5	55.7	54.4	53.4	56.4	41.4	29.6	35.4	38.9
Nov '17	57.6	59.4	58.4	54.6	58.0	55.7	43.6	28.8	33.3	40.6
Dec '17	62.1	67.4	62.2	55.7	62.9	56.1	44.6	34.6	39.1	40.3
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
July '18	57.7	59.6	56.1	56.2	59.1	52.1	43.1	42.1	40.5	45.0
Aug '18	58.0	59.3	56.9	56.7	58.9	50.8	43.3	40.1	40.3	44.8
Sep '18	56.5	58.1	55.8	55.4	56.8	50.2	41.5	40.3	41.3	45.7
Oct '18	57.0	58.3	56.4	55.7	57.6	50.7	42.8	39.7	42.2	45.5
Nov '18	58.4	60.4	57.5	56.2	59.6	52.6	42.0	38.7	39.4	45.9
Dec '18	62.3	65.2	63.1	57.9	62.8	52.4	42.7	42.0	41.3	45.8
Jan '19	60.1	61.7	60.2	57.7	60.6	52.2	40.1	38.1	40.4	45.5
Feb '19	58.4	59.7	58.6	57.3	58.2	50.3	38.8	36.2	42.2	44.6