

Central Bank of Nigeria



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

Statistics Department

January 2019

PURCHASING MANAGERS' INDEX (PMI) JANUARY 2019 REPORT

1.0 Introduction

The January 2019 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period January 14-18, 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.

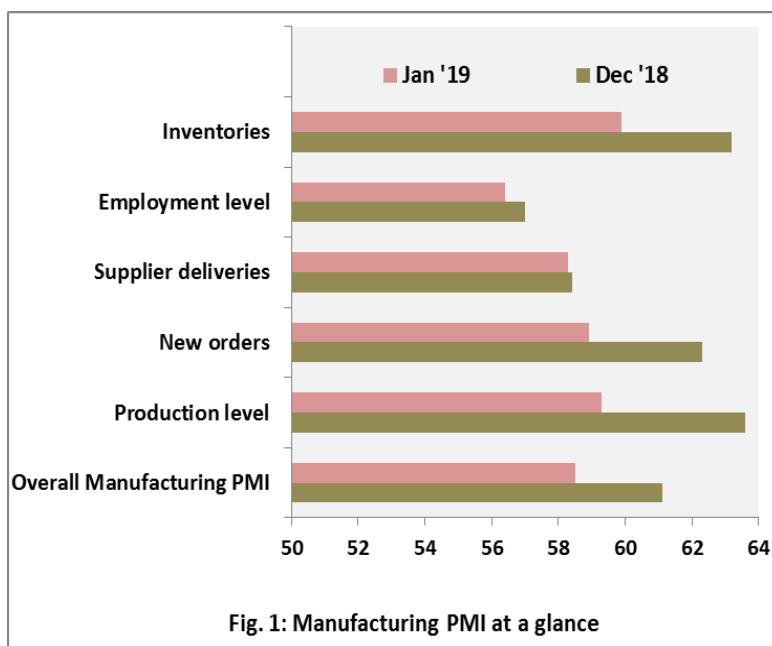
1.1 Data and Method of Presentation

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 January 2019



The *Manufacturing PMI* in the month of January stood at 58.5 index points, indicating expansion in the manufacturing sector for the twenty-second consecutive month (Fig. 2 and Table 1). The index grew at a slower rate when compared to the index in the previous month. All 14 subsectors surveyed reported growth in the review month in the following order: petroleum & coal products; chemical & pharmaceutical products; primary metal; paper products; cement; furniture & related products; printing & related support activities; fabricated metal products; electrical equipment; food, beverage & tobacco products; nonmetallic mineral products; textile, apparel, leather & footwear; plastics & rubber products; and transportation equipment.

2.1 Production Level

At 59.3 points, the production level index for the manufacturing sector grew for the twenty-third consecutive month in January 2019. The index indicated a slower growth in the current month, when compared to its level in the preceding month. Twelve of the 14 manufacturing subsectors recorded increased production level, while 2 remained unchanged (Fig. 3 and Table 2).

2.2 New Orders

At 58.9 points, the new orders index grew for the twenty-second consecutive month, indicating increase in new orders in January 2019. Eleven subsectors reported growth, 2 remained unchanged, while 1 contracted in the review month (Fig. 4 and Table 3).

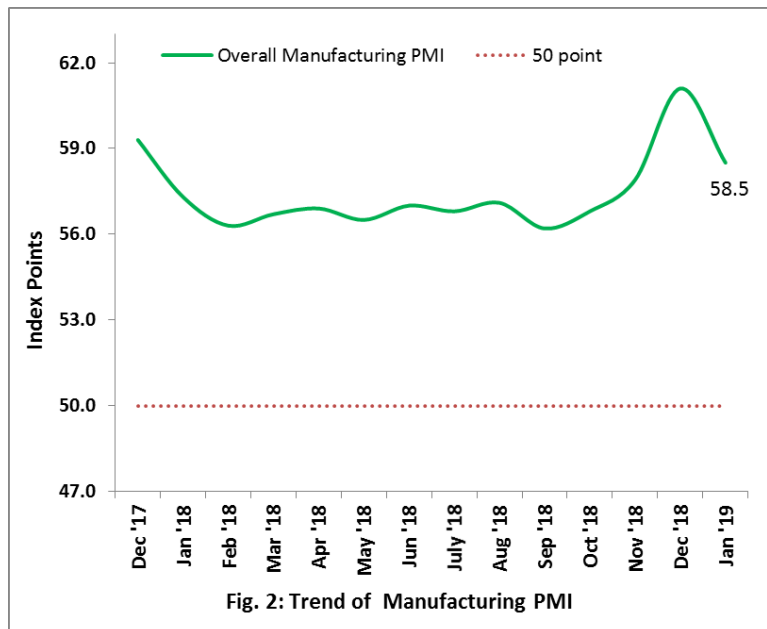


Fig. 2: Trend of Manufacturing PMI

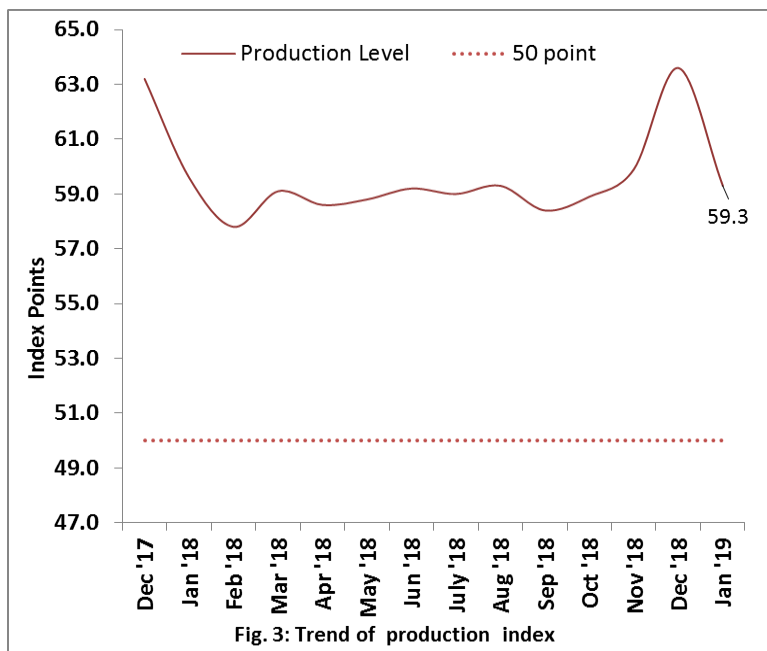


Fig. 3: Trend of production index

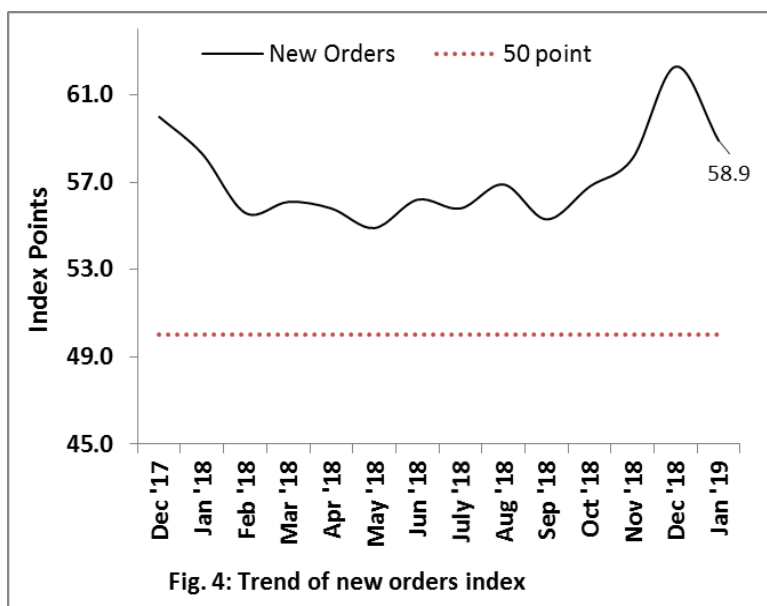
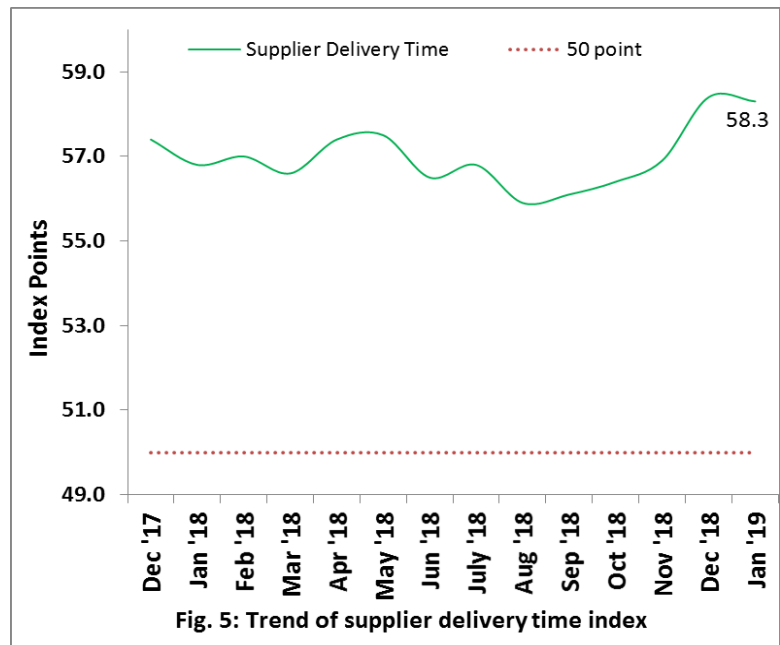


Fig. 4: Trend of new orders index

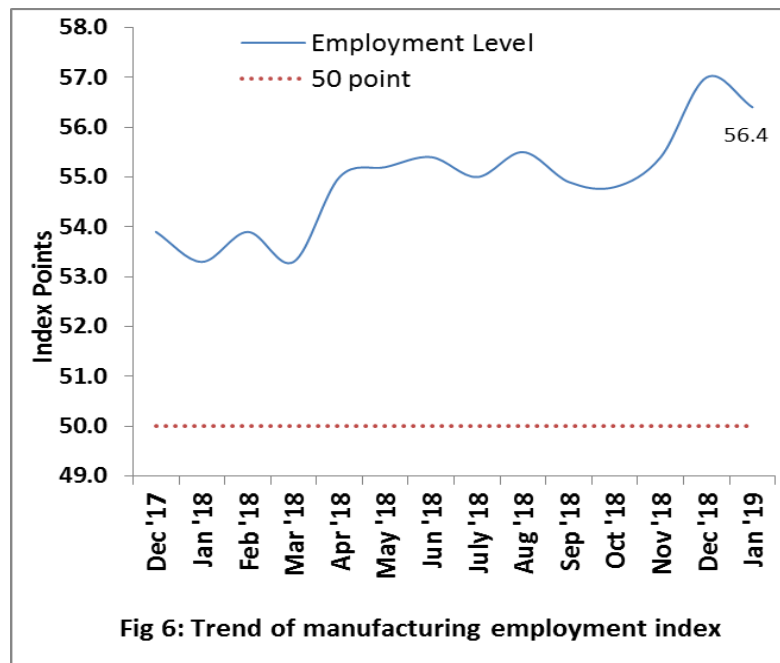
2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 58.3 points in January 2019, indicating slower supplier delivery time. The index has recorded growth for twenty consecutive months. Eleven subsectors recorded improved suppliers' delivery time, while 3 remained unchanged (Fig. 5 and Table 4).



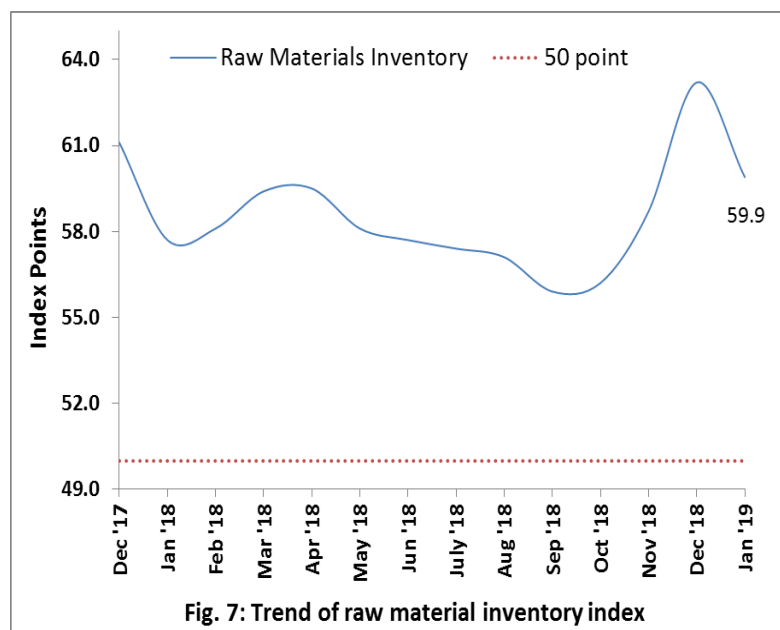
2.4 Employment Level

The employment level index in January 2019 stood at 56.4 points, indicating growth in employment level for the twenty-first 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-second consecutive month in January 2019. At 59.9 points, the index grew at a slower rate when compared to its level in December 2018. Twelve of the 14 subsectors recorded growth, 1 recorded unchanged, while 1 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 January 2019

The *composite PMI* for the *non-manufacturing sector* stood at 60.1 points in January 2019, indicating expansion in the Non-manufacturing PMI for the twenty-first consecutive month. The index grew at a slower rate when compared to that in December 2018. Of the 17 surveyed subsectors, 16 recorded growth in the following order: utilities; repair, maintenance/washing of motor vehicles; professional, scientific, & technical services; educational services; arts, entertainment & recreation; electricity, gas, steam & air conditioning supply; information & communication; finance & insurance; wholesale/retail trade; real estate rental & leasing; construction; health care & social assistance; agriculture; accommodation & food services; transportation & warehousing; and water supply, sewage & waste management. The management of companies subsector remained unchanged during the review period (Fig. 9 and Table 7).

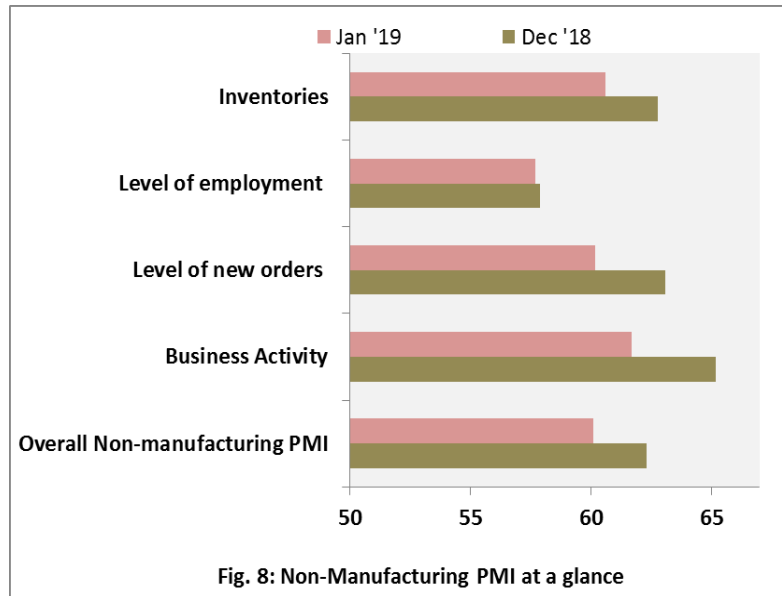


Fig. 8: Non-Manufacturing PMI at a glance

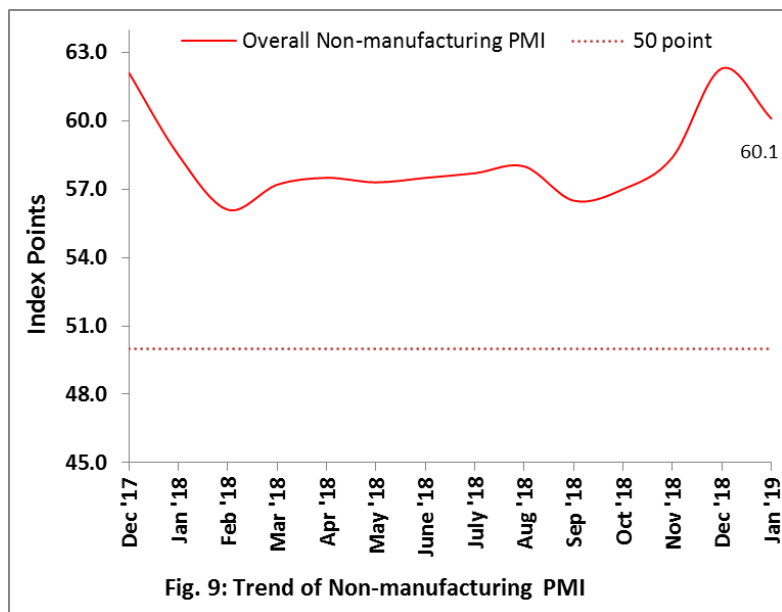


Fig. 9: Trend of Non-manufacturing PMI

3.1 Business Activity

At 61.7 points, the business activity index grew for the twenty-second consecutive month, indicating expansion in non-manufacturing business activity in January 2019. The index grew at a slower rate when compared to its level in the previous month. Fifteen subsectors recorded growth in business activity while 2 remained unchanged in the review month (Fig 10 Table 8).

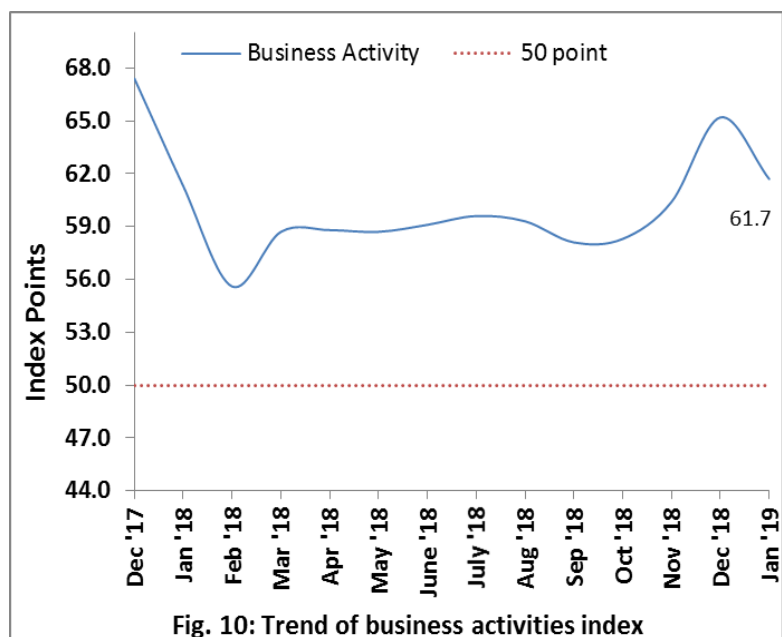
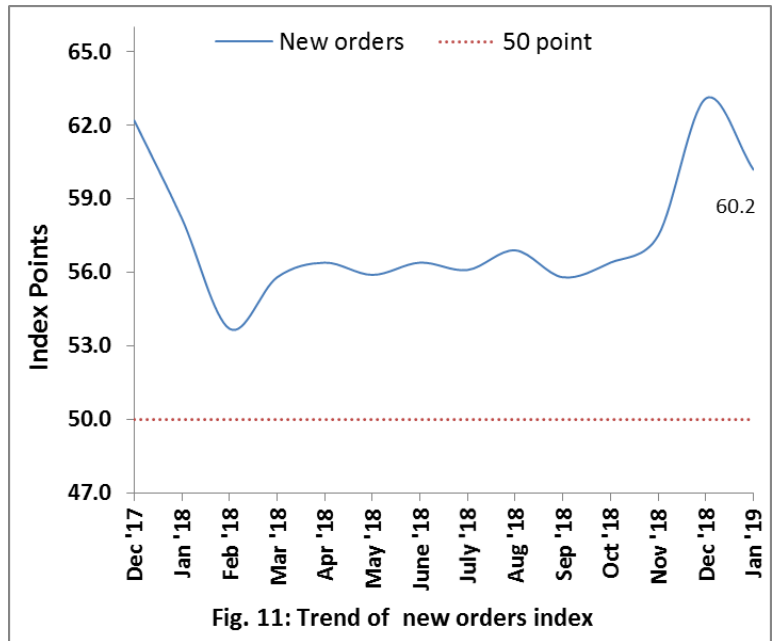


Fig. 10: Trend of business activities index

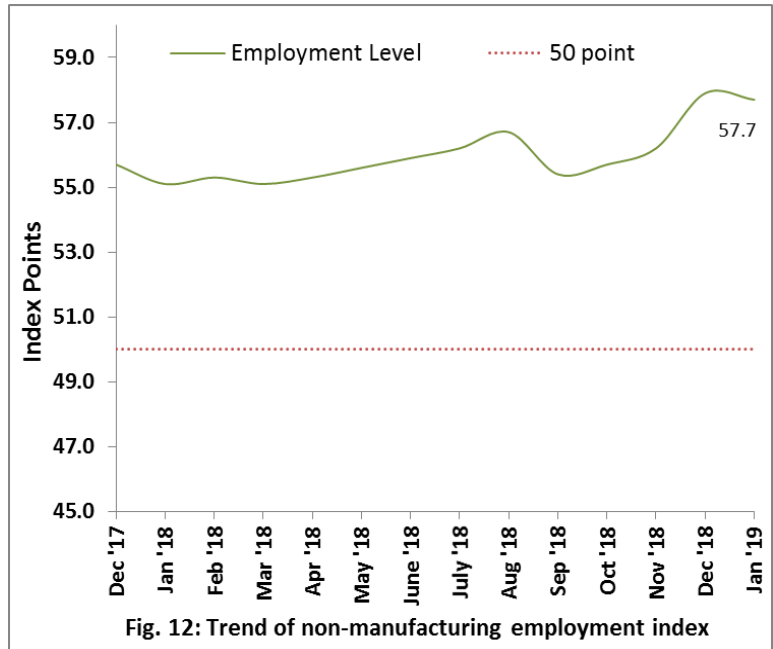
3.2 New Orders

At 60.2 points, new orders index grew for the twenty-first consecutive month in January 2019. All 17 subsectors recorded growth in new orders in the review month (Fig 11 Table 9).



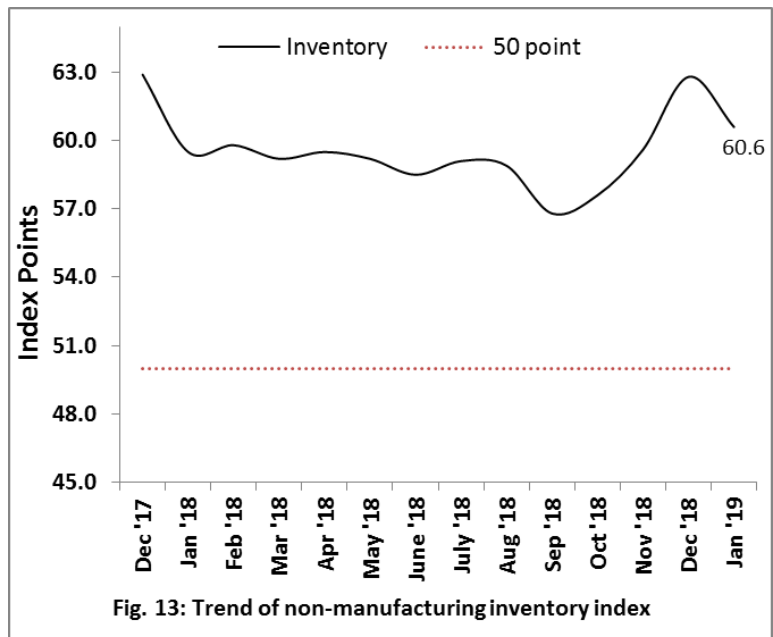
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 57.7 points, indicating growth in employment for the twenty-first 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 60.6 points, non-manufacturing inventory index grew for the twenty-first consecutive month, indicating growth in inventories in the review period. Of the seventeen surveyed subsectors, 14 recorded higher inventories, 2 remained unchanged while 1 recorded a decline in January 2019 (Fig 13 Table 11).



APPENDICES

Table 1: Details of Overall Manufacturing PMI

Index	December 2018 Index*	January 2019 Index*	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	61.1	58.5	-2.6	Growing	Slower	22
Production level	63.6	59.3	-4.3	Growing	Slower	23
New orders	62.3	58.9	-3.4	Growing	Slower	22
Supplier delivery time	58.4	58.3	-0.1	Growing	Slower	20
Employment level	57.0	56.4	-0.6	Growing	Slower	21
Raw materials/WIP Inventory	63.2	59.9	-3.3	Growing	Slower	22
New Export Orders	42.1	41.4	-0.7	Declining	Faster	47
Output Prices	51.6	52.5	0.9	Growing	Faster	37
Input Prices	61.3	62.2	0.9	Growing	Faster	55
Quantity of Purchases	56.1	52.5	-3.6	Growing	Slower	4
Outstanding Business/Backlog of Work	41.7	42.1	0.4	Declining	Slower	14
Stock of Finished Goods	50.6	52.3	1.7	Growing	Faster	10
Manufacturing Sub-Sectors						
Cement	58.0	61.0	3.0	Growing	Faster	4
Chemical & pharmaceutical products	61.0	62.4	1.4	Growing	Faster	12
Electrical equipment	57.9	58.5	0.6	Growing	Faster	12
Fabricated metal products	58.3	58.7	0.4	Growing	Faster	7
Food, beverage & tobacco products	60.8	56.8	-4.0	Growing	Slower	28
Furniture & related products	66.7	61.0	-5.7	Growing	Slower	8
Nonmetallic mineral products	60.3	56.7	-3.6	Growing	Slower	8
Paper products	58.9	61.3	2.4	Growing	Faster	4
Petroleum & coal products	57.5	78.8	21.3	Growing	Faster	4
Plastics & rubber products	61.9	54.0	-7.9	Growing	Slower	6
Primary metal	48.1	61.5	13.4	Growing	From Contraction	1
Printing & related support activities	66.0	60.4	-5.6	Growing	Slower	10
Textile, apparel, leather & footwear	65.7	54.6	-11.1	Growing	Slower	23
Transportation equipment	70.0	53.0	-17.0	Growing	Slower	5

\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	December 2018 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	63.6	59.3	-4.3	Growing	Slower	23
Cement	60.0	70.0	10.0	Growing	Faster	2
Chemical & pharmaceutical products	65.2	60.3	-4.9	Growing	Slower	12
Electrical equipment	50.0	57.1	7.1	Growing	From No Change	1
Fabricated metal products	57.4	56.6	-0.8	Growing	Slower	7
Food, beverage & tobacco products	60.6	57.9	-2.7	Growing	Slower	28
Furniture & related products	70.4	66.7	-3.7	Growing	Slower	8
Nonmetallic mineral products	68.2	60.5	-7.7	Growing	Slower	7
Paper products	68.2	50.0	-18.2	No Change	From Expansion	1
Petroleum & coal products	50.0	100.0	50.0	Growing	From No Change	1
Plastics & rubber products	65.9	52.2	-13.7	Growing	Slower	6
Primary metal	41.7	61.5	19.8	Growing	From Contraction	1
Printing & related support activities	77.8	72.5	-5.3	Growing	Slower	10
Textile, apparel, leather & footwear	76.3	52.9	-23.4	Growing	Slower	10
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 3: Details of New Orders PMI

Index	December 2018 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	62.3	58.9	-3.4	Growing	Slower	22
Cement	60.0	60.0	0.0	Growing	Flat	4
Chemical & pharmaceutical products	59.8	66.2	6.4	Growing	Faster	11
Electrical equipment	66.7	57.1	-9.6	Growing	Slower	12
Fabricated metal products	61.8	61.8	0.0	Growing	Flat	7
Food, beverage & tobacco products	64.2	57.0	-7.2	Growing	Slower	28
Furniture & related products	74.1	62.5	-11.6	Growing	Slower	8
Nonmetallic mineral products	61.4	47.4	-14.0	Declining	From Expansion	1
Paper products	54.5	65.0	10.5	Growing	Faster	4
Petroleum & coal products	62.5	100.0	37.5	Growing	Faster	2
Plastics & rubber products	63.6	52.2	-11.4	Growing	Slower	3
Primary metal	41.7	50.0	8.3	No Change	From Contraction	1
Printing & related support activities	58.3	65.0	6.7	Growing	Faster	9
Textile, apparel, leather & footwear	60.5	52.9	-7.6	Growing	Slower	8
Transportation equipment	75.0	50.0	-25.0	No Change	From Expansion	1

Table 4: Details of Supplier Delivery Time PMI

Index	December 2018 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	58.4	58.3	-0.1	Growing	Slower	20
Cement	60.0	50.0	-10.0	No Change	From Expansion	1
Chemical & pharmaceutical products	63.0	58.8	-4.2	Growing	Slower	7
Electrical equipment	58.3	50.0	-8.3	No Change	From Expansion	1
Fabricated metal products	55.9	59.2	3.3	Growing	Faster	11
Food, beverage & tobacco products	56.4	52.3	-4.1	Growing	Slower	7
Furniture & related products	59.3	58.3	-1.0	Growing	Slower	2
Nonmetallic mineral products	52.3	66.7	14.4	Growing	Faster	9
Paper products	63.6	65.0	1.4	Growing	Faster	8
Petroleum & coal products	50.0	50.0	0.0	No Change	Flat	2
Plastics & rubber products	54.5	58.7	4.2	Growing	Faster	8
Primary metal	62.5	69.2	6.7	Growing	Faster	2
Printing & related support activities	63.9	65.0	1.1	Growing	Faster	4
Textile, apparel, leather & footwear	60.5	61.8	1.3	Growing	Faster	17
Transportation equipment	100.0	70.0	-30.0	Growing	Slower	7

Table 5: Details of Employment Level PMI

Index	December 2018 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	57.0	56.4	-0.6	Growing	Slower	21
Cement	50.0	50.0	0.0	No Change	Flat	3
Chemical & pharmaceutical products	56.5	64.7	8.2	Growing	Faster	12
Electrical equipment	58.3	58.3	0.0	Growing	Flat	2
Fabricated metal products	51.5	55.3	3.8	Growing	Faster	3
Food, beverage & tobacco products	57.8	58.3	0.5	Growing	Faster	9
Furniture & related products	53.7	50.0	-3.7	No Change	From Expansion	1
Nonmetallic mineral products	56.8	57.9	1.1	Growing	Faster	2
Paper products	54.5	70.0	15.5	Growing	Faster	2
Petroleum & coal products	62.5	50.0	-12.5	No Change	From Expansion	1
Plastics & rubber products	59.1	52.2	-6.9	Growing	Slower	3
Primary metal	50.0	65.4	15.4	Growing	From No Change	1
Printing & related support activities	61.1	42.5	-18.6	Declining	From Expansion	1
Textile, apparel, leather & footwear	63.9	50.0	-13.9	No Change	From Expansion	1
Transportation equipment	75.0	50.0	-25.0	No Change	From Expansion	1

Table 6: Details of Raw Materials Inventory PMI

Index	December 2018 Index	January 2019 Index	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	63.2	59.9	-3.3	Growing	Slower	22
Cement	60.0	80.0	20.0	Growing	Faster	3
Chemical & pharmaceutical products	59.8	57.4	-2.4	Growing	Slower	8
Electrical equipment	50.0	78.6	28.6	Growing	From No Change	1
Fabricated metal products	67.6	60.5	-7.1	Growing	Slower	4
Food, beverage & tobacco products	63.3	56.9	-6.4	Growing	Slower	28
Furniture & related products	72.2	68.8	-3.4	Growing	Slower	11
Nonmetallic mineral products	56.8	57.9	1.1	Growing	Faster	4
Paper products	50.0	55.0	5.0	Growing	From No Change	1
Petroleum & coal products	62.5	62.5	0.0	Growing	Flat	12
Plastics & rubber products	63.6	60.9	-2.7	Growing	Slower	6
Primary metal	58.3	76.9	18.6	Growing	Faster	2
Printing & related support activities	72.2	45.0	-27.2	Declining	From Expansion	1
Textile, apparel, leather & footwear	65.8	61.8	-4.0	Growing	Slower	2
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 7: Non-Manufacturing at a Glance

Index	December	January	Difference	Direction	Rate of Change	Trend (Months)
	2018 Index	2019 Index				
Composite PMI \1	62.3	60.1	-2.2	Growing	Slower	21
Business Activity	65.2	61.7	-3.5	Growing	Slower	22
Level of new orders/customers/incoming business	63.1	60.2	-2.9	Growing	Slower	22
Employment Level	57.9	57.7	-0.2	Growing	Slower	21
Inventory	62.8	60.6	-2.2	Growing	Slower	21
Average price of Inputs (volume weighted)	52.4	52.2	-0.2	Growing	Slower	39
Level of outstanding business/ Backlog of work	42.7	40.1	-2.6	Declining	Faster	55
New Exports orders	42.0	38.1	-3.9	Declining	Faster	55
Imports	41.3	40.4	-0.9	Declining	Faster	55
Inventory (sentiments)	45.8	45.5	-0.3	Declining	Faster	55
Non-manufacturing sub-sectors						
Accommodation & food services	62.5	54.9	-7.6	Growing	Slower	7
Agriculture	61.4	55.6	-5.8	Growing	Slower	32
Arts, Entertainment & Recreation	62.5	66.1	3.6	Growing	Faster	4
Construction	59.1	58.7	-0.4	Growing	Slower	4
Educational services	59.2	66.2	7.0	Growing	Faster	7
Electricity, gas, steam & air conditioning supply	62.5	65.6	3.1	Growing	Faster	3
Finance & insurance	62.1	62.0	-0.1	Growing	Slower	23
Health care & social assistance	58.1	57.6	-0.5	Growing	Slower	21
Information & communication	69.8	65.1	-4.7	Growing	Slower	22
Management of companies	58.3	50.0	-8.3	No Change	From Expansion	1
Professional, scientific, & technical services	63.0	66.7	3.7	Growing	Faster	3
Real estate rental & leasing	58.4	61.1	2.7	Growing	Faster	11
Repair, Maintenance/Washing Of Motor Vehicles...	75.0	67.9	-7.1	Growing	Slower	8
Transportation & warehousing	60.3	53.9	-6.4	Growing	Slower	3
Utilities	62.5	78.1	15.6	Growing	Faster	2
Water supply, sewage & waste management	69.6	52.2	-17.4	Growing	Slower	3
Wholesale/Retail trade	64.4	61.4	-3.0	Growing	Slower	20

\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	December	January	Difference	Direction	Rate of Change	Trend (Months)
	2018 Index	2019 Index				
BUSINESS ACTIVITY PMI	65.2	61.7	-3.5	Growing	Slower	22
Accommodation & food services	65.1	53.6	-11.5	Growing	Slower	7
Agriculture	54.8	55.7	0.9	Growing	Faster	32
Arts, Entertainment & Recreation	60.5	50.0	-10.5	No Change	From Expansion	1
Construction	65.0	59.7	-5.3	Growing	Slower	3
Educational services	67.6	61.6	-6.0	Growing	Slower	17
Electricity, gas, steam & air conditioning supply	69.2	68.8	-0.4	Growing	Slower	2
Finance & insurance	67.2	70.8	3.6	Growing	Faster	22
Health care & social assistance	58.8	54.9	-3.9	Growing	Slower	4
Information & communication	76.3	70.6	-5.7	Growing	Slower	22
Management of companies	54.5	50.0	-4.5	No Change	From Expansion	1
Professional, scientific, & technical services	63.0	63.5	0.5	Growing	Faster	3
Real estate rental & leasing	51.1	69.0	17.9	Growing	Faster	9
Repair, Maintenance/Washing Of Motor Vehicles.	83.3	75.0	-8.3	Growing	Slower	4
Transportation & warehousing	73.8	55.3	-18.5	Growing	Slower	3
Utilities	71.4	87.5	16.1	Growing	Faster	2
Water supply, sewage & waste management	85.7	72.7	-13.0	Growing	Slower	3
Wholesale/Retail trade	66.8	61.5	-5.3	Growing	Slower	7

Table 9: New Orders at a Glance

Index	December	January	Difference	Direction	Rate of Change	Trend (Months)
	2018 Index	2019 Index				
NEW ORDERS PMI	63.1	60.2	-2.9	Growing	Slower	22
Accommodation & food services	60.5	52.8	-7.7	Growing	Slower	7
Agriculture	71.0	52.9	-18.1	Growing	Slower	9
Arts, Entertainment & Recreation	65.8	78.6	12.8	Growing	Faster	4
Construction	61.3	59.4	-1.9	Growing	Slower	3
Educational services	56.9	73.1	16.2	Growing	Faster	7
Electricity, gas, steam & air conditioning supply	65.4	62.5	-2.9	Growing	Slower	2
Finance & insurance	62.8	62.1	-0.7	Growing	Slower	23
Health care & social assistance	59.6	59.2	-0.4	Growing	Slower	4
Information & communication	76.3	69.1	-7.2	Growing	Slower	22
Management of companies	70.0	50.0	-20.0	No Change	From Expansion	1
Professional, scientific, & technical services	58.7	72.0	13.3	Growing	Faster	3
Real estate rental & leasing	59.8	59.5	-0.3	Growing	Slower	3
Repair, Maintenance/Washing Of Motor Vehicles..	87.5	64.3	-23.2	Growing	Slower	4
Transportation & warehousing	54.8	60.5	5.7	Growing	Faster	2
Utilities	78.6	87.5	8.9	Growing	Faster	2
Water supply, sewage & waste management	67.9	36.4	-31.5	Declining	From Expansion	1
Wholesale/Retail trade	62.5	60.3	-2.2	Growing	Slower	20

Table 10: Employment at a Glance

Index	December	January	Difference	Direction	Rate of Change	Trend (Months)
	2018 Index	2019 Index				
EMPLOYMENT LEVEL PMI	57.9	57.7	-0.2	Growing	Slower	21
Accommodation & food services	60.9	54.0	-6.9	Growing	Slower	5
Agriculture	51.6	52.9	1.3	Growing	Faster	21
Arts, Entertainment & Recreation	63.2	64.3	1.1	Growing	Faster	7
Construction	51.3	57.8	6.5	Growing	Faster	4
Educational services	59.5	70.9	11.4	Growing	Faster	7
Electricity, gas, steam & air conditioning supply	57.7	56.3	-1.4	Growing	Slower	9
Finance & insurance	59.1	57.8	-1.3	Growing	Slower	20
Health care & social assistance	53.6	60.6	7.0	Growing	Faster	20
Information & communication	62.5	57.4	-5.1	Growing	Slower	4
Management of companies	63.6	50.0	-13.6	No Change	From Expansion	1
Professional, scientific, & technical services	65.2	60.4	-4.8	Growing	Slower	3
Real estate rental & leasing	53.3	56.0	2.7	Growing	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles..	58.3	64.3	6.0	Growing	Faster	15
Transportation & warehousing	57.5	50.0	-7.5	No Change	From Expansion	1
Utilities	42.9	62.5	19.6	Growing	From Contraction	1
Water supply, sewage & waste management	64.3	54.5	-9.8	Growing	Slower	2
Wholesale/Retail trade	57.6	56.9	-0.7	Growing	Slower	8

Table 11: Inventory at a Glance

Index	December	January	Difference	Direction	Rate of Change	Trend (Months)
	2018 Index	2019 Index				
INVENTORY PMI	62.8	60.6	-2.2	Growing	Slower	21
Accommodation & food services	63.4	59.3	-4.1	Growing	Slower	7
Agriculture	68.3	60.9	-7.4	Growing	Slower	4
Arts, Entertainment & Recreation	60.5	71.4	10.9	Growing	Faster	4
Construction	58.8	58.1	-0.7	Growing	Slower	7
Educational services	52.9	59.0	6.1	Growing	Faster	7
Electricity, gas, steam & air conditioning supply	57.7	75.0	17.3	Growing	Faster	4
Finance & insurance	59.4	57.4	-2.0	Growing	Slower	12
Health care & social assistance	60.3	55.7	-4.6	Growing	Slower	21
Information & communication	64.1	63.2	-0.9	Growing	Slower	9
Management of companies	45.0	50.0	5.0	No Change	From Contraction	1
Professional, scientific, & technical services	65.2	70.8	5.6	Growing	Faster	3
Real estate rental & leasing	69.3	60.0	-9.3	Growing	Slower	11
Repair, Maintenance/Washing Of Motor Vehicles	70.8	67.9	-2.9	Growing	Slower	4
Transportation & warehousing	55.0	50.0	-5.0	No Change	From Expansion	1
Utilities	57.1	75.0	17.9	Growing	Faster	6
Water supply, sewage & waste management	60.7	45.0	-15.7	Declining	From Expansion	1
Wholesale/Retail trade	70.7	66.9	-3.8	Growing	Slower	18

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

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