

Central Bank of Nigeria



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

Statistics Department

October 2018

PURCHASING MANAGERS' INDEX (PMI) OCTOBER 2018 REPORT

1.0 Introduction

The October 2018 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period October 8-12, 2018. 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) (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.

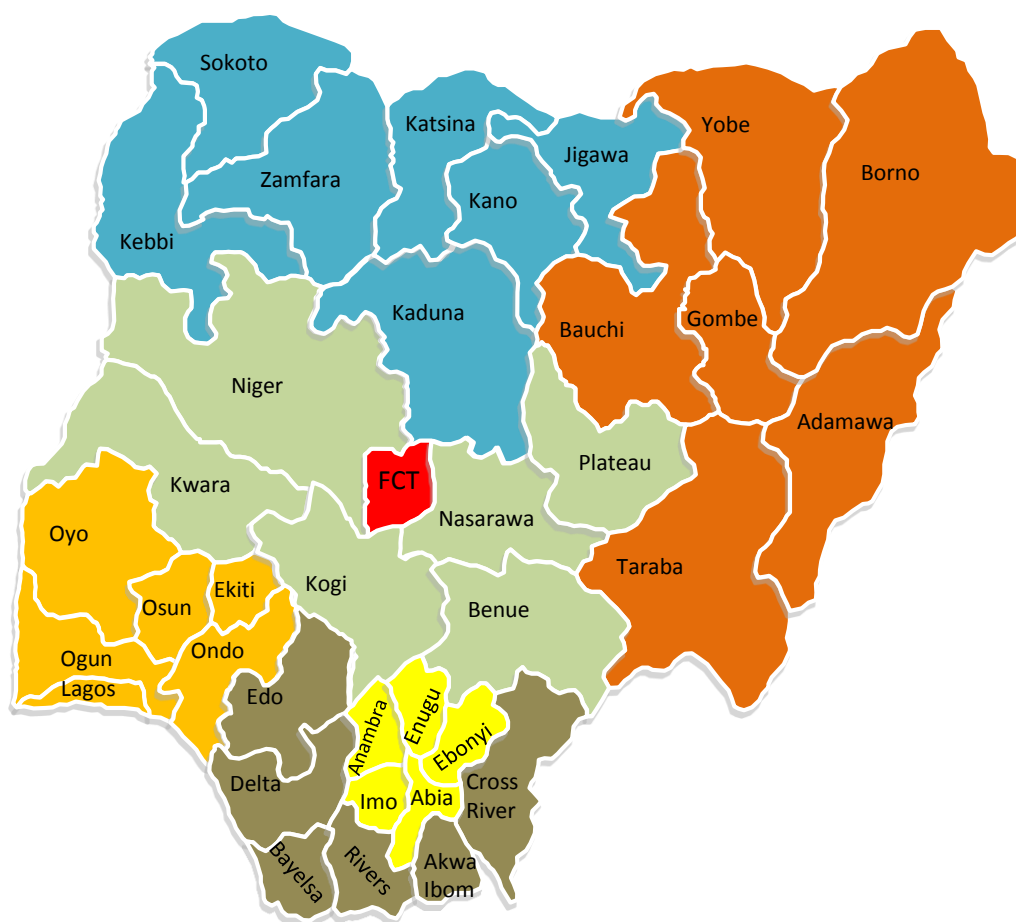


Fig. 1: Map of Nigeria Showing the 36 States and the FCT

1.1 Data and Method of Presentation

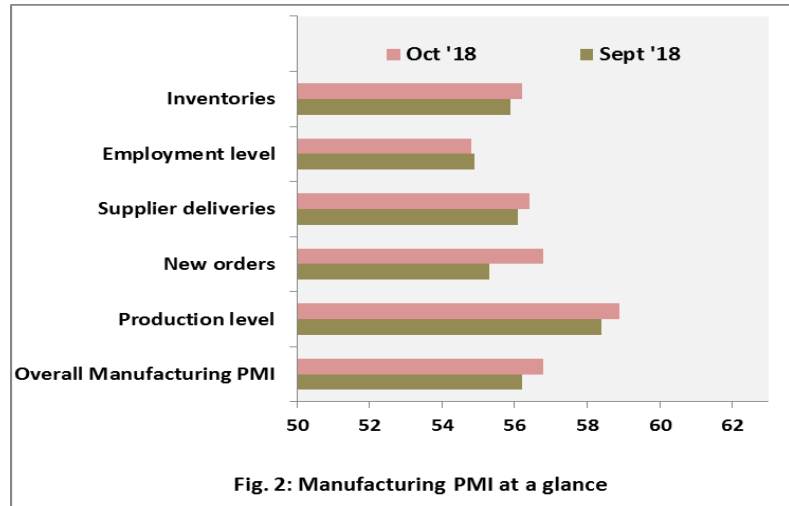
The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses, indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses.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

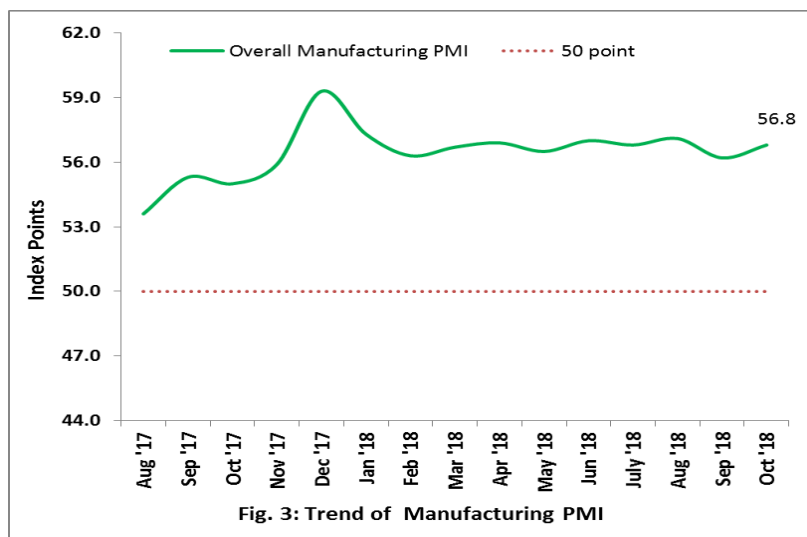
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those 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 and inventories grew at a faster rate; employment level grew at a slower rate in October 2018

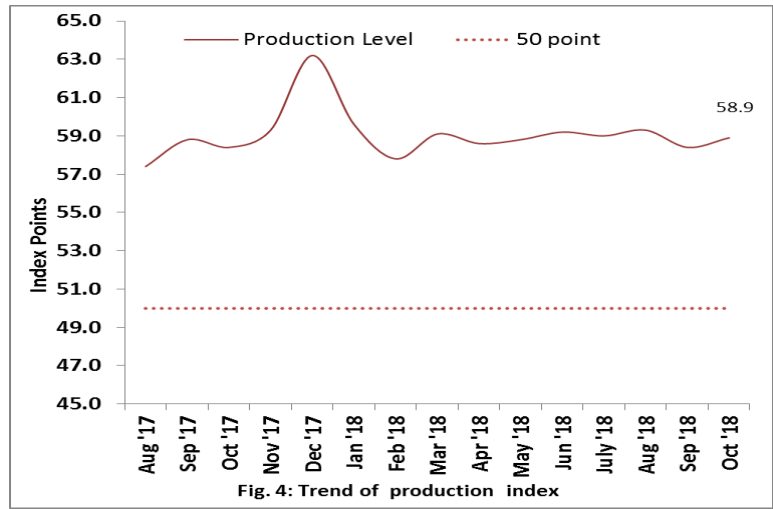


The *Manufacturing PMI* in the month of October stood at 56.8 index points, indicating expansion in the manufacturing sector for the nineteenth consecutive month (Fig. 3 and Table 1). The index grew at a faster rate when compared to the index in the previous month. Of the 14 subsectors surveyed, 13 reported growth in the review month in the following order: electrical equipment; petroleum & coal products; printing & related support activities; cement; chemical & pharmaceutical products; textile, apparel, leather & footwear; furniture & related products; transportation equipment; plastics & rubber products; food, beverage & tobacco products; fabricated metal products; nonmetallic mineral products; and paper products. The primary metal subsector declined in the review month.



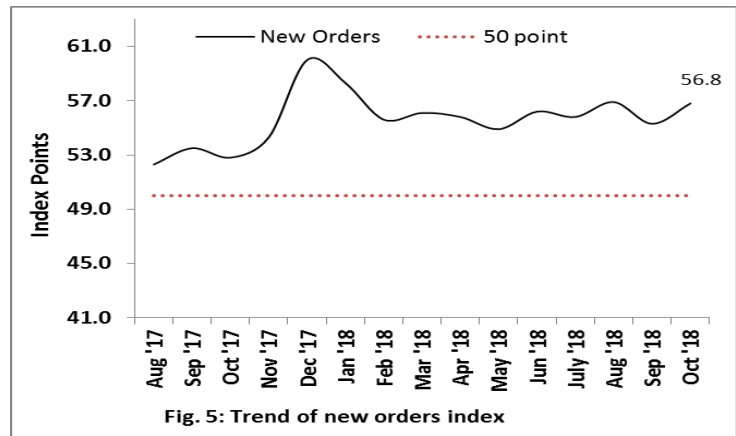
2.1 Production Level

At 58.9 points, the production level index for the manufacturing sector grew for the twentieth consecutive month in October 2018. The index indicated a faster growth in the current month, when compared to its level in the preceding month. Eleven of the 14 manufacturing subsectors recorded increase in production level, 2 remained unchanged while 1 declined (Fig. 4 and Table 2).



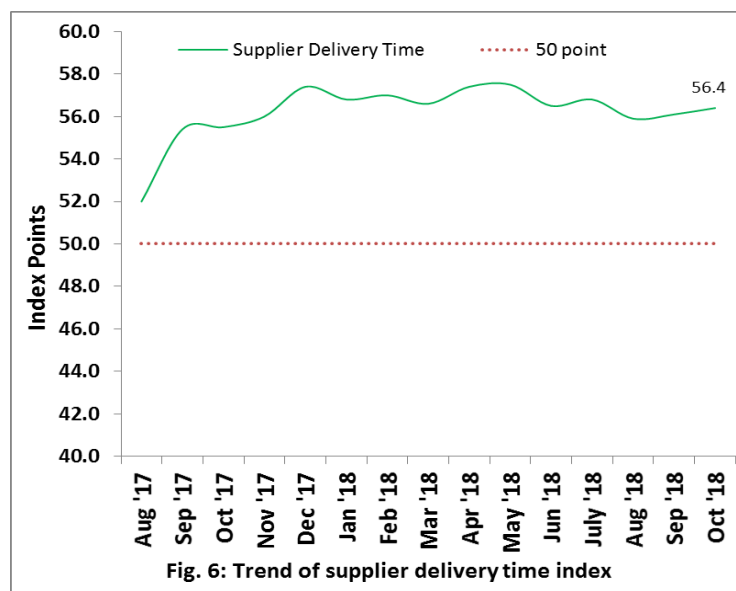
2.2 New Orders

At 56.8 points, the new orders index grew for the nineteenth consecutive month, indicating an increase in new orders in October 2018. Nine subsectors reported growth, 2 remained unchanged, while 3 contracted in the review month (Fig. 5 and Table 3).



2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 56.4 points in October 2018, indicating faster supplier delivery time for the seventeenth consecutive month. Thirteen subsectors recorded improved suppliers' delivery time, while 1 reported unchanged delivery time (Fig. 6 and Table 4).



2.4 Employment Level

The employment level index in October 2018 stood at 54.8 points, indicating growth in employment level for the eighteenth consecutive month. Of the 14 subsectors surveyed, 8 reported increased employment level, 4 remained unchanged while 2 reported reduced employment level in the review month (Fig. 7 and Table 5).

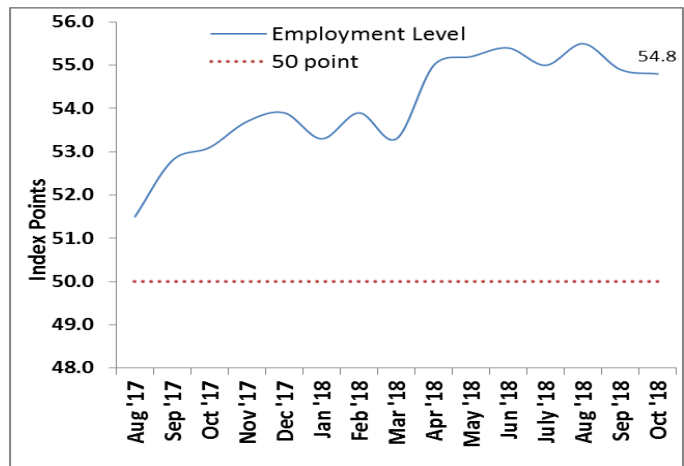


Fig 7: Trend of manufacturing employment index

2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the nineteenth consecutive month in October 2018. At 56.2 points, the index grew at a faster rate when compared to its level in the previous month. Ten of the 14 subsectors recorded growth, 2 remained unchanged, while 2 recorded decline in raw material inventories (Fig. 8 and Table 6).

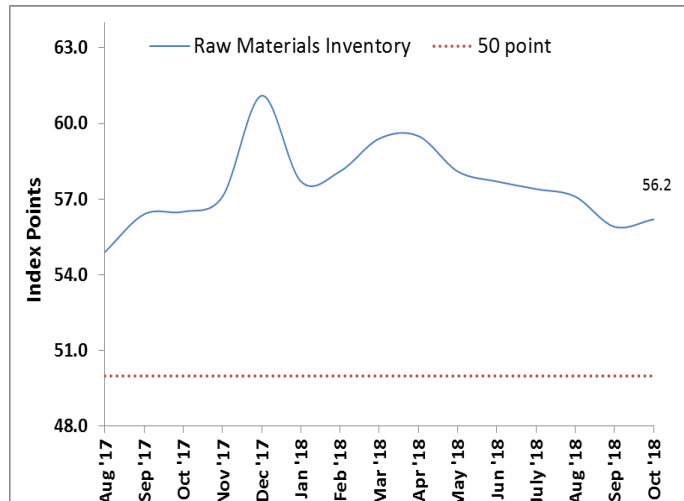


Fig. 8: Trend of raw material inventory index

3.0 Non-Manufacturing PMI Report

Business activity, new orders, employment level and inventories grew at a faster rate in October 2018

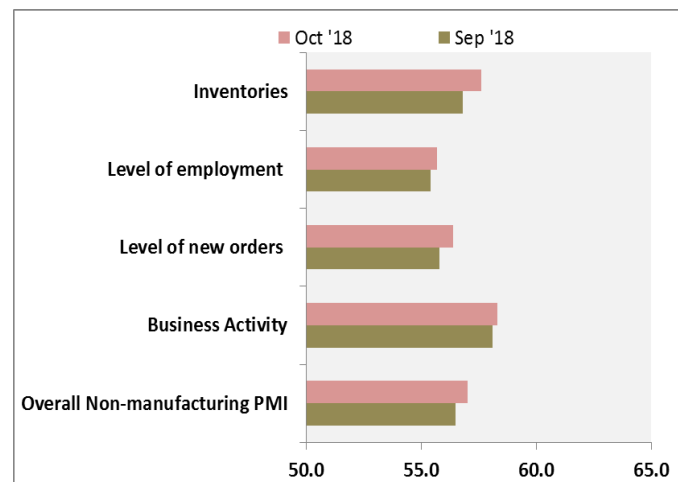


Fig. 9: Non-Manufacturing PMI at a glance

The *composite PMI* for the *non-manufacturing sector* stood at 57.0 points in October 2018, indicating expansion in the Non-manufacturing PMI for the eighteenth consecutive month. The index grew at a faster rate when compared to its level in September 2018. Thirteen of the 17 subsectors recorded growth in the following order: repair, maintenance/washing of motor vehicles; agriculture; wholesale/retail trade; information & communication; educational services; management of companies; utilities; finance & insurance; arts, entertainment & recreation; accommodation & food services; health care & social assistance; real estate rental & leasing; and construction. The water supply, sewage & waste management; professional, scientific, & technical services; transportation & warehousing; and electricity, gas, steam & air conditioning supply subsectors recorded contraction in the review period (Fig. 10 and Table 7).

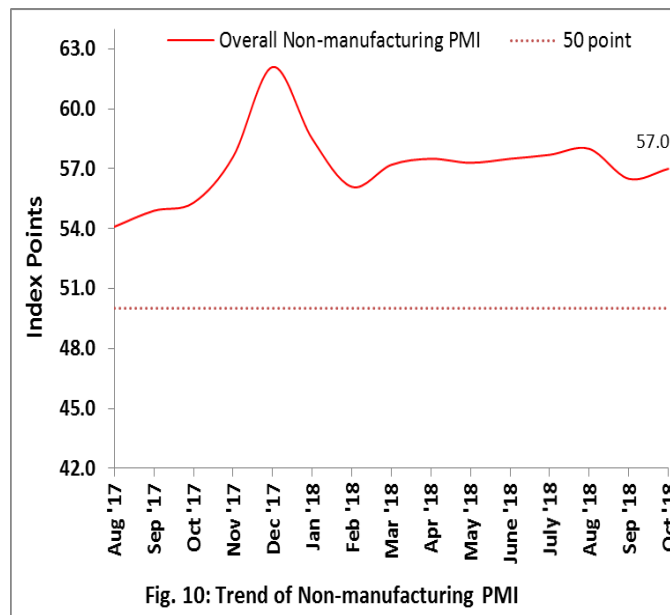


Fig. 10: Trend of Non-manufacturing PMI

3.1 Business Activity

At 58.3 points, the business activity index grew for the nineteenth consecutive month, indicating expansion in non-manufacturing business activity in October 2018. The index grew at a faster rate when compared to its level in the previous month. Twelve subsectors recorded growth in business activity, 1 remained unchanged while 4 declined in the review month (Fig 11 Table 8).

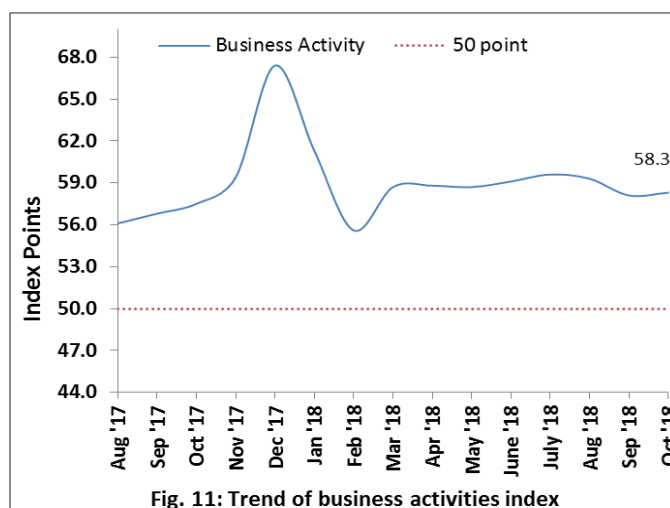


Fig. 11: Trend of business activities index

3.2 New Orders

At 56.4 points, new orders index grew for the nineteenth successive month in October 2018. Of the 17 subsectors, 11 reported growth, while 6 recorded a decline in new orders (Fig 12 Table 9).

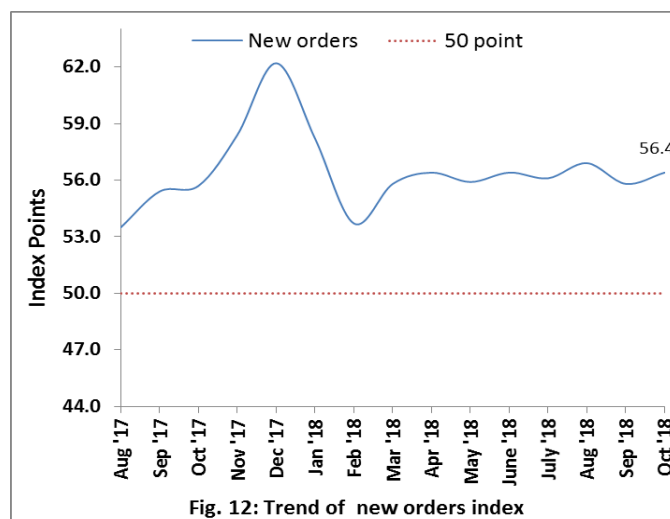
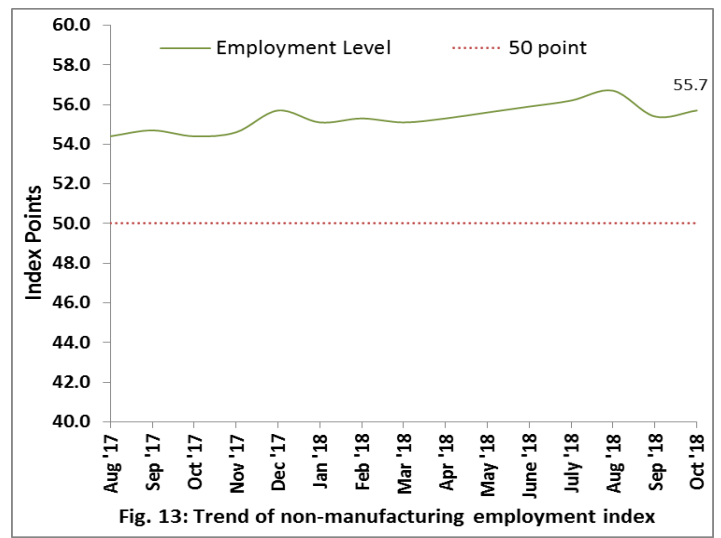


Fig. 12: Trend of new orders index

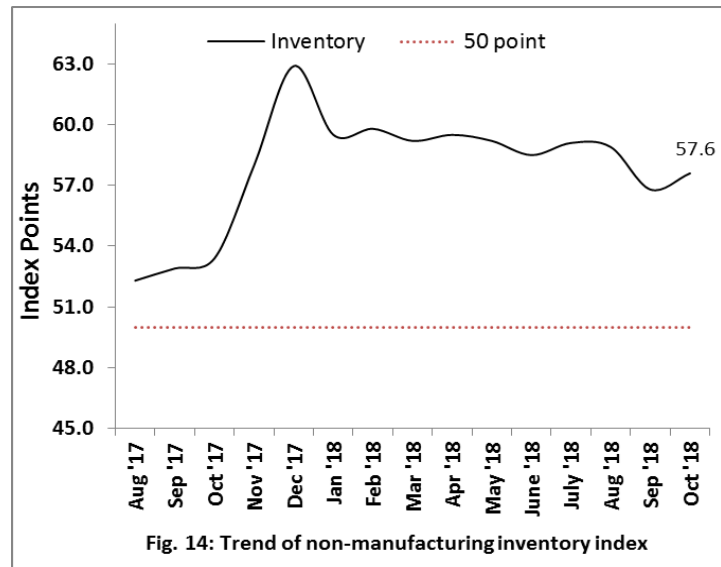
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.7 points, indicating growth in employment for the eighteenth consecutive month. Fourteen subsectors recorded growth, 1 remained unchanged while 2 recorded decline in the review month (Fig 13 Table 10).



3.4 Non-manufacturing Inventory

At 57.6 points, non-manufacturing inventory index grew for the eighteenth consecutive month, indicating growth in inventories in the review period. Fourteen subsectors recorded higher inventories, while 3 remained unchanged in October 2018 (Fig 14 Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

Index	Series Index* September	Series Index* October	Difference	Direction	Rate of Change	Trend** (Months)
Composite PMI \1	56.2	56.8	0.6	Growing	Faster	19
Production level	58.4	58.9	0.5	Growing	Faster	20
New orders	55.3	56.8	1.5	Growing	Faster	19
Supplier delivery time	56.1	56.4	0.3	Growing	Faster	17
Employment level	54.9	54.8	-0.1	Growing	Slower	18
Raw materials/WIP Inventory	55.9	56.2	0.3	Growing	Faster	19
New Export Orders	37.1	39.9	2.8	Declining	Slower	44
Output Prices	52.4	51.2	-1.2	Growing	Slower	34
Input Prices	57.5	56.7	-0.8	Growing	Slower	52
Quantity of Purchases	49.4	50.9	1.5	Growing	From Contraction	1
Outstanding Business/Backlog of Work	42.2	39.6	-2.6	Declining	Faster	11
Stock of Finished Goods	50.5	51.5	1.0	Growing	Faster	7
Manufacturing Sub-Sectors						
Cement	46.6	59.2	12.6	Growing	From Contraction	1
Chemical & pharmaceutical products	58.7	59.1	0.4	Growing	Faster	9
Electrical equipment	63.8	65.8	2.0	Growing	Faster	9
Fabricated metal products	58.7	55.2	-3.5	Growing	Slower	4
Food, beverage & tobacco products	55.3	55.6	0.3	Growing	Faster	25
Furniture & related products	57.7	57.5	-0.2	Growing	Slower	5
Nonmetallic mineral products	59.4	54.2	-5.2	Growing	Slower	5
Paper products	48.4	53.4	5.0	Growing	From Contraction	1
Petroleum & coal products	44.2	61.9	17.7	Growing	From Contraction	1
Plastics & rubber products	55.2	56.2	1.0	Growing	Faster	3
Primary metal	49.2	43.3	-5.9	Declining	Faster	2
Printing & related support activities	61.7	61.5	-0.2	Growing	Slower	7
Textile, apparel, leather & footwear	57.1	57.9	0.8	Growing	Faster	20
Transportation equipment	61.7	57.0	-4.7	Growing	Slower	2

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

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

** Number of month moving in current direction

Table 2: Production at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
PRODUCTION PMI	58.4	58.9	0.5	Growing	Faster	20
Cement	42.9	50.0	7.1	No Change	From Contraction	1
Chemical & pharmaceutical products	63.2	60.5	-2.7	Growing	Slower	9
Electrical equipment	62.5	66.7	4.2	Growing	Faster	9
Fabricated metal products	65.0	54.4	-10.6	Growing	Slower	4
Food, beverage & tobacco products	57.4	61.7	4.3	Growing	Faster	25
Furniture & related products	64.3	53.7	-10.6	Growing	Slower	5
Nonmetallic mineral products	64.7	57.1	-7.6	Growing	Slower	4
Paper products	36.4	50.0	13.6	No Change	From Contraction	1
Petroleum & coal products	50.0	87.5	37.5	Growing	From No Change	1
Plastics & rubber products	52.3	68.4	16.1	Growing	Faster	3
Primary metal	42.3	29.2	-13.1	Declining	Faster	3
Printing & related support activities	68.4	57.1	-11.3	Growing	Slower	7
Textile, apparel, leather & footwear	58.8	54.8	-4.0	Growing	Slower	7
Transportation equipment	66.7	60.0	-6.7	Growing	Slower	4

Table 3: New Orders at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.3	56.8	1.5	Growing	Faster	19
Cement	50.0	66.7	16.7	Growing	From No Change	1
Chemical & pharmaceutical products	59.2	55.3	-3.9	Growing	Slower	8
Electrical equipment	62.5	75.0	12.5	Growing	Faster	9
Fabricated metal products	55.0	63.2	8.2	Growing	Faster	4
Food, beverage & tobacco products	55.9	55.8	-0.1	Growing	Slower	25
Furniture & related products	57.1	61.1	4.0	Growing	Faster	5
Nonmetallic mineral products	61.8	38.1	-23.7	Declining	From Expansion	1
Paper products	45.5	59.1	13.6	Growing	From Contraction	1
Petroleum & coal products	16.7	37.5	20.8	Declining	Slower	3
Plastics & rubber products	52.3	50.0	-2.3	No Change	From Expansion	1
Primary metal	42.3	45.8	3.5	Declining	Slower	2
Printing & related support activities	65.8	71.4	5.6	Growing	Faster	6
Textile, apparel, leather & footwear	55.9	54.8	-1.1	Growing	Slower	5
Transportation equipment	50.0	50.0	0.0	No Change	Flat	2

Table 4: Supplier Delivery Time at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	56.1	56.4	0.3	Growing	Faster	17
Cement	58.3	66.7	8.4	Growing	Faster	3
Chemical & pharmaceutical products	57.9	59.2	1.3	Growing	Faster	4
Electrical equipment	62.5	50.0	-12.5	No Change	From Expansion	1
Fabricated metal products	51.7	52.9	1.2	Growing	Faster	8
Food, beverage & tobacco products	55.0	52.9	-2.1	Growing	Slower	4
Furniture & related products	57.1	51.9	-5.2	Growing	Slower	2
Nonmetallic mineral products	58.8	54.8	-4.0	Growing	Slower	6
Paper products	68.2	63.6	-4.6	Growing	Slower	5
Petroleum & coal products	33.3	75.0	41.7	Growing	From Contraction	1
Plastics & rubber products	61.4	55.3	-6.1	Growing	Slower	5
Primary metal	50.0	62.5	12.5	Growing	From No Change	1
Printing & related support activities	50.0	59.5	9.5	Growing	From No Change	1
Textile, apparel, leather & footwear	58.8	59.5	0.7	Growing	Faster	14
Transportation equipment	66.7	80.0	13.3	Growing	Faster	4

Table 5: Employment Level at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	54.9	54.8	-0.1	Growing	Slower	18
Cement	42.9	58.3	15.4	Growing	From Contraction	1
Chemical & pharmaceutical products	52.6	65.8	13.2	Growing	Faster	9
Electrical equipment	62.5	66.7	4.2	Growing	Faster	2
Fabricated metal products	68.3	45.6	-22.7	Declining	From Expansion	1
Food, beverage & tobacco products	52.5	51.0	-1.5	Growing	Slower	6
Furniture & related products	51.8	59.3	7.5	Growing	Faster	6
Nonmetallic mineral products	58.8	71.4	12.6	Growing	Faster	4
Paper products	54.5	50.0	-4.5	No Change	From Expansion	1
Petroleum & coal products	66.7	50.0	-16.7	No Change	From Expansion	1
Plastics & rubber products	56.8	50.0	-6.8	No Change	From Expansion	1
Primary metal	57.7	45.8	-11.9	Declining	From Expansion	1
Printing & related support activities	50.0	52.4	2.4	Growing	From No Change	1
Textile, apparel, leather & footwear	52.9	57.1	4.2	Growing	Faster	3
Transportation equipment	66.7	50.0	-16.7	No Change	From Expansion	1

Table 6: Raw Materials Inventory at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	55.9	56.2	0.3	Growing	Faster	19
Cement	35.7	50.0	14.3	No Change	From Contraction	1
Chemical & pharmaceutical products	59.2	53.9	-5.3	Growing	Slower	5
Electrical equipment	75.0	58.3	-16.7	Growing	Slower	11
Fabricated metal products	45.0	55.9	10.9	Growing	From Contraction	1
Food, beverage & tobacco products	54.5	53.4	-1.1	Growing	Slower	25
Furniture & related products	55.4	61.1	5.7	Growing	Faster	8
Nonmetallic mineral products	41.2	59.5	18.3	Growing	From Contraction	1
Paper products	45.5	36.4	-9.1	Declining	Faster	3
Petroleum & coal products	83.3	75.0	-8.3	Growing	Slower	9
Plastics & rubber products	59.1	57.9	-1.2	Growing	Slower	3
Primary metal	69.2	37.5	-31.7	Declining	From Expansion	1
Printing & related support activities	73.7	64.3	-9.4	Growing	Slower	5
Textile, apparel, leather & footwear	62.5	73.8	11.3	Growing	Faster	13
Transportation equipment	66.7	50.0	-16.7	No Change	From Expansion	1

Table 7: Non-Manufacturing at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
Composite PMI \1	56.5	57.0	0.5	Growing	Faster	18
Business Activity	58.1	58.3	0.2	Growing	Faster	19
Level of new orders/customers/incoming business	55.8	56.4	0.6	Growing	Faster	19
Employment Level	55.4	55.7	0.3	Growing	Faster	18
Inventory	56.8	57.6	0.8	Growing	Faster	18
Average price of Inputs (volume weighted)	50.2	50.7	0.5	Growing	Faster	36
Level of outstanding business/ Backlog of work	41.5	42.8	1.3	Declining	Slower	52
New Exports orders	40.3	39.7	-0.6	Declining	Faster	52
Imports	41.3	42.2	0.9	Declining	Slower	52
Inventory (sentiments)	45.7	45.5	-0.2	Declining	Faster	52
Non-manufacturing sub-sectors						
Accommodation & food services	55.9	56.1	0.2	Growing	Faster	4
Agriculture	60.2	63.0	2.8	Growing	Faster	29
Arts, Entertainment & Recreation	50.0	56.8	6.8	Growing	From No Change	1
Construction	47.5	51.9	4.4	Growing	From Contraction	1
Educational services	65.9	60.1	-5.8	Growing	Slower	4
Electricity, gas, steam & air conditioning supply	53.1	49.4	-3.7	Declining	From Expansion	1
Finance & insurance	59.4	59.2	-0.2	Growing	Slower	20
Health care & social assistance	52.5	55.0	2.5	Growing	Faster	18
Information & communication	61.9	61.8	-0.1	Growing	Slower	19
Management of companies	64.8	60.0	-4.8	Growing	Slower	3
Professional, scientific, & technical services	52.8	46.4	-6.4	Declining	From Expansion	1
Real estate rental & leasing	56.8	54.1	-2.7	Growing	Slower	8
Repair, Maintenance/Washing Of Motor Vehicles...	50.8	68.3	17.5	Growing	Faster	5
Transportation & warehousing	55.7	47.4	-8.3	Declining	From Expansion	1
Utilities	56.3	59.7	3.4	Growing	Faster	2
Water supply, sewage & waste management	57.7	45.8	-11.9	Declining	From Expansion	1
Wholesale/Retail trade	57.3	61.9	4.6	Growing	Faster	17

\1 The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories

Table 8: Business activity at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	58.1	58.3	0.2	Growing	Faster	19
Accommodation & food services	57.0	57.1	0.1	Growing	Faster	4
Agriculture	64.8	66.0	1.2	Growing	Faster	29
Arts, Entertainment & Recreation	50.0	58.3	8.3	Growing	From No Change	1
Construction	44.3	47.4	3.1	Declining	Slower	3
Educational services	73.3	61.4	-11.9	Growing	Slower	14
Electricity, gas, steam & air conditioning supply	47.5	42.5	-5.0	Declining	Faster	2
Finance & insurance	61.5	60.6	-0.9	Growing	Slower	19
Health care & social assistance	50.0	53.4	3.4	Growing	From No Change	1
Information & communication	67.3	70.4	3.1	Growing	Faster	19
Management of companies	71.9	66.7	-5.2	Growing	Slower	3
Professional, scientific, & technical services	52.3	50.0	-2.3	No Change	From Expansion	1
Real estate rental & leasing	58.6	57.0	-1.6	Growing	Slower	6
Repair, Maintenance/Washing Of Motor Vehicles.	50.0	73.3	23.3	Growing	From No Change	1
Transportation & warehousing	55.0	39.5	-15.5	Declining	From Expansion	1
Utilities	62.5	66.7	4.2	Growing	Faster	2
Water supply, sewage & waste management	57.7	46.7	-11.0	Declining	From Expansion	1
Wholesale/Retail trade	60.4	62.7	2.3	Growing	Faster	4

Table 9: New Orders at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
NEW ORDERS PMI	55.8	56.4	0.6	Growing	Faster	19
Accommodation & food services	53.5	57.1	3.6	Growing	Faster	4
Agriculture	68.5	64.0	-4.5	Growing	Slower	6
Arts, Entertainment & Recreation	50.0	56.3	6.3	Growing	From No Change	1
Construction	40.0	44.9	4.9	Declining	Slower	2
Educational services	63.3	56.1	-7.2	Growing	Slower	4
Electricity, gas, steam & air conditioning supply	57.5	45.0	-12.5	Declining	From Expansion	1
Finance & insurance	63.4	61.1	-2.3	Growing	Slower	20
Health care & social assistance	44.6	52.7	8.1	Growing	From Contraction	1
Information & communication	65.6	63.5	-2.1	Growing	Slower	19
Management of companies	62.5	56.7	-5.8	Growing	Slower	2
Professional, scientific, & technical services	52.3	41.7	-10.6	Declining	From Expansion	1
Real estate rental & leasing	55.7	48.8	-6.9	Declining	From Expansion	1
Repair, Maintenance/Washing Of Motor Vehicles..	40.0	73.3	33.3	Growing	From Contraction	1
Transportation & warehousing	52.5	44.7	-7.8	Declining	From Expansion	1
Utilities	56.3	61.1	4.8	Growing	Faster	2
Water supply, sewage & waste management	53.8	43.3	-10.5	Declining	From Expansion	1
Wholesale/Retail trade	58.5	65.8	7.3	Growing	Faster	17

Table 10: Employment Level at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	55.4	55.7	0.3	Growing	Faster	18
Accommodation & food services	57.5	55.1	-2.4	Growing	Slower	2
Agriculture	59.3	60.0	0.7	Growing	Faster	18
Arts, Entertainment & Recreation	53.7	60.4	6.7	Growing	Faster	4
Construction	48.6	60.3	11.7	Growing	From Contraction	1
Educational services	65.0	61.4	-3.6	Growing	Slower	4
Electricity, gas, steam & air conditioning supply	57.5	57.5	0.0	Growing	Flat	6
Finance & insurance	53.6	54.2	0.6	Growing	Faster	17
Health care & social assistance	58.0	56.0	-2.0	Growing	Slower	17
Information & communication	50.0	58.2	8.2	Growing	From No Change	1
Management of companies	59.4	56.7	-2.7	Growing	Slower	2
Professional, scientific, & technical services	47.7	44.0	-3.7	Declining	Faster	2
Real estate rental & leasing	54.3	51.2	-3.1	Growing	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles..	66.7	63.3	-3.4	Growing	Slower	12
Transportation & warehousing	60.0	55.3	-4.7	Growing	Slower	7
Utilities	43.8	50.0	6.2	No Change	From Contraction	1
Water supply, sewage & waste management	65.4	43.3	-22.1	Declining	From Expansion	1
Wholesale/Retail trade	52.8	55.7	2.9	Growing	Faster	5

Table 11: Inventory at a Glance

Index	Series Index September	Series Index October	Difference	Direction	Rate of Change	Trend (Months)
INVENTORY PMI	56.8	57.6	0.8	Growing	Faster	18
Accommodation & food services	55.6	55.1	-0.5	Growing	Slower	4
Agriculture	48.1	62.0	13.9	Growing	From Contraction	1
Arts, Entertainment & Recreation	46.2	52.1	5.9	Growing	From Contraction	1
Construction	57.1	55.1	-2.0	Growing	Slower	4
Educational services	62.1	61.4	-0.7	Growing	Slower	4
Electricity, gas, steam & air conditioning supply	50.0	52.5	2.5	Growing	From No Change	1
Finance & insurance	59.2	60.8	1.6	Growing	Faster	9
Health care & social assistance	57.1	57.8	0.7	Growing	Faster	18
Information & communication	64.6	55.1	-9.5	Growing	Slower	6
Management of companies	65.6	60.0	-5.6	Growing	Slower	3
Professional, scientific, & technical services	59.1	50.0	-9.1	No Change	From Expansion	1
Real estate rental & leasing	58.6	59.3	0.7	Growing	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles	46.7	63.3	16.6	Growing	From Contraction	1
Transportation & warehousing	55.3	50.0	-5.3	No Change	From Expansion	1
Utilities	62.5	61.1	-1.4	Growing	Slower	3
Water supply, sewage & waste management	53.8	50.0	-3.8	No Change	From Expansion	1
Wholesale/Retail trade	57.6	63.3	5.7	Growing	Faster	15

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

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