



**Central Bank of Nigeria**

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

Statistics Department  
September 2020

**Data and Method:** *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.*

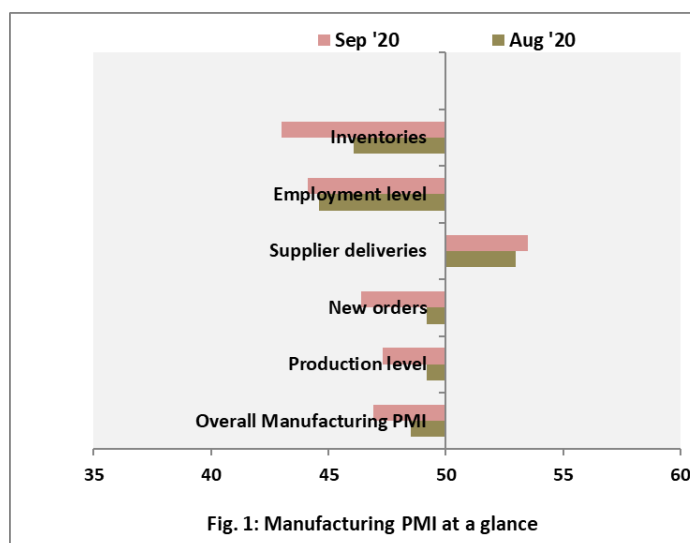
*A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while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

## 1.0 Introduction

The September 2020 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period September 7-11, 2020. 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.

## 2.0 Manufacturing September 2020 PMI

*In September 2020, supplier delivery time grew faster, while Production level, new orders, employment level and raw materials inventories contracted.*



The **Manufacturing PMI** in the month of September stood at 46.9 index points, indicating contraction in the manufacturing sector for the fifth time (Fig. 2 and Table 1). Of the 14 subsectors surveyed, 4 subsectors reported expansion (above 50% threshold) in the review month in the following order: electrical equipment; transportation equipment; cement and nonmetallic mineral products. The remaining subsectors reported contractions in the following order: petroleum & coal products; primary metal; furniture & related products; printing & related support activities; food, beverage & tobacco products; textile, apparel, leather & footwear; chemical & pharmaceutical products; fabricated metal products and plastics & rubber products; while paper product subsector was stable.

### 2.1 Production Level

At 47.3 points, the production level index for the manufacturing sector indicated contraction in September 2020 for the fifth consecutive month. Of the 14 subsectors surveyed, 5 subsectors recorded increased production level, 1 subsector reported same level of production, while 8 subsectors recorded declines in production in September 2020 (Fig. 3 and Table 2).

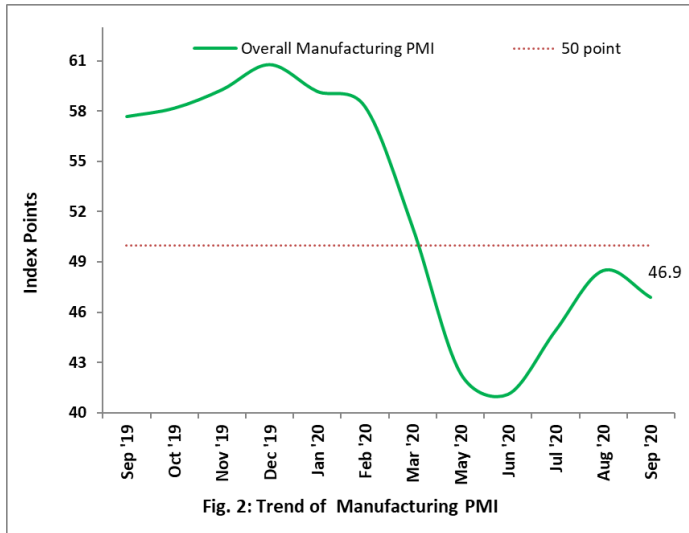


Fig. 2: Trend of Manufacturing PMI

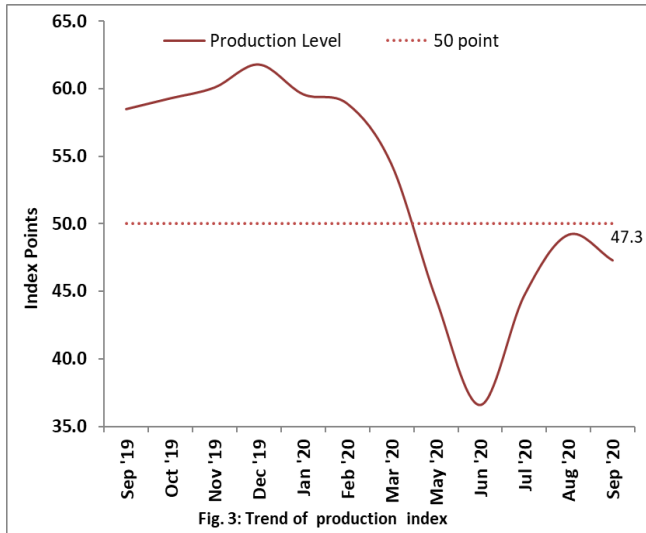


Fig. 3: Trend of production index

### 2.2 New Orders

At 46.4 points, the new orders index contracted in September 2020 for the fifth consecutive month. Six subsectors reported expansion in new orders, while the remaining 8 recorded contraction in the review month (Fig. 4 and Table 3).

### 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 53.5 points in September 2020, indicating faster supplier delivery time for the fifth time. Six of the 14 subsectors recorded improved suppliers' delivery time, 5 subsectors reported same level, while 3 subsectors recorded slower delivery time (Fig. 5 and Table 4).

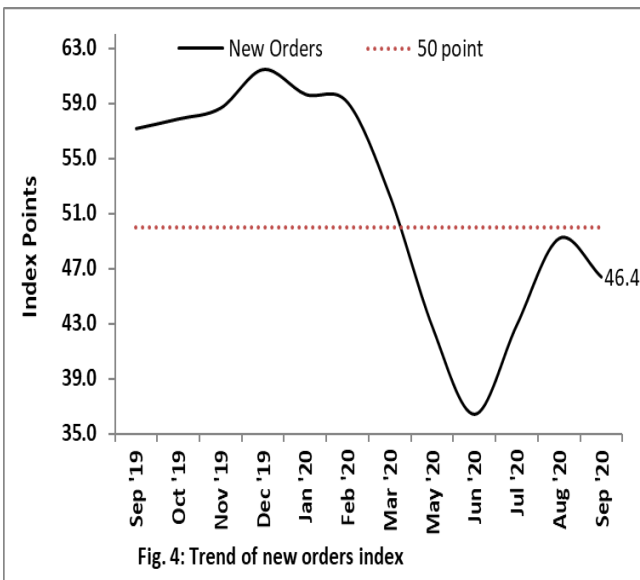


Fig. 4: Trend of new orders index

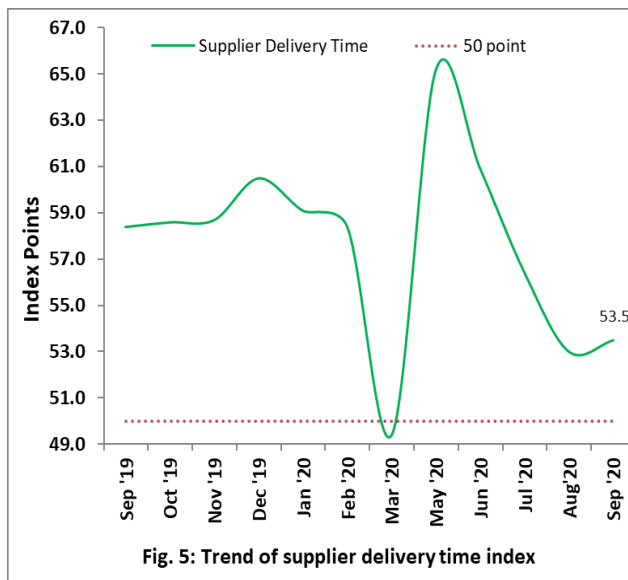


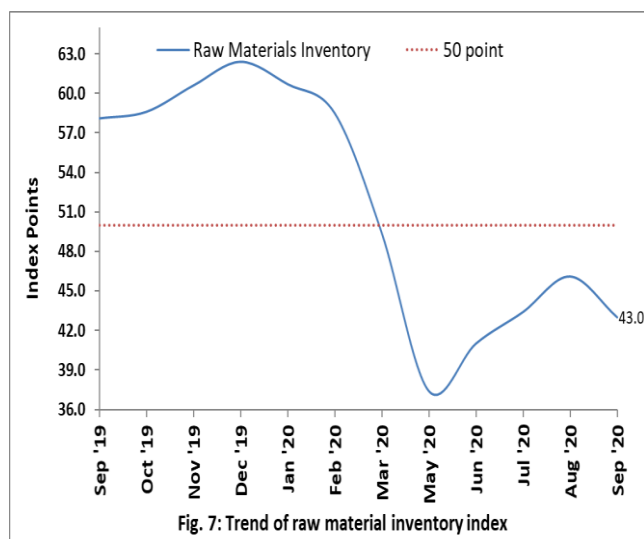
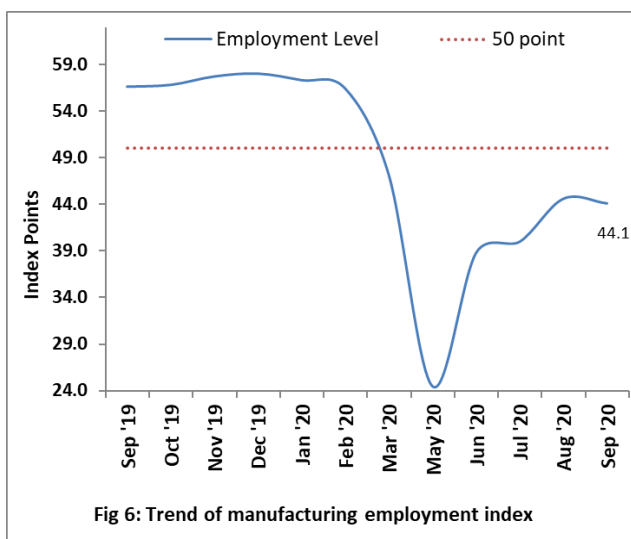
Fig. 5: Trend of supplier delivery time index

## 2.4 Employment Level

The employment level index for September 2020 stood at 44.1 points, indicating contraction in employment level for the sixth consecutive month. Of the 14 subsectors, 2 subsectors recorded growth in employment, 3 subsectors recorded same level of employment, while the remaining 9 subsectors recorded lower employment level in the review month (Fig. 6 and Table 5).

## 2.5 Raw material Inventories

The manufacturing sector inventories index contracted for the sixth consecutive time. At 43.0 points, the index declined in the review month. Four of the 14 subsectors recorded growth in inventories, while the remaining 10 subsectors recorded lower raw material inventories in the review month (Fig. 7 and Table 6).



## 3.0 Non-Manufacturing PMI Report

The **non-manufacturing** sector PMI stood at 41.9 points in September 2020, indicating contraction in non-manufacturing PMI for the sixth consecutive month. Of the 17 sub-sectors surveyed, 3 subsectors reported growth in the following order: water supply, sewage & waste management; arts, entertainment & recreation and professional, scientific, & technical services, while the remaining 14 subsectors reported declines in the following order: management of companies; repair, maintenance/washing of motor vehicle; agriculture; finance & insurance; electricity, gas, steam & air conditioning supply; accommodation & food services; information & communication; health care & social assistance; real estate, rental & leasing; educational services; wholesale trade; transportation & warehousing; utilities and construction (Fig. 9 and Table 7).

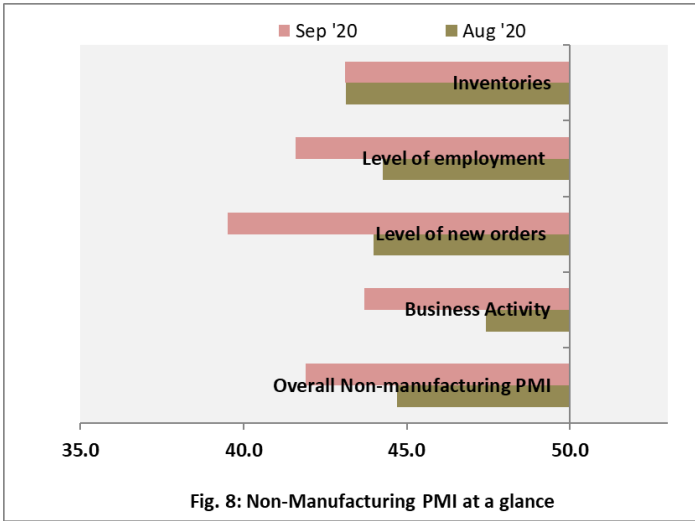


Fig. 8: Non-Manufacturing PMI at a glance

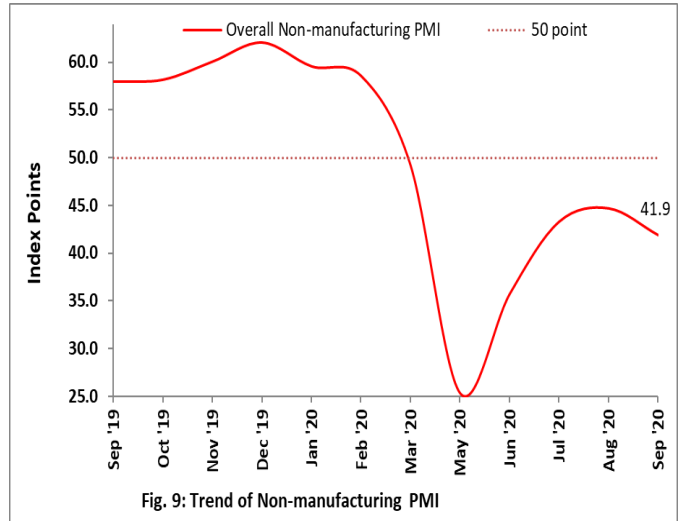


Fig. 9: Trend of Non-manufacturing PMI

### 3.1 Business Activity

At 43.7 points, the business activity index declined for the fifth consecutive month, indicating contraction in non-manufacturing business activity in September 2020. Three out of the 17 subsectors reported growth in business activities (above 50% threshold) in the review month; while the remaining 14 subsectors recorded decline in business activity in the review month (Fig. 10 Table 8).

### 3.2 New Orders

At 39.5 points, new orders index declined for the sixth time in September 2020. Two of the 17 subsectors reported growth in new order (above 50% threshold) in the review month, 1 sector reported same level of new order, while the remaining 14 subsectors recorded decline in new orders in the review month (Fig. 11 Table 9).

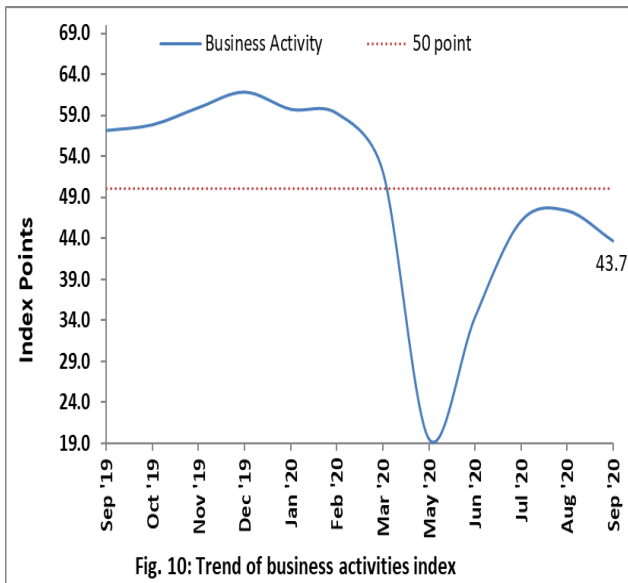


Fig. 10: Trend of business activities index

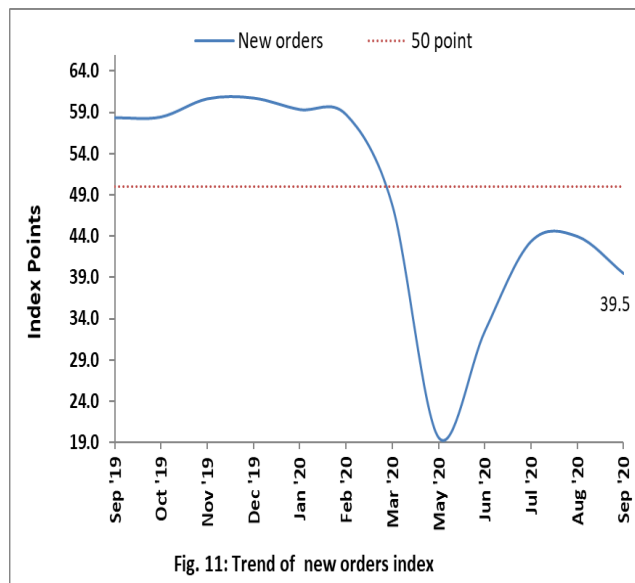


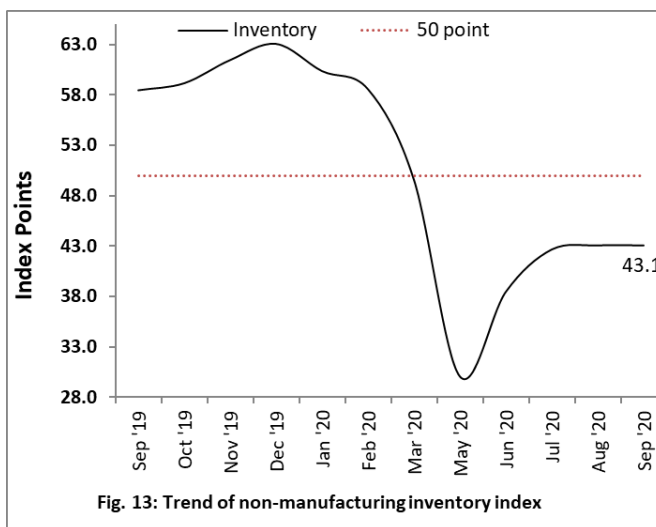
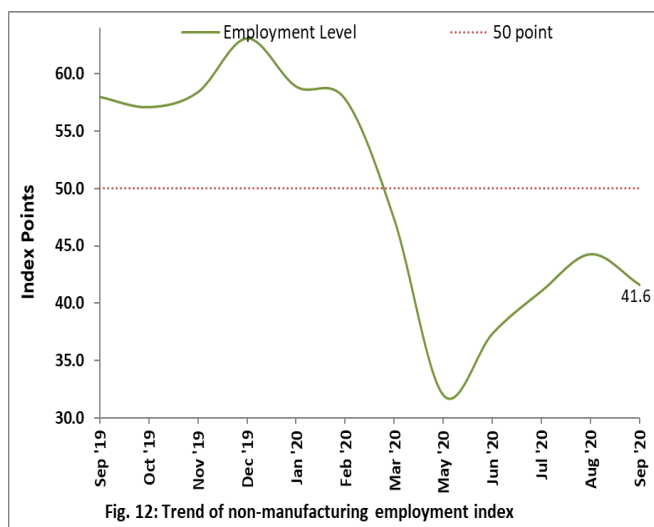
Fig. 11: Trend of new orders index

### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 41.6 points, indicating contraction in employment level in September 2020. Two subsectors recorded growth, 1 subsector recorded same level of employment, while the remaining 14 subsectors reported decline in employment level (below 50% threshold) in the review month (Fig. 12 Table 10).

### 3.4 Non-manufacturing Inventory

At 43.1 points, non-manufacturing inventory index declined for the sixth consecutive month. This indicates reduced inventories in the review period. Three subsectors reported growth in inventory; the arts, entertainment & recreation sector reported same level of inventories, while the remaining 13 subsectors recorded decline in inventories in the review period (Fig. 13, Table 11).



## APPENDICES

Table 1: Details of Overall Manufacturing PMI

Index	Aug 2020 Index*	Sept 2020 Index*	Direction	Difference	Rate of Change	Trend** (Months)
Composite PMI \1	48.5	46.9	Declining	-1.6	Faster	5
Production level	49.2	47.3	Declining	-1.9	Faster	5
New orders	49.2	46.4	Declining	-2.8	Faster	5
Supplier delivery time	53.0	53.5	Growing	0.5	Faster	5
Employment level	44.6	44.1	Declining	-0.5	Faster	6
Raw materials/WIP Inventory	46.1	43.0	Declining	-3.1	Faster	6
New Export Orders	31.8	32.7	Declining	0.9	Slower	66
Output Prices	58.4	58.8	Growing	0.4	Faster	56
Input Prices	66.8	69.8	Growing	3.0	Faster	74
Quantity of Purchases	47.7	42.9	Declining	-4.8	Faster	5
Outstanding Business/Backlog of Work	41.1	42.0	Declining	0.9	Slower	33
Stock of Finished Goods	45.6	45.8	Declining	0.2	Slower	5
<b>Manufacturing Sub-Sectors</b>						
Cement	64.4	58.1	Growing	-6.3	Slower	2
Chemical & pharmaceutical products	52.2	47.8	Declining	-4.4	From Expansion	1
Electrical equipment	33.3	66.7	Growing	33.4	From Contraction	1
Fabricated metal products	48.0	47.9	Declining	-0.1	Faster	5
Food, beverage & tobacco products	47.9	47.0	Declining	-0.9	Faster	5
Furniture & related products	43.3	38.5	Declining	-4.8	Faster	5
Nonmetallic mineral products	66.0	50.6	Growing	-15.4	Slower	2
Paper products	44.4	50.0	Stationary	5.6	From Contraction	1
Petroleum & coal products	40.0	28.8	Declining	-11.2	Faster	3
Plastics & rubber products	55.2	49.1	Declining	-6.1	From Expansion	1
Primary metal	40.8	37.8	Declining	-3.0	Faster	14
Printing & related support activities	32.8	43.3	Declining	10.5	Slower	7
Textile, apparel, leather & footwear	51.6	47.5	Declining	-4.1	From Expansion	1
Transportation equipment	53.8	58.1	Growing	4.3	Faster	4

\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	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
PRODUCTION PMI	49.2	47.3	Declining	-1.9	Faster	5
Cement	66.7	66.7	Growing	0.0	Flat	2
Chemical & pharmaceutical products	55.3	48.9	Declining	-6.4	From Expansion	1
Electrical equipment	25.0	91.7	Growing	66.7	From Contraction	1
Fabricated metal products	45.2	45.7	Declining	0.5	Slower	5
Food, beverage & tobacco products	50.5	47.5	Declining	-3.0	From Expansion	1
Furniture & related products	40.9	35.4	Declining	-5.5	Faster	5
Nonmetallic mineral products	76.9	50.0	Stationary	-26.9	From Expansion	1
Paper products	42.9	55.6	Growing	12.7	From Contraction	1
Petroleum & coal products	50.0	25.0	Declining	-25.0	From Stationary	1
Plastics & rubber products	56.3	52.9	Growing	-3.4	Slower	2
Primary metal	33.3	25.0	Declining	-8.3	Faster	6
Printing & related support activities	27.5	41.3	Declining	13.8	Slower	8
Textile, apparel, leather & footwear	50.0	47.2	Declining	-2.8	From Stationary	1
Transportation equipment	50.0	62.5	Growing	12.5	From Stationary	1

**Table 3: Details of New Orders PMI**

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	49.2	46.4	Declining	-2.8	Faster	5
Cement	72.2	61.1	Growing	-11.1	Slower	2
Chemical & pharmaceutical products	55.4	47.8	Declining	-7.6	From Expansion	1
Electrical equipment	25.0	66.7	Growing	41.7	From Contraction	1
Fabricated metal products	45.0	45.6	Declining	0.6	Slower	5
Food, beverage & tobacco products	49.1	47.5	Declining	-1.6	Faster	5
Furniture & related products	34.1	29.2	Declining	-4.9	Faster	5
Nonmetallic mineral products	73.1	55.6	Growing	-17.5	Slower	4
Paper products	57.1	61.1	Growing	4.0	Faster	2
Petroleum & coal products	50.0	25.0	Declining	-25.0	From Stationary	1
Plastics & rubber products	55.9	47.1	Declining	-8.8	From Expansion	1
Primary metal	41.7	25.0	Declining	-16.7	Faster	4
Printing & related support activities	30.0	41.3	Declining	11.3	Slower	8
Textile, apparel, leather & footwear	54.5	55.3	Growing	0.8	Faster	2
Transportation equipment	50.0	62.5	Growing	12.5	From Stationary	1

**Table 4: Details of Suppliers' Delivery PMI**

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	53.0	53.5	Growing	0.5	Faster	5
Cement	44.4	50.0	Stationary	5.6	From Contraction	1
Chemical & pharmaceutical products	48.7	55.4	Growing	6.7	From Contraction	1
Electrical equipment	58.3	41.7	Declining	-16.6	From Expansion	1
Fabricated metal products	60.3	57.4	Growing	-2.9	Slower	5
Food, beverage & tobacco products	49.5	51.2	Growing	1.7	From Contraction	1
Furniture & related products	61.4	64.6	Growing	3.2	Faster	5
Nonmetallic mineral products	57.7	50.0	Stationary	-7.7	From Expansion	1
Paper products	43.8	44.4	Declining	0.6	Slower	4
Petroleum & coal products	50.0	50.0	Stationary	0.0	Flat	7
Plastics & rubber products	52.9	47.1	Declining	-5.8	From Expansion	1
Primary metal	50.0	56.3	Growing	6.3	From Stationary	1
Printing & related support activities	62.5	50.0	Stationary	-12.5	From Expansion	1
Textile, apparel, leather & footwear	59.5	55.3	Growing	-4.2	Slower	5
Transportation equipment	25.0	50.0	Stationary	25.0	From Contraction	1



Table 5: Details of Employment Level PMI

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	44.6	44.1	Declining	-0.5	Faster	6
Cement	66.7	55.6	Growing	-11.1	Slower	2
Chemical & pharmaceutical products	46.1	43.3	Declining	-2.8	Faster	6
Electrical equipment	50.0	66.7	Growing	16.7	From Stationary	1
Fabricated metal products	41.7	50.0	Stationary	8.3	From Contraction	1
Food, beverage & tobacco products	46.7	43.3	Declining	-3.4	Faster	5
Furniture & related products	42.7	39.6	Declining	-3.1	Faster	6
Nonmetallic mineral products	45.5	38.9	Declining	-6.6	Faster	6
Paper products	50.0	38.9	Declining	-11.1	From Stationary	1
Petroleum & coal products	31.3	25.0	Declining	-6.3	Faster	2
Plastics & rubber products	0.0	46.9	Declining	46.9	Slower	2
Primary metal	58.8	50.0	Stationary	-8.8	From Expansion	1
Printing & related support activities	41.7	41.3	Declining	-0.4	Faster	9
Textile, apparel, leather & footwear	22.5	42.1	Declining	19.6	Slower	6
Transportation equipment	50.0	50.0	Stationary	0.0	Flat	5

Table 6: Details of Raw Materials Inventory PMI

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	46.1	43.0	Declining	-3.1	Faster	6
Cement	61.1	44.4	Declining	-16.7	From Expansion	1
Chemical & pharmaceutical products	52.7	42.4	Declining	-10.3	From Expansion	1
Electrical equipment	25.0	41.7	Declining	16.7	Slower	3
Fabricated metal products	48.4	41.4	Declining	-7.0	Faster	6
Food, beverage & tobacco products	45.5	45.5	Declining	0.0	Flat	5
Furniture & related products	45.5	33.3	Declining	-12.2	Faster	2
Nonmetallic mineral products	61.5	61.1	Growing	-0.4	Slower	3
Paper products	37.5	33.3	Declining	-4.2	Faster	6
Petroleum & coal products	50.0	25.0	Declining	-25.0	From Stationary	1
Plastics & rubber products	47.1	52.9	Growing	5.8	From Contraction	1
Primary metal	41.7	56.3	Growing	14.6	From Contraction	1
Printing & related support activities	30.0	47.8	Declining	17.8	Slower	5
Textile, apparel, leather & footwear	38.1	23.7	Declining	-14.4	Faster	6
Transportation equipment	75.0	62.5	Growing	-12.5	Slower	2

**Table 7: Non-Manufacturing at a Glance**

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
Composite PMI \1	44.7	41.9	Declining	-2.8	Faster	6
Business Activity	47.4	43.7	Declining	-3.7	Faster	5
Level of new orders/customers/incoming business	44.0	39.5	Declining	-4.5	Faster	6
Employment Level	44.3	41.6	Declining	-2.7	Faster	6
Inventories	43.1	43.1	Declining	0.0	Flat	6
Average price of Inputs (volume weighted)	53.5	51.2	Growing	-2.3	Slower	3
Level of outstanding business/ Backlog of work	43.1	42.3	Declining	-0.8	Faster	74
New Exports orders	34.2	32.8	Declining	-1.4	Faster	74
Imports	36.6	33.5	Declining	-3.1	Faster	74
Inventory (sentiments)	40.7	39.3	Declining	-1.4	Faster	74
<b>Non-manufacturing sub-sectors</b>						
Accommodation & food services	45.7	41.3	Declining	-4.4	Faster	6
Agriculture	48.7	35.3	Declining	-13.4	Faster	6
Arts, Entertainment & Recreation	45.3	51.8	Growing	6.5	From Contraction	1
Construction	45.0	45.3	Declining	0.3	Slower	6
Educational services	43.6	44.2	Declining	0.6	Slower	6
Electricity, gas, steam & air conditioning supply	42.3	37.8	Declining	-4.5	Faster	6
Finance & insurance	44.6	36.8	Declining	-7.8	Faster	6
Health care & social assistance	44.0	42.1	Declining	-1.9	Faster	5
Information & communication	49.1	42.1	Declining	-7.0	Faster	5
Management of companies	39.9	31.3	Declining	-8.6	Faster	5
Professional, scientific, & technical services	39.8	51.8	Growing	12.0	From Contraction	1
Real estate rental & leasing	39.1	43.0	Declining	3.9	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles...	38.1	33.7	Declining	-4.4	Faster	5
Transportation & warehousing	45.4	45.0	Declining	-0.4	Faster	2
Utilities	50.0	45.3	Declining	-4.7	From Stationary	1
Water supply, sewage & waste management	46.1	59.8	Growing	13.7	From Contraction	1
Wholesale/Retail trade	47.2	44.2	Declining	-3.0	Faster	5

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

**Table 8: Details of Business Activity PMI**

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	47.4	43.7	Declining	-3.7	Faster	5
Accommodation & food services	44.1	43.4	Declining	-0.7	Faster	6
Agriculture	57.3	36.2	Declining	-21.1	From Expansion	1
Arts, Entertainment & Recreation	62.5	60.7	Growing	-1.8	Slower	3
Construction	50.0	45.1	Declining	-4.9	From Stationary	1
Educational services	44.4	42.9	Declining	-1.5	Faster	6
Electricity, gas, steam & air conditioning supply	50.0	42.5	Declining	-7.5	From Stationary	1
Finance & insurance	48.4	39.6	Declining	-8.8	Faster	5
Health care & social assistance	43.5	44.5	Declining	1.0	Slower	2
Information & communication	51.9	48.1	Declining	-3.8	From Expansion	1
Management of companies	45.0	33.3	Declining	-11.7	Faster	2
Professional, scientific, & technical services	42.3	52.3	Growing	10.0	From Contraction	1
Real estate rental & leasing	43.2	43.0	Declining	-0.2	Faster	5
Repair, Maintenance/Washing Of Motor Vehicles.	37.5	34.6	Declining	-2.9	Faster	5
Transportation & warehousing	40.6	47.5	Declining	6.9	Slower	2
Utilities	50.0	43.8	Declining	-6.2	From Stationary	1
Water supply, sewage & waste management	57.1	65.4	Growing	8.3	Faster	2
Wholesale/Retail trade	53.8	44.5	Declining	-9.3	From Expansion	1

Table 9: Details of New Orders PMI

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	44.0	39.5	Declining	-4.5	Faster	6
Accommodation & food services	44.1	37.0	Declining	-7.1	Faster	6
Agriculture	51.2	28.3	Declining	-22.9	From Expansion	1
Arts, Entertainment & Recreation	56.3	46.4	Declining	-9.9	From Expansion	1
Construction	47.0	38.8	Declining	-8.2	Faster	6
Educational services	43.0	43.9	Declining	0.9	Slower	6
Electricity, gas, steam & air conditioning supply	40.0	39.5	Declining	-0.5	Faster	2
Finance & insurance	39.1	37.9	Declining	-1.2	Faster	6
Health care & social assistance	44.2	42.3	Declining	-1.9	Faster	5
Information & communication	50.0	35.2	Declining	-14.8	From Stationary	1
Management of companies	35.0	25.0	Declining	-10.0	Faster	2
Professional, scientific, & technical services	40.4	54.5	Growing	14.1	From Contraction	1
Real estate rental & leasing	38.2	38.4	Declining	0.2	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles..	30.8	34.6	Declining	3.8	Slower	5
Transportation & warehousing	43.3	40.0	Declining	-3.3	Faster	2
Utilities	50.0	50.0	Stationary	0.0	Flat	3
Water supply, sewage & waste management	57.1	65.4	Growing	8.3	Faster	2
Wholesale/Retail trade	49.4	40.4	Declining	-9.0	Faster	6

Table 10: Details of Employment Level PMI

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	44.3	41.6	Declining	-2.7	Faster	6
Accommodation & food services	48.1	39.9	Declining	-8.2	Faster	6
Agriculture	41.5	41.5	Declining	0.0	Faster	6
Arts, Entertainment & Recreation	31.3	50.0	Stationary	18.7	From Contraction	1
Construction	40.9	51.3	Growing	10.4	From Contraction	1
Educational services	43.2	43.0	Declining	-0.2	Faster	6
Electricity, gas, steam & air conditioning supply	47.6	37.5	Declining	-10.1	Faster	6
Finance & insurance	46.7	34.9	Declining	-11.8	Faster	6
Health care & social assistance	47.8	41.4	Declining	-6.4	Faster	6
Information & communication	46.4	42.6	Declining	-3.8	Faster	6
Management of companies	35.0	33.3	Declining	-1.7	Faster	5
Professional, scientific, & technical services	38.5	45.5	Declining	7.0	Slower	7
Real estate rental & leasing	39.7	43.0	Declining	3.3	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles..	42.3	34.6	Declining	-7.7	Faster	5
Transportation & warehousing	44.1	40.0	Declining	-4.1	Faster	2
Utilities	50.0	43.8	Declining	-6.3	From Stationary	1
Water supply, sewage & waste management	28.6	53.8	Growing	25.2	From Contraction	1
Wholesale/Retail trade	41.7	43.8	Declining	2.1	Slower	5

**Table 10: Details of Inventory PMI**

Index	Aug 2020 Index	Sep 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
INVENTORY PMI	43.1	43.1	Declining	0.0	Flat	6
Accommodation & food services	46.5	44.7	Declining	-1.8	Faster	6
Agriculture	44.9	35.2	Declining	-9.7	Faster	6
Arts, Entertainment & Recreation	31.3	50.0	Stationary	18.7	From Contraction	1
Construction	42.2	46.3	Declining	4.1	Slower	5
Educational services	43.8	46.9	Declining	3.1	Slower	5
Electricity, gas, steam & air conditioning supply	31.6	31.6	Declining	0.0	Flat	5
Finance & insurance	44.4	35.0	Declining	-9.4	Faster	6
Health care & social assistance	40.4	40.3	Declining	-0.1	Faster	6
Information & communication	48.1	42.6	Declining	-5.5	Faster	5
Management of companies	44.4	33.3	Declining	-11.1	Faster	5
Professional, scientific, & technical services	38.0	54.8	Growing	16.8	From Contraction	1
Real estate rental & leasing	35.1	47.5	Declining	12.4	Slower	5
Repair, Maintenance/Washing Of Motor Vehicles	41.7	30.8	Declining	-10.9	Faster	5
Transportation & warehousing	53.3	52.5	Growing	-0.8	Slower	3
Utilities	50.0	43.8	Declining	-6.2	From Stationary	1
Water supply, sewage & waste management	41.7	54.5	Growing	12.8	From Contraction	1
Wholesale/Retail trade	43.8	47.9	Declining	4.1	Slower	6

Table 3: 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
Mar '19	57.4	58.3	56.7	58.4	56.9	57.1	47.9	62.3	57.6	51.8	47.6	60.7
Apr '19	57.7	58.8	57.2	58.1	57.0	57.5	37.4	52.4	60.2	57.3	44.5	54.4
May '19	57.8	59.1	56.9	58.4	57.3	56.8	37.7	52.3	62.2	51.5	40.8	51.5
June '19	57.4	59.3	55.9	58.7	57.5	55.0	38.0	52.4	62.7	52.1	43.8	51.1
July '19	57.6	58.9	57.2	57.5	57.3	56.2	41.1	52.2	59.5	52.5	41.8	51.5
Aug '19	57.9	58.7	57.1	58.3	57.1	58.7	39.9	50.3	57.0	51.2	42.4	52.1
Sep '19	57.7	58.5	57.2	58.4	56.6	58.1	39	51.9	58.8	50.7	43.9	53.5
Oct '19	58.2	59.3	57.9	58.6	56.8	58.6	40	52.5	58.4	53.7	42.5	53.1
Nov '19	59.3	60.1	59.4	58.7	57.7	60.6	41.0	53.1	59.3	55.8	41.4	53.1
Dec '19	60.8	61.8	61.5	60.5	58	62.4	39.1	51.9	59.2	57	45.5	52.8
Jan '20	59.2	59.6	59.7	59.1	57.3	60.7	37.0	55.3	63.5	54.8	42.6	51.0
Feb '20	58.3	58.9	59.1	58.4	56.4	58.5	41.9	53.7	61.4	55.5	43.3	51.8
Mar '20	51.1	54.4	52.3	49.4	47.1	49.4	42.3	53	62.6	55.6	41.2	50.3
May '20	42.4	44.5	42.8	65.2	24.5	37.4	36.3	53.2	61.4	26.3	34.9	39.6
Jun '20	41.1	36.6	36.4	60.9	38.8	41.0	25.9	53.2	67.2	35.8	36.4	43.3
Jul '20	44.9	44.7	42.9	56.4	40.0	43.4	29.1	58.5	67.4	39.6	39.0	46.2
Aug '20	48.5	49.2	49.2	53.0	44.6	46.1	31.8	58.4	66.8	47.7	41.1	45.6
Sep '20	46.9	47.3	46.4	53.5	44.1	43.0	32.7	58.8	69.8	42.9	42.0	45.8

**Table 4: 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
Mar '19	58.5	57.8	58.9	57.8	59.5	50.5	40.3	39.4	38.7	44.2
Apr '19	58.7	58.4	59.0	58.7	58.5	52.1	43.5	38.8	40.8	45.0
May '19	58.9	59.2	58.6	58.5	59.3	51.3	42.3	39.8	43.2	44.5
June '19	58.6	58.2	59.2	58.3	58.8	52.1	40.3	43.0	45.3	46.1
July '19	58.7	57.6	60.1	58.0	58.9	51.7	41.4	42.0	43.9	46.6
Aug '19	58.8	58.2	59.6	57.8	59.8	51.2	45.1	44.1	45.2	48.1
Sep '19	58.0	57.2	58.4	58.0	58.5	51.9	45.5	42.4	45.7	48.7
Oct '19	58.2	57.9	58.5	57.1	59.2	52.2	42.9	40.4	41.7	45.1
Nov '19	60.1	60.0	60.7	58.4	61.5	54.6	43.6	41.6	41.9	45.8
Dec '19	62.1	62.6	61.9	60.8	63.1	56.0	42.5	43.2	41.8	43.5
Jan '20	59.6	59.8	59.4	58.9	60.4	51.2	43.2	41.3	42.3	45.3
Feb '20	58.6	59.3	58.8	57.8	58.6	52.1	44.1	44.6	42.9	46.0
Mar '20	49.2	52.2	47.8	47.3	49.6	51.2	41.6	36.1	39.1	44.4
May '20	25.3	19.5	19.6	32.0	30.1	42.6	31.1	22.6	22.7	29.8
Jun '20	35.7	34.3	32.5	37.4	38.5	46.7	38.5	27.0	29.6	34.5
Jul '20	43.3	46.1	43.4	41.1	42.7	50.9	38.7	31.0	32.5	38.9
Aug '20	44.7	47.4	44	44.3	43.1	53.5	43.1	34.2	36.6	40.7
Sep '20	41.9	43.7	39.5	41.6	43.1	51.2	42.3	32.8	33.5	39.3