



**Central Bank of Nigeria**

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

Statistics Department  
August 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.*

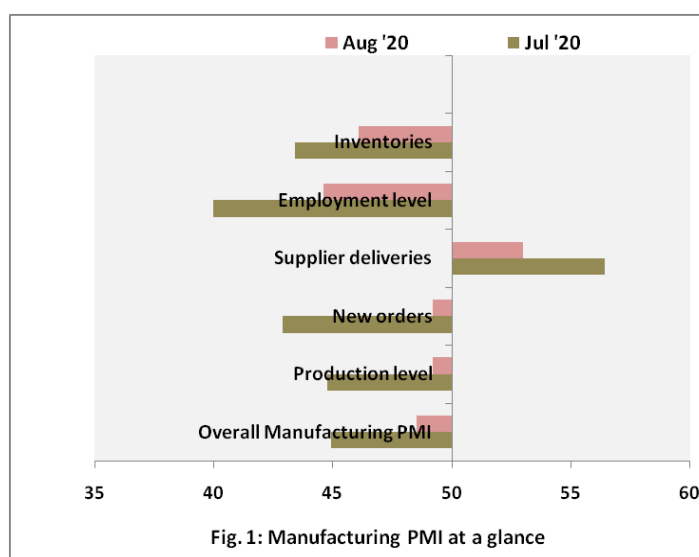
*A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while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

## 1.0 Introduction

The August 2020 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period August 10-14, 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 August 2020 PMI

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



The **Manufacturing PMI** in the month of August stood at 48.5 index points, indicating contraction in the manufacturing sector for the fourth consecutive months (Fig. 2 and Table 1). However, of the 14 subsectors surveyed, 6 subsectors reported expansion (above 50% threshold) in the review month in the following order: nonmetallic mineral products; cement; plastics & rubber products; transportation equipment; chemical & pharmaceutical products and textile, apparel, leather & footwear. The remaining 8 subsectors reported contraction in the following order: printing & related support activities; electrical equipment; petroleum & coal products; primary metal; furniture & related products; paper products; food, beverage & tobacco products; and fabricated metal products.

## 2.1 Production Level

At 49.2 points, the production level index for the manufacturing sector showed contraction in August 2020 and for the fourth consecutive months. Of the 14 subsectors surveyed, 5 subsectors recorded expansion in production level, 3 subsectors reported same level of production, while 6 subsectors recorded contraction in production in August 2020 (Fig. 3 and Table 2).

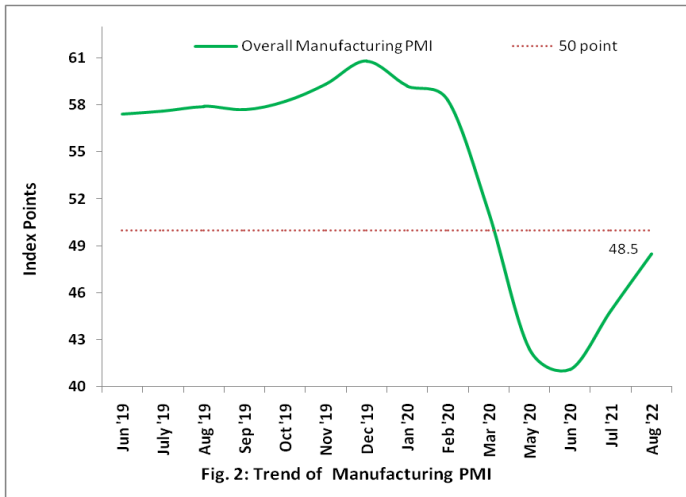


Fig. 2: Trend of Manufacturing PMI

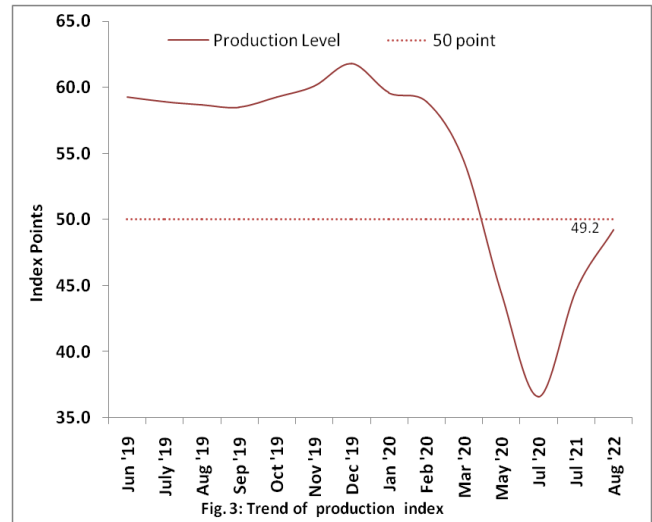


Fig. 3: Trend of production index

## 2.2 New Orders

At 49.2 points, the new orders index shows slower contraction in August 2020. Six subsectors reported expansion in new orders, 2 subsectors maintained same level, while 6 recorded contraction in the review month (Fig. 4 and Table 3).

## 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 53.0 points in August 2020, indicating faster supplier delivery time for the fourth time. Seven of the 14 subsectors recorded improved suppliers' delivery time, 2 subsectors reported same level, while 5 sectors recorded slower delivery time in August 2020 (Fig. 5 and Table 4).

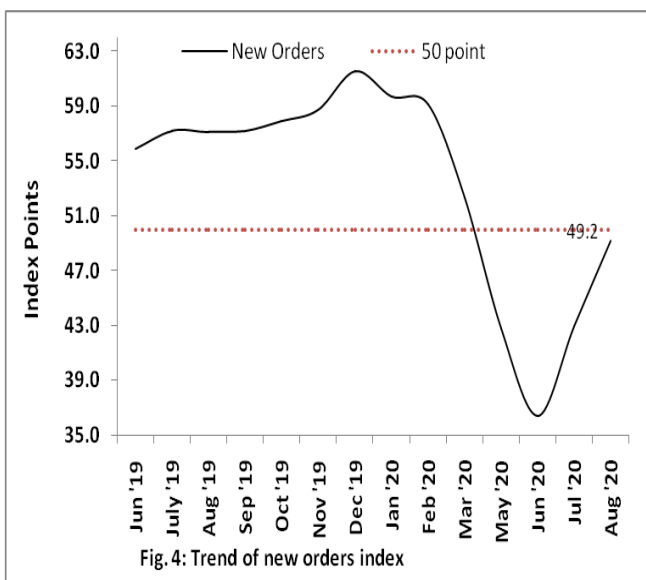


Fig. 4: Trend of new orders index

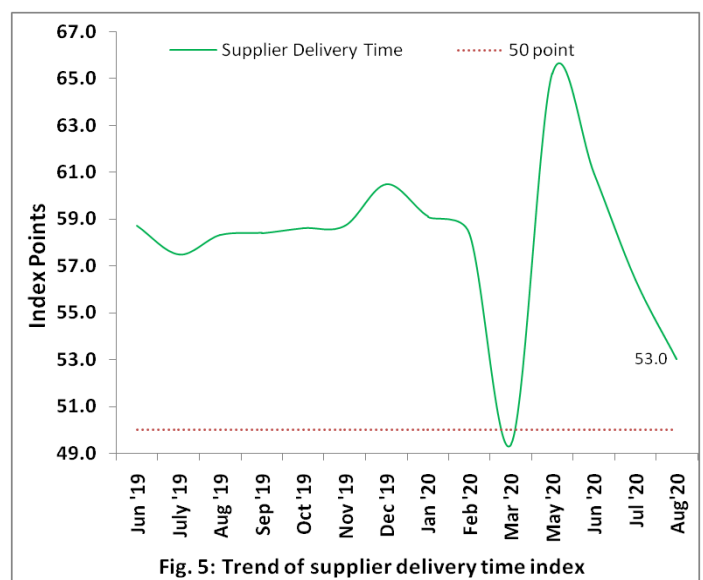


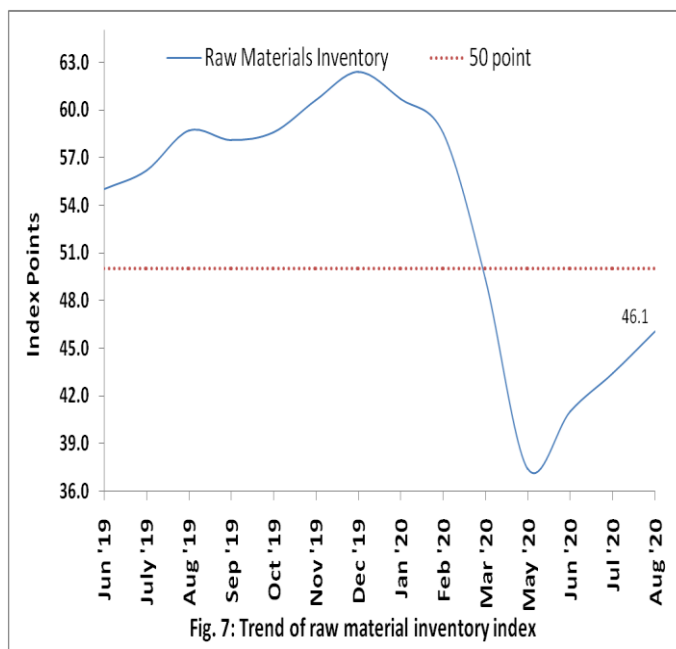
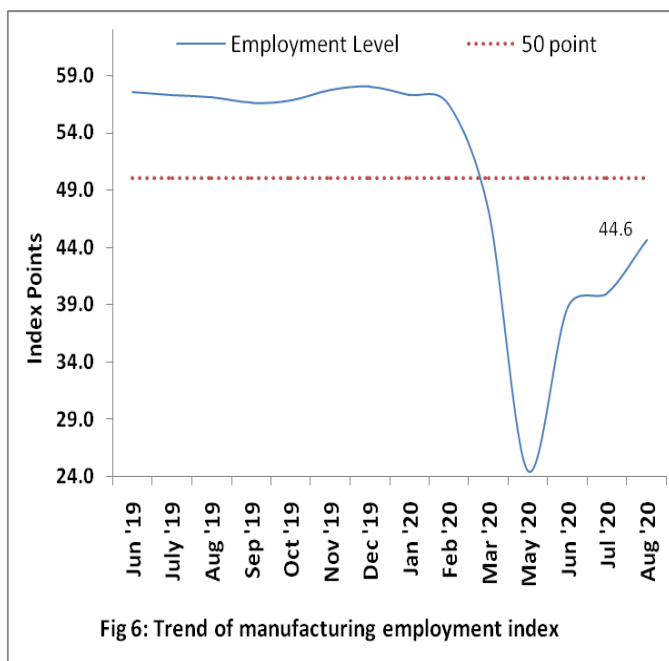
Fig. 5: Trend of supplier delivery time index

## 2.4 Employment Level

The employment level index for August 2020 stood at 44.6 points, indicating contraction in employment level for the fifth consecutive months. Of the 14 subsectors, 2 subsectors recorded expansion in employment level in the review month; 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 fifth time in August 2020. At 46.1 points, the index declined in the review month. Four of the 14 subsectors recorded growth in inventories, the petroleum and coal subsector reported same level of inventories, while the remaining 9 subsectors recorded lower raw material inventories in the review month (Fig. 7 and Table 6).



## 3.0 Non-Manufacturing PMI Report

The PMI for the **non-manufacturing** sector stood at 44.7 points in August 2020, indicating contraction in non-manufacturing activities for the fifth consecutive months. Of the 17 surveyed sub-sectors, only the utilities subsector reported same level, while the remaining 16 subsectors reported contracted in the following order: repair, maintenance/washing of motor vehicles; real estate rental & leasing; professional, scientific, & technical services; management of companies; electricity, gas, steam & air conditioning supply; educational services; health care & social assistance; finance & insurance; construction; arts, entertainment & recreation; transportation & warehousing; accommodation & food services; water supply, sewage & waste management; wholesale/retail trade; agriculture and Information & communication (Fig. 9 and Table 7).

### 3.1 Business Activity

At 47.4 points, the business activity index declined for the fourth consecutive month, indicating contraction in non-manufacturing business activity in August 2020. Five out of the 17 subsectors reported growth in business activities (above 50% threshold) in the review month; 3 subsectors reported same level, while the remaining 9 subsectors recorded decline in business activity in the review month (Fig. 10 Table 8).

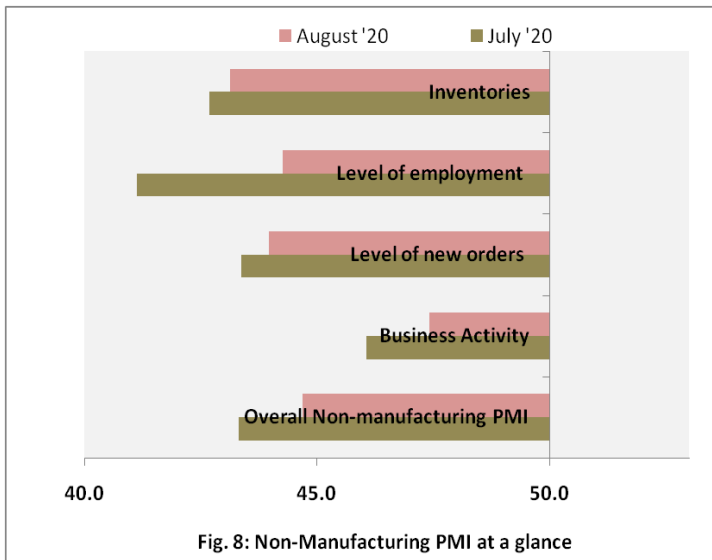


Fig. 8: Non-Manufacturing PMI at a glance

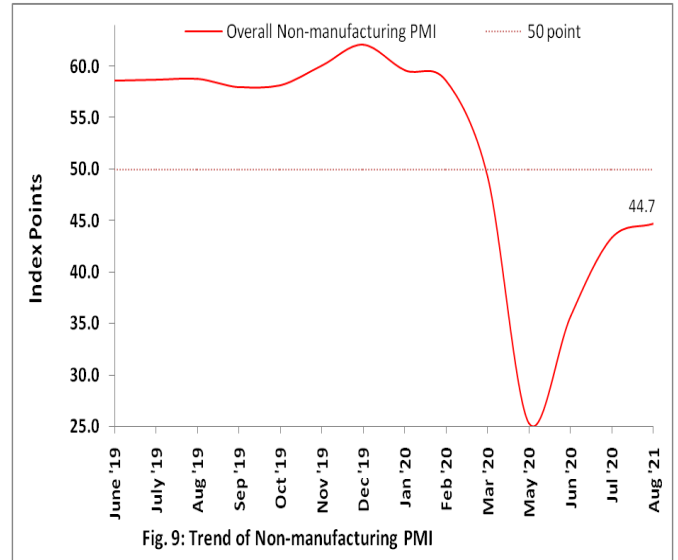


Fig. 9: Trend of Non-manufacturing PMI

### 3.2 New Orders

At 44.0 points, new orders index declined for the fifth time in August 2020. Three of the 17 subsectors reported growth in new order (above 50% threshold) in the review month, 2 sectors reported same level, while the remaining 12 subsectors recorded decline in new orders in the review month (Fig. 11 Table 9).

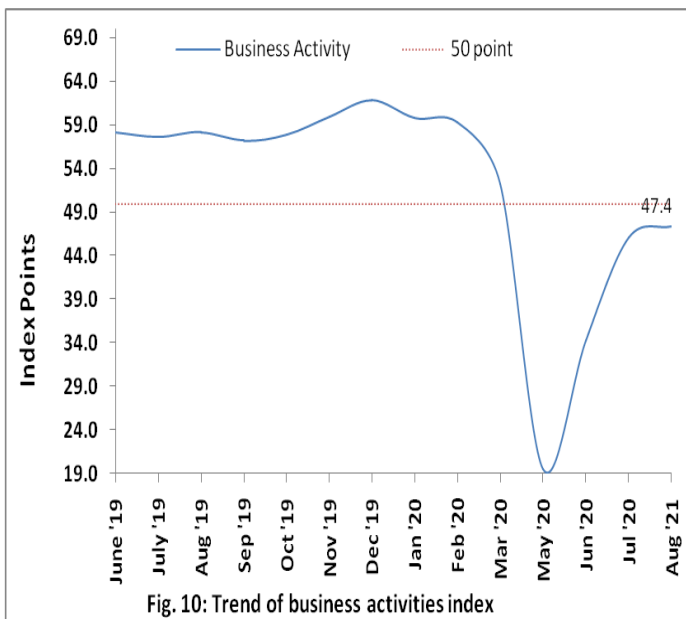


Fig. 10: Trend of business activities index

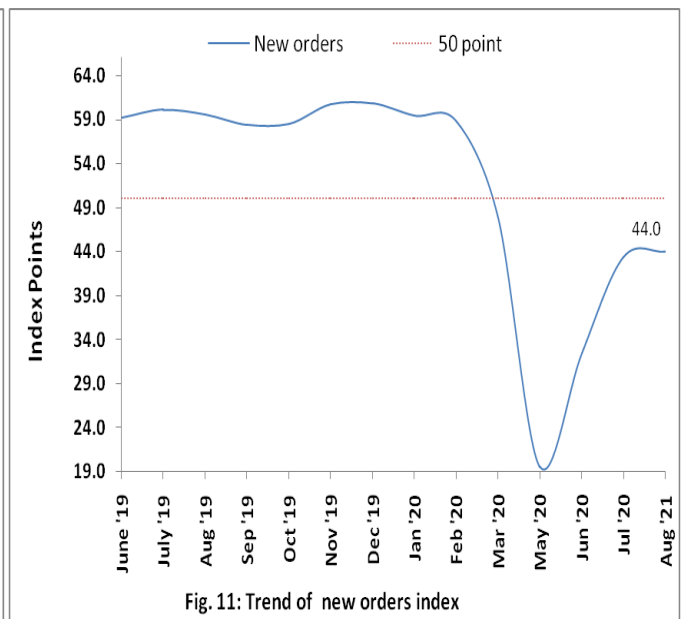


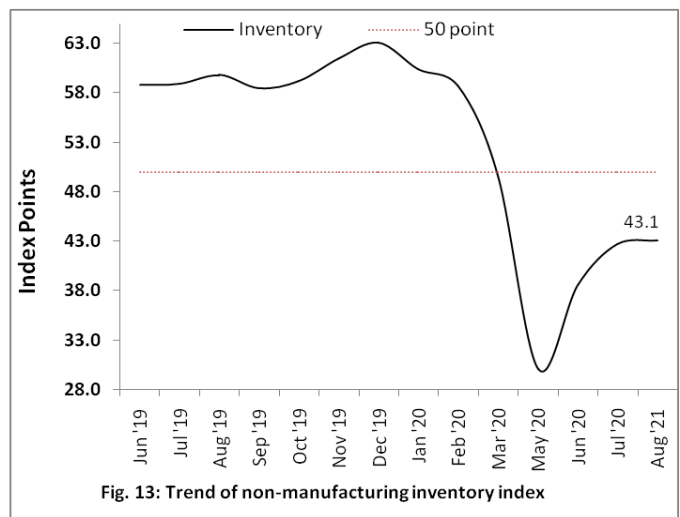
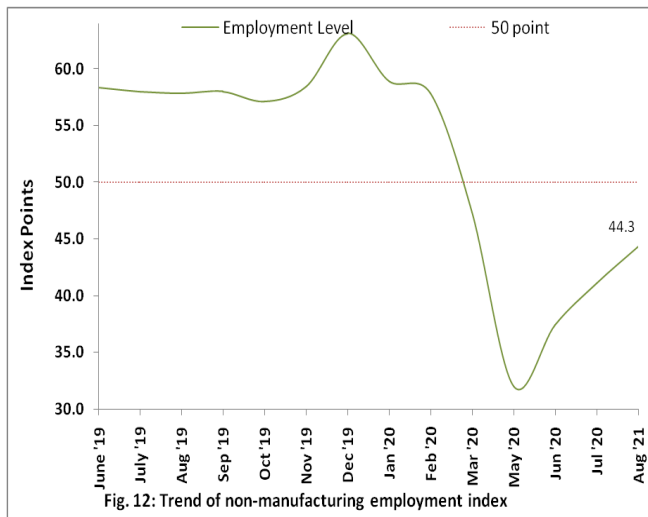
Fig. 11: Trend of new orders index

### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 44.3 points, indicating decline in employment level in August 2020. Utilities subsector recorded same level of employment, while the remaining 16 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 fifth consecutive month. This indicates reduced inventories in the review period. The transport & warehousing subsector reported growth in inventory; the utilities sector reported same level of inventories, while the remaining 15 subsectors recorded decline in inventories in the review period (Fig. 13, Table 11).



## APPENDICES

Table 1: Details of Overall Manufacturing PMI

Index	Jul 2020 Index*	Aug 2020 Index*	Direction	Difference	Rate of Change	Trend** (Months)
Composite PMI \1	44.9	48.5	Declining	3.6	Slower	4
Production level	44.7	49.2	Declining	4.5	Slower	4
New orders	42.9	49.2	Declining	6.3	Slower	4
Supplier delivery time	56.4	53.0	Growing	-3.4	Slower	4
Employment level	40.0	44.6	Declining	4.6	Slower	5
Raw materials/WIP Inventory	43.4	46.1	Declining	2.7	Slower	5
New Export Orders	29.1	31.8	Declining	2.7	Slower	65
Output Prices	58.5	58.4	Growing	-0.1	Slower	55
Input Prices	67.4	66.8	Growing	-0.6	Slower	73
Quantity of Purchases	39.6	47.7	Declining	8.1	Slower	4
Outstanding Business/Backlog of Work	39.0	41.1	Declining	2.1	Slower	32
Stock of Finished Goods	46.2	45.6	Declining	-0.6	Faster	4
<b>Manufacturing Sub-Sectors</b>						
Cement	48.6	64.4	Growing	15.8	From Contraction	1
Chemical & pharmaceutical products	46.2	52.2	Growing	6.0	From Contraction	1
Electrical equipment	46.4	33.3	Declining	-13.1	Faster	2
Fabricated metal products	43.9	48.0	Declining	4.1	Slower	4
Food, beverage & tobacco products	45.3	47.9	Declining	2.6	Slower	4
Furniture & related products	46.3	43.3	Declining	-3.0	Faster	4
Nonmetallic mineral products	50.0	66.0	Growing	16.0	From Stationary	1
Paper products	44.7	44.4	Declining	-0.3	Faster	2
Petroleum & coal products	47.5	40.0	Declining	-7.5	Faster	2
Plastics & rubber products	46.7	55.2	Growing	8.5	From Contraction	1
Primary metal	40.0	40.8	Declining	0.8	Slower	13
Printing & related support activities	27.1	32.8	Declining	5.7	Slower	6
Textile, apparel, leather & footwear	48.1	51.6	Growing	3.5	From Contraction	1
Transportation equipment	68.3	53.8	Growing	-14.5	Slower	3

\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	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
PRODUCTION PMI	44.7	49.2	Declining	4.5	Slower	4
Cement	44.4	66.7	Growing	22.3	From Contraction	1
Chemical & pharmaceutical products	43.6	55.3	Growing	11.7	From Contraction	1
Electrical equipment	50.0	25.0	Declining	-25.0	From Stationary	1
Fabricated metal products	44.1	45.2	Declining	1.1	Slower	4
Food, beverage & tobacco products	48.6	50.5	Growing	1.9	From Contraction	1
Furniture & related products	41.3	40.9	Declining	-0.4	Faster	4
Nonmetallic mineral products	50.0	76.9	Growing	26.9	From Stationary	1
Paper products	50.0	42.9	Declining	-7.1	From Stationary	1
Petroleum & coal products	50.0	50.0	Stationary	0.0	Flat	4
Plastics & rubber products	43.8	56.3	Growing	12.6	From Contraction	1
Primary metal	41.7	33.3	Declining	-8.4	Faster	5
Printing & related support activities	19.0	27.5	Declining	8.5	Slower	7
Textile, apparel, leather & footwear	45.0	50.0	Stationary	5.0	From Contraction	1
Transportation equipment	83.3	50.0	Stationary	-33.3	From Expansion	1

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

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	42.9	49.2	Declining	6.3	Slower	4
Cement	50.0	72.2	Growing	22.2	From Stationary	1
Chemical & pharmaceutical products	47.4	55.4	Growing	8.0	From Contraction	1
Electrical equipment	50.0	25.0	Declining	-25.0	From Stationary	1
Fabricated metal products	41.2	45.0	Declining	3.8	Slower	4
Food, beverage & tobacco products	43.6	49.1	Declining	5.5	Slower	4
Furniture & related products	44.0	34.1	Declining	-9.9	Faster	4
Nonmetallic mineral products	52.8	73.1	Growing	20.3	Faster	3
Paper products	44.4	57.1	Growing	12.7	From Contraction	1
Petroleum & coal products	50.0	50.0	Stationary	0.0	Flat	3
Plastics & rubber products	46.9	55.9	Growing	9.0	From Contraction	1
Primary metal	25.0	41.7	Declining	16.7	Slower	3
Printing & related support activities	14.3	30.0	Declining	15.7	Slower	7
Textile, apparel, leather & footwear	45.0	54.5	Growing	9.5	From Contraction	1
Transportation equipment	83.3	50.0	Stationary	-33.3	From Expansion	1

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

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	56.4	53.0	Growing	-3.4	Slower	4
Cement	61.1	44.4	Declining	-16.7	From Expansion	1
Chemical & pharmaceutical products	56.9	48.7	Declining	-8.2	From Expansion	1
Electrical equipment	58.3	58.3	Growing	0.0	Flat	6
Fabricated metal products	56.1	60.3	Growing	4.2	Faster	4
Food, beverage & tobacco products	51.4	49.5	Declining	-1.9	From Expansion	1
Furniture & related products	68.0	61.4	Growing	-6.6	Slower	4
Nonmetallic mineral products	61.1	57.7	Growing	-3.4	Slower	27
Paper products	44.4	43.8	Declining	-0.6	Faster	3
Petroleum & coal products	50.0	50.0	Stationary	0.0	Flat	6
Plastics & rubber products	40.6	52.9	Growing	12.3	From Contraction	1
Primary metal	58.3	50.0	Stationary	-8.3	From Expansion	1
Printing & related support activities	71.4	62.5	Growing	-8.9	Slower	13
Textile, apparel, leather & footwear	65.8	59.5	Growing	-6.3	Slower	4
Transportation equipment	50.0	25.0	Declining	-25.0	From Stationary	1



**Table 5: Details of Employment Level PMI**

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	40.0	44.6	Declining	4.6	Slower	5
Cement	44.4	66.7	Growing	22.3	From Contraction	1
Chemical & pharmaceutical products	38.5	46.1	Declining	7.6	Slower	5
Electrical equipment	30.0	50.0	Stationary	20.0	From Contraction	1
Fabricated metal products	39.4	41.7	Declining	2.3	Slower	5
Food, beverage & tobacco products	41.3	46.7	Declining	5.4	Slower	4
Furniture & related products	36.0	42.7	Declining	6.7	Slower	5
Nonmetallic mineral products	36.1	45.5	Declining	9.4	Slower	5
Paper products	44.4	50.0	Stationary	5.6	From Contraction	1
Petroleum & coal products	50.0	31.3	Declining	-18.7	From Stationary	1
Plastics & rubber products	50.0	0.0	Declining	-50.0	From Stationary	1
Primary metal	41.7	58.8	Growing	17.1	From Contraction	1
Printing & related support activities	26.2	41.7	Declining	15.5	Slower	8
Textile, apparel, leather & footwear	47.4	22.5	Declining	-24.9	Faster	5
Transportation equipment	50.0	50.0	Stationary	0.0	Flat	4

**Table 6: Details of Raw Materials Inventory PMI**

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	43.4	46.1	Declining	2.7	Slower	5
Cement	44.4	61.1	Growing	16.7	From Contraction	1
Chemical & pharmaceutical products	48.7	52.7	Growing	4.0	From Contraction	1
Electrical equipment	41.7	25.0	Declining	-16.7	Faster	2
Fabricated metal products	42.6	48.4	Declining	5.8	Slower	5
Food, beverage & tobacco products	41.4	45.5	Declining	4.1	Slower	4
Furniture & related products	54.0	45.5	Declining	-8.5	From Expansion	1
Nonmetallic mineral products	52.8	61.5	Growing	8.7	Faster	2
Paper products	33.3	37.5	Declining	4.2	Slower	5
Petroleum & coal products	25.0	50.0	Stationary	25.0	From Contraction	1
Plastics & rubber products	56.3	47.1	Declining	-9.2	From Expansion	1
Primary metal	50.0	41.7	Declining	-8.3	From Stationary	1
Printing & related support activities	21.4	30.0	Declining	8.6	Slower	4
Textile, apparel, leather & footwear	40.0	38.1	Declining	-1.9	Faster	5
Transportation equipment	50.0	75.0	Growing	25.0	From Stationary	1

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

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
Composite PMI \1	43.3	44.7	Declining	1.4	Slower	5
Business Activity	46.1	47.4	Declining	1.3	Slower	4
Level of new orders/customers/incoming business	43.4	44.0	Declining	0.6	Slower	5
Employment Level	41.1	44.3	Declining	3.2	Slower	5
Inventories	42.7	43.1	Declining	0.4	Slower	5
Average price of Inputs (volume weighted)	50.9	53.5	Growing	2.6	Faster	2
Level of outstanding business/ Backlog of work	38.7	43.1	Declining	4.4	Slower	73
New Exports orders	31.0	34.2	Declining	3.2	Slower	73
Imports	32.5	36.6	Declining	4.1	Slower	73
Inventory (sentiments)	38.9	40.7	Declining	1.8	Slower	73
<b>Non-manufacturing sub-sectors</b>			Declining			
Accommodation & food services	43.6	45.7	Declining	2.1	Slower	5
Agriculture	44.3	48.7	Declining	4.4	Slower	5
Arts, Entertainment & Recreation	65.3	45.3	Declining	-20.0	From Expansion	1
Construction	45.7	45.0	Declining	-0.7	Faster	5
Educational services	40.3	43.6	Declining	3.3	Slower	5
Electricity, gas, steam & air conditioning supply	46.0	42.3	Declining	-3.7	Faster	5
Finance & insurance	38.5	44.6	Declining	6.1	Slower	5
Health care & social assistance	46.0	44.0	Declining	-2.0	Faster	4
Information & communication	45.2	49.1	Declining	3.9	Slower	4
Management of companies	45.0	39.9	Declining	-5.1	Faster	4
Professional, scientific, & technical services	37.3	39.8	Declining	2.5	Slower	6
Real estate rental & leasing	32.8	39.1	Declining	6.3	Slower	4
Repair, Maintenance/Washing Of Motor Vehicles...	55.3	38.1	Declining	-17.2	From Expansion	4
Transportation & warehousing	43.8	45.4	Declining	1.6	Slower	1
Utilities	31.3	50.0	Stationary	18.7	From Contraction	1
Water supply, sewage & waste management	43.1	46.1	Declining	3.0	Slower	4
Wholesale/Retail trade	43.1	47.2	Declining	4.1	Slower	4

\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	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	46.1	47.4	Declining	1.3	Slower	4
Accommodation & food services	46.2	44.1	Declining	-2.1	Faster	5
Agriculture	46.4	57.3	Growing	10.9	From Contraction	1
Arts, Entertainment & Recreation	77.8	62.5	Growing	-15.3	Slower	2
Construction	43.9	50.0	Stationary	6.1	From Contraction	1
Educational services	40.6	44.4	Declining	3.8	Slower	5
Electricity, gas, steam & air conditioning supply	55.0	50.0	Stationary	-5.0	From Expansion	1
Finance & insurance	39.7	48.4	Declining	8.7	Slower	4
Health care & social assistance	52.1	43.5	Declining	-8.6	From Expansion	1
Information & communication	45.2	51.9	Growing	6.7	From Contraction	1
Management of companies	58.3	45.0	Declining	-13.3	From Expansion	1
Professional, scientific, & technical services	43.5	42.3	Declining	-1.2	Faster	4
Real estate rental & leasing	44.2	43.2	Declining	-1.0	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles.	30.0	37.5	Declining	7.5	Slower	4
Transportation & warehousing	60.5	40.6	Declining	-19.9	From Expansion	1
Utilities	41.7	50.0	Stationary	8.3	From Contraction	1
Water supply, sewage & waste management	31.3	57.1	Growing	25.8	From Contraction	1
Wholesale/Retail trade	47.9	53.8	Growing	5.9	From Contraction	1

Table 9: Details of New Orders PMI

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	43.4	44.0	Declining	0.6	Slower	5
Accommodation & food services	43.0	44.1	Declining	1.1	Slower	5
Agriculture	43.8	51.2	Growing	7.4	From Contraction	1
Arts, Entertainment & Recreation	66.7	56.3	Growing	-10.4	Slower	2
Construction	43.9	47.0	Declining	3.1	Slower	5
Educational services	40.8	43.0	Declining	2.2	Slower	5
Electricity, gas, steam & air conditioning supply	52.5	40.0	Declining	-12.5	From Expansion	1
Finance & insurance	34.7	39.1	Declining	4.4	Slower	5
Health care & social assistance	47.9	44.2	Declining	-3.7	Faster	4
Information & communication	48.4	50.0	Stationary	1.6	From Contraction	1
Management of companies	50.0	35.0	Declining	-15.0	From Stationary	1
Professional, scientific, & technical services	33.3	40.4	Declining	7.1	Slower	4
Real estate rental & leasing	43.2	38.2	Declining	-5.0	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles..	30.0	30.8	Declining	0.8	Slower	4
Transportation & warehousing	57.9	43.3	Declining	-14.6	From Expansion	1
Utilities	50.0	50.0	Stationary	0.0	Flat	2
Water supply, sewage & waste management	37.5	57.1	Growing	19.6	From Contraction	1
Wholesale/Retail trade	45.1	49.4	Declining	4.3	Slower	5

Table 10: Details of Employment Level PMI

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	41.1	44.3	Declining	3.2	Slower	5
Accommodation & food services	43.0	48.1	Declining	5.1	Slower	5
Agriculture	39.3	41.5	Declining	2.2	Slower	5
Arts, Entertainment & Recreation	61.1	31.3	Declining	-29.8	From Expansion	1
Construction	46.3	40.9	Declining	-5.4	Faster	5
Educational services	42.7	43.2	Declining	0.5	Slower	5
Electricity, gas, steam & air conditioning supply	35.0	47.6	Declining	12.6	Slower	5
Finance & insurance	40.1	46.7	Declining	6.6	Slower	5
Health care & social assistance	41.1	47.8	Declining	6.7	Slower	5
Information & communication	41.9	46.4	Declining	4.5	Slower	5
Management of companies	41.7	35.0	Declining	-6.7	Faster	4
Professional, scientific, & technical services	34.8	38.5	Declining	3.7	Slower	6
Real estate rental & leasing	40.7	39.7	Declining	-1.0	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles..	36.4	42.3	Declining	5.9	Slower	4
Transportation & warehousing	50.0	44.1	Declining	-5.9	From Stationary	1
Utilities	50.0	50.0	Stationary	0.0	Flat	2
Water supply, sewage & waste management	25.0	28.6	Declining	3.6	Slower	4
Wholesale/Retail trade	36.6	41.7	Declining	5.1	Slower	4

**Table 10: Details of Inventory PMI**

Index	Jul 2020 Index	Aug 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
INVENTORY PMI	42.7	43.1	Declining	0.4	Slower	5
Accommodation & food services	42.1	46.5	Declining	4.4	Slower	5
Agriculture	47.6	44.9	Declining	-2.7	Faster	5
Arts, Entertainment & Recreation	55.6	31.3	Declining	-24.3	From Expansion	1
Construction	48.7	42.2	Declining	-6.5	Faster	4
Educational services	37.0	43.8	Declining	6.8	Slower	4
Electricity, gas, steam & air conditioning supply	41.7	31.6	Declining	-10.1	Faster	4
Finance & insurance	39.5	44.4	Declining	4.9	Slower	5
Health care & social assistance	43.1	40.4	Declining	-2.7	Faster	5
Information & communication	45.2	48.1	Declining	2.9	Slower	4
Management of companies	30.0	44.4	Declining	14.4	Slower	4
Professional, scientific, & technical services	37.5	38.0	Declining	0.5	Slower	4
Public administration	50.0	25.0	Declining	-25.0	From Stationary	1
Real estate rental & leasing	46.4	35.1	Declining	-11.3	Faster	4
Repair, Maintenance/Washing Of Motor Vehicles	35.0	41.7	Declining	6.7	Slower	4
Transportation & warehousing	52.9	53.3	Growing	0.4	Faster	2
Utilities	33.3	50.0	Stationary	16.7	From Contraction	1
Water supply, sewage & waste management	31.3	41.7	Declining	10.4	Slower	4
Wholesale/Retail trade	42.8	43.8	Declining	1.0	Slower	5

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

**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