

## **Central Bank of Nigeria**

# Purchasing Managers' Index (PMI) Survey Report

Statistics Department
December 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.

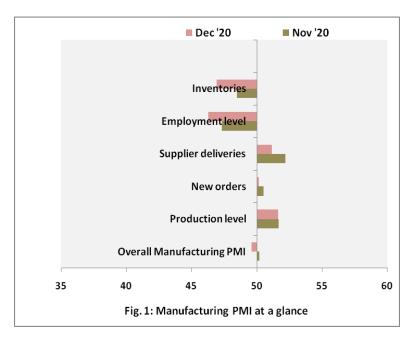
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those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

#### 1.0 Introduction

The December 2020 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period December 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 December 2020 PMI

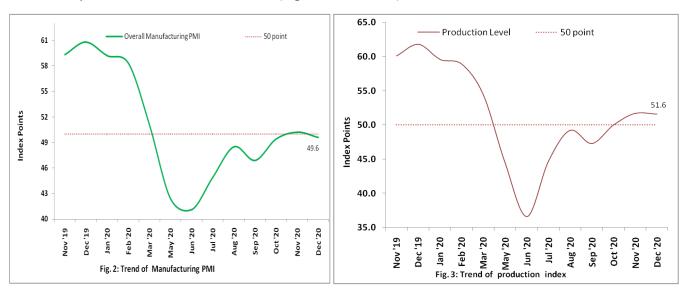
In December 2020, suppliers' delivery time was faster, new orders and production level increased while employment level and raw materials inventories contracted.



The Manufacturing PMI in the month of December stood at 49.6 index points, indicating a contraction from the expansionary level recorded in the month of November 2020 (Fig. 2 and Table 1). Of the 14 surveyed subsectors, 4 subsectors reported expansion (above 50% threshold) in the review month in the following order: Transportation equipment, Nonmetallic mineral products, Paper products and Food, beverage & tobacco products. Textile, apparel, leather & footwear subsector remained stationary while the remaining 9 subsectors reported contractions in the following order: Primary metal, Petroleum & coal products; Cement, Electrical equipment, Fabricated metal products, Printing & related support activities, Plastics & rubber products; Chemical & pharmaceutical products and Furniture & related products.

#### 2.1 Production Level

The December 2020 production level index for the manufacturing sector stood at 51.6 points, indicating expansion for two consecutive months. Of the 14 subsectors surveyed, 6 subsectors recorded increased production level, 4 subsectors reported stationary level of production, while 4 subsectors recorded declines in production in December 2020 (Fig. 3 and Table 2).

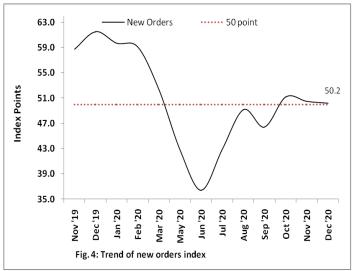


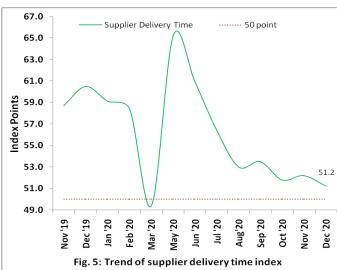
#### 2.2 New Orders

The new orders expanded for the third consecutive months in the month of December. The index stood at 50.2 points in December 2020. Five subsectors reported expansion in new orders, 2 subsectors remained stationary while the remaining 7 recorded contraction in the review month (Fig. 4 and Table 3).

#### 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 51.2 points in December 2020, this indicates that supplier delivery time was faster for the eighth consecutive months. Eight of the 14 subsectors recorded improved suppliers' delivery time, 3 subsectors remained stationary, while 3 subsectors recorded slower delivery time (Fig. 5 and Table 4).



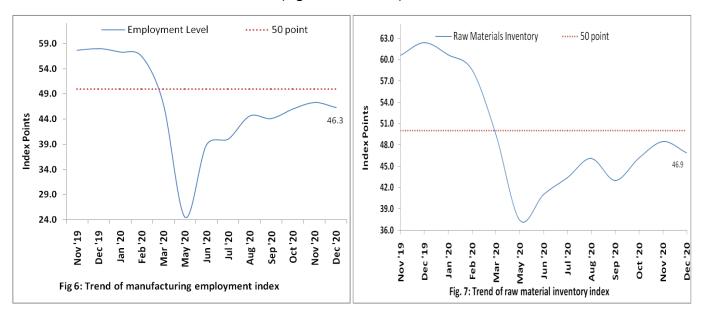


#### 2.4 Employment Level

The employment level index for December 2020 stood at 46.3 points, indicating contraction in employment level for the ninth consecutive months. Of the 14 subsectors, only transportation equipment subsector recorded growth in employment level. Four subsectors recorded stationary employment level while the remaining nine subsectors recorded lower employment level in the review month (Fig. 6 and Table 5).

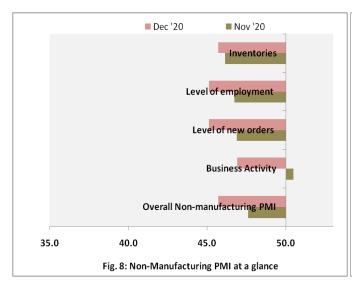
#### 2.5 Raw material Inventories

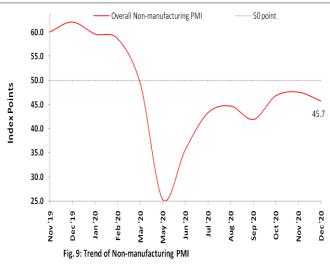
The manufacturing sector inventories index contracted for the ninth consecutive months in December 2020. At 46.9 points, the index declined in the review month. Four of the 14 subsectors recorded growth in inventories, 2 subsectors remained stationary while the remaining 8 subsectors recorded lower raw material inventories in the review month (Fig. 7 and Table 6).



#### 3.0 Non-Manufacturing PMI Report

PMI for the non-manufacturing sector stood at 45.7 points in December 2020, indicating contraction in Non-manufacturing PMI for the ninth consecutive months. Of the 17 surveyed sub-sectors, 5 subsectors reported growth in the following order: Arts, Entertainment & Recreation; Water supply, sewage & waste management; Electricity, gas, steam & air conditioning supply; Educational services and Professional, scientific & technical services. Twelve subsectors reported declines in the following order: Management of companies; Utilities; Transportation & warehousing; Real estate rental & leasing; Construction; Finance & insurance; Agriculture; Wholesale/Retail trade; Information & communication; Repair, Maintenance/Washing Of Motor Vehicles...; Health care & social assistance and Accommodation & food services (Fig. 9 and Table 7).





#### 3.1 Business Activity

At 46.9 points, the business activity index for the non-manufacturing sector contracted from the expansionary level recorded in the month of November 2020. Six out of the 17 subsectors reported expansion in business activities (above 50% threshold). Information & communication subsector reported stationary level of business activities while the remaining 10 subsectors recorded contraction in business activity in the review month (Fig. 10 Table 8).

#### 3.2 New Orders

At 45.1 points, new orders index declined for the ninth consecutive months in December 2020. Four of the 17 subsectors reported growth in new order (above 50% threshold), 2 subsectors reported stationary levels, while the remaining 11 subsectors recorded decline in new orders in the review month (Fig. 11).

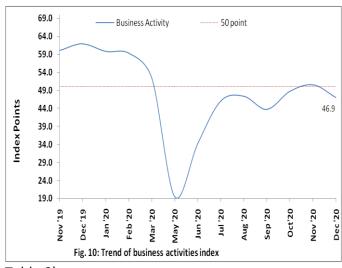




Table 9).

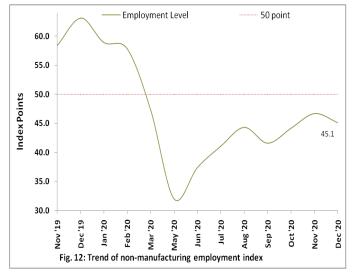
#### 3.3 Employment Level

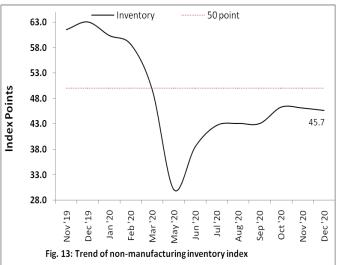
The employment level Index for the non-manufacturing sector in the month of December 2020 stood at 45.1 points, indicating contraction in employment level for the ninth consecutive months. Only Electricity, gas, steam & air conditioning supply subsector reported growth in employment level (above 50%)

threshold), 2 subsectors reported stationary level, while the remaining 14 subsectors recorded decline in new orders in the review month (Fig. 12 Table 10).

### 3.4 Non-manufacturing Inventory

At 45.7 points, non-manufacturing inventory index declined for the ninth consecutive months. This indicates reduced inventories in the review period. Two subsectors reported growth in inventory, while 4 subsectors recorded stationary level and the remaining 11 subsectors recorded decline in inventories in the review period (Fig. 13, Table 11).





APPENDICES

Table 1: Details of Overall Manufacturing PMI

Index	Nov 2020 Index*	Dec 2020 Index*	Direction	Difference	Rate of Change	Trend** (Months)
Composite PMI \1	50.2	49.6	Declining	-0.6	From Expansion	1
Production level	51.7	51.6	Growing	-0.1	Slower	2
New orders	50.5	50.2	Growing	-0.3	Slower	3
Supplier delivery time	52.2	51.2	Growing	-1.0	Slower	8
Employment level	47.3	46.3	Declining	-1.0	Faster	9
Raw materials/WIP Inventory	48.5	46.9	Declining	-1.6	Faster	9
New Export Orders	35.4	33.1	Declining	-2.2	Faster	69
Output Prices	60.1	61.4	Growing	1.4	Faster	59
Input Prices	71.7	73.0	Growing	1.3	Faster	77
Quantity of Purchases	51.7	49.0	Declining	-2.7	From Expansion	1
Outstanding Business/Backlog of Work	43.3	41.0	Declining	-2.2	Faster	36
Stock of Finished Goods	46.6	42.7	Declining	-3.9	Faster	8
Manufacturing Sub-Sectors						
Cement	52.6	43.8	Declining	-8.8	From Expansion	3
Chemical & pharmaceutical products	45.1	49.7	Declining	4.6	Slower	2
Electrical equipment	40.5	44.5	Declining	4.0	Slower	2
Fabricated metal products	49.9	45.7	Declining	-4.1	Faster	8
Food, beverage & tobacco products	50.1	51.3	Growing	1.3	Faster	2
Furniture & related products	55.8	49.8	Declining	-6.0	From Expansion	1
Nonmetallic mineral products	59.4	54.8	Growing	-4.6	Slower	2
Paper products	49.6	53.3	Growing	3.7	From Contraction	1
Petroleum & coal products	41.3	38.8	Declining	-2.5	Faster	6
Plastics & rubber products	50.3	48.6	Declining	-1.7	From Expansion	1
Primary metal	48.7	35.9	Declining	-12.8	Faster	17
Printing & related support activities	50.1	48.4	Declining	-1.6	From Expansion	1
Textile, apparel, leather & footwear	50.6	50.0	Stationary	-0.6	From Expansion	1
Transportation equipment	64.2	72.5	Growing	8.3	Faster	7

<sup>&</sup>quot;\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.

**Table 2: Details of Production PMI** 

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
PRODUCTION PMI	51.7	51.6	Growing	-0.1	Slower	2
Cement	62.5	38.9	Declining	-23.6	From Expansion	1
Chemical & pharmaceutical products	44.6	55.1	Growing	10.5	From Contraction	1
Electrical equipment	40.0	40.0	Declining	0.0	Flat	2
Fabricated metal products	55.8	45.2	Declining	-10.6	From Expansion	1
Food, beverage & tobacco products	49.5	54.2	Growing	4.7	From Contraction	1
Furniture & related products	58.7	50.0	Stationary	-8.7	From Expansion	1
Nonmetallic mineral products	69.2	54.2	Growing	-15.1	Slower	3
Paper products	57.1	66.7	Growing	9.5	Faster	4
Petroleum & coal products	50.0	50.0	Stationary	0.0	Flat	2
Plastics & rubber products	44.4	50.0	Stationary	5.6	From Contraction	1
Primary metal	50.0	28.6	Declining	-21.4	From Stationary	1
Printing & related support activities	54.3	52.1	Growing	-2.3	Slower	3
Textile, apparel, leather & footwear	50.0	50.0	Stationary	0.0	Flat	2
Transportation equipment	66.7	75.0	Growing	8.3	Faster	2

<sup>\*</sup>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. "

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

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	50.5	50.2	Growing	-0.3	Slower	3
Cement	50.0	38.9	Declining	-11.1	From Stationary	1
Chemical & pharmaceutical products	38.2	47.4	Declining	9.3	Slower	4
Electrical equipment	30.0	40.0	Declining	10.0	Slower	2
Fabricated metal products	44.2	40.3	0.3 Declining -3.9		Faster	2
Food, beverage & tobacco products	52.4	55.0	Growing	2.6	Faster	2
Furniture & related products	58.7	54.0	Growing	-4.7	Slower	2
Nonmetallic mineral products	61.5	58.3	Growing	-3.2	Slower	2
Paper products	64.3	61.1	Growing	-3.2	Slower	5
Petroleum & coal products	50.0	25.0	Declining	-25.0	From Stationary	1
Plastics & rubber products	50.0	50.0	Stationary	0.0	Flat	2
Primary metal	43.8	21.4	Declining	-22.3	Faster	7
Printing & related support activities	54.5	45.8	Declining	-8.7	From Expansion	1
Textile, apparel, leather & footwear	52.3	50.0	Stationary	-2.3	From Expansion	1
Transportation equipment	83.3	75.0	Growing	-8.3	Slower	2

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

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	52.2	51.2	Growing	-1.0	Slower	8
Cement	27.8	50.0	Stationary	22.2	From Contraction	1
Chemical & pharmaceutical products	60.5	54.1	Growing	-6.5	Slower	2
Electrical equipment	50.0	70.0	Growing	20.0	From Stationary	1
Fabricated metal products	64.0	62.1	Growing	-1.9	Slower	2
Food, beverage & tobacco products	52.9	45.9	Declining	-7.0	From Expansion	1
Furniture & related products	47.8	48.1	Declining	0.3	Slower	2
Nonmetallic mineral products	50.0	50.0	Stationary	0.0	Flat	4
Paper products	35.7	33.3	Declining	-2.4	Faster	2
Petroleum & coal products	25.0	75.0	Growing	50.0	From Contraction	1
Plastics & rubber products	44.4	57.9	Growing	13.5	From Contraction	1
Primary metal	50.0	58.3	Growing	8.3	From Stationary	1
Printing & related support activities	45.7	50.0	Stationary	4.3 From Contraction		1
Textile, apparel, leather & footwear	63.6	56.3	Growing	-7.4	Slower	2
Transportation equipment	16.7	75.0	Growing	58.3	From Contraction	1

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

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	47.3	46.3	Declining	-1.0	Faster	9
Cement	55.6	43.8	Declining	-11.8	From Expansion	1
Chemical & pharmaceutical products	43.4	44.9	Declining	1.5	Slower	9
Electrical equipment	40.0	40.0	Declining	0.0	Flat	3
Fabricated metal products	46.2	43.5	Declining	-2.6	Faster	3
Food, beverage & tobacco products	46.6	48.2	Declining	1.6	Slower	8
Furniture & related products	52.2	50.0	Stationary	-2.2	From Expansion	1
Nonmetallic mineral products	46.2	50.0	Stationary	3.8	From Contraction	1
Paper products	35.7	38.9	Declining	3.2	Slower	2
Petroleum & coal products	25.0	0.0	Declining	-25.0	Faster	2
Plastics & rubber products	63.9	39.5	Declining	-24.4	From Expansion	1
Primary metal	56.3	50.0	Stationary	-6.3	From Expansion	1
Printing & related support activities	41.3	45.8	Declining	clining 4.5 Slower		2
Textile, apparel, leather & footwear	45.5	50.0	Stationary	ry 4.5 From Contraction		1
Transportation equipment	66.7	75.0	Growing	8.3	Faster	2

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

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	48.5	46.9	Declining	-1.6	Faster	9
Cement	66.7	61.1	Growing	-5.6	Slower	3
Chemical & pharmaceutical products	47.4	46.2	Declining	-1.2	Faster	4
Electrical equipment	60.0	40.0	Declining	-20.0	From Expansion	1
Fabricated metal products	38.5	43.3	Declining	4.9	Slower	2
Food, beverage & tobacco products	47.1	47.7	Declining	0.6	Slower	8
Furniture & related products	58.7	38.5	Declining	-20.2	From Expansion	1
Nonmetallic mineral products	69.2	62.5	Growing	-6.7	Slower	2
Paper products	35.7	55.6	Growing	19.8	From Contraction	1
Petroleum & coal products	50.0	75.0	Growing	25.0	From Stationary	1
Plastics & rubber products	47.2	44.7	Declining	-2.5	Faster	3
Primary metal	42.9	35.7	Declining	-7.1	Faster	3
Printing & related support activities	50.0	50.0	Stationary	0.0	Flat	2
Textile, apparel, leather & footwear	38.1	40.6	Declining	2.5	Slower	9
Transportation equipment	66.7	50.0	Stationary	-16.7	From Expansion	1

Table 7: Non-Manufacturing at a Glance

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
Composite PMI \1	47.6	45.7	Declining	-1.9	Faster	9
Business Activity	50.5	46.9	Declining	-3.6	From Expansion	1
Level of new orders/customers/incoming business	46.9	45.1	Declining	-1.8	Faster	9
Employment Level	46.7	45.1	Declining	-1.6	Faster	9
Inventories	46.1	45.7	Declining	-0.4	Faster	9
Average price of Inputs (volume weighted)	54.5	54.7	Growing	0.2	Faster	6
Level of outstanding business/ Backlog of work	43.2	43.4	Declining	0.3	Slower	77
New Exports orders	34.6	34.6	Declining	0.0	Faster	77
Imports	37.1	34.2	Declining	-2.9	Faster	77
Inventory (sentiments)	41.7	41.1	Declining	-0.5	Faster	77
Non-manufacturing sub-sectors						
Accommodation & food services	46.0	48.5	Declining	2.4	Slower	9
Agriculture	51.4	42.9	Declining	-8.5	From Expansion	1
Arts, Entertainment & Recreation	31.9	58.3	Growing	26.4	From Contraction	1
Construction	41.0	41.5	Declining	0.6	Slower	9
Educational services	48.1	50.5	Growing	2.5	From Contraction	1
Electricity, gas, steam & air conditioning supply	49.9	52.8	Growing	3.0	From Contraction	1
Finance & insurance	46.8	41.8	Declining	-4.9	Faster	2
Health care & social assistance	55.6	47.9	Declining	-7.8	From Expansion	1
Information & communication	46.8	44.7	Declining	-2.1	Faster	8
Management of companies	50.0	33.9	Declining	-16.1	From Stationary	1
Professional, scientific, & technical services	38.7	50.7	Growing	12.0	From Contraction	1
Real estate rental & leasing	45.5	40.0	Declining	-5.5	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles	42.3	46.1	Declining	3.8	Slower	8
Transportation & warehousing	58.1	38.9	Declining	-19.2	From Expansion	1
Utilities	43.8	37.5	Declining	-6.3	Faster	4
Water supply, sewage & waste management	44.3	54.5	Growing	10.2	From Contraction	1
Wholesale/Retail trade	47.9	43.8	Declining	-4.1	Faster	8

<sup>\1</sup> 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	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	50.5	46.9	Declining	-3.6	From Expansion	1
Accommodation & food services	48.7	48.7	Declining	0.0	Slower	10
Agriculture	51.2	42.1	Declining	-9.1	From Expansion	1
Arts, Entertainment & Recreation	27.8	62.5	Growing	34.7	From Contraction	1
Construction	44.6	38.2	Declining	-6.4	Faster	5
Educational services	51.1	54.4	Growing	3.4	Faster	2
Electricity, gas, steam & air conditioning supply	47.6	56.8	Growing	9.2	From Contraction	1
Finance & insurance	51.8	43.7	Declining	-8.1	From Expansion	1
Health care & social assistance	58.5	54.2	Growing	-4.2	Slower	3
Information & communication	52.0	50.0	Stationary	-2.0	From Expansion	1
Management of companies	50.0	35.7	Declining	-14.3	From Stationary	1
Professional, scientific, & technical services	33.3	55.6	Growing	22.2	From Contraction	1
Real estate rental & leasing	50.0	39.3	Declining	-10.7	From Stationary	1
Repair, Maintenance/Washing Of Motor Vehicles	42.9	42.3	Declining	-0.5	Faster	9
Transportation & warehousing	64.7	32.4	Declining	-32.4	From Expansion	1
Utilities	50.0	40.0	Declining	-10.0	From Stationary	1
Water supply, sewage & waste management	55.0	59.1	Growing	4.1	Faster	2
Wholesale/Retail trade	51.5	42.8	Declining	-8.7	From Expansion	1

**Table 9: Details of New Orders PMI** 

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	46.9	45.1	Declining	-1.8	Faster	9
Accommodation & food services	43.0	49.2	Declining	6.1	Slower	9
Agriculture	48.8	39.2	Declining	-9.6	Faster	2
Arts, Entertainment & Recreation	35.0	66.7	Growing	31.7	From Contraction	1
Construction	36.5	39.2	Declining	2.7	Slower	9
Educational services	45.7	52.3	Growing	6.6	From Contraction	1
Electricity, gas, steam & air conditioning supply	52.4	50.0	Stationary	-2.4	From Expansion	1
Finance & insurance	46.4	40.2	Declining	-6.2	Faster	9
Health care & social assistance	59.9	47.2	Declining	-12.7	From Expansion	1
Information & communication	41.3	41.3	Declining	0.0	Flat	2
Management of companies	56.3	28.6	Declining	-27.7	From Expansion	1
Professional, scientific, & technical services	38.1	50.0	Stationary	11.9	From Contraction	1
Real estate rental & leasing	45.5	41.5	Declining	-4.0	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles	42.9	53.8	Growing	11.0	From Contraction	1
Transportation & warehousing	61.8	32.4	Declining	-29.4	From Expansion	1
Utilities	50.0	40.0	Declining	-10.0	From Stationary	1
Water supply, sewage & waste management	38.9	59.1	Growing	20.2	From Contraction	1
Wholesale/Retail trade	47.8	41.4	Declining	-6.3	Faster	9

Table 10: Details of Employment Level PMI

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	46.7	45.1	Declining	-1.6	Faster	9
Accommodation & food services	47.8	48.7	Declining	0.9	Slower	9
Agriculture	48.8	43.2	Declining	-5.5	Faster	9
Arts, Entertainment & Recreation	35.0	50.0	Stationary	15.0	From Contraction	1
Construction	41.4	47.4	Declining	5.9	Slower	3
Educational services	46.7	48.9	Declining	2.1	Slower	9
Electricity, gas, steam & air conditioning supply	54.8	52.3	Growing	-2.5	Slower	2
Finance & insurance	44.6	40.3	Declining	-4.2	Faster	9
Health care & social assistance	53.5	43.8	Declining	-9.8	From Expansion	1
Information & communication	44.0	37.5	Declining	-6.5	Faster	9
Management of companies	43.8	28.6	Declining	-15.2	Faster	8
Professional, scientific, & technical services	42.9	47.1	Declining	4.2	Slower	10
Real estate rental & leasing	43.2	38.1	Declining	-5.1	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles	41.7	42.3	Declining	0.6	Slower	8
Transportation & warehousing	55.9	47.1	Declining	-8.8	From Expansion	1
Utilities	41.7	20.0	Declining	-21.7	Faster	4
Water supply, sewage & waste management	50.0	50.0	Stationary	0.0	Flat	2
Wholesale/Retail trade	44.0	48.0	Declining	4.0	Slower	8

Table 11: Details of Inventory PMI

Index	Nov 2020 Index	Dec 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
INVENTORY PMI	46.1	45.7	Declining	-0.4	Faster	9
Accommodation & food services	44.6	47.3	Declining	2.7	Slower	9
Agriculture	56.8	47.1	Declining	-9.7	From Expansion	1
Arts, Entertainment & Recreation	30.0	54.2	Growing	24.2	From Contraction	1
Construction	41.4	41.4	Declining	0.0	Flat	3
Educational services	48.9	46.6	Declining	-2.3	Faster	2
Electricity, gas, steam & air conditioning supply	44.7	52.3	Growing	7.5	From Contraction	1
Finance & insurance	44.4	43.1	Declining	-1.3	Faster	9
Health care & social assistance	50.7	46.3	Declining	-4.5	From Expansion	1
Information & communication	50.0	50.0	Stationary	0.0	Flat	2
Management of companies	50.0	42.9	Declining	-7.1	From Stationary	1
Professional, scientific, & technical services	40.5	50.0	Stationary	9.5	From Contraction	1
Real estate rental & leasing	43.2	41.0	Declining	-2.2	Faster	8
Repair, Maintenance/Washing Of Motor Vehicles	41.7	45.8	Declining	4.2	Slower	8
Transportation & warehousing	50.0	43.8	Declining	-6.3	From Stationary	1
Utilities	33.3	50.0	Stationary	16.7	From Contraction	1
Water supply, sewage & waste management	33.3	50.0	Stationary	16.7	From Contraction	1
Wholesale/Retail trade	48.4	43.2	Declining	-5.3	Faster	9

**Table 12: Manufacturing PMI Data Series** 

			-	U.D.O		acturing						
Month	COMPOSITE	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	42.1	40.5	38.7	55.6	41.2	40.0	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	52.5	58.2	51.0	50.3	51.1	52.3	32.6	62.7	66.6	46.1	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	52.7	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	49.4	50.8	50.4
Nov '17	55.9	59.3	54.3	56.0	53.7	57.1	37.6	54.0	64.3	48.1	50.8	48.8
Dec '17	59.3	63.2	60.0	57.4	53.7	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 57.1	59.0	55.8	56.8	55.0	57.4	39.4	52.3	60.7	51.1	40.7	51.3
Aug '18	56.2	59.3 58.4	56.9 55.3	55.9 56.1	55.5 54.9	57.1 55.9	39.7	50.1	59.3	50.1 49.4	43.1 42.2	50.7 50.5
Sep '18							37.1	52.4	57.5			
Oct '18 Nov '18	56.8 57.9	58.9 59.9	56.8 58.1	56.4 56.9	54.8 55.4	56.2 58.7	39.9 41.2	51.2 51.9	56.7 57.8	50.9 52.2	39.6 40.0	51.5 53.8
Dec '18			62.3		55.4 57.0		41.2					53.8
Jan '19	61.1 58.5	63.6 59.3	58.9	58.4 58.3	56.4	63.2 59.9	42.1	51.6 52.5	61.3 62.2	56.1 52.5	41.7 42.1	50.6
				58.3							44.1	
Feb '19 Mar '19	57.1 57.4	57.5	56.9 56.7	58.2 58.4	56.3 56.9	56.2 57.1	39.7 47.9	53.7	60.9 57.6	52.1 51.8	44.1	55.4 60.7
Apr '19	57.4 57.7	58.3 58.8	57.2	58.4	57.0	57.1	37.4	62.3 52.4	60.2	57.3	44.5	54.4
	57.7 57.8	58.8 59.1	56.9	58.1	57.0	56.8	37.4	52.4	62.2	51.5	44.5	51.5
May '19	57.8 57.4	59.1						52.3 52.4	62.2		40.8	
June '19 July '19		59.3 58.9	55.9	58.7	57.5	55.0 56.2	38.0 41.1	52.4 52.2	62.7 59.5	52.1	43.8	51.1
July '19 Aug '19	57.6 57.9	58.9 58.7	57.2 57.1	57.5 58.3	57.3 57.1	56.2	39.9	50.3	59.5 57.0	52.5 51.2	41.8	51.5 52.1
Sep '19 Oct '19	57.7 58.2	58.5 59.3	57.2 57.9	58.4 58.6	56.6 56.8	58.1 58.6	39 40	51.9 52.5	58.8 58.4	50.7 53.7	43.9 42.5	53.5 53.1
	58.2			58.6								
Nov '19	59.3	60.1	59.4	58.7	57.7	60.6	41.0	53.1	59.3	55.8 57	41.4	53.1
Dec '19	60.8	61.8	61.5	60.5	58 57.2	62.4	39.1	51.9	59.2	57 54.9	45.5	52.8
Jan '20	59.2	59.6	59.7	59.1	57.3	60.7	37.0	55.3 52.7	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
Oct '20	49.4	50.0	51.2	51.8	46.0	46.2	33.4	60.0	70.9	47.8	42.0	44.9
Nov '20	50.2	51.7	50.5	52.2	47.3	48.5	35.4	60.1	71.7	51.7	43.3	46.6
Dec '20	49.6	51.6	50.2	51.2	46.3	46.9	33.1	61.4	73.0	49.0	41.0	42.7

**Table 13: Non-Manufacturing PMI Data Series** 

Month	COMPOSITE	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 Mar '16	44.3 45.4	43.7 46.3	42.0 44.7	44.5 43.9	47.1 46.5	53.6	39.6 43.8	37.5 34.3	36.6 35.0	43.6 41.1
Mar '16 Apr '16	45.4 44.3	46.3	44.7	43.9 43.3	46.5 47.6	58.5 62.2	43.8 43.1	34.3 31.8	35.0	41.1 39.8
May '16	44.3	44.2	42.2	43.3 44.6	46.9	62.2	38.1	33.2	35.0	40.3
Jun '16	44.3	40.2	39.6	44.6	46.9 47.1	60.7	39.6	33.2	35.0	38.5
Jun 16 Jul '16	42.3	40.2	42.3	42.5	47.1 45.8	60.7	38.6	33.2	34.7	38.5
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 56.8	50.8 50.2	43.3 41.5	40.1 40.3	40.3 41.3	44.8 45.7
Sep '18 Oct '18	56.5	58.1	55.8	55.4			42.8		41.3	45.7 45.5
Nov '18	57.0 58.4	58.3 60.4	56.4 57.5	55.7 56.2	57.6 59.6	50.7 52.6	42.8 42.0	39.7 38.7	39.4	45.5 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	52.4	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
	59.6	59.8	59.4	58.9	60.4	51.2	43.2	41.3	42.3	45.3
Jan '20	39.0			F-7.0	58.6	52.1	44.1	44.6	42.9	46.0
Jan '20 Feb '20	58.6	59.3	58.8	57.8	50.0					
		59.3 52.2	58.8 47.8	47.3	49.6	51.2	41.6	36.1	39.1	44.4
Feb '20 Mar '20 May '20	58.6 49.2 25.3	52.2 19.5			49.6 30.1	51.2 42.6	41.6 31.1	22.6	39.1 22.7	44.4 29.8
Feb '20 Mar '20 May '20 Jun '20	58.6 49.2 25.3 35.7	52.2 19.5 34.3	47.8 19.6 32.5	47.3 32.0 37.4	49.6 30.1 38.5	42.6 46.7	31.1 38.5	22.6 27.0	22.7 29.6	29.8 34.5
Feb '20 Mar '20 May '20 Jun '20 Jul '20	58.6 49.2 25.3 35.7 43.3	52.2 19.5 34.3 46.1	47.8 19.6 32.5 43.4	47.3 32.0 37.4 41.1	49.6 30.1 38.5 42.7	42.6 46.7 50.9	31.1 38.5 38.7	22.6 27.0 31.0	22.7	29.8 34.5 38.9
Feb '20 Mar '20 May '20 Jun '20 Jul '20 Aug '20	58.6 49.2 25.3 35.7 43.3 44.7	52.2 19.5 34.3 46.1 47.4	47.8 19.6 32.5 43.4 44	47.3 32.0 37.4 41.1 44.3	49.6 30.1 38.5 42.7 43.1	42.6 46.7 50.9 53.5	31.1 38.5 38.7 43.1	22.6 27.0 31.0 34.2	22.7 29.6 32.5 36.6	29.8 34.5 38.9 40.7
Feb '20 Mar '20 May '20 Jun '20 Jul '20 Aug '20 Sep '20	58.6 49.2 25.3 35.7 43.3 44.7 41.9	52.2 19.5 34.3 46.1 47.4 43.7	47.8 19.6 32.5 43.4 44 39.5	47.3 32.0 37.4 41.1 44.3 41.6	49.6 30.1 38.5 42.7 43.1 43.1	42.6 46.7 50.9 53.5 51.2	31.1 38.5 38.7 43.1 42.3	22.6 27.0 31.0 34.2 32.8	22.7 29.6 32.5 36.6 33.5	29.8 34.5 38.9 40.7 39.3
Feb '20 Mar '20 May '20 Jun '20 Jul '20 Aug '20 Sep '20 Oct '20	58.6 49.2 25.3 35.7 43.3 44.7 41.9 46.8	52.2 19.5 34.3 46.1 47.4 43.7 48.7	47.8 19.6 32.5 43.4 44 39.5 47.8	47.3 32.0 37.4 41.1 44.3 41.6 44.2	49.6 30.1 38.5 42.7 43.1 43.1 46.3	42.6 46.7 50.9 53.5 51.2 52.6	31.1 38.5 38.7 43.1 42.3 43.9	22.6 27.0 31.0 34.2 32.8 34.2	22.7 29.6 32.5 36.6 33.5 37.2	29.8 34.5 38.9 40.7 39.3 41.8
Feb '20 Mar '20 May '20 Jun '20 Jul '20 Aug '20 Sep '20	58.6 49.2 25.3 35.7 43.3 44.7 41.9	52.2 19.5 34.3 46.1 47.4 43.7	47.8 19.6 32.5 43.4 44 39.5	47.3 32.0 37.4 41.1 44.3 41.6	49.6 30.1 38.5 42.7 43.1 43.1	42.6 46.7 50.9 53.5 51.2	31.1 38.5 38.7 43.1 42.3	22.6 27.0 31.0 34.2 32.8	22.7 29.6 32.5 36.6 33.5	29.8 34.5 38.9 40.7 39.3