



Central Bank of Nigeria

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

Statistics Department
October 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.

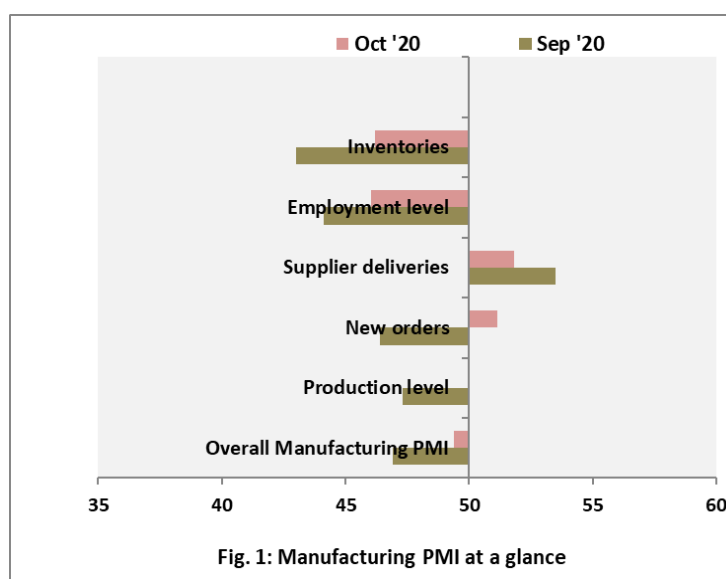
A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those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

1.0 Introduction

The October 2020 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period October 12-16, 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 October 2020 PMI

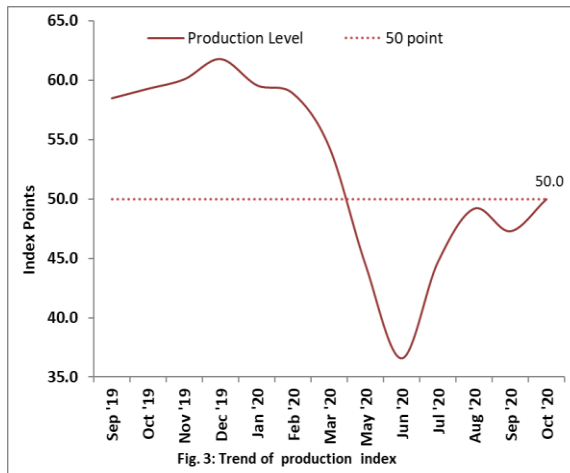
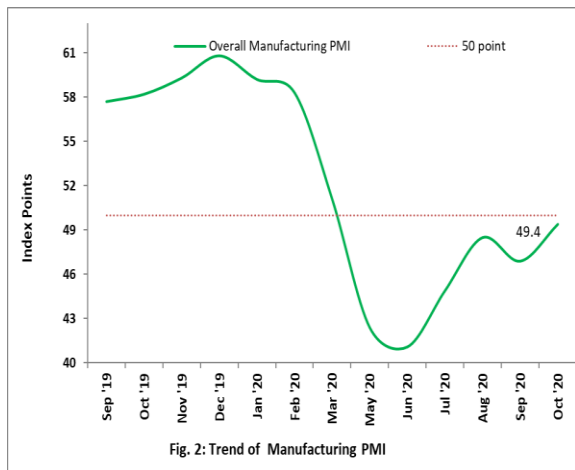
In October 2020, suppliers' delivery time was faster, new orders increased, while employment level and raw materials inventories contracted.



The **Manufacturing PMI** in the month of October stood at 49.4 index points, indicating slowing contraction in the manufacturing sector compared with the last five months (Fig. 2 and Table 1). Of the 14 subsectors surveyed, 6 subsectors reported expansion (above 50% threshold) in the review month in the following order: Electrical equipment, Transportation equipment, Printing & related support activities, Chemical & pharmaceutical products, Textile, apparel, leather & footwear and Cement. The remaining 8 subsectors reported contractions in the following order: Primary metal, Petroleum & coal products, Paper products, Fabricated metal products, Furniture & related products, Nonmetallic mineral products, Plastics & rubber products and Food, beverage & tobacco products.

2.1 Production Level

At 50.0 points, the production level index in October 2020 for the manufacturing sector indicating halting in contraction which commenced since May 2020. Of the 14 subsectors surveyed, 7 subsectors recorded expansion in production level, 1 subsector maintained current level, while 6 subsectors recorded declines in production in October 2020 (Fig. 3 and Table 2).

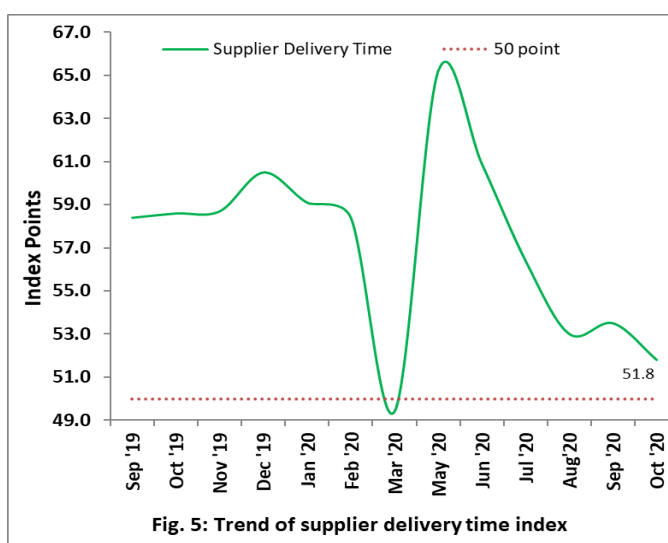
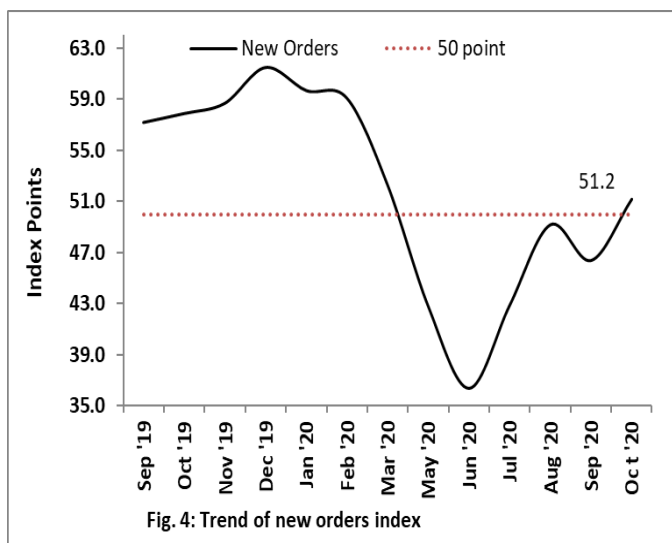


2.2 New Orders

The new orders index expanded at 51.2 points from contraction in the previous month. Four subsectors reported expansion in new orders, 4 subsectors were stationary, while the remaining 6 recorded contractions in the review month (Fig. 4 and Table 3).

2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 51.8 points in October 2020. This indicates that supplier delivery time is faster for the sixth consecutive month. Six of the 14 subsectors recorded improved suppliers' delivery time, 5 subsectors reported stationery level, while 3 subsectors recorded slowing delivery time (Fig. 5 and Table 4).



2.4 Employment Level

The employment level index for October 2020 stood at 46.0 points, indicating contraction in employment level for the seventh consecutive month. Of the 14 subsectors, 3 subsectors recorded growth in

employment level in the review month; 2 subsectors recorded stationary level of employment, while the remaining 9 subsectors recorded lower employment levels in the review month (Fig. 6 and Table 5).

2.5 Raw material Inventories

At 46.2 index points, the manufacturing sector inventories contracted for the seventh time in October 2020. Two of the 14 subsectors recorded growth in inventories, while the remaining 12 subsectors recorded lower raw material inventories in the review month (Fig. 7 and Table 6).

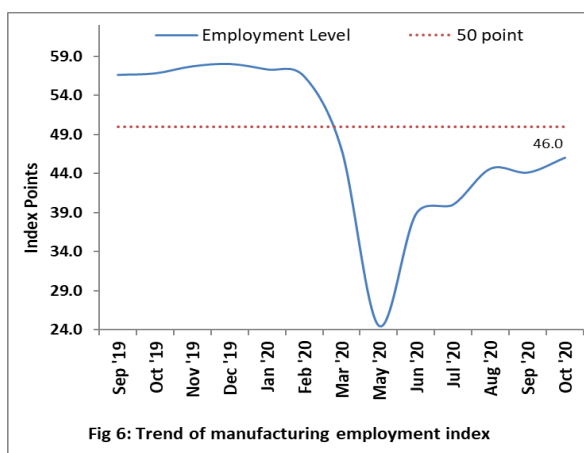


Fig 6: Trend of manufacturing employment index

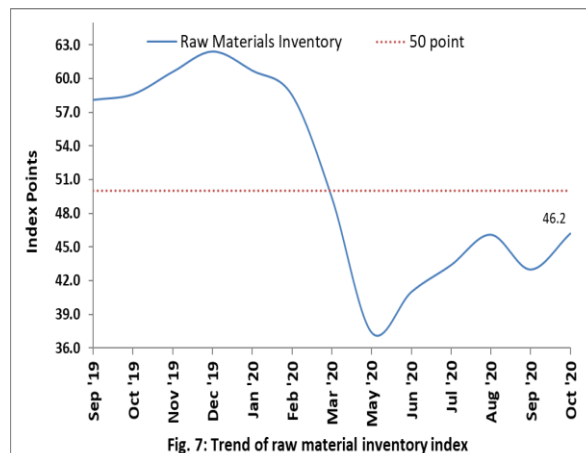


Fig. 7: Trend of raw material inventory index

3.0 Non-Manufacturing PMI Report

PMI for the **non-manufacturing** sector stood at 46.8 points in October 2020, indicating contraction in Non-manufacturing PMI for the seventh consecutive month. Of the 17 sub-sectors surveyed, 3 subsectors reported growth in the following order: Electricity, gas, steam & air conditioning supply; Art, entertainment & recreation and Health care & social assistance. Eleven subsectors reported declines in the following order: Management of companies; Utilities; Information & communication; Construction; Professional, scientific, & technical services; Repair, Maintenance/Washing of Motor Vehicles...; Wholesale/Retail trade; Educational services; Transportation & warehousing; Accommodation & food services and Real estate rental & leasing. While 3 subsectors Agriculture; finance & insurance and Water supply, sewage & waste management were stationary (Fig. 9 and Table 7).

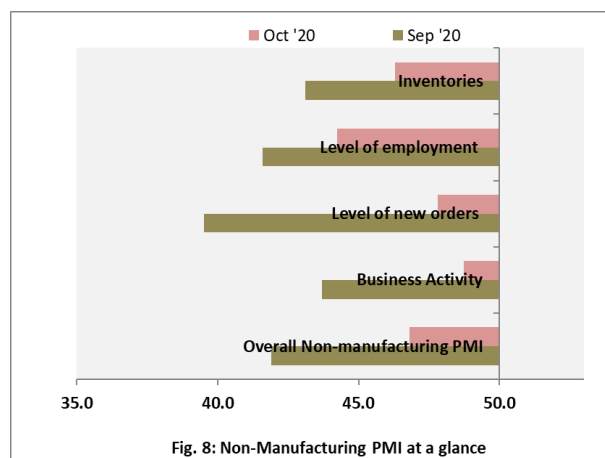


Fig. 8: Non-Manufacturing PMI at a glance

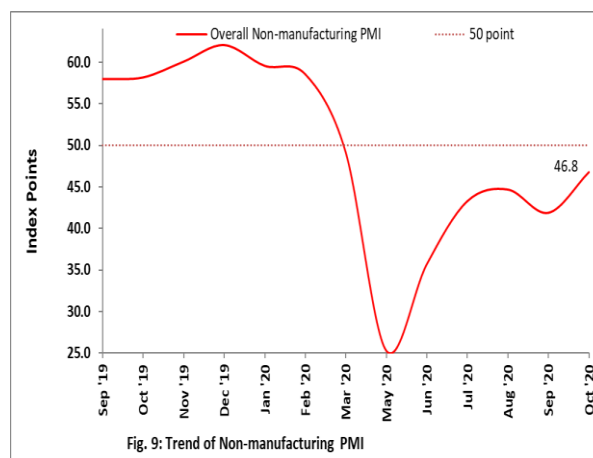


Fig. 9: Trend of Non-manufacturing PMI

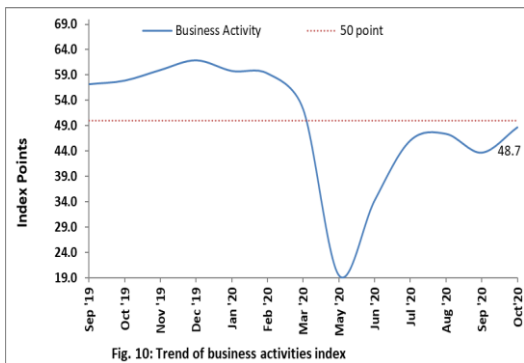
3.1 Business Activity

At 48.7 points, the business activity index declined for the sixth consecutive month, indicating contraction in non-manufacturing business activity in October 2020. Three out of the 17 subsectors reported growth in

business activities (above 50% threshold) in the review month; while 11 subsectors recorded decline in business activity and 3 subsectors were stationary in October 2020 (Fig. 10 Table 8).

3.2 New Orders

At 47.8 points, new orders index declined for the seventh time in October 2020. Six of the 17 subsectors reported growth in new order (above 50% threshold) in the review month, 1 sector reported stationary level, while the remaining 10 subsectors recorded decline in new orders in the review month (Fig. 11 Table 9).

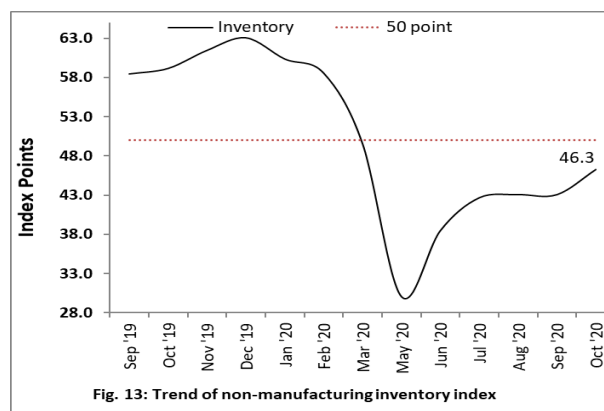
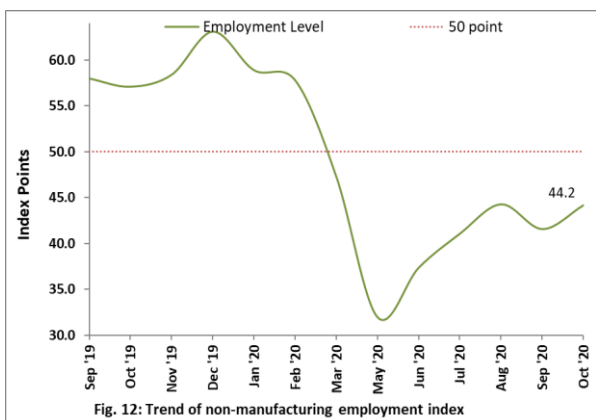


3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 44.2 points, indicating contraction in employment level in October 2020. All 17 subsectors reported decline in employment level (below 50% threshold) in the review month (Fig. 12 Table 10).

3.4 Non-manufacturing Inventory

At 46.3 points, non-manufacturing inventory index declined for the seventh consecutive month. Four subsectors reported growth in inventory, 2 subsectors recorded stationary inventories while 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	Sept 2020 Index*	Oct 2020 Index*	Direction	Difference	Rate of Change	Trend** (Months)
Composite PMI \1	46.9	49.4	Declining	2.5	Slower	6
Production level	47.3	50.0	Stationary	2.7	From Contraction	1
New orders	46.4	51.2	Growing	4.8	From Contraction	1
Supplier delivery time	53.5	51.8	Growing	-1.7	Slower	6
Employment level	44.1	46.0	Declining	1.9	Slower	7
Raw materials/WIP Inventory	43.0	46.2	Declining	3.2	Slower	7
New Export Orders	32.7	33.4	Declining	0.7	Slower	67
Output Prices	58.8	60.0	Growing	1.2	Faster	57
Input Prices	69.8	70.9	Growing	1.1	Faster	75
Quantity of Purchases	42.9	47.8	Declining	4.9	Slower	6
Outstanding Business/Backlog of Work	42.0	42.0	Declining	0.0	Slower	34
Stock of Finished Goods	45.8	44.9	Declining	-0.9	Faster	6
Manufacturing Sub-Sectors						
Cement	58.1	50.5	Growing	-7.6	Slower	3
Chemical & pharmaceutical products	47.8	52.6	Growing	4.8	From Contraction	1
Electrical equipment	66.7	66.3	Growing	-0.5	Slower	2
Fabricated metal products	47.9	46.1	Declining	-1.8	Faster	6
Food, beverage & tobacco products	47.0	49.3	Declining	2.3	Slower	6
Furniture & related products	38.5	46.6	Declining	8.1	Slower	6
Nonmetallic mineral products	50.6	47.5	Declining	-3.1	From Expansion	1
Paper products	50.0	45.8	Declining	-4.2	From Stationary	1
Petroleum & coal products	28.8	43.8	Declining	15.0	Slower	4
Plastics & rubber products	49.1	48.3	Declining	-0.8	Faster	2
Primary metal	37.8	38.0	Declining	0.2	Slower	15
Printing & related support activities	43.3	52.9	Growing	9.6	From Contraction	1
Textile, apparel, leather & footwear	47.5	50.9	Growing	3.4	From Contraction	1
Transportation equipment	58.1	59.6	Growing	1.5	Faster	5

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

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

Table 2: Details of Production PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
PRODUCTION PMI	47.3	50.0	Stationary	2.7	From Contraction	1
Cement	66.7	56.3	Growing	-10.5	Slower	3
Chemical & pharmaceutical products	48.9	42.7	Declining	-6.2	Faster	2
Electrical equipment	91.7	50.0	Stationary	-41.7	From Expansion	1
Fabricated metal products	45.7	60.9	Growing	15.2	From Contraction	1
Food, beverage & tobacco products	47.5	48.1	Declining	0.6	Slower	2
Furniture & related products	35.4	52.4	Growing	17.0	From Contraction	1
Nonmetallic mineral products	50.0	56.3	Growing	6.3	From Stationary	1
Paper products	55.6	66.7	Growing	11.1	Faster	2
Petroleum & coal products	25.0	25.0	Declining	0.0	Flat	2
Plastics & rubber products	52.9	56.3	Growing	3.4	Faster	3
Primary metal	25.0	21.4	Declining	-3.6	Faster	7
Printing & related support activities	41.3	55.0	Growing	13.7	From Contraction	1
Textile, apparel, leather & footwear	47.2	41.7	Declining	-5.5	Faster	2
Transportation equipment	62.5	37.5	Declining	-25.0	From Expansion	1

Table 3: Details of New Orders PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	46.4	51.2	Growing	4.8	From Contraction	1
Cement	61.1	50.0	Stationary	-11.1	From Expansion	1
Chemical & pharmaceutical products	47.8	48.8	Declining	1.0	Slower	2
Electrical equipment	66.7	50.0	Stationary	-16.7	From Expansion	1
Fabricated metal products	45.6	60.9	Growing	15.3	From Contraction	1
Food, beverage & tobacco products	47.5	49.1	Declining	1.6	Slower	6
Furniture & related products	29.2	42.9	Declining	13.7	Slower	6
Nonmetallic mineral products	55.6	50.0	Stationary	-5.6	From Expansion	1
Paper products	61.1	61.1	Growing	0.0	Faster	3
Petroleum & coal products	25.0	25.0	Declining	0.0	Flat	2
Plastics & rubber products	47.1	56.7	Growing	9.6	From Contraction	1
Primary metal	25.0	18.8	Declining	-6.3	Faster	5
Printing & related support activities	41.3	67.5	Growing	26.2	From Contraction	1
Textile, apparel, leather & footwear	55.3	50.0	Stationary	-5.3	From Expansion	1
Transportation equipment	62.5	37.5	Declining	-25.0	From Expansion	1

Table 4: Details of Suppliers' Delivery PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
SUPPLIER DELIVERY TIME PMI	53.5	51.8	Growing	-1.7	Slower	6
Cement	50.0	50.0	Stationary	0.0	Flat	2
Chemical & pharmaceutical products	55.4	50.0	Stationary	-5.4	From Expansion	1
Electrical equipment	41.7	66.7	Growing	25.0	From Contraction	1
Fabricated metal products	57.4	45.3	Declining	-12.1	From Expansion	1
Food, beverage & tobacco products	51.2	52.8	Growing	1.6	Faster	2
Furniture & related products	64.6	62.5	Growing	-2.1	Slower	6
Nonmetallic mineral products	50.0	50.0	Stationary	0.0	Flat	2
Paper products	44.4	50.0	Stationary	5.6	From Contraction	1
Petroleum & coal products	50.0	75.0	Growing	25.0	From Stationary	1
Plastics & rubber products	47.1	37.5	Declining	-9.6	Faster	2
Primary metal	56.3	64.3	Growing	8.0	Faster	2
Printing & related support activities	50.0	52.5	Growing	2.5	From Stationary	1
Textile, apparel, leather & footwear	55.3	47.2	Declining	-8.1	From Expansion	1
Transportation equipment	50.0	50.0	Stationary	0.0	Flat	2

Table 5: Details of Employment Level PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	44.1	46.0	Declining	1.9	Slower	7
Cement	55.6	50.0	Stationary	-5.6	From Expansion	1
Chemical & pharmaceutical products	43.3	42.7	Declining	-0.6	Faster	7
Electrical equipment	66.7	41.7	Declining	-25.0	From Expansion	1
Fabricated metal products	50.0	48.4	Declining	-1.6	From Stationary	1
Food, beverage & tobacco products	43.3	47.7	Declining	4.4	Slower	6
Furniture & related products	39.6	40.5	Declining	0.9	Slower	7
Nonmetallic mineral products	38.9	33.3	Declining	-5.6	Faster	7
Paper products	38.9	61.1	Growing	22.2	From Contraction	1
Petroleum & coal products	25.0	50.0	Stationary	25.0	From Contraction	1
Plastics & rubber products	46.9	43.8	Declining	-3.2	Faster	3
Primary metal	50.0	18.8	Declining	-31.3	From Stationary	1
Printing & related support activities	41.3	52.5	Growing	11.2	From Contraction	1
Textile, apparel, leather & footwear	42.1	52.8	Growing	10.7	From Contraction	1
Transportation equipment	50.0	37.5	Declining	-12.5	From Stationary	1

Table 6: Details of Raw Materials Inventory PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
RAW MATERIALS INVENTORY PMI	43.0	46.2	Declining	3.2	Slower	7
Cement	44.4	62.5	Growing	18.1	From Contraction	1
Chemical & pharmaceutical products	42.4	42.7	Declining	0.3	Slower	2
Electrical equipment	41.7	41.7	Declining	0.0	Faster	4
Fabricated metal products	41.4	57.8	Growing	16.4	From Contraction	1
Food, beverage & tobacco products	45.5	49.1	Declining	3.6	Slower	6
Furniture & related products	33.3	42.5	Declining	9.2	Slower	3
Nonmetallic mineral products	61.1	33.3	Declining	-27.8	From Expansion	1
Paper products	33.3	44.4	Declining	11.1	Slower	7
Petroleum & coal products	25.0	25.0	Declining	0.0	Flat	2
Plastics & rubber products	52.9	40.6	Declining	-12.3	From Expansion	1
Primary metal	56.3	42.9	Declining	-13.4	From Expansion	1
Printing & related support activities	47.8	42.1	Declining	-5.7	Faster	6
Textile, apparel, leather & footwear	23.7	44.4	Declining	20.7	Slower	7
Transportation equipment	62.5	25.0	Declining	-37.5	From Expansion	1

Table 7: Non-Manufacturing at a Glance

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
Composite PMI \1	41.9	46.8	Declining	4.9	Slower	7
Business Activity	43.7	48.7	Declining	5.0	Slower	6
Level of new orders/customers/incoming business	39.5	47.8	Declining	8.3	Slower	7
Employment Level	41.6	44.2	Declining	2.6	Slower	7
Inventories	43.1	46.3	Declining	3.2	Slower	7
Average price of Inputs (volume weighted)	51.2	52.6	Growing	1.4	Faster	4
Level of outstanding business/ Backlog of work	42.3	43.9	Declining	1.6	Slower	75
New Exports orders	32.8	34.2	Declining	1.4	Slower	75
Imports	33.5	37.2	Declining	3.7	Slower	75
Inventory (sentiments)	39.3	41.8	Declining	2.5	Slower	75
Non-manufacturing sub-sectors						
Accommodation & food services	41.3	46.9	Declining	5.6	Slower	7
Agriculture	35.3	50.0	Stationary	14.7	From Contraction	1
Arts, Entertainment & Recreation	51.8	64.3	Growing	12.5	Faster	2
Construction	45.3	42.9	Declining	-2.4	Faster	7
Educational services	44.2	46.4	Declining	2.2	Slower	7
Electricity, gas, steam & air conditioning supply	37.8	66.7	Growing	28.9	From Contraction	1
Finance & insurance	36.8	50.0	Stationary	13.2	From Contraction	1
Health care & social assistance	42.1	62.1	Growing	20.0	From Contraction	1
Information & communication	42.1	42.3	Declining	0.2	Slower	6
Management of companies	31.3	18.2	Declining	-13.1	Faster	6
Professional, scientific, & technical services	51.8	44.7	Declining	-7.1	From Expansion	1
Real estate rental & leasing	43.0	47.5	Declining	4.5	Slower	6
Repair, Maintenance/Washing Of Motor Vehicles...	33.7	45.5	Declining	11.8	Slower	6
Transportation & warehousing	45.0	46.9	Declining	1.9	Slower	3
Utilities	45.3	35.7	Declining	-9.6	Faster	2
Water supply, sewage & waste management	59.8	50.0	Stationary	-9.8	From Expansion	1
Wholesale/Retail trade	44.2	45.9	Declining	1.7	Slower	6

\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	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
BUSINESS ACTIVITY PMI	43.7	48.7	Declining	5.0	Slower	7
Accommodation & food services	43.4	46.9	Declining	3.5	Slower	8
Agriculture	36.2	50.0	Stationary	13.8	From Contraction	1
Arts, Entertainment & Recreation	60.7	64.3	Growing	3.6	Faster	5
Construction	45.1	42.9	Declining	-2.2	Faster	3
Educational services	42.9	46.4	Declining	3.5	Slower	8
Electricity, gas, steam & air conditioning supply	42.5	66.7	Growing	24.2	From Contraction	1
Finance & insurance	39.6	50.0	Stationary	10.4	From Contraction	1
Health care & social assistance	44.5	62.1	Growing	17.6	From Contraction	1
Information & communication	48.1	42.3	Declining	-5.8	Faster	3
Management of companies	33.3	18.2	Declining	-15.1	Faster	4
Professional, scientific, & technical services	52.3	44.7	Declining	-7.6	From Expansion	1
Real estate rental & leasing	43.0	47.5	Declining	4.5	Slower	7
Repair, Maintenance/Washing Of Motor Vehicles.	34.6	45.5	Declining	10.9	Slower	7
Transportation & warehousing	47.5	46.9	Declining	-0.6	Faster	4
Utilities	43.8	35.7	Declining	-8.1	Faster	3
Water supply, sewage & waste management	65.4	50.0	Stationary	-15.4	From Expansion	1
Wholesale/Retail trade	44.5	45.9	Declining	1.4	Slower	3

Table 9: Details of New Orders PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
NEW ORDERS PMI	39.5	47.8	Declining	8.3	Slower	7
Accommodation & food services	37.0	42.0	Declining	5.0	Slower	7
Agriculture	28.3	53.5	Growing	25.2	From Contraction	1
Arts, Entertainment & Recreation	46.4	71.4	Growing	25.0	From Contraction	1
Construction	38.8	42.9	Declining	4.1	Slower	7
Educational services	43.9	41.0	Declining	-2.9	Faster	7
Electricity, gas, steam & air conditioning supply	39.5	55.6	Growing	16.1	From Contraction	1
Finance & insurance	37.9	49.4	Declining	11.5	Slower	7
Health care & social assistance	42.3	59.0	Growing	16.7	From Contraction	1
Information & communication	35.2	52.0	Growing	16.8	From Contraction	1
Management of companies	25.0	27.3	Declining	2.3	Slower	3
Professional, scientific, & technical services	54.5	52.8	Growing	-1.7	Slower	2
Real estate rental & leasing	38.4	46.3	Declining	7.9	Slower	6
Repair, Maintenance/Washing Of Motor Vehicles..	34.6	40.9	Declining	6.3	Slower	6
Transportation & warehousing	40.0	40.0	Declining	0.0	Flat	3
Utilities	50.0	35.7	Declining	-14.3	From Stationary	1
Water supply, sewage & waste management	65.4	50.0	Stationary	-15.4	From Expansion	1
Wholesale/Retail trade	40.4	48.0	Declining	7.6	Slower	7

Table 10: Details of Employment Level PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
EMPLOYMENT LEVEL PMI	41.6	44.2	Declining	2.6	Slower	7
Accommodation & food services	39.9	44.7	Declining	4.8	Slower	7
Agriculture	41.5	48.9	Declining	7.4	Slower	7
Arts, Entertainment & Recreation	50.0	42.9	Declining	-7.1	From Stationary	1
Construction	51.3	40.0	Declining	-11.3	From Expansion	1
Educational services	43.0	47.6	Declining	4.6	Slower	7
Electricity, gas, steam & air conditioning supply	37.5	44.4	Declining	6.9	Slower	7
Finance & insurance	34.9	42.3	Declining	7.4	Slower	7
Health care & social assistance	41.4	46.2	Declining	4.8	Slower	7
Information & communication	42.6	40.4	Declining	-2.2	Faster	7
Management of companies	33.3	40.9	Declining	7.6	Slower	6
Professional, scientific, & technical services	45.5	44.7	Declining	-0.7	Faster	8
Real estate rental & leasing	43.0	40.0	Declining	-3.0	Faster	6
Repair, Maintenance/Washing Of Motor Vehicles..	34.6	40.9	Declining	6.3	Slower	6
Transportation & warehousing	40.0	43.8	Declining	3.8	Slower	3
Utilities	43.8	28.6	Declining	-15.2	Faster	2
Water supply, sewage & waste management	53.8	44.4	Declining	-9.4	From Expansion	1
Wholesale/Retail trade	43.8	46.6	Declining	2.8	Slower	6

Table 10: Details of Inventory PMI

Index	Sep 2020 Index	Oct 2020 Index	Direction	Difference	Rate of Change	Trend (Months)
INVENTORY PMI	43.1	46.3	Declining	3.2	Slower	7
Accommodation & food services	44.7	48.8	Declining	4.1	Slower	7
Agriculture	35.2	57.1	Growing	21.9	From Contraction	1
Arts, Entertainment & Recreation	50.0	40.9	Declining	-9.1	From Stationary	1
Construction	46.3	52.6	Growing	6.3	From Contraction	1
Educational services	46.9	50.0	Stationary	3.1	From Contraction	1
Electricity, gas, steam & air conditioning supply	31.6	42.4	Declining	10.8	Slower	6
Finance & insurance	35.0	47.6	Declining	12.6	Slower	7
Health care & social assistance	40.3	45.8	Declining	5.5	Slower	7
Information & communication	42.6	31.8	Declining	-10.8	Faster	6
Management of companies	33.3	55.6	Growing	22.3	From Contraction	1
Professional, scientific, & technical services	54.8	66.7	Growing	11.9	Faster	2
Real estate rental & leasing	47.5	45.5	Declining	-2.0	Faster	6
Repair, Maintenance/Washing Of Motor Vehicles	30.8	40.0	Declining	9.2	Slower	6
Transportation & warehousing	52.5	50.0	Stationary	-2.5	From Expansion	1
Utilities	43.8	38.9	Declining	-4.9	Faster	2
Water supply, sewage & waste management	54.5	45.1	Declining	-9.4	From Expansion	1
Wholesale/Retail trade	47.9		Declining	-47.9	Faster	7

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	56.8	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
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

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
Oct '20	46.8	48.7	47.8	44.2	46.3	52.6	43.9	34.2	37.2	41.8