Central Bank of Nigeria



Purchasing Managers' Index (PMI) Survey Report

Statistics Department

September 2017

PURCHASING MANAGERS' INDEX (PMI) SEPTEMBER 2017 REPORT

1.0 Introduction

The September 2017 PMI was conducted by the Statistics Department of the Central Bank of Nigeria during the period September 11 - 15, 2017. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in 13 locations in Nigeria (2 states in each geopolitical zone and the Federal Capital Territory, Fig. 1). A total of 1,625 responses were received from a sample of 1,950 respondents, representing a response rate of 83.3 per cent.

The Bank makes no representation regarding the individual companies, other than the data they provided. The data contained herein further provides input for policy decisions.



Fig. 1: Map of Nigeria with * showing the survey locations

1.1 Data and Method of Presentation

The *Manufacturing and Non-Manufacturing PMI Report* on businesses is based on survey responses indicating the *changes* in the level of business activities in the *current month* compared with the *preceding month*. For each of the indicators measured, this report shows the diffusion index of the responses. The diffusion index is computed as the percentage of *responses with positive change plus one-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 one-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: production level, new orders, supplier delivery time, employment level and raw materials inventory, with assigned weights of 25%, 30%, 15%, 10% and 20%, respectively. The composite PMI for the non-manufacturing sector is

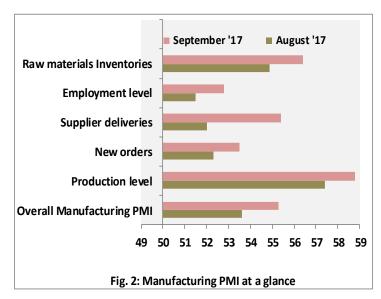
computed from four diffusion indices: business activity, new orders, employment level and inventory, with equal weights of 25% each.

A composite PMI above 50 points indicates that the manufacturing/non-manufacturing economy is generally expanding, 50 points indicates no change and below 50 points indicates that it is generally

contracting. The subsectors reporting growth are listed in the order of highest to lowest growth, while those reporting contraction are listed in the order of the highest to the lowest contraction.

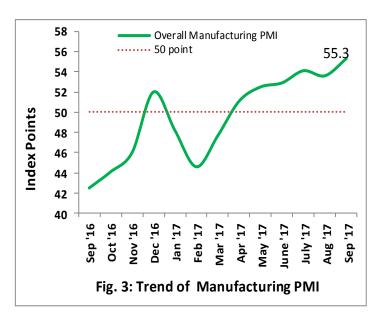
2.0 Manufacturing PMI Report

Production level, new orders, supplier delivery time, employment level and raw material inventories growing at a faster rate in September 2017



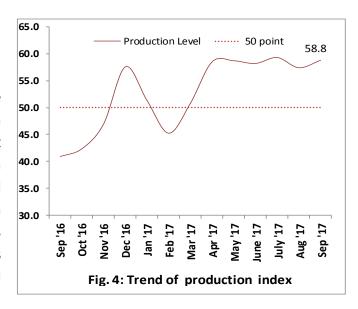
The *Manufacturing PMI* stood at 55.3 index points in September 2017, indicating expansion in the manufacturing sector for the sixth consecutive month (Fig. 3 and Table 1). Fourteen of the sixteen subsectors reported growth in the review month in the following order: appliances & components;

electrical equipment; chemical pharmaceutical products; nonmetallic mineral products; printing & related support activities; plastics & rubber products; food, beverage & tobacco products; furniture & related products; transportation equipment; cement; paper products; computer & electronic products; textile, apparel, leather & footwear and fabricated metal products. The primary metal and petroleum & coal products subsectors contracted in the review month.



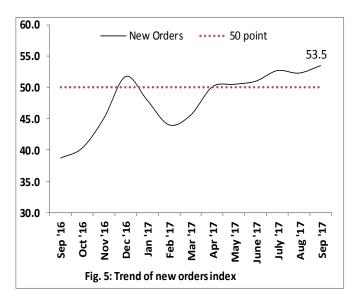
2.1 Production Level

The production level index for the manufacturing sector grew for the seventh consecutive month in September 2017. At 58.8 points, the index indicated an increase in production at a faster rate, when compared to its level in the preceding month. Thirteen of the sixteen manufacturing subsectors recorded increase, while three subsectors declined during the review month (Fig. 4 and Table 2).



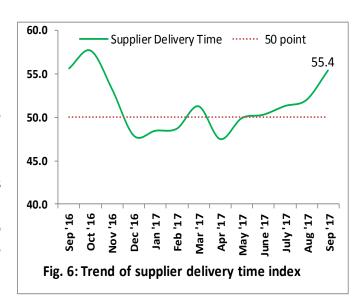
2.2 New Orders

At 53.5 points, the new orders index grew for the sixth consecutive month. Ten subsectors reported growth, while six subsectors contracted in the month of September, 2017 (Fig. 5 and Table 3).



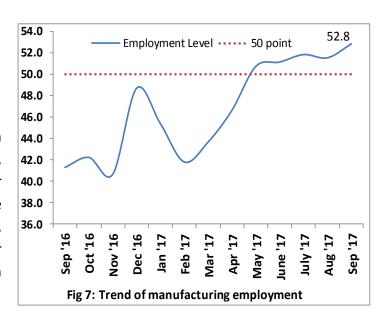
2.3 Supplier Delivery Time

The supplier delivery time index for the manufacturing sector, at 55.4 points in September 2017, rose for the fourth consecutive month. Twelve subsectors recorded improved suppliers' delivery time, two remained unchanged while two subsectors recorded delayed delivery time (Fig. 6 and Table 4).



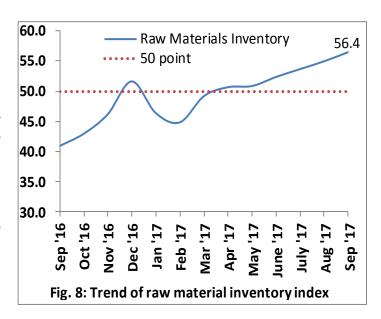
2.4 Employment Level

The employment level index in September 2017 stood at 52.8 points, indicating growth in employment level for the fifth consecutive month. Of the sixteen subsectors, six recorded growth, four remained unchanged while the other six subsectors recorded decline in employment level (Fig. 7 and Table 5).



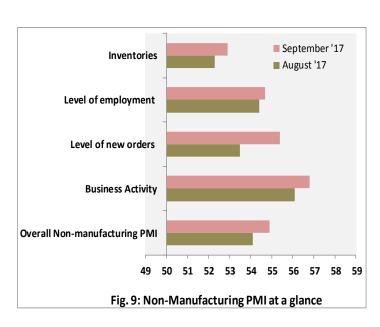
2.5 Raw Materials Inventories

At 56.4 points, raw materials inventories index grew for the sixth consecutive month, and at a faster rate when compared to its level in August 2017. Twelve of the sixteen subsectors recorded growth, one remained unchanged and the remaining three subsectors recorded decline in inventories (Fig. 8 and Table 6).



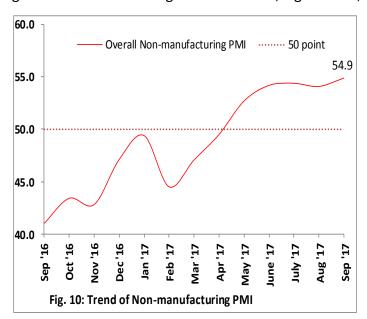
3.0 Non-Manufacturing PMI Report

Business activity, new orders, employment level and inventory growing at a faster rate in September 2017



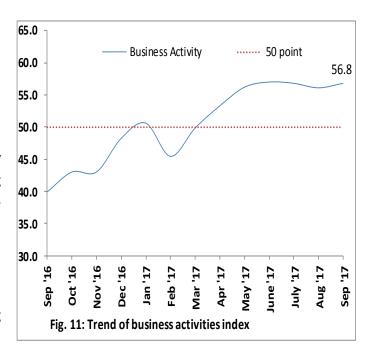
The *composite PMI* for the *non-manufacturing sector* stood at 54.9 points in September 2017, indicating growth in Non-manufacturing PMI for the fifth consecutive month. Of the eighteen non-manufacturing subsectors, fifteen recorded growth in the following order: utilities; agriculture;

health care & social assistance; finance & insurance; transportation & warehousing; electricity, gas, steam & air conditioning supply; repair, maintenance/washing of motor vehicles; public administration; wholesale/retail trade; water supply, sewage & waste management; educational services; arts, entertainment & recreation; information & communication; accommodation & food services; real estate rental & leasing. The construction; management of companies; professional, scientific & technical services sub sectors recorded contraction in the review period (Fig. 10 and Table 7).



3.1 Business Activity

The business activity index rose marginally to 56.8 points in September 2017, indicating growth for the sixth consecutive month. The index grew at a faster rate, when compared to its level in the preceding month. Fourteen subsectors recorded growth in business activity, two remained unchanged and two declined in the review month (Fig 11 and Table 8).



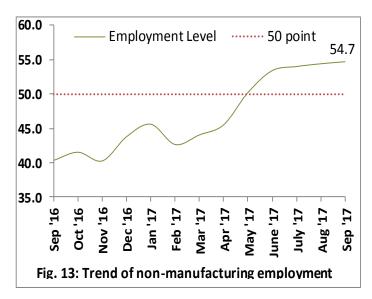
3.2 New Orders

New orders index at 55.4 points grew in September 2017 for the sixth consecutive month. Of the eighteen subsectors, thirteen reported growth, three remained unchanged while two recorded declines (Fig. 12 and Table 9).



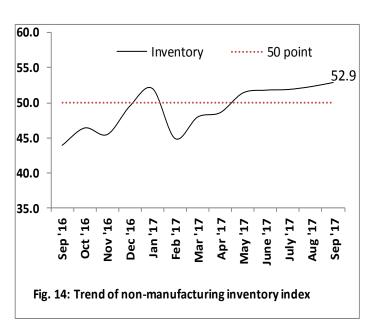
3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 54.7 points, indicating growth in employment for the fifth consecutive month. Fifteen subsectors recorded growth in the review month, while the remaining three subsectors declined (Fig. 13 and Table 10).



3.4 Non-manufacturing Inventory

At 52.9 points, non-manufacturing inventory index grew for the fifth consecutive month, indicating growth in inventories in the review period. Twelve subsectors recorded higher inventory, three remained unchanged, while three subsectors recorded lower inventory in September, 2017 (Fig. 14 and Table 11).



APPENDICES

Table 1: Manufacturing at a Glance

	Series	Series			Rate	
	Index*	Index*			of	Trend**
Index	August	September	Change	Direction	Change	(Months)
Composite PMI \1	53.6	55.3	1.7	Growing	Faster	6
Production level	57.4	58.8	1.4	Growing	Faster	7
New orders	52.3	53.5	1.2	Growing	Faster	6
Supplier delivery time	52.0	55.4	3.4	Growing	Faster	4
Employment level	51.5	52.8	1.3	Growing	Faster	5
Raw materials/WIP Inventory	54.9	56.4	1.5	Growing	Faster	6
New Export Orders	36.7	30.4	-6.3	Declining	Faster	31
Output Prices	58.8	58.2	-0.6	Growing	Slower	21
Input Prices	64.9	65.7	0.8	Growing	Faster	39
Quantity of Purchases	49.0	49.4	0.4	Declining	Slower	6
Outstanding Business/Backlog of Work	47.9	51.9	4.0	Growing	From Contraction	1
Stock of Finished Goods	51.6	50.4	-1.2	Growing	Slower	2
Manufacturing Sub-Sectors						
Appliances & components	61.0	73.0	12.0	Growing	Faster	10
Cement	51.2	54.1	2.9	Growing	Faster	3
Chemical & pharmaceutical products	59.9	61.6	1.7	Growing	Faster	3
Computer & electronic products	69.2	52.5	-16.7	Growing	Slower	4
Electrical equipment	55.5	62.7	7.2	Growing	Faster	6
Fabricated metal products	48.8	50.4	1.6	Growing	From Contraction	1
Food, beverage & tobacco products	53.2	56.8	3.6	Growing	Faster	12
Furniture & related products	51.9	55.5	3.6	Growing	Faster	2
Nonmetallic mineral products	54.1	59.8	5.7	Growing	Faster	2
Paper products	54.6	53.7	-0.9	Growing	Slower	5
Petroleum & coal products	47.7	45.6	-2.1	Declining	Faster	3
Plastics & rubber products	50.2	58.6	8.4	Growing	Faster	2
Primary metal	42.7	42.7	0.0	Declining	Flat	2
Printing & related support activities	55.3	58.8	3.5	Growing	Faster	3
Textile, apparel, leather & footwear	56.5	51.4	-5.1	Growing	Slower	7
Transportation equipment	17.5	55.0	37.5	Growing	From Contraction	1

^{\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: Production at a Glance

^{*}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

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
PRODUCTION PMI	57.4	58.8	1.4	Growing	Faster	7
Appliances & components	80.0	70.0	-10.0	Growing	Slower	9
Cement	58.3	60.0	1.7	Growing	Faster	7
Chemical & pharmaceutical products	66.3	66.3	0.0	Growing	Flat	3
Computer & electronic products	75.0	58.3	-16.7	Growing	Slower	7
Electrical equipment	60.7	71.4	10.7	Growing	Faster	6
Fabricated metal products	52.1	48.9	-3.2	Declining	From Expansion	1
Food, beverage & tobacco products	56.4	57.9	1.5	Growing	Faster	12
Furniture & related products	57.8	62.7	4.8	Growing	Faster	7
Nonmetallic mineral products	62.5	65.3	2.8	Growing	Faster	3
Paper products	50.0	53.8	3.8	Growing	From No Change	1
Petroleum & coal products	37.5	41.7	4.2	Declining	Slower	3
Plastics & rubber products	48.2	64.3	16.1	Growing	From Contraction	1
Primary metal	40.9	31.8	-9.1	Declining	Faster	2
Printing & related support activities	55.3	60.7	5.3	Growing	Faster	6
Textile, apparel, leather & footwear	63.1	60.1	-3.0	Growing	Slower	7
Transportation equipment	0.0	100.0	100.0	Growing	From Contraction	1

Table 3: New Orders at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
NEW ORDERS PMI	52.3	53.5	1.2	Growing	Faster	6
Appliances & components	40.0	100.0	60.0	Growing	From Contraction	1
Cement	45.0	51.7	6.7	Growing	From Contraction	1
Chemical & pharmaceutical products	58.7	63.5	4.8	Growing	Faster	3
Computer & electronic products	75.0	58.3	-16.7	Growing	Slower	2
Electrical equipment	46.4	67.9	21.5	Growing	From Contraction	1
Fabricated metal products	45.3	47.9	2.6	Declining	Slower	3
Food, beverage & tobacco products	53.5	62.4	8.9	Growing	Faster	12
Furniture & related products	50.0	51.8	1.8	Growing	From No Change	1
Nonmetallic mineral products	45.8	55.6	9.8	Growing	From Contraction	1
Paper products	53.8	48.1	-5.7	Declining	From Expansion	1
Petroleum & coal products	45.8	37.5	-8.3	Declining	Faster	3
Plastics & rubber products	48.2	53.6	5.4	Growing	From Contraction	1
Primary metal	36.4	40.9	4.5	Declining	Slower	2
Printing & related support activities	59.3	53.3	-6.0	Growing	Slower	3
Textile, apparel, leather & footwear	58.1	46.5	-11.6	Declining	From Expansion	1
Transportation equipment	0.0	0.0	0.0	Declining	Flat	3

Table 4: Supplier Delivery Time at a Glance

	Series Index	Series Index			Rate of	Trend
Index	August	September	Change	Direction	Change	(Months)
SUPPLIER DELIVERY TIME PMI	52.0	55.4	3.4	Growing	Faster	4
Appliances & components	60.0	50.0	-10.0	No Change	From Expansion	1
Cement	55.0	51.7	-3.3	Growing	Slower	4
Chemical & pharmaceutical products	51.9	58.7	6.8	Growing	Faster	4
Computer & electronic products	58.3	50.0	-8.3	No Change	From Expansion	1
Electrical equipment	78.6	53.6	-25.0	Growing	Slower	9
Fabricated metal products	55.3	55.8	0.5	Growing	Faster	3
Food, beverage & tobacco products	49.5	51.5	2.0	Growing	From Contraction	1
Furniture & related products	48.2	56.1	7.9	Growing	From Contraction	1
Nonmetallic mineral products	63.9	55.6	-8.3	Growing	Slower	3
Paper products	61.5	57.7	-3.8	Growing	Slower	2
Petroleum & coal products	58.3	45.8	-12.5	Declining	From Expansion	1
Plastics & rubber products	48.2	60.7	12.5	Growing	From Contraction	1
Primary metal	50.0	40.9	-9.1	Declining	From No Change	1
Printing & related support activities	44.7	63.3	18.6	Growing	From Contraction	1
Textile, apparel, leather & footwear	48.0	53.5	5.5	Growing	From Contraction	1
Transportation equipment	50.0	100.0	50.0	Growing	From No Change	1

Table 5: Employment Level at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
EMPLOYMENT LEVEL PMI	51.5	52.8	1.3	Growing	Faster	5
Appliances & components	50.0	40.0	-10.0	Declining	From No Change	1
Cement	48.3	50.0	1.7	No Change	From Contraction	1
Chemical & pharmaceutical products	59.6	55.8	-3.8	Growing	Slower	3
Computer & electronic products	58.3	41.7	-16.6	Declining	From Expansion	1
Electrical equipment	50.0	50.0	0.0	No Change	Flat	3
Fabricated metal products	42.6	49.5	6.9	Declining	Slower	2
Food, beverage & tobacco products	51.0	49.5	-1.5	Declining	From Expansion	1
Furniture & related products	54.2	50.0	-4.2	No Change	From Expansion	1
Nonmetallic mineral products	48.6	66.7	18.1	Growing	From Contraction	1
Paper products	53.8	57.7	3.9	Growing	Faster	5
Petroleum & coal products	50.0	41.7	-8.3	Declining	From No Change	1
Plastics & rubber products	50.0	57.1	7.1	Growing	From No Change	1
Primary metal	45.5	59.1	13.6	Growing	From Contraction	1
Printing & related support activities	56.7	64.0	7.3	Growing	Faster	2
Textile, apparel, leather & footwear	52.5	48.0	-4.5	Declining	From Expansion	1
Transportation equipment	0.0	50.0	50.0	No Change	From Contraction	1

Table 6: Raw Materials Inventory at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
RAW MATERIALS INVENTORY PMI	54.9	56.4	1.5	Growing	Faster	6
Appliances & components	100.0	100.0	0.0	Growing	Flat	10
Cement	51.7	58.3	6.6	Growing	Faster	3
Chemical & pharmaceutical products	59.6	60.6	1.0	Growing	Faster	4
Computer & electronic products	75.0	45.8	-29.2	Declining	From Expansion	1
Electrical equipment	46.4	64.3	17.9	Growing	From Contraction	1
Fabricated metal products	53.7	55.8	2.1	Growing	Faster	2
Food, beverage & tobacco products	54.0	59.9	5.9	Growing	Faster	12
Furniture & related products	43.4	58.4	15.0	Growing	From Contraction	1
Nonmetallic mineral products	54.3	51.4	-2.9	Growing	Slower	2
Paper products	59.6	55.8	-3.8	Growing	Slower	5
Petroleum & coal products	58.3	87.5	29.2	Growing	Faster	2
Plastics & rubber products	64.3	58.9	-5.4	Growing	Slower	2
Primary metal	50.0	45.5	-4.5	Declining	From No Change	1
Printing & related support activities	56.7	53.3	-3.4	Growing	Slower	3
Textile, apparel, leather & footwear	56.1	48.5	-7.6	Declining	From Expansion	1
Transportation equipment	100.0	50.0	-50.0	No Change	From Expansion	1

Table 7: Non-Manufacturing at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
Composite PMI \1	54.1	54.9	0.8	Growing	Faster	5
Business Activity	56.1	56.8	0.7	Growing	Faster	6
Level of new orders/customers/incoming business	53.5	55.4	1.9	Growing	Faster	6
Level of employment	54.4	54.7	0.3	Growing	Faster	5
Inventory	52.3	52.9	0.6	Growing	Faster	5
Average price of Inputs (volume weighted)	54.5	56.9	2.4	Growing	Faster	23
Level of outstanding business/ Backlog of work	42.8	42.2	-0.6	Declining	Faster	39
New Exports orders	34.5	31.2	-3.3	Declining	Faster	39
Imports	34.8	35.9	1.1	Declining	Slower	39
Inventory (sentiments)	42.0	44.2	2.2	Declining	Slower	39
Non-manufacturing sub-sectors						
Accommodation & food services	56.7	52.3	-4.4	Growing	Slower	5
Agriculture	56.8	60.6	3.8	Growing	Faster	16
Arts, entertainment & recreation	50.7	53.9	3.2	Growing	Faster	2
Construction	47.1	44.9	-2.2	Declining	Faster	28
Educational services	51.4	54.8	3.4	Growing	Faster	10
Electricity, gas, steam & air conditioning supply	56.5	56.6	0.1	Growing	Faster	7
Finance & insurance	58.4	57.3	-1.1	Growing	Slower	7
Health care & social assistance	58.0	57.6	-0.4	Growing	Slower	5
Information & communication	58.7	53.4	-5.3	Growing	Slower	6
Management of companies	48.9	45.0	-3.9	Declining	Faster	2
Professional, scientific, & technical services	51.3	49.3	-2.0	Declining	From Expansion	1
Public administration	59.1	55.6	-3.5	Growing	Slower	3
Real estate rental & leasing	42.6	51.8	9.2	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	53.8	55.7	1.9	Growing	Faster	4
Transportation & warehousing	55.8	57.2	1.4	Growing	Faster	7
Utilities	63.8	68.4	4.6	Growing	Faster	6
Water supply, sewage & waste management	50.6	55.0	4.4	Growing	Faster	7
Wholesale/Retail trade	53.2	55.3	2.1	Growing	Faster	4

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

Table 8: Business activity at a Glance

	Series	Series			Rate	T
Index	Index August	Index September	Change	Direction	of Change	Trend (Months)
BUSINESS ACTIVITY PMI	56.1	56.8	0.7	Growing	Faster	6
Accommodation & food services	56.8	52.2	-4.6	- J	Slower	5
	60.3	52.2 59.2		Growing	Slower	5 16
Agriculture			-1.1	Growing		
Arts, entertainment & recreation	44.3	62.9	18.6	Growing	From Contraction	1
Construction	51.3	50.0	-1.3	No Change	From Expansion	1
Educational services	50.0	52.4	2.4	Growing	From No Change	1
Electricity, gas, steam & air conditioning supply	62.0	60.2	-1.8	Growing	Slower	7
Finance & insurance	60.8	62.8	2.0	Growing	Faster	6
Health care & social assistance	65.6	61.1	-4.5	Growing	Slower	7
Information & communication	62.5	53.4	-9.1	Growing	Slower	6
Management of companies	50.0	30.0	-20.0	Declining	From No Change	1
Professional, scientific, & technical services	46.5	50.0	3.5	No Change	From Contraction	1
Public administration	59.1	44.4	-14.7	Declining	From Expansion	1
Real estate rental & leasing	42.1	55.5	13.4	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	53.3	58.1	4.8	Growing	Faster	6
Transportation & warehousing	63.8	62.2	-1.6	Growing	Slower	6
Utilities	65.0	81.6	16.6	Growing	Faster	6
Water supply, sewage & waste management	50.0	60.0	10.0	Growing	From No Change	1
Wholesale/Retail trade	56.6	55.1	-1.5	Growing	Slower	5

Table 9: New Orders at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
NEW ORDERS PMI	53.5	55.4	1.9	Growing	Faster	6
Accommodation & food services	54.2	50.0	-4.2	No Change	From Expansion	1
Agriculture	58.1	63.1	5.0	Growing	Faster	3
Arts, entertainment & recreation	47.1	54.3	7.2	Growing	From Contraction	1
Construction	41.3	46.9	5.6	Declining	Slower	28
Educational services	48.8	52.4	3.6	Growing	From Contraction	1
Electricity, gas, steam & air conditioning supply	58.7	62.2	3.5	Growing	Faster	7
Finance & insurance	63.7	53.2	-10.5	Growing	Slower	7
Health care & social assistance	58.8	59.7	0.9	Growing	Faster	4
Information & communication	56.7	54.3	-2.4	Growing	Slower	6
Management of companies	45.5	50.0	4.5	No Change	From Contraction	1
Professional, scientific, & technical services	50.9	50.0	-0.9	No Change	From Expansion	1
Public administration	54.5	61.1	6.6	Growing	Faster	3
Real estate rental & leasing	38.9	47.3	8.4	Declining	Slower	2
Repair, maintenance/washing of motor vehicles	54.2	55.1	0.9	Growing	Faster	4
Transportation & warehousing	54.3	60.0	5.7	Growing	Faster	7
Utilities	75.0	78.9	3.9	Growing	Faster	6
Water supply, sewage & waste management	50.0	52.5	2.5	Growing	From No Change	1
Wholesale/Retail trade	53.0	56.2	3.2	Growing	Faster	4

Table 10: Employment at a Glance

	Series	Series			Rate	
	Index	Index			of	Trend
Index	August	September	Change	Direction	Change	(Months)
EMPLOYMENT LEVEL PMI	54.4	54.7	0.3	Growing	Faster	5
Accommodation & food services	59.5	55.1	-4.4	Growing	Slower	2
Agriculture	51.5	64.6	13.1	Growing	Faster	5
Arts, entertainment & recreation	55.7	54.3	-1.4	Growing	Slower	5
Construction	53.8	48.4	-5.4	Declining	From Expansion	1
Educational services	58.1	57.1	-1.0	Growing	Slower	9
Electricity, gas, steam & air conditioning supply	53.3	54.1	0.8	Growing	Faster	2
Finance & insurance	55.9	53.2	-2.7	Growing	Slower	4
Health care & social assistance	51.3	56.9	5.6	Growing	Faster	4
Information & communication	56.7	50.9	-5.8	Growing	Slower	5
Management of companies	50.0	30.0	-20.0	Declining	From No Change	1
Professional, scientific, & technical services	60.5	50.9	-9.6	Growing	Slower	4
Public administration	63.6	44.4	-19.2	Declining	From Expansion	1
Real estate rental & leasing	45.2	54.5	9.3	Growing	From Contraction	1
Repair, maintenance/washing of motor vehicles	54.2	53.0	-1.2	Growing	Slower	4
Transportation & warehousing	57.4	54.4	-3.0	Growing	Slower	7
Utilities	65.0	57.9	-7.1	Growing	Slower	6
Water supply, sewage & waste management	40.0	57.5	17.5	Growing	From Contraction	1
Wholesale/Retail trade	52.7	54.8	2.1	Growing	Faster	4

Table 11: Inventory at a Glance

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	Series	Series		Rate	
	Index	Index		of	Trend
Index	August	September	Change	Direction Change	(Months)
INVENTORY PMI	52.3	52.9	0.6	Growing Faster	5
Accommodation & food services	56.3	51.7	-4.6	Growing Slower	2
Agriculture	57.4	55.4	-2.0	Growing Slower	6
Arts, entertainment & recreation	55.7	44.3	-11.4	Declining From Expansion	1
Construction	42.3	34.4	-7.9	Declining Faster	3
Educational services	48.8	57.3	8.5	Growing From Contraction	1
Electricity, gas, steam & air conditioning supply	52.2	50.0	-2.2	No Chang∈ From Expansion	1
Finance & insurance	53.1	60.0	6.9	Growing Faster	4
Health care & social assistance	56.3	52.8	-3.5	Growing Slower	5
Information & communication	58.8	55.2	-3.6	Growing Slower	3
Management of companies	50.0	70.0	20.0	Growing From No Change	1
Professional, scientific, & technical services	47.3	46.5	-0.8	Declining Faster	2
Public administration	59.1	72.2	13.1	Growing Faster	3
Real estate rental & leasing	44.4	50.0	5.6	No Change From Contraction	1
Repair, maintenance/washing of motor vehicles	53.4	56.6	3.2	Growing Faster	3
Transportation & warehousing	47.8	52.2	4.4	Growing From Contraction	1
Utilities	50.0	55.3	5.3	Growing From No Change	1
Water supply, sewage & waste management	62.5	50.0	-12.5	No Change From Expansion	1
Wholesale/Retail trade	50.3	55.1	4.8	Growing Faster	2

Table 12: Manufacturing PMI Data Series

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	42.5	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

Table 13: Non-Manufacturing PMI Data Series

Month	COMPOSITE	Business Activity	New orders	Employmen t 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