## PURCHASING MANAGERS' INDEX

A MONTHLY PUBLICATION

## MARCH 2017 REPORT



SURVEY MANAGEMENT DIVISION STATISTICS DEPARTMENT<br>CENTRAL BANK OF NIGERIA, ABUJA

## PURCHASING MANAGERS' INDEX (PMI) MARCH 2017 REPORT

### 1.0 Introduction

The Statistics Department, Central Bank of Nigeria conducts a monthly survey of purchasing and supply executives of manufacturing and non-manufacturing organizations in 13 locations in Nigeria: two states in each of the six geo-political zones, and the FCT (Fig. 1). The survey results are used to compute the monthly Purchasing Managers' Index (PMI). The survey for this month was conducted March $13^{\text {th }}$ to $20^{\text {th }}, 2017$ with a total of 1,788 responses received from a sample of 1,950 respondents, representing a response rate of 91.7 per cent. The Bank makes no representation regarding the individual companies, other than that stated by the respondents. The data contained herein further provides input for policy decisions.


Fig. 1: Map of Nigeria showing the survey locations

### 1.1 Data and Method of Presentation

The Manufacturing and Non-Manufacturing PMI Report on businesses is derived from the data compiled from purchasing and supply executives. Survey responses indicate whether there is change or no change in the level of business activities in the current month compared with the previous month. For each of the indicators measured, this report shows the diffusion index of the responses. The diffusion index is computed as the percent of positive responses plus one-half of the percent of those reporting no change. The composite PMI is then computed as the weighted average of five diffusion indices for manufacturing sector: 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 non-manufacturing sector is computed from four diffusion
indices: business activity, 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 declining. The sub-sectors reporting growth are listed in the order of highest to lowest growth. For the sub-sectors reporting contraction/decline, they are listed in the order of the highest to the lowest decline.

### 2.0 Manufacturing PMI Report

Production level expanding from expansion, new orders declining at a slower rate, supplier delivery time improving from worsening condition, employment level declining at a slower rate, and raw material inventories declining at a slower rate


The Manufacturing PMI stood at 47.7 index points in March 2017, indicating declines in the manufacturing sector for the third consecutive month (Fig. 2 and Table 1) but at a slower rate. Thirteen of the sixteen sub-sectors reported declines in the review month in the following order: primary metal; transportation equipment; plastics \& rubber products; electrical equipment; paper products; printing \& related support activities; petroleum \& coal products; nonmetallic mineral products; furniture \& related products; cement; fabricated metal products; computer \& electronic products; and chemical \& pharmaceutical products. The appliances \& components; food, beverage \& tobacco products; and textile, apparel, leather \& footwear sub sectors reported expansion in the review period.


Fig. 2: Trend of Manufacturing PMI
Table 1: Manufacturing at a Glance

| Index | Series <br> Index* <br> February | Series <br> Index* <br> March | Percentage Point Change | Direction | Rate of Change | Trend** <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite PMI \1 | 44.6 | 47.7 | 3.1 | Declining | Slower | 3 |
| Production level | 45.2 | 50.8 | 5.6 | Growing | From Contraction | 1 |
| New orders | 44.0 | 45.6 | 1.6 | Declining | Slower | 3 |
| Supplier delivery time | 48.7 | 51.3 | 2.6 | Improving | From Worsening | 1 |
| Employment level | 41.7 | 43.6 | 1.9 | Declining | Slower | 25 |
| Raw materials/WIP Inventories | 44.8 | 49.1 | 4.3 | Declining | Slower | 3 |
| New Export Orders | 38.4 | 38.5 | 0.1 | Declining | Slower | 25 |
| Output Prices | 69.9 | 65.0 | -4.9 | Growing | Slower | 15 |
| Input Prices | 70.9 | 68.3 | -2.6 | Growing | Slower | 33 |
| Quantity of Purchases | 47.7 | 50.1 | 2.5 | Growing | From Contraction | 1 |
| Business Outstanding/ Backlog of Work | 43.2 | 43.6 | 0.5 | Declining | Slower | 25 |
| Stocks of Finished Goods | 43.9 | 45.1 | 1.2 | Declining | Slower | 25 |
| Capacity Utilization | 45.6 | 46.6 | 1.0 | Declining | Slower | 2 |
| Manufacturing Sub-Sectors |  |  |  |  |  |  |
| Appliances \& components | 55.4 | 63.9 | 8.5 | Growing | Faster | 4 |
| Cement | 44.1 | 46.7 | 2.6 | Declining | Slower | 3 |
| Chemical \& pharmaceutical products | 41.8 | 48.0 | 6.1 | Declining | Slower | 3 |
| Computer \& electronic products | 47.7 | 47.5 | -0.2 | Declining | Faster | 2 |
| Electrical equipment | 38.9 | 40.8 | 1.9 | Declining | Slower | 4 |
| Fabricated metal products | 41.2 | 47.2 | 6.1 | Declining | Slower | 3 |
| Food, beverage \& tobacco products | 51.9 | 53.2 | 1.3 | Growing | Faster | 6 |
| Furniture \& related products | 43.3 | 46.7 | 3.4 | Declining | Slower | 3 |
| Nonmetallic mineral products | 49.1 | 45.9 | -3.3 | Declining | Faster | 2 |
| Paper products | 35.8 | 44.9 | 9.0 | Declining | Slower | 3 |
| Petroleum \& coal products | 45.6 | 45.4 | -0.2 | Declining | Faster | 2 |
| Plastics \& rubber products | 45.5 | 40.5 | -4.9 | Declining | Faster | 3 |
| Primary metal | 49.5 | 30.3 | -19.1 | Declining | Faster | 15 |
| Printing \& related support activities | 41.0 | 45.1 | 4.1 | Declining | Slower | 18 |
| Textile, apparel, leather \& footwear | 46.3 | 52.3 | 6.0 | Growing | From Contraction | 1 |
| Transportation equipment | 29.5 | 39.8 | 10.3 | Declining | Slower | 9 |

$\backslash 1$ The composite PMI is a weighted average of the following diffusion indices: production level, new orders, supplier deliveries, employment
** Number of month moving in current direction

### 2.1 Production Level

The production level index for manufacturing sector expanded in March 2017. The index at 50.8 points indicated an expansion in production level as compared to contraction in the previous month. Seven manufacturing sub-sectors recorded increase in production level during the review month in the following order: appliances \& components; petroleum \& coal products; textile, apparel, leather \& footwear; food, beverage \& tobacco products; cement; computer \& electronic products; and furniture \& related products. The nonmetallic mineral products sub-sector remained unchanged, while the primary metal; transportation equipment; electrical equipment; plastics \& rubber products; paper products; chemical \& pharmaceutical products; printing \& related support activities; and fabricated metal products recorded declines in production in March 2017.(Table 2).

Table 2: Production at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage Point Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRODUCTION PMI | 45.2 | 50.8 | 5.6 | Growing | From Contraction | 1 |
| Appliances \& components | 58.3 | 83.3 | 25.0 | Growing | Faster | 3 |
| Cement | 48.5 | 53.7 | 5.2 | Growing | From Contraction | 1 |
| Chemical \& pharmaceutical products | 38.2 | 45.8 | 7.6 | Declining | Slower | 2 |
| Computer \& electronic products | 46.4 | 53.1 | 6.7 | Growing | From Contraction | 1 |
| Electrical equipment | 25.0 | 36.1 | 11.1 | Declining | Slower | 3 |
| Fabricated metal products | 41.5 | 49.5 | 8.0 | Declining | Slower | 4 |
| Food, beverage \& tobacco products | 57.1 | 57.9 | 0.8 | Growing | Faster | 6 |
| Furniture \& related products | 40.9 | 51.7 | 10.8 | Growing | From Contraction | 1 |
| Nonmetallic mineral products | 55.1 | 50.0 | -5.1 | No Change | From Expansion | 1 |
| Paper products | 28.3 | 44.6 | 16.3 | Declining | Slower | 4 |
| Petroleum \& coal products | 50.0 | 58.3 | 8.3 | Growing | From No Change | 1 |
| Plastics \& rubber products | 40.6 | 40.9 | 0.3 | Declining | Slower | 2 |
| Primary metal | 46.4 | 20.0 | -26.4 | Declining | Faster | 13 |
| Printing \& related support activities | 44.0 | 48.6 | 4.5 | Declining | Slower | 4 |
| Textile, apparel, leather \& footwear | 48.2 | 58.2 | 10.1 | Growing | From Contraction | 1 |
| Transportation equipment | 28.6 | 25.0 | -3.6 | Declining | Faster | 9 |

### 2.2 New Orders

At 45.6 points, the index declined for the third consecutive month but at a slower rate when compared to the level achieved in February 2017. Twelve sub-sectors recorded declines in the following order: primary metal; plastics \& rubber products; petroleum \& coal products; printing \& related support activities; electrical equipment; transportation equipment; computer \& electronic products; paper products; fabricated metal products; furniture \& related products; cement; and nonmetallic mineral products. The remaining four sub-sectors grew in the following order: appliances \& components; food, beverage \& tobacco products; textile, apparel, leather \& footwear; and chemical \& pharmaceutical products (Table 3).

Table 3: New Orders at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW ORDERS PMI | 44.0 | 45.6 | 1.6 | Declining | Slower | 3 |
| Appliances \& components | 58.3 | 61.1 | 2.8 | Growing | Faster | 3 |
| Cement | 39.4 | 46.2 | 6.8 | Declining | Slower | 3 |
| Chemical \& pharmaceutical products | 46.1 | 52.5 | 6.4 | Growing | From Contraction | 1 |
| Computer \& electronic products | 46.4 | 40.6 | -5.8 | Declining | Faster | 2 |
| Electrical equipment | 44.4 | 38.9 | -5.6 | Declining | Faster | 4 |
| Fabricated metal products | 38.1 | 43.8 | 5.7 | Declining | Slower | 3 |
| Food, beverage \& tobacco products | 53.1 | 53.5 | 0.4 | Growing | Faster | 6 |
| Furniture \& related products | 43.2 | 43.9 | 0.7 | Declining | Slower | 15 |
| Nonmetallic mineral products | 48.7 | 46.6 | -2.1 | Declining | Faster | 2 |
| Paper products | 28.3 | 41.9 | 13.6 | Declining | Slower | 3 |
| Petroleum \& coal products | 43.8 | 37.5 | -6.3 | Declining | Faster | 2 |
| Plastics \& rubber products | 54.7 | 31.8 | -22.9 | Declining | From Expansion | 1 |
| Primary metal | 46.4 | 16.7 | -29.8 | Declining | Faster | 13 |
| Printing \& related support activities | 36.7 | 37.9 | 1.1 | Declining | Slower | 15 |
| Textile, apparel, leather \& footwear | 45.5 | 52.6 | 7.1 | Growing | From Contraction | 1 |
| Transportation equipment | 25.0 | 38.9 | 13.9 | Declining | Slower | 8 |

### 2.3 Supplier Delivery Time

At 51.3 index points, the supplier delivery time index for the manufacturing sub-sectors improved in March 2017. Nine sub-sectors recorded improved suppliers' delivery time in the following order: computer \& electronic products; electrical equipment; paper products; plastics \& rubber products; chemical \& pharmaceutical products; primary metal; printing \& related support activities; food, beverage \& tobacco products; and fabricated metal products. The appliances \& components; petroleum \& coal products; and transportation equipment sub-sector remained unchanged, while the cement; textile, apparel, leather \& footwear; furniture \& related products; and nonmetallic mineral products sub-sectors recorded declines in delivery time in March 2017 (Table 4).

Table 4: Supplier Delivery Time at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage Point Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUPPLIER DELIVERY PMI | 48.7 | 51.3 | 2.6 | Improving | From Worsening | 1 |
| Appliances \& components | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |
| Cement | 42.4 | 44.4 | 2.0 | Worsening | Slower | 4 |
| Chemical \& pharmaceutical products | 47.1 | 53.3 | 6.3 | Improving | From Worsening | 1 |
| Computer \& electronic products | 64.3 | 59.4 | -4.9 | Improving | Slower | 2 |
| Electrical equipment | 52.8 | 58.3 | 5.6 | Improving | Faster | 3 |
| Fabricated metal products | 52.8 | 51.6 | -1.3 | Improving | Slower | 12 |
| Food, beverage \& tobacco products | 42.0 | 51.8 | 9.8 | Improving | From Worsening | 1 |
| Furniture \& related products | 51.1 | 48.3 | -2.8 | Worsening | From Improving | 1 |
| Nonmetallic mineral products | 39.7 | 48.9 | 9.1 | Worsening | Slower | 4 |
| Paper products | 45.0 | 58.1 | 13.1 | Improving | From Worsening | 1 |
| Petroleum \& coal products | 62.5 | 50.0 | -12.5 | No Change | From Improving | 1 |
| Plastics \& rubber products | 37.5 | 54.5 | 17.0 | Improving | From Worsening | 1 |
| Primary metal | 50.0 | 53.3 | 3.3 | Improving | From No Change | 1 |
| Printing \& related support activities | 52.4 | 52.1 | -0.3 | Improving | Slower | 3 |
| Textile, apparel, leather \& footwear | 53.6 | 47.9 | -5.7 | Worsening | From Improving | 1 |
| Transportation equipment | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |

### 2.4 Employment Level

Employment level index in March 2017 stood at 43.6 points, indicating a decline in employment level for twenty-five consecutive months. However, the index declined at a slower rate when compared with the level in the preceding month. Of the sixteen sub-sectors, fifteen recorded declines in the following order: electrical equipment; primary metal; petroleum \& coal products; transportation equipment; nonmetallic mineral products; cement; chemical \& pharmaceutical products; paper products; furniture \& related products; plastics \& rubber products; computer \& electronic products; fabricated metal products; textile, apparel, leather \& footwear; printing \& related support activities; and food, beverage \& tobacco products. The appliances \& components sub-sector recorded growth during the review period (Table 5).

Table 5: Employment Level at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage Point Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYMENT LEVEL PMI | 41.7 | 43.6 | 1.9 | Declining | Slower | 25 |
| Appliances \& components | 41.7 | 55.6 | 13.9 | Growing | From Contraction | 1 |
| Cement | 48.5 | 38.9 | -9.6 | Declining | Faster | 3 |
| Chemical \& pharmaceutical products | 36.3 | 39.2 | 2.9 | Declining | Slower | 17 |
| Computer \& electronic products | 35.7 | 43.8 | 8.0 | Declining | Slower | 8 |
| Electrical equipment | 33.3 | 33.3 | 0.0 | Declining | Flat | 10 |
| Fabricated metal products | 36.4 | 44.8 | 8.4 | Declining | Slower | 20 |
| Food, beverage \& tobacco products | 50.4 | 47.8 | -2.7 | Declining | From Expansion | 1 |
| Furniture \& related products | 42.0 | 42.2 | 0.3 | Declining | Slower | 17 |
| Nonmetallic mineral products | 44.9 | 38.6 | -6.2 | Declining | Faster | 15 |
| Paper products | 48.3 | 41.9 | -6.4 | Declining | Faster | 3 |
| Petroleum \& coal products | 37.5 | 37.5 | 0.0 | Declining | Flat | 2 |
| Plastics \& rubber products | 45.3 | 42.4 | -2.9 | Declining | Faster | 2 |
| Primary metal | 50.0 | 36.7 | -13.3 | Declining | From No Change | 1 |
| Printing \& related support activities | 34.5 | 47.1 | 12.6 | Declining | Slower | 20 |
| Textile, apparel, leather \& footwear | 42.2 | 46.9 | 4.7 | Declining | Slower | 3 |
| Transportation equipment | 18.8 | 37.5 | 18.8 | Declining | Slower | 2 |

### 2.5 Raw Materials Inventory

At 49.1 points, the raw materials inventory index declined for the third consecutive months. Of the sixteen sub-sectors, nine recorded declines in raw materials inventories in the order: paper products; plastics \& rubber products; nonmetallic mineral products; computer \& electronic products; printing \& related support activities; petroleum \& coal products; electrical equipment; furniture \& related products; and chemical \& pharmaceutical products. The cement and primary metal sub-sectors remained unchanged, while the remaining five sub-sectors recorded increase in inventories in the order: transportation equipment; appliances \& components; textile, apparel, leather \& footwear; food, beverage \& tobacco products; and fabricated metal products (Table 6).

Table 6: Raw Materials Inventories at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage Point Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RAW MATERIALS INVENTORIES PMI | 44.8 | 49.1 | 4.3 | Declining | Slower | 3 |
| Appliances \& components | 75.0 | 61.1 | -13.9 | Growing | Slower | 4 |
| Cement | 40.9 | 50.0 | 9.1 | No Change | From Contraction | 1 |
| Chemical \& pharmaceutical products | 41.2 | 49.2 | 8.0 | Declining | Slower | 2 |
| Computer \& electronic products | 53.6 | 43.3 | -10.2 | Declining | From Expansion | 1 |
| Electrical equipment | 47.2 | 47.2 | 0.0 | Declining | Flat | 4 |
| Fabricated metal products | 42.0 | 50.5 | 8.6 | Growing | From Contraction | 1 |
| Food, beverage \& tobacco products | 52.7 | 53.1 | 0.4 | Growing | Faster | 6 |
| Furniture \& related products | 40.3 | 48.9 | 8.5 | Declining | Slower | 14 |
| Nonmetallic mineral products | 57.7 | 43.2 | -14.5 | Declining | From Expansion | 1 |
| Paper products | 38.3 | 40.5 | 2.2 | Declining | Slower | 3 |
| Petroleum \& coal products | 31.3 | 45.8 | 14.6 | Declining | Slower | 13 |
| Plastics \& rubber products | 42.2 | 40.9 | -1.3 | Declining | Faster | 3 |
| Primary metal | 64.3 | 50.0 | -14.3 | No Change | From Expansion | 1 |
| Printing \& related support activities | 41.6 | 43.6 | 2.0 | Declining | Slower | 16 |
| Textile, apparel, leather \& footwear | 41.7 | 54.1 | 12.5 | Growing | From Contraction | 1 |
| Transportation equipment | 35.7 | 68.8 | 33.0 | Growing | From Contraction | 1 |

### 3.0 Non-Manufacturing PMI Report

Business activity, new orders, employment level and raw materials inventories declining in March 2017


The composite PMI for the non-manufacturing sector declined for the fifteenth consecutive month. The index stood at 47.1 points, indicating a slower decline when compared to the 44.5 points in February 2017. Of the eighteen non-manufacturing sub-sectors, eleven recorded declines in the following order: construction; professional, scientific, \& technical services; real estate, rental \& leasing; management of companies; repair, maintenance/washing of motor vehicles; accommodation \& food services; wholesale/retail trade; arts, entertainment \& recreation; information \& communication; utilities; and health care \& social assistance. The remaining seven sub-sectors: public administration; educational services; agriculture; water supply, sewage \& waste management; electricity, gas, steam \& air conditioning supply; transportation \& warehousing; and finance \& insurance reported growth in the review month (Table 7 and Fig. 3).

Table 7: Non-Manufacturing at a Glance

| Index | Series <br> Index <br> February | Series Index March | Percentage <br> Point <br> Change | Direction |  | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite PMI \2 | 44.5 | 47.1 | 2.6 | Declining | Slower | 15 |
| Business Activity | 45.4 | 49.8 | 4.4 | Declining | Slower | 2 |
| Level of new orders/customers/incoming business | 44.9 | 46.4 | 1.5 | Declining | Slower | 15 |
| Level of employment in your organisation | 42.6 | 44.0 | 1.4 | Declining | Slower | 15 |
| Raw materials/WIP Inventories | 44.9 | 48.0 | 3.1 | Declining | Slower | 2 |
| Average price of yourinputs (volume weighted) | 65.4 | 62.1 | -3.2 | Growing | Slower | 17 |
| Level of outstanding business/ Backlog of work | 42.9 | 42.7 | -0.2 | Declining | Faster | 33 |
| New Exports orders | 33.4 | 33.1 | -0.3 | Declining | Faster | 33 |
| Imports | 34.5 | 34.5 | 0.0 | Declining | Faster | 33 |
| Finished goods Inventories (sentiments) | 38.7 | 40.6 | 1.9 | Declining | Slower | 33 |
| Non-manufacturing sub-sectors |  |  |  |  |  |  |
| Accommodation \& food services | 42.4 | 45.5 | 3.2 | Declining | Slower | 15 |
| Agriculture | 51.0 | 53.5 | 2.5 | Growing | Faster | 10 |
| Arts, entertainment \& recreation | 43.6 | 46.2 | 2.6 | Declining | Slower | 2 |
| Construction | 34.0 | 38.0 | 4.0 | Declining | Slower | 22 |
| Educational services | 52.5 | 55.5 | 3.0 | Growing | Faster | 4 |
| Electricity, gas, steam \& air conditioning supply | 47.0 | 52.7 | 5.7 | Growing | From Contraction | 1 |
| Finance \& insurance | 44.5 | 51.1 | 6.6 | Growing | From Contraction | 1 |
| Health care \& social assistance | 45.7 | 49.9 | 4.1 | Declining | Slower | 10 |
| Information \& communication | 44.4 | 46.5 | 2.1 | Declining | Slower | 2 |
| Management of companies | 50.0 | 42.5 | -7.5 | Declining | From No Change | 1 |
| Professional, scientific, \& technical services | 39.4 | 41.5 | 2.1 | Declining | Slower | 25 |
| Public administration | 42.7 | 56.6 | 13.9 | Growing | From Contraction | 1 |
| Real estate, rental \& leasing | 43.9 | 41.9 | -2.0 | Declining | Faster | 3 |
| Repair, maintenance/washing of motor vehicles | 45.5 | 43.6 | -1.9 | Declining | Faster | 15 |
| Transportation \& warehousing | 49.6 | 51.3 | 1.7 | Growing | From Contraction | 1 |
| Utilities | 44.1 | 46.6 | 2.5 | Declining | Slower | 2 |
| Water supply, sewage \& waste management | 39.7 | 53.3 | 13.6 | Growing | From Contraction | 1 |
| Wholesale/Retail trade | 44.1 | 45.8 | 1.8 | Declining | Slower | 15 |

$\backslash 2$ The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories.


Fig. 3: Trend of Non-Manufacturing PMI

### 3.1 Business Activity

The business activity index stood at 49.8 points in March 2017, from its level of 45.4 points in February 2017. Nine sub-sectors recorded decline in the following order: management of companies; construction; arts, entertainment \& recreation; repair, maintenance/washing of motor vehicles; professional, scientific \& technical services; real estate, rental \& leasing; accommodation \& food services; information \& communication; and finance \& insurance. The transportation \& warehousing and utilities sub-sectors remained unchanged, while the remaining seven sub-sectors recorded growth in the order: public administration; agriculture; educational services; water supply, sewage \& waste management; health care \& social assistance; electricity, gas, steam \& air conditioning supply; and wholesale/retail trade (Table 8).

Table 8: Business Activity at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage <br> Point <br> Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUSINESS ACTIVITY PMI | 45.4 | 49.8 | 4.4 | Declining | Slower | 2 |
| Accommodation \& food services | 43.7 | 47.8 | 4.1 | Declining | Slower | 15 |
| Agriculture | 54.6 | 63.2 | 8.5 | Growing | Faster | 10 |
| Arts, entertainment \& recreation | 41.9 | 43.1 | 1.2 | Declining | Slower | 2 |
| Construction | 34.1 | 40.4 | 6.3 | Declining | Slower | 13 |
| Educational services | 52.2 | 60.7 | 8.5 | Growing | Faster | 4 |
| Electricity, gas, steam \& air conditioning supply | 47.6 | 53.2 | 5.6 | Growing | From Contraction | 1 |
| Finance \& insurance | 47.2 | 49.0 | 1.8 | Declining | Slower | 4 |
| Health care \& social assistance | 47.7 | 55.0 | 7.3 | Growing | From Contraction | 1 |
| Information \& communication | 44.8 | 48.2 | 3.4 | Declining | Slower | 2 |
| Management of companies | 45.0 | 30.0 | -15.0 | Declining | Faster | 3 |
| Professional, scientific, \& technical services | 41.4 | 44.1 | 2.7 | Declining | Slower | 2 |
| Public administration | 45.8 | 64.7 | 18.9 | Growing | From Contraction | 1 |
| Real estate, rental \& leasing | 43.8 | 46.1 | 2.3 | Declining | Slower | 3 |
| Repair, maintenance/washing of motor vehicles | 46.7 | 43.7 | -3.0 | Declining | Faster | 15 |
| Transportation \& warehousing | 51.6 | 50.0 | -1.6 | No Change | From Expansion | 1 |
| Utilities | 42.1 | 50.0 | 7.9 | No Change | From Contraction | 1 |
| Water supply, sewage \& waste management | 35.4 | 60.5 | 25.1 | Growing | From Contraction | 1 |
| Wholesale/Retail trade | 46.0 | 53.2 | 7.2 | Growing | From Contraction | 1 |

### 3.2 New Orders

At 46.4 points, the new orders index declined for the fifteen consecutive months in March 2017, but at a slower rate. Of the eighteen sub-sectors, ten declined in the following order: construction; management of companies; professional, scientific, \& technical services; information \& communication; wholesale/retail trade; utilities; real estate, rental \& leasing; repair, maintenance/washing of motor vehicles; accommodation \& food services; and arts, entertainment \& recreation. The water supply, sewage \& waste management sub-sector remained unchanged, while the remaining seven sub-sectors recorded growth in the order: public administration; electricity, gas, steam \& air conditioning supply; finance \& insurance; agriculture; educational services; health care \& social assistance; and transportation \& warehousing (Table 9).

Table 9: New Orders at a Glance

| Index | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { February }\end{array}$ | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { March }\end{array}$ | $\begin{array}{c}\text { Percentage } \\ \text { Point } \\ \text { Change }\end{array}$ | Direction | $\begin{array}{c}\text { Rate } \\ \text { of } \\ \text { Change }\end{array}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| (Months) |  |  |  |  |  |$\}$

### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 44.0 points indicating a decline in employment for fifteen consecutive months. Fourteen sub-sectors recorded declines in employment level in the following order: construction; real estate, rental \& leasing; utilities; management of companies; professional, scientific, \& technical services; accommodation \& food services; wholesale/retail trade; repair, maintenance/washing of motor vehicles; health care \& social assistance; electricity, gas, steam \& air conditioning supply; finance \& insurance; arts, entertainment \& recreation; agriculture; and information \& communication. The public administration sub-sector remained unchanged, while the water supply, sewage \& waste management; transportation \& warehousing; and educational services recorded increase in employment level (Table 10).

Table 10: Employment at a Glance

| Index | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { February }\end{array}$ | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { March }\end{array}$ | $\begin{array}{c}\text { Percentage } \\ \text { Point } \\ \text { Change }\end{array}$ | $\begin{array}{c}\text { Rate } \\ \text { of }\end{array}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Trend |  |  |  |  |
| (Months) |  |  |  |  |$\}$

### 3.4 Inventories/Work in Progress

Non-manufacturing inventories/work in progress index in March 2017 stood at 48.0 points indicating a decline at an increasing rate from the 44.9 points in the previous month. Ten sub-sectors recorded lower inventories in the following order: real estate, rental \& leasing; repair, maintenance/washing of motor vehicles; professional, scientific, \& technical services; wholesale/retail trade; arts, entertainment \& recreation; construction; accommodation \& food services; water supply, sewage \& waste management; information \& communication; and health care \& social assistance. The agriculture and public administration sub sectors remain unchanged, while management of companies; educational services; electricity, gas, steam \& air conditioning supply; utilities; finance \& insurance; and transportation \& warehousing subsectors recorded higher inventories in March 2017. (Table 11).

Table 11: Raw Materials Inventories at a Glance

| Index | Series <br> Index <br> February | Series <br> Index <br> March | Percentage <br> Point <br> Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INVENTORY PMI | 44.9 | 48.0 | 3.1 | Declining | Slower | 2 |
| Accommodation \& food services | 44.2 | 46.9 | 2.8 | Declining | Slower | 22 |
| Agriculture | 49.2 | 50.0 | 0.8 | No Change | From Contraction | 1 |
| Arts, entertainment \& recreation | 47.3 | 45.8 | -1.5 | Declining | Faster | 2 |
| Construction | 39.8 | 46.7 | 7.0 | Declining | Slower | 25 |
| Educational services | 50.0 | 57.5 | 7.5 | Growing | From No Change | 1 |
| Electricity, gas, steam \& air conditioning supply | 46.3 | 55.4 | 9.1 | Growing | From Contraction | 1 |
| Finance \& insurance | 42.2 | 53.4 | 11.3 | Growing | From Contraction | 1 |
| Health care \& social assistance | 45.2 | 48.3 | 3.1 | Declining | Slower | 4 |
| Information \& communication | 50.0 | 48.2 | -1.8 | Declining | From No Change | 1 |
| Management of companies | 50.0 | 65.0 | 15.0 | Growing | From No Change | 1 |
| Professional, scientific, \& technical services | 42.9 | 43.2 | 0.3 | Declining | Slower | 4 |
| Public administration | 33.3 | 50.0 | 16.7 | No Change | From Contraction | 1 |
| Real estate, rental \& leasing | 45.2 | 40.5 | -4.8 | Declining | Faster | 2 |
| Repair, maintenance/washing of motor vehicles | 39.2 | 42.8 | 3.6 | Declining | Slower | 5 |
| Transportation \& warehousing | 50.8 | 50.7 | -0.1 | Growing | Slower | 4 |
| Utilities | 55.3 | 53.8 | -1.4 | Growing | Slower | 4 |
| Water supply, sewage \& waste management | 40.5 | 47.4 | 6.9 | Declining | Slower | 3 |
| Wholesale/Retail trade | 42.0 | 45.6 | 3.6 | Declining | Slower | 2 |

## APPENDICES: HISTORICAL DATA

## MANUFACTURING PMI DATA SERIES

|  | $\begin{aligned} & \underset{\underline{L}}{n} \\ & \sum_{0}^{n} \sum_{a}^{n} \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & \text { む } \\ & 0 \\ & 0 \\ & 3 \\ & 3 \\ & 2 \\ & \hline \end{aligned}$ |  |  |  | $\begin{aligned} & \frac{1}{0} \\ & 0 \\ & \frac{0}{x} \\ & \frac{n}{4} \\ & 3 \\ & \frac{n}{d} \\ & 2 \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 45.6 |
| 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 | 46.6 |

NON-MANUFACTURING PMI DATA SERIES

|  | $\begin{aligned} & \stackrel{\mu}{5} \\ & 0 \\ & \sum_{0}^{0} \\ & \sum_{0} \end{aligned}$ |  | $\begin{aligned} & \frac{n}{0} \\ & \text { 은 } \\ & 3 \\ & \text { z } \end{aligned}$ |  | $\begin{aligned} & \text { Z } \\ & 0 \\ & \text { N } \\ & \text { İ } \\ & \text { In } \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

