## PURCHASING MANAGERS' INDEX

A MONTHLY PUBLICATION

## JANUARY 2017 REPORT



## SURVEY MANAGEMENT DIVISION

 STATISTICS DEPARTMENTCENTRAL BANK OF NIGERIA, ABUJA

## PURCHASING MANAGERS' INDEX (PMI) JANUARY 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 January $13^{\text {th }}$ to $20^{\text {th }}$, 2017 with a total of 1,781 responses received from a sample of 1,950 respondents, representing a response rate of 91.3 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 based on 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 growing at a slower rate, new orders declining from expansion in December 2016, supplier delivery time worsening , employment level declining faster and raw material inventories declining from expansion in December 2016

The Manufacturing PMI stood at 48.2 index points in January 2017, indicating a decline in the manufacturing sector during the review period. The index averaged 45.2 in the last twelve months, and had grown in December 2016 after recording declines for eleven consecutive months. (Fig. 2 and Table 1). Ten of the sixteen sub-sectors surveyed recorded decline in the review month in the following order: primary metal; transportation equipment; paper products; electrical equipment; fabricated metal products; printing \& related support activities; cement; furniture \& related products; plastics \& rubber products; and chemical \& pharmaceutical products. The remaining six subsectors are expected to expand in the order: petroleum \& coal products; appliances \& components; nonmetallic mineral products; food, beverage \& tobacco products; textile, apparel, leather \& footwear; and computer \& electronic products.


Fig. 2: Trend of Manufacturing PMI

Table 1: Manufacturing at a Glance

| Index |  | Series Index* January | Percentage Point Change | Direction | $\begin{gathered} \text { Rate } \\ \text { of } \\ \text { Change } \end{gathered}$ | Trend** <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite PMI \1 | 52.0 | 48.2 | -3.8 | Declining | From Expansion | 1 |
| Production level | 57.6 | 51.3 | -6.2 | Growing | Slower | 2 |
| New orders | 51.8 | 47.9 | -3.8 | Declining | From Expansion | 1 |
| Supplier delivery time | 47.9 | 48.5 | 0.6 | Worsening | Slower | 2 |
| Employment level | 48.6 | 45.3 | -3.3 | Declining | Faster | 23 |
| Raw materials/WIP Inventories | 51.6 | 46.3 | -5.3 | Declining | From Expansion | 1 |
| New Export Orders | 37.2 | 33.1 | -4.1 | Declining | Faster | 23 |
| Output Prices | 70.4 | 67.9 | -2.5 | Growing | Slower | 13 |
| Input Prices | 73.2 | 71.4 | -1.8 | Growing | Slower | 31 |
| Quantity of Purchases | 52.7 | 48.4 | -4.3 | Declining | From Expansion | 1 |
| Business Outstanding/ Backlog of Work | 45.3 | 43.6 | -1.6 | Declining | Faster | 23 |
| Stocks of Finished Goods | 48.5 | 46.9 | -1.6 | Declining | Faster | 23 |
| Manufacturing Sub-Sectors |  |  |  |  |  |  |
| Appliances \& components | 50.4 | 54.2 | 3.8 | Growing | Faster | 2 |
| Cement | 62.4 | 47.0 | -15.4 | Declining | From Expansion | 1 |
| Chemical \& pharmaceutical products | 50.2 | 49.0 | -1.2 | Declining | From Expansion | 1 |
| Computer \& electronic products | 39.6 | 51.1 | 11.5 | Growing | From Contraction | 1 |
| Electrical equipment | 40.8 | 44.0 | 3.2 | Declining | Slower | 2 |
| Fabricated metal products | 50.0 | 44.2 | -5.9 | Declining | From Expansion | 1 |
| Food, beverage \& tobacco products | 59.9 | 52.2 | -7.7 | Growing | Slower | 4 |
| Furniture \& related products | 50.2 | 47.4 | -2.7 | Declining | From Expansion | 1 |
| Nonmetallic mineral products | 48.1 | 52.5 | 4.4 | Growing | From Contraction | 1 |
| Paper products | 51.1 | 43.4 | -7.7 | Declining | From Expansion | 1 |
| Petroleum \& coal products | 46.4 | 55.0 | 8.6 | Growing | From Contraction | 1 |
| Plastics \& rubber products | 52.8 | 49.0 | -3.8 | Declining | From Expansion | 1 |
| Primary metal | 43.0 | 32.5 | -10.5 | Declining | Faster | 13 |
| Printing \& related support activities | 46.8 | 44.4 | -2.4 | Declining | Faster | 16 |
| Textile, apparel, leather \& footwear | 56.8 | 51.2 | -5.6 | Growing | Slower | 2 |
| Transportation equipment | 43.6 | 41.3 | -2.3 | Declining | Faster | 7 |

\1 The composite PMI is a weighted average of the following diffusion indices: production level, new orders, supplier deliveries, employment level and inventories. The weights assigned to these variables are $25 \%, 30 \%, 15 \%, 10 \%$ and $20 \%$ respectively.
*The series index is a diffusion index defined as a weighted percentage of high, same and low with $1.0,0.5$ and 0.0 as weights respectively.
${ }^{* *}$ Number of month moving in current direction

### 2.1 Production Level

The production level index for manufacturing sector grew for the second consecutive month. The index stood at 51.3 points, indicating a slower growth when compared to the 57.6 points in the month of December 2016. Nine manufacturing sub-sectors recorded growth in production level during the review month in the following order: nonmetallic mineral products; computer \& electronic products; appliances \& components; food, beverage \& tobacco products; petroleum \& coal products; cement; chemical \& pharmaceutical products; textile, apparel, leather \& footwear; and furniture \& related products. The plastics \& rubber products sub-sector remained unchanged, while the remaining six sub-sectors declined in the review period in the order: primary metal; transportation equipment; paper products; fabricated metal products; electrical equipment; and printing \& related support activities (Table 2).

Table 2: Production at a Glance

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

### 2.2 New Orders

The index for new orders declined to 47.9 points after one month of expansion recorded in December 2016. The eight sub-sectors that declined in new orders were: primary metal; paper products; printing \& related support activities; fabricated metal products; electrical equipment; transportation equipment; cement; and furniture \& related products. The chemical \& pharmaceutical products sub-sector remained unchanged, while new orders for the remaining seven sub-sectors grew in the order: petroleum \& coal products; appliances \& components; computer \& electronic products; plastics \& rubber products; textile, apparel, leather \& footwear; nonmetallic mineral products; and food, beverage \& tobacco products (Table 3).

Table 3: New Orders at a Glance

| Index | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW ORDERS PMI | 51.8 | 47.9 | -3.9 | Declining | From Expansion | 1 |
| Appliances \& components | 43.3 | 60.0 | 16.7 | Growing | From Contraction | 1 |
| Cement | 66.7 | 44.2 | -22.4 | Declining | From Expansion | 1 |
| Chemical \& pharmaceutical products | 49.0 | 50.0 | 1.0 | No Change | From Contraction | 1 |
| Computer \& electronic products | 45.8 | 59.4 | 13.5 | Growing | From Contraction | 1 |
| Electrical equipment | 38.5 | 43.3 | 4.9 | Declining | Slower | 2 |
| Fabricated metal products | 52.6 | 41.1 | -11.5 | Declining | From Expansion | 1 |
| Food, beverage \& tobacco products | 62.5 | 51.3 | -11.2 | Growing | Slower | 4 |
| Furniture \& related products | 47.6 | 47.8 | 0.2 | Declining | Slower | 13 |
| Nonmetallic mineral products | 46.4 | 52.4 | 6.0 | Growing | From Contraction | 1 |
| Paper products | 53.6 | 40.0 | -13.6 | Declining | From Expansion | 1 |
| Petroleum \& coal products | 43.8 | 66.7 | 22.9 | Growing | From Contraction | 1 |
| Plastics \& rubber products | 50.0 | 55.0 | 5.0 | Growing | From No Change | 1 |
| Primary metal | 35.7 | 21.4 | -14.3 | Declining | Faster | 11 |
| Printing \& related support activities | 44.2 | 40.4 | -3.8 | Declining | Faster | 13 |
| Textile, apparel, leather \& footwear | 57.0 | 53.4 | -3.6 | Growing | Slower | 2 |
| Transportation equipment | 40.0 | 43.8 | 3.8 | Declining | Slower | 6 |

### 2.3 Supplier Delivery Time

At 48.5 index points, the supplier delivery time index for manufacturing sub-sectors worsened for the second consecutive month, but at a slower rate in the month of January 2017. The index had recorded nine consecutive periods of improvement as at November 2016. Ten sub-sectors recorded worsening suppliers' delivery time in the following order: plastics \& rubber products; petroleum \& coal products; chemical \& pharmaceutical products; transportation equipment; appliances \& components; cement; nonmetallic mineral products; food, beverage \& tobacco products; furniture \& related products; and textile, apparel, leather \& footwear. The computer \& electronic products sub-sector remained unchanged, while the electrical equipment; primary metal; printing \& related support activities; fabricated metal products; and paper products subsectors recorded improving delivery time in January (Table 4).

Table 4: Supplier Delivery Time at a Glance

| Index | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SUPPLIER DELIVERY PMI | 47.9 | 48.5 | 0.6 | Worsening | Slower | 2 |
| Appliances \& components | 66.7 | 44.4 | -22.2 | Worsening | From Improving | 1 |
| Cement | 42.6 | 46.2 | 3.6 | Worsening | Slower | 2 |
| Chemical \& pharmaceutical products | 45.9 | 43.3 | -2.6 | Worsening | Faster | 3 |
| Computer \& electronic products | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |
| Electrical equipment | 50.0 | 66.7 | 16.7 | Improving | From No Change | 1 |
| Fabricated metal products | 50.5 | 51.7 | 1.2 | Improving | Faster | 10 |
| Food, beverage \& tobacco products | 42.4 | 46.9 | 4.5 | Worsening | Slower | 5 |
| Furniture \& related products | 56.5 | 47.8 | -8.7 | Worsening | From Improving | 1 |
| Nonmetallic mineral products | 49.1 | 46.4 | -2.7 | Worsening | Faster | 2 |
| Paper products | 44.6 | 51.7 | 7.0 | Improving | From Worsening | 1 |
| Petroleum \& coal products | 56.3 | 41.7 | -14.6 | Worsening | From Improving | 1 |
| Plastics \& rubber products | 46.2 | 36.7 | -9.5 | Worsening | Faster | 2 |
| Primary metal | 59.5 | 53.6 | -6.0 | Improving | Slower | 2 |
| Printing \& related support activities | 44.8 | 52.4 | 7.6 | Improving | From Worsening | 1 |
| Textile, apparel, leather \& footwear | 43.3 | 49.1 | 5.8 | Worsening | Slower | 2 |
| Transportation equipment | 40.0 | 43.8 | 3.8 | Worsening | Slower | 2 |

### 2.4 Employment Level

Employment level index in the month of January 2017 stood at 45.3 points, indicating declines in employment level for the twenty-third consecutive month. However, the index declined at a faster rate when compared with the level in the preceding month. Of the sixteen sub-sectors, twelve recorded declines in the following order: electrical equipment; computer \& electronic products; appliances \& components; cement; printing \& related support activities; nonmetallic mineral products; furniture \& related products; paper products; chemical \& pharmaceutical products; fabricated metal products; food, beverage \& tobacco products; and textile, apparel, leather \& footwear. The plastics \& rubber products; primary metal; and transportation equipment subsectors remained unchanged, while only the petroleum \& coal products sub-sector recorded growth during the review period (Table 5).

Table 5: Employment Level at a Glance

| Index | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYMENT LEVEL PMI | 48.6 | 45.3 | -3.3 | Declining | Faster | 23 |
| Appliances \& components | 43.3 | 40.0 | -3.3 | Declining | Faster | 3 |
| Cement | 57.4 | 40.4 | -17.0 | Declining | From Expansion | 1 |
| Chemical \& pharmaceutical products | 44.9 | 45.2 | 0.3 | Declining | Slower | 15 |
| Computer \& electronic products | 29.2 | 34.4 | 5.2 | Declining | Slower | 6 |
| Electrical equipment | 38.5 | 30.0 | -8.5 | Declining | Faster | 8 |
| Fabricated metal products | 45.4 | 45.5 | 0.1 | Declining | Slower | 18 |
| Food, beverage \& tobacco products | 54.9 | 47.4 | -7.5 | Declining | From Expansion | 1 |
| Furniture \& related products | 44.0 | 44.6 | 0.6 | Declining | Slower | 15 |
| Nonmetallic mineral products | 49.1 | 42.9 | -6.2 | Declining | Faster | 13 |
| Paper products | 50.0 | 45.0 | -5.0 | Declining | From No Change | 1 |
| Petroleum \& coal products | 50.0 | 54.2 | 4.2 | Growing | From No Change | 1 |
| Plastics \& rubber products | 55.8 | 50.0 | -5.8 | No Change | From Expansion | 1 |
| Primary metal | 45.2 | 50.0 | 4.8 | No Change | From Contraction | 1 |
| Printing \& related support activities | 43.5 | 41.6 | -1.9 | Declining | Faster | 18 |
| Textile, apparel, leather \& footwear | 53.8 | 49.6 | -4.2 | Declining | From Expansion | 1 |
| Transportation equipment | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |

### 2.5 Raw Materials Inventory

At 46.3 points, the raw materials inventory index declined after one month of growth. Of the sixteen sub-sectors, thirteen recorded decline in raw materials inventories in the order: computer \& electronic products; petroleum \& coal products; electrical equipment; primary metal; transportation equipment; printing \& related support activities; furniture \& related products; fabricated metal products; plastics \& rubber products; paper products; textile, apparel, leather \& footwear; cement and chemical \& pharmaceutical products. The remaining three sub-sectors recorded increased inventories in the order: appliances \& components; food, beverage \& tobacco products and nonmetallic mineral products (Table 6).

Table 6: Raw Materials Inventories at a Glance

|  | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| INVENTORIES PMI | 51.6 | 46.3 | -5.3 | Declining | From Expansion | 1 |
| Appliances \& components | 53.6 | 65.0 | 11.4 | Growing | Faster | 2 |
| Cement | 64.8 | 48.1 | -16.7 | Declining | From Expansion | 1 |
| Chemical \& pharmaceutical products | 56.1 | 48.1 | -8.0 | Declining | From Expansion | 1 |
| Computer \& electronic products | 31.8 | 33.3 | 1.5 | Declining | Slower | 3 |
| Electrical equipment | 34.6 | 33.3 | -1.3 | Declining | Faster | 2 |
| Fabricated metal products | 44.8 | 44.4 | -0.3 | Declining | Faster | 9 |
| Food, beverage \& tobacco products | 64.7 | 55.8 | -8.9 | Growing | Slower | 4 |
| Furniture \& related products | 44.6 | 43.5 | -1.1 | Declining | Faster | 12 |
| Nonmetallic mineral products | 40.9 | 54.8 | 13.9 | Growing | From Contraction | 1 |
| Paper products | 53.6 | 46.6 | -7.0 | Declining | From Expansion | 1 |
| Petroleum \& coal products | 31.3 | 33.3 | 2.1 | Declining | Slower | 11 |
| Plastics \& rubber products | 57.7 | 45.0 | -12.7 | Declining | From Expansion | 1 |
| Primary metal | 35.7 | 35.7 | 0.0 | Declining | Flat | 7 |
| Printing \& related support activities | 47.1 | 39.5 | -7.6 | Declining | Faster | 14 |
| Textile, apparel, leather \& footwear | 59.8 | 46.6 | -13.3 | Declining | From Expansion | 1 |
| Transportation equipment | 55.6 | 37.5 | -18.1 | Declining | From Expansion | 1 |

### 3.0 Non-Manufacturing PMI Report

Business activity and raw materials inventories growing from contraction, new orders and employment level declining at a slower rate in January 2017

The composite PMI for the non-manufacturing sector declined for the thirteenth consecutive month. The index stood at 49.4 points in January 2017, indicating a slowing decline when compared to that in December 2016. The composite PMI averaged 44.3 points in the last twelve months period. Of the eighteen non-manufacturing sub-sectors, eleven recorded declines in the following order: management of companies; construction; finance \& insurance; public administration; water supply, sewage \& waste management; repair, maintenance/washing of motor vehicles; professional, scientific, \& technical services; accommodation \& food services; health care \& social assistance; real estate, rental \& leasing; and wholesale/retail trade. The remaining seven subsectors recorded growth in the order: transportation \& warehousing; agriculture; educational services; arts, entertainment \& recreation; utilities; electricity, gas, steam \& air conditioning supply; and information \& communication (Table 7 and Fig. 3).

Table 7: Non-Manufacturing at a Glance
$\left.\begin{array}{lcccccc}\hline & \text { Series } & \text { Series } & \text { Percentage } & & \text { Rate } \\ \text { Index } & \text { Index } & \text { Point } & \text { Trend } \\ \text { (Months) }\end{array}\right]$

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Fig. 3: Trend of Non-Manufacturing PMI

### 3.1 Business Activity

The business activity index grew to 50.6 points in January 2017, after twelve consecutive months of decline. Seven sub-sectors recorded growth in the following order: transportation \& warehousing; agriculture; educational services; electricity, gas, steam \& air conditioning supply; arts, entertainment \& recreation; information \& communication; and professional, scientific, \& technical services. The public administration sub-sector remained unchanged, while the remaining ten subsectors recorded growth in the order: management of companies; construction; finance \& insurance; water supply, sewage \& waste management; repair, maintenance/washing of motor vehicles; real estate, rental \& leasing; utilities; health care \& social assistance; accommodation \& food services; and wholesale/retail trade (Table 8).

Table 8: Business Activity at a Glance

| Index | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| BUSINESS ACTIVITY PMI | 48.2 | 50.6 | 2.4 | Growing | From Contraction | 1 |
| Accommodation \& food services | 46.7 | 49.1 | 2.4 | Declining | Slower | 13 |
| Agriculture | 60.7 | 63.8 | 3.2 | Growing | Faster | 8 |
| Arts, entertainment \& recreation | 51.3 | 51.3 | 0.0 | Growing | Slower | 2 |
| Construction | 19.5 | 38.4 | 18.9 | Declining | Slower | 11 |
| Educational services | 61.6 | 60.7 | -0.9 | Growing | Slower | 2 |
| Electricity, gas, steam \& air conditioning supply | 46.7 | 52.2 | 5.5 | Growing | From Contraction | 1 |
| Finance \& insurance | 46.7 | 42.7 | -4.0 | Declining | Faster |  |
| Health care \& social assistance | 49.3 | 48.7 | -0.6 | Declining | Faster | 2 |
| Information \& communication | 34.2 | 50.8 | 16.6 | Growing | From Contraction | 1 |
| Management of companies | 55.0 | 25.0 | -30.0 | Declining | From Expansion | 1 |
| Professional, scientific, \& technical services | 38.3 | 50.7 | 12.4 | Growing | From Contraction | 1 |
| Public administration | 31.8 | 50.0 | 18.2 | No Change | From Contraction | 1 |
| Real estate, rental \& leasing | 52.5 | 46.8 | -5.7 | Declining | From Expansion | 1 |
| Repair, maintenance/washing of motor vehicles... | 46.0 | 45.5 | -0.5 | Declining | Faster | 13 |
| Transportation \& warehousing | 55.1 | 65.1 | 10.0 | Growing | Faster | 4 |
| Utilities | 69.0 | 47.9 | -21.0 | Declining | From Expansion | 1 |
| Water supply, sewage \& waste management | 52.6 | 44.7 | -7.9 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 50.8 | 49.2 | -1.6 | Declining | From Expansion | 1 |

### 3.2 New Orders

At 49.4 points, the new orders index declined for the thirteenth consecutive month in January 2017, but at a slower rate. Of the eighteen sub-sectors, eleven declined in the following order: construction; finance \& insurance; real estate, rental \& leasing; management of companies; public administration; repair, maintenance/washing of motor vehicles; professional, scientific, \& technical services; health care \& social assistance; water supply, sewage \& waste management; wholesale/retail trade; and accommodation \& food services. The arts, entertainment \& recreation; information \& communication and utilities sub-sectors remained unchanged, while the remaining four sub-sectors recorded growth in the order: transportation \& warehousing; agriculture; educational services; and electricity, gas, steam \& air conditioning supply (Table 9).

Table 9: New Orders at a Glance

| Index | Series <br> Index <br> December | Series <br> Index <br> January | Percentage <br> Point <br> Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW ORDERS PMI | 46.9 | 49.4 | 2.5 | Declining | Slower | 13 |
| Accommodation \& food services | 42.9 | 48.1 | 5.3 | Declining | Slower | 13 |
| Agriculture | 56.6 | 58.5 | 1.9 | Growing | Faster | 8 |
| Arts, entertainment \& recreation | 61.5 | 50.0 | -11.5 | No Change | From Expansion | 1 |
| Construction | 25.6 | 37.2 | 11.6 | Declining | Slower | 20 |
| Educational services | 53.5 | 58.3 | 4.8 | Growing | Faster | 2 |
| Electricity, gas, steam \& air conditioning supply | 45.7 | 57.8 | 12.1 | Growing | From Contraction | 1 |
| Finance \& insurance | 53.3 | 42.7 | -10.6 | Declining | From Expansion | 1 |
| Health care \& social assistance | 45.9 | 46.8 | 0.8 | Declining | Slower | 2 |
| Information \& communication | 39.5 | 50.0 | 10.5 | No Change | From Contraction | 1 |
| Management of companies | 60.0 | 43.8 | -16.3 | Declining | From Expansion | 1 |
| Professional, scientific, \& technical services | 35.2 | 46.6 | 11.4 | Declining | Slower | 15 |
| Public administration | 31.8 | 43.8 | 11.9 | Declining | Slower | 13 |
| Real estate, rental \& leasing | 43.2 | 42.7 | -0.5 | Declining | Faster | 17 |
| Repair, maintenance/washing of motor vehicles... | 48.4 | 45.5 | -2.9 | Declining | Faster | 7 |
| Transportation \& warehousing | 48.0 | 64.2 | 16.2 | Growing | From Contraction | 1 |
| Utilities | 58.6 | 50.0 | -8.6 | No Change | From Expansion | 1 |
| Water supply, sewage \& waste management | 52.6 | 47.4 | -5.3 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 50.0 | 48.0 | -2.0 | Declining | From No Change | 1 |

### 3.3 Employment Level

The employment level Index declined for the thirteenth consecutive month in January 2017. At 45.6 points, the index declined at a slower rate when compared with the 43.8 points recorded in December 2016. Fifteen sub-sectors recorded declines in employment level in the following order: management of companies; finance \& insurance; electricity, gas, steam \& air conditioning supply; public administration; wholesale/retail trade; construction; repair, maintenance/washing of motor vehicles; water supply, sewage \& waste management; health care \& social assistance; professional, scientific, \& technical services; real estate, rental \& leasing; information \& communication; accommodation \& food services; utilities; and agriculture. The arts, entertainment \& recreation sub-sector remained unchanged, while the educational services; and transportation \& warehousing sub-sectors grew in the review month (Table 10).

Table 10: Employment at a Glance

| Index | Series <br> Index December | Series <br> Index January | Percentage Point Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYMENT PMI | 43.8 | 45.6 | 1.8 | Declining | Slower | 13 |
| Accommodation \& food services | 46.7 | 46.7 | 0.0 | Declining | Faster | 8 |
| Agriculture | 46.7 | 49.2 | 2.5 | Declining | Slower | 2 |
| Arts, entertainment \& recreation | 41.0 | 50.0 | 9.0 | No Change | From Contraction | 1 |
| Construction | 26.8 | 44.2 | 17.4 | Declining | Slower | 20 |
| Educational services | 50.0 | 58.0 | 8.0 | Growing | From No Change | 1 |
| Electricity, gas, steam \& air conditioning supply | 47.8 | 43.3 | -4.5 | Declining | Faster | 8 |
| Finance \& insurance | 42.2 | 34.4 | -7.8 | Declining | Faster | 12 |
| Health care \& social assistance | 43.9 | 44.9 | 1.0 | Declining | Slower | 13 |
| Information \& communication | 42.1 | 46.2 | 4.0 | Declining | Slower | 23 |
| Management of companies | 55.0 | 18.8 | -36.3 | Declining | From Expansion | 1 |
| Professional, scientific, \& technical services | 36.7 | 45.2 | 8.5 | Declining | Slower | 12 |
| Public administration | 40.9 | 43.8 | 2.8 | Declining | Slower | 8 |
| Real estate, rental \& leasing | 47.5 | 45.2 | -2.3 | Declining | Faster | 14 |
| Repair, maintenance/washing of motor vehicles... | 43.5 | 44.7 | 1.1 | Declining | Slower | 10 |
| Transportation \& warehousing | 51.0 | 52.8 | 1.8 | Growing | Faster | 2 |
| Utilities | 50.0 | 47.8 | -2.2 | Declining | From No Change | 1 |
| Water supply, sewage \& waste management | 47.4 | 44.7 | -2.6 | Declining | Faster | 3 |
| Wholesale/Retail trade | 41.9 | 44.1 | 2.2 | Declining | Slower | 14 |

### 3.4 Inventories/Work in Progress

Non-manufacturing inventories/work in progress index grew in January 2017, after twelve consecutive months of decline. Nine sub-sectors recorded higher inventories in the following order: agriculture; transportation \& warehousing; arts, entertainment \& recreation; utilities; real estate, rental \& leasing; educational services; information \& communication; electricity, gas, steam \& air conditioning supply; and wholesale/retail trade. The remaining nine sub-sectors recorded lower inventory in the following order: management of companies; public administration; construction; water supply, sewage \& waste management; finance \& insurance; accommodation \& food services; professional, scientific, \& technical services; repair, maintenance/washing of motor vehicles; and health care \& social assistance (Table 11).

Table 11: Raw Materials Inventories at a Glance

| Index | Series <br> Index December | Series <br> Index January | Percentage <br> Point <br> Change | Direction | Rate of Change | Trend <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INVENTORY PMI | 49.5 | 52.0 | 2.5 | Growing | From Contraction | 1 |
| Accommodation \& food services | 45.1 | 44.3 | -0.7 | Declining | Faster | 20 |
| Agriculture | 59.8 | 66.9 | 7.1 | Growing | Faster | 8 |
| Arts, entertainment \& recreation | 55.1 | 63.8 | 8.6 | Growing | Faster | 9 |
| Construction | 28.8 | 39.5 | 10.8 | Declining | Slower | 23 |
| Educational services | 63.4 | 54.9 | -8.5 | Growing | Slower | 2 |
| Electricity, gas, steam \& air conditioning supply | 56.7 | 53.4 | -3.3 | Growing | Slower | 2 |
| Finance \& insurance | 46.3 | 42.4 | -3.9 | Declining | Faster | 13 |
| Health care \& social assistance | 48.0 | 48.1 | 0.1 | Declining | Slower | 2 |
| Information \& communication | 42.1 | 53.8 | 11.7 | Growing | From Contraction | 1 |
| Management of companies | 45.0 | 25.0 | -20.0 | Declining | Faster | 9 |
| Professional, scientific, \& technical services | 35.5 | 45.1 | 9.7 | Declining | Slower | 2 |
| Public administration | 31.8 | 31.3 | -0.6 | Declining | Faster | 7 |
| Real estate, rental \& leasing | 57.0 | 54.9 | -2.1 | Growing | Slower | 2 |
| Repair, maintenance/washing of motor vehicles... | 42.6 | 47.6 | 5.0 | Declining | Slower | 3 |
| Transportation \& warehousing | 64.3 | 64.2 | -0.1 | Growing | Slower | 2 |
| Utilities | 69.6 | 62.5 | -7.1 | Growing | Slower | 2 |
| Water supply, sewage \& waste management | 55.3 | 42.1 | -13.2 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 49.2 | 53.4 | 4.2 | Growing | From Contraction | 1 |

## APPENDICES: HISTORICAL DATA

MANUFACTURING PMI DATA SERIES

| $\begin{aligned} & \frac{1}{c} \\ & 0 \\ & \Sigma \end{aligned}$ | $\begin{aligned} & \frac{1}{\bar{N}} \\ & \sum_{0}^{0} \\ & \sum_{0} \\ & \sum_{a} \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & \text { ש } \\ & 010 \\ & \frac{3}{3} \\ & \text { Z } \end{aligned}$ |  |  |  |  | U ㅡㅡㅁ \# 首 0 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |

NON-MANUFACTURING PMI DATA SERIES

|  | $\begin{aligned} & \frac{\mu}{\bar{n}} \\ & 0 \\ & \sum_{0}^{0} \\ & i \\ & i \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \frac{4}{0} \\ & 0 \\ & \frac{0}{x} \\ & 山 \\ & 3 \\ & \frac{n}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \underline{4} \\ & 0 \\ & \underline{E} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |


[^0]:    12 The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories.

