# Central Bank of Nigeria 



Purchasing Managers' Index (PMI) Survey Report

Statistics Department
February 2018

### 1.0 Introduction

The February 2018 PMI survey was conducted by the Statistics Department of the Central Bank of Nigeria during the period February 12-20, 2018. The respondents were purchasing and supply executives of manufacturing and non-manufacturing organizations in 27 locations in Nigeria (Fig. 1). The Bank makes no representation regarding the individual companies, other than the information they have provided. The data contained herein further provides input for policy decisions.


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 half of the percentage of those reporting no change, except for supplier delivery time, which is computed as the percentage of responses with negative change plus half of the percentage of those reporting no change. The composite PMI for the manufacturing sector is computed as the weighted average of five diffusion indices: production level, level of new orders, suppliers' delivery time, employment level and raw materials inventory/work in progress, with assigned weights of $25 \%, 30 \%, 15 \%, 10 \%$ and $20 \%$, respectively. The composite PMI for the non-
manufacturing sector is computed from four diffusion indices: business activity, level of new orders, employment level and raw materials inventory, with equal weights of $25 \%$ each.

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

### 2.0 Manufacturing PMI Report

Production level and new orders, growing at a slower rate; supplier delivery time, employment level and inventories growing at a faster rate in February 2018


The Manufacturing PMI in the month of February stood at 56.3 index points, indicating expansion in the manufacturing sector for the eleventh consecutive month. (Fig. 3 and Table 1). The index however grew at a slower rate, when compared to that in the previous month. Of the 15 subsectors surveyed, 10 reported growth in the review month in the following order: Plastics \& rubber products; textile, apparel, leather \& footwear; appliances \& components; paper products; primary metal; petroleum \& coal products; chemical \& pharmaceutical products; food, beverage \& tobacco products; electrical equipment and furniture \& related products. The remaining 5 subsectors contracted in the following order: printing \& related support activities; cement; nonmetallic mineral products; fabricated metal products; and


Fig. 3: Trend of Manufacturing PMI transportation equipment.

### 2.1 Production Level

At 57.8 points, the production level index for the manufacturing sector grew for the twelfth consecutive month in February 2018. The index indicated a slower growth in the current month, when compared to its level in the preceding month. Six of the 15 manufacturing subsectors recorded increase in production level, 6 remained unchanged, while the remaining 3 recorded declines in production level during the review month (Fig. 4 and Table 2).

### 2.2 New Orders

At 55.6 points, the new orders index grew for the eleventh consecutive month, indicating increase in new orders in February 2018. Eight subsectors reported growth, 4 remained unchanged while 3 contracted in the review month (Fig. 5 and Table 3).

### 2.3 Supplier Delivery Time

The manufacturing supplier delivery time index stood at 57.0 points in February 2018, indicating faster supplier delivery time for the ninth consecutive month. Six subsectors recorded improved suppliers' delivery time, 7 remained unchanged while 2 subsectors recorded delayed delivery time (Fig. 6 and Table 4).



Fig. 5: Trend of new orders index


Fig. 6: Trend of supplier delivery time index

### 2.4 Employment Level

The employment level index in February 2018 stood at 53.9 points, indicating growth in employment level for the tenth consecutive month. Of the 15 subsectors, 6 subsectors increased their employment level, 2 remained unchanged while 7 reduced their employment level in the review month (Fig. 7 and Table 5).

### 2.5 Raw material Inventories

The Manufacturing sector inventories index grew for the eleventh consecutive month in February 2018. At 58.1 points, the index grew at a faster rate when compared to its level in the previous month. Nine of the 15 subsectors recorded growth, 5 remained unchanged while 1 recorded decline in raw material inventories (Fig. 8 and Table 6).

### 3.0 Non-Manufacturing PMI Report

Business activity and new orders, growing at a slower rate; employment and inventories growing at a faster rate in February 2018


Fig 7: Trend of manufacturing employment index


Fig. 8: Trend of raw material inventory index


The composite PMI for the non-manufacturing sector stood at 56.1 points in February 2018, indicating expansion in the Non-manufacturing PMI for the tenth consecutive month. Eleven of the 16 subsectors recorded growth in the following order: information \& communication; wholesale/retail trade; educational services; management of companies; utilities; finance \& insurance; agriculture; health care \& social assistance; construction; electricity, gas, steam \& air conditioning supply; and professional, scientific, \& technical services. The real estate rental \& leasing remained unchanged, while the public administration; water supply, sewage \& waste management; accommodation \& food services; and transportation \& warehousing subsectors recorded contraction in the review period (Fig. 10 and Table 7).

### 3.1 Business Activity

At 55.6 points, the business activity index grew for the eleventh consecutive month, indicating expansion in business activity in February 2018. The index grew at a slower rate, when compared to its level in the previous month. Nine subsectors recorded growth in business activity, 3 sectors remain unchanged, while 4 declined in the review month (Table 8).


Fig. 10: Trend of Non-manufacturing PMI


Fig. 11: Trend of business activities index

### 3.2 New Orders

At 53.7 points, new orders index grew in February 2018 for the eleventh consecutive month. Of the 16 subsectors, 8 reported growth, 1 remained unchanged while 7 recorded declines (Table 9).

### 3.3 Employment Level

The employment level Index for the non-manufacturing sector stood at 55.3 points, indicating growth in employment for the tenth consecutive month. Nine subsectors recorded growth in the review month, 4 remained unchanged while 3 recorded declines (Table 10).

### 3.4 Non-manufacturing Inventory

At 59.8 points, non-manufacturing inventory index grew for the tenth consecutive month, indicating growth in inventories in the review period. Twelve subsectors recorded higher inventories, 2 remained unchanged, while 2 subsectors recorded lower inventory in February, 2018 (Table 11).


Fig. 12: Trend of new orders index


Fig. 13: Trend of non-manufacturing employment index


Fig. 14: Trend of non-manufacturing inventory index

## APPENDICES

Table 1: Manufacturing at a Glance

| Index | Series <br> Index* <br> January | Series <br> Index* <br> February | Change | Direction | Rate of Change | Trend** <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite PMI \1 | 57.3 | 56.3 | -1.0 | Growing | Slower | 11 |
| Production level | 59.6 | 57.8 | -1.8 | Growing | Slower | 12 |
| New orders | 58.3 | 55.6 | -2.7 | Growing | Slower | 11 |
| Supplier delivery time | 56.8 | 57.0 | 0.2 | Growing | Faster | 9 |
| Employment level | 53.3 | 53.9 | 0.6 | Growing | Faster | 10 |
| Raw materials/WIP Inventory | 57.7 | 58.1 | 0.4 | Growing | Faster | 11 |
| New Export Orders | 35.1 | 42.0 | 6.9 | Declining | Slower | 36 |
| Output Prices | 55.0 | 55.9 | 0.9 | Growing | Faster | 26 |
| Input Prices | 63.3 | 65.4 | 2.1 | Growing | Faster | 44 |
| Quantity of Purchases | 49.1 | 54.3 | 5.2 | Growing | From Contraction | 1 |
| Outstanding Business/Backlog of Work | 42.9 | 37.6 | -5.3 | Declining | Faster | 3 |
| Stock of Finished Goods | 45.4 | 53.3 | 7.9 | Growing | From Contraction | 1 |
| Manufacturing Sub-Sectors |  |  |  |  |  |  |
| Appliances \& components | 60.0 | 60.0 | 0.0 | Growing | Flat | 3 |
| Cement | 65.0 | 43.8 | -21.2 | Declining | From Expansion | 1 |
| Chemical \& pharmaceutical products | 44.0 | 57.9 | 13.9 | Growing | From Contraction | 1 |
| Electrical equipment | 30.8 | 55.6 | 24.8 | Growing | From Contraction | 1 |
| Fabricated metal products | 55.5 | 44.5 | -11.0 | Declining | From Expansion | 1 |
| Food, beverage \& tobacco products | 56.8 | 57.1 | 0.3 | Growing | Faster | 17 |
| Furniture \& related products | 56.8 | 55.5 | -1.3 | Growing | Slower | 7 |
| Nonmetallic mineral products | 67.2 | 43.8 | -23.4 | Declining | From Expansion | 1 |
| Paper products | 55.9 | 59.4 | 3.5 | Growing | Faster | 10 |
| Petroleum \& coal products | 56.9 | 58.3 | 1.4 | Growing | Faster | 4 |
| Plastics \& rubber products | 55.4 | 63.0 | 7.6 | Growing | Faster | 7 |
| Primary metal | 57.8 | 59.2 | 1.4 | Growing | Faster | 5 |
| Printing \& related support activities | 61.8 | 39.5 | -22.3 | Declining | From Expansion | 1 |
| Textile, apparel, leather \& footwear | 64.1 | 60.2 | -3.9 | Growing | Slower | 12 |
| Transportation equipment | 46.9 | 48.8 | 1.9 | Declining | Slower | 2 |

$\backslash 1$ 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

Table 2: Production at a Glance

| Index | Series <br> Index <br> January | Series <br> Index <br> February | Change | Direction | Rate <br> of <br> Change | Trend <br> (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRODUCTION PMI | 59.6 | 57.8 | -1.8 | Growing | Slower | 12 |
| Appliances \& components | 50.0 | 50.0 | 0.0 | No Change | Flat | 4 |
| Cement | 100.0 | 50.0 | -50.0 | No Change | From Expansion | 1 |
| Chemical \& pharmaceutical products | 42.6 | 57.5 | 14.9 | Growing | From Contraction | 1 |
| Electrical equipment | 33.3 | 62.5 | 29.2 | Growing | From Contraction | 1 |
| Fabricated metal products | 60.9 | 40.0 | -20.9 | Declining | From Expansion | 1 |
| Food, beverage \& tobacco products | 59.7 | 62.2 | 2.5 | Growing | Faster | 17 |
| Furniture \& related products | 54.6 | 60.0 | 5.4 | Growing | Faster | 12 |
| Nonmetallic mineral products | 50.0 | 50.0 | 0.0 | No Change | Flat | 3 |
| Paper products | 59.1 | 62.5 | 3.4 | Growing | Faster | 6 |
| Petroleum \& coal products | 75.0 | 50.0 | -25.0 | No Change | From Expansion | 1 |
| Plastics \& rubber products | 59.6 | 73.3 | 13.7 | Growing | Faster | 6 |
| Primary metal | 50.0 | 16.7 | -33.3 | Declining | From No Change | 1 |
| Printing \& related support activities | 67.9 | 40.0 | -27.9 | Declining | From Expansion | 1 |
| Textile, apparel, leather \& footwear | 65.1 | 50.0 | -15.1 | No Change | From Expansion | 1 |
| Transportation equipment | 62.5 | 50.0 | -12.5 | No Change | From Expansion | 1 |

Table 3: New Orders at a Glance

| Index |  | Series <br> Index <br> February | Change | Direction |  | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW ORDERS PMI | 58.3 | 55.6 | -2.7 | Growing | Slower | 11 |
| Appliances \& components | 50.0 | 50.0 | 0.0 | No Change | Flat | 4 |
| Cement | 50.0 | 25.0 | -25.0 | Declining | From No Change | 1 |
| Chemical \& pharmaceutical products | 44.4 | 50.0 | 5.6 | No Change | From Contraction | 1 |
| Electrical equipment | 33.3 | 75.0 | 41.7 | Growing | From Contraction | 1 |
| Fabricated metal products | 52.7 | 50.0 | -2.7 | No Change | From Expansion | 1 |
| Food, beverage \& tobacco products | 55.6 | 54.4 | -1.2 | Growing | Slower | 17 |
| Furniture \& related products | 61.1 | 70.0 | 8.9 | Growing | Faster | 4 |
| Nonmetallic mineral products | 75.0 | 37.5 | -37.5 | Declining | From Expansion | 1 |
| Paper products | 54.5 | 68.8 | 14.3 | Growing | Faster | 3 |
| Petroleum \& coal products | 62.5 | 83.3 | 20.8 | Growing | Faster | 3 |
| Plastics \& rubber products | 50.0 | 56.7 | 6.7 | Growing | From No Change | 1 |
| Primary metal | 75.0 | 83.3 | 8.3 | Growing | Faster | 5 |
| Printing \& related support activities | 65.1 | 20.0 | -45.1 | Declining | From Expansion | 1 |
| Textile, apparel, leather \& footwear | 66.0 | 63.3 | -2.7 | Growing | Slower | 5 |
| Transportation equipment | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |

Table 4: Supplier Delivery Time at a Glance

| Series <br> Index <br> Index | Series <br> Index |  |  | Rate <br> of | Trend <br> February | Change | Direction |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Change |
| :--- |$\quad$ (Months)

Table 5: Employment Level at a Glance

| Index | Series Index <br> January | Series <br> Index <br> February | Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYMENT LEVEL PMI | 53.3 | 53.9 | 0.6 | Growing | Faster | 10 |
| Appliances \& components | 75.0 | 100.0 | 25.0 | Growing | Faster | 2 |
| Cement | 50.0 | 50.0 | 0.0 | No Change | Flat | 2 |
| Chemical \& pharmaceutical products | 40.7 | 67.5 | 26.8 | Growing | From Contraction | 1 |
| Electrical equipment | 16.7 | 12.5 | -4.2 | Declining | Faster | 4 |
| Fabricated metal products | 50.0 | 35.0 | -15.0 | Declining | From No Change | 1 |
| Food, beverage \& tobacco products | 52.8 | 57.8 | 5.0 | Growing | Faster | 5 |
| Furniture \& related products | 54.6 | 40.0 | -14.6 | Declining | From Expansion | 1 |
| Nonmetallic mineral products | 81.3 | 37.5 | -43.8 | Declining | From Expansion | 1 |
| Paper products | 59.1 | 50.0 | -9.1 | No Change | From Expansion | 1 |
| Petroleum \& coal products | 50.0 | 33.3 | -16.7 | Declining | From No Change | 1 |
| Plastics \& rubber products | 55.8 | 63.3 | 7.5 | Growing | Faster | 6 |
| Primary metal | 40.0 | 66.7 | 26.7 | Growing | From Contraction | 1 |
| Printing \& related support activities | 60.4 | 40.0 | -20.4 | Declining | From Expansion | 1 |
| Textile, apparel, leather \& footwear | 54.7 | 56.7 | 2.0 | Growing | Faster | 5 |
| Transportation equipment | 25.0 | 25.0 | 0.0 | Declining | Flat | 2 |

Table 6: Raw Materials Inventory at a Glance

| Index |  |  | Change | Direction |  | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RAW MATERIALS INVENTORY PMI | 57.7 | 58.1 | 0.4 | Growing | Faster | 11 |
| Appliances \& components | 100.0 | 50.0 | -50.0 | No Change | From Expansion | 1 |
| Cement | 75.0 | 100.0 | 25.0 | Growing | Faster | 3 |
| Chemical \& pharmaceutical products | 40.7 | 52.5 | 11.8 | Growing | From Contraction | 1 |
| Electrical equipment | 66.7 | 75.0 | 8.3 | Growing | Faster | 3 |
| Fabricated metal products | 52.7 | 50.0 | -2.7 | No Change | From Expansion | 1 |
| Food, beverage \& tobacco products | 59.9 | 56.7 | -3.2 | Growing | Slower | 17 |
| Furniture \& related products | 44.4 | 40.0 | -4.4 | Declining | Faster | 2 |
| Nonmetallic mineral products | 75.0 | 50.0 | -25.0 | No Change | From Expansion | 1 |
| Paper products | 68.2 | 56.3 | -11.9 | Growing | Slower | 3 |
| Petroleum \& coal products | 37.5 | 66.7 | 29.2 | Growing | From Contraction | 1 |
| Plastics \& rubber products | 59.6 | 80.0 | 20.4 | Growing | Faster | 2 |
| Primary metal | 80.0 | 66.7 | -13.3 | Growing | Slower | 2 |
| Printing \& related support activities | 60.4 | 50.0 | -10.4 | No Change | From Expansion | 1 |
| Textile, apparel, leather \& footwear | 69.8 | 53.3 | -16.5 | Growing | Slower | 5 |
| Transportation equipment | 37.5 | 50.0 | 12.5 | No Change | From Contraction | 1 |

Table 7: Non-Manufacturing at a Glance

| Index | Series Index January | Series Index February | Change | Direction | Rate of Change | Trend <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Composite PMI \1 | 58.5 | 56.1 | -2.4 | Growing | Slower | 10 |
| Business Activity | 61.3 | 55.6 | -5.7 | Growing | Slower | 11 |
| Level of new orders/customers/incoming business | 58.2 | 53.7 | -4.5 | Growing | Slower | 11 |
| Level of employment | 55.1 | 55.3 | 0.2 | Growing | Faster | 10 |
| Inventory | 59.5 | 59.8 | 0.3 | Growing | Faster | 10 |
| Average price of Inputs (volume weighted) | 56.9 | 52.8 | -4.1 | Growing | Slower | 28 |
| Level of outstanding business/ Backlog of work | 41.3 | 41.2 | -0.1 | Declining | Faster | 44 |
| New Exports orders | 31.0 | 34.7 | 3.7 | Declining | Slower | 44 |
| Imports | 35.1 | 39.1 | 4.0 | Declining | Slower | 44 |
| Inventory (sentiments) | 42.8 | 40.3 | -2.5 | Declining | Faster | 44 |
| Non-manufacturing sub-sectors |  |  |  |  |  |  |
| Accommodation \& food services | 49.3 | 48.8 | -0.5 | Declining | Faster | 2 |
| Agriculture | 61.3 | 57.0 | -4.3 | Growing | Slower | 21 |
| Construction | 51.7 | 56.7 | 5.0 | Growing | Faster | 3 |
| Educational services | 65.2 | 62.5 | -2.7 | Growing | Slower | 15 |
| Electricity, gas, steam \& air conditioning supply | 56.1 | 53.1 | -3.0 | Growing | Slower | 12 |
| Finance \& insurance | 58.7 | 62.2 | 3.5 | Growing | Faster | 12 |
| Health care \& social assistance | 56.8 | 56.8 | 0.0 | Growing | Faster | 10 |
| Information \& communication | 61.4 | 64.0 | 2.6 | Growing | Faster | 11 |
| Management of companies | 50.0 | 62.5 | 12.5 | Growing | From No Change | 1 |
| Professional, scientific, \& technical services | 58.1 | 51.4 | -6.7 | Growing | Slower | 3 |
| Public administration | 81.3 | 31.3 | -50.0 | Declining | From Expansion | 1 |
| Real estate rental \& leasing | 62.9 | 50.0 | -12.9 | No Change | From Expansion | 1 |
| Transportation \& warehousing | 64.0 | 48.8 | -15.2 | Declining | From Expansion | 1 |
| Utilities | 52.5 | 62.5 | 10.0 | Growing | Faster | 11 |
| Water supply, sewage \& waste management | 64.6 | 40.6 | -24.0 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 57.6 | 63.3 | 5.7 | Growing | Faster | 9 |

\1 The composite PMI is a simple average of the following diffusion (series) indices: business activity, new orders, employment level and inventories
Table 8: Business activity at a Glance

| Index | Series Index January | Series Index <br> February | Change | Direction | Rate of Change | Trend (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUSINESS ACTIVITY PMI | 61.3 | 55.6 | -5.7 | Growing | Slower | 11 |
| Accommodation \& food services | 47.9 | 41.5 | -6.4 | Declining | Faster | 2 |
| Agriculture | 59.7 | 58.0 | -1.7 | Growing | Slower | 21 |
| Construction | 55.0 | 64.3 | 9.3 | Growing | Faster | 3 |
| Educational services | 64.1 | 67.9 | 3.8 | Growing | Faster | 6 |
| Electricity, gas, steam \& air conditioning supply | 70.8 | 50.0 | -20.8 | No Change | From Expansion | 1 |
| Finance \& insurance | 63.6 | 63.9 | 0.3 | Growing | Faster | 11 |
| Health care \& social assistance | 52.4 | 57.1 | 4.7 | Growing | Faster | 12 |
| Information \& communication | 61.8 | 61.1 | -0.7 | Growing | Slower | 11 |
| Management of companies | 50.0 | 50.0 | 0.0 | No Change | Flat | 3 |
| Professional, scientific, \& technical services | 61.7 | 50.0 | -11.7 | No Change | From Expansion | 1 |
| Public administration | 75.0 | 25.0 | -50.0 | Declining | From Expansion | 1 |
| Real estate rental \& leasing | 73.4 | 66.7 | -6.7 | Growing | Slower | 6 |
| Transportation \& warehousing | 68.0 | 45.0 | -23.0 | Declining | From Expansion | 1 |
| Utilities | 60.0 | 75.0 | 15.0 | Growing | Faster | 11 |
| Water supply, sewage \& waste management | 66.7 | 37.5 | -29.2 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 64.8 | 56.3 | -8.5 | Growing | Slower | 10 |

Table 9: New Orders at a Glance

| Index | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { January }\end{array}$ | $\begin{array}{c}\text { Series } \\ \text { Index } \\ \text { February }\end{array}$ | Change | Direction | $\begin{array}{c}\text { Rate } \\ \text { of }\end{array}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Change |  |  |  |  |  |\(\left.\quad \begin{array}{c}Trend <br>

(Months)\end{array}\right)\)

## Table 10: Employment at a Glance

| Index | Series <br> Index <br> January | Series <br> Index <br> February | Change | Direction | Rate of Change | Trend <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EMPLOYMENT LEVEL PMI | 55.1 | 55.3 | 0.2 | Growing | Faster | 10 |
| Accommodation \& food services | 52.8 | 56.0 | 3.2 | Growing | Faster | 7 |
| Agriculture | 54.8 | 58.0 | 3.2 | Growing | Faster | 10 |
| Construction | 48.3 | 47.6 | -0.7 | Declining | Faster | 2 |
| Educational services | 60.9 | 64.3 | 3.4 | Growing | Faster | 14 |
| Electricity, gas, steam \& air conditioning supply | 62.5 | 37.5 | -25.0 | Declining | From Expansion | 1 |
| Finance \& insurance | 57.6 | 58.3 | 0.7 | Growing | Faster | 9 |
| Health care \& social assistance | 55.6 | 56.7 | 1.1 | Growing | Faster | 9 |
| Information \& communication | 50.0 | 50.0 | 0.0 | No Change | Flat | 3 |
| Management of companies | 50.0 | 66.7 | 16.7 | Growing | From No Change | 1 |
| Professional, scientific, \& technical services | 61.7 | 50.0 | -11.7 | No Change | From Expansion | 1 |
| Public administration | 75.0 | 50.0 | -25.0 | No Change | From Expansion | 1 |
| Real estate rental \& leasing | 59.4 | 58.3 | -1.1 | Growing | Slower | 3 |
| Transportation \& warehousing | 58.0 | 55.0 | -3.0 | Growing | Slower | 12 |
| Utilities | 30.0 | 50.0 | 20.0 | No Change | From Contraction | 1 |
| Water supply, sewage \& waste management | 54.2 | 37.5 | -16.7 | Declining | From Expansion | 1 |
| Wholesale/Retail trade | 50.0 | 56.3 | 6.3 | Growing | From No Change | 1 |

Table 11: Inventory at a Glance

|  | Series <br> Index <br> January | Series <br> Index <br> February | Change | Direction | Rate <br> of <br> Change | (Months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

Table 12: Manufacturing PMI Data Series

|  | $\begin{aligned} & \frac{\omega}{n} \\ & 0 \\ & \sum_{0}^{0} \\ & 0 \\ & \sum_{0} \end{aligned}$ |  | $\begin{aligned} & \frac{n}{0} \\ & \frac{0}{0} \\ & 0 \\ & 3 \\ & \frac{3}{2} \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| Mar '17 | 47.7 | 50.8 | 45.6 | 51.3 | 43.6 | 49.1 | 38.5 | 65.0 | 68.3 | 50.1 | 43.6 | 45.1 |
| Apr '17 | 51.1 | 58.5 | 50.1 | 47.5 | 46.6 | 50.6 | 37.7 | 65.1 | 69.2 | 45.1 | 40.0 | 46.4 |
| May '17 | 52.5 | 58.7 | 50.5 | 49.9 | 50.7 | 50.8 | 37.6 | 61.3 | 68.4 | 46.1 | 42.3 | 51.8 |
| June '17 | 52.9 | 58.2 | 51.0 | 50.3 | 51.1 | 52.3 | 32.6 | 62.7 | 66.6 | 46.2 | 43.9 | 49.1 |
| July '17 | 54.1 | 59.3 | 52.7 | 51.3 | 51.8 | 53.6 | 37.5 | 60.4 | 64.1 | 48.0 | 42.1 | 48.5 |
| Aug '17 | 53.6 | 57.4 | 52.3 | 52.0 | 51.5 | 54.9 | 36.7 | 58.8 | 64.9 | 49.0 | 47.9 | 51.6 |
| Sep '17 | 55.3 | 58.8 | 53.5 | 55.4 | 52.8 | 56.4 | 30.4 | 58.2 | 65.7 | 49.4 | 51.9 | 50.4 |
| Oct '17 | 55.0 | 58.4 | 52.8 | 55.5 | 53.1 | 56.5 | 35.5 | 55.4 | 62.7 | 49.6 | 50.8 | 50.0 |
| Nov '17 | 55.9 | 59.3 | 54.3 | 56.0 | 53.7 | 57.1 | 37.6 | 54.0 | 64.3 | 48.1 | 50.0 | 48.8 |
| Dec '17 | 59.3 | 63.2 | 60.0 | 57.4 | 53.9 | 61.1 | 40.2 | 54.3 | 63.4 | 53.6 | 45.7 | 47.4 |
| Jan '18 | 57.3 | 59.6 | 58.3 | 56.8 | 53.3 | 57.7 | 35.1 | 55.0 | 63.3 | 49.1 | 42.9 | 45.4 |
| Feb '18 | 56.3 | 57.8 | 55.6 | 57 | 53.9 | 58.1 | 42 | 55.9 | 65.4 | 54.3 | 37.6 | 53.3 |

Table 13: Non-Manufacturing PMI Data Series

|  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Ł } \\ & 0 \\ & \underline{0} \\ & \underline{E} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| Feb '17 | 44.5 | 45.4 | 44.9 | 42.6 | 44.9 | 65.4 | 42.9 | 33.4 | 34.5 | 38.7 |
| Mar '17 | 47.1 | 49.8 | 46.4 | 44.0 | 48.0 | 62.1 | 42.7 | 33.1 | 34.5 | 40.6 |
| Apr '17 | 49.5 | 53.3 | 50.5 | 45.5 | 48.6 | 63.1 | 41.6 | 29.2 | 33.2 | 41.1 |
| May '17 | 52.7 | 56.2 | 53.2 | 50.2 | 51.4 | 62.7 | 45.3 | 31.6 | 34.1 | 43.6 |
| June '17 | 54.2 | 57.0 | 54.6 | 53.4 | 51.8 | 58.6 | 40.5 | 30.3 | 33.5 | 42.7 |
| July '17 | 54.4 | 56.8 | 55.1 | 54.0 | 51.9 | 58.1 | 42.9 | 32.0 | 36.8 | 41.5 |
| Aug '17 | 54.1 | 56.1 | 53.5 | 54.4 | 52.3 | 54.5 | 42.8 | 34.5 | 34.8 | 42.0 |
| Sep '17 | 54.9 | 56.8 | 55.4 | 54.7 | 52.9 | 56.9 | 42.2 | 31.2 | 35.9 | 44.2 |
| Oct '17 | 55.3 | 57.5 | 55.7 | 54.4 | 53.4 | 56.4 | 41.4 | 29.6 | 35.4 | 38.9 |
| Nov '17 | 57.6 | 59.4 | 58.4 | 54.6 | 58.0 | 55.7 | 43.6 | 28.8 | 33.3 | 40.6 |
| Dec '17 | 62.1 | 67.4 | 62.2 | 55.7 | 62.9 | 56.1 | 44.6 | 34.6 | 39.1 | 40.3 |
| Jan '18 | 58.5 | 61.3 | 58.2 | 55.1 | 59.5 | 56.9 | 41.3 | 31.0 | 35.1 | 42.8 |
| Feb '18 | 56.1 | 55.6 | 53.7 | 55.3 | 59.8 | 52.8 | 41.2 | 34.7 | 39.1 | 40.3 |

