

February 2019

# U.S. Equipment & Software Investment Momentum Monitor



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## About the U.S. Equipment & Software Investment Momentum Monitor

Business leaders require actionable forward-looking intelligence to make strategic decisions. Accordingly, the Equipment Leasing & Finance Foundation commissioned Keybridge LLC to develop a series of custom leading indicators for the equipment sector. Published monthly, the “U.S. Equipment & Software Investment Momentum Monitor” consists of indices for the 12 equipment and software investment verticals listed below. These indices are designed to identify turning points in their respective investment cycles with a 3 to 6 month lead time.

The Momentum Monitor is based on Keybridge’s extensive research which shows that not all movements in economic data are reliable signals of future economic trends. Keybridge has operationalized its research by constructing indices, each comprised of between 10 to 20 high-frequency indicators. These indicators undergo rigorous testing to determine the optimal thresholds at which their short-term fluctuations are economically meaningful. In simpler terms, the Momentum Monitor sifts out the “noise” in the data and identifies the dominant trends. As a result, each Momentum Monitor index is statistically optimized to signal turning points in the investment cycle without giving false readings of shifts in momentum.

The Momentum Monitor covers 12 equipment and software verticals as defined by the U.S. Department of Commerce Bureau of Economic Analysis.

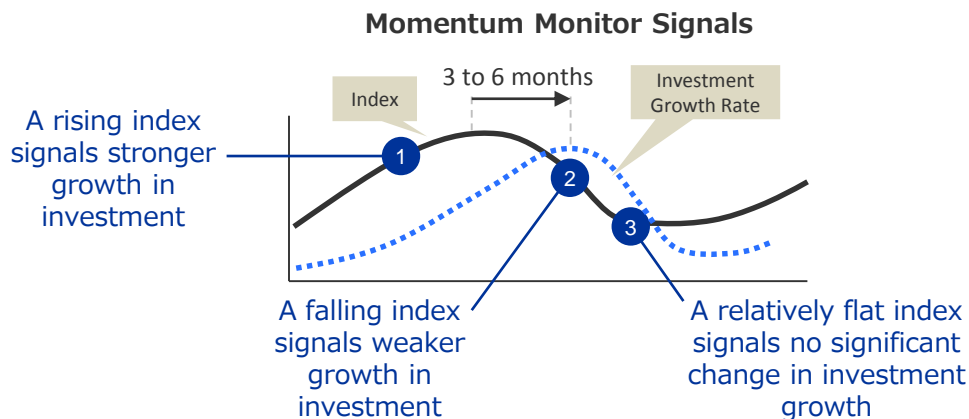
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- |                                   |                       |
|-----------------------------------|-----------------------|
| 1) Agriculture Machinery          | 7) Aircraft           |
| 2) Construction Machinery         | 8) Ships and Boats    |
| 3) Materials Handling Equipment   | 9) Railroad Equipment |
| 4) All Other industrial Equipment | 10) Trucks            |
| 5) Medical Equipment              | 11) Computers         |
| 6) Mining & Oilfield Machinery    | 12) Software          |

## How to Read the Monitor

Each Momentum Monitor index provides a signal of the direction and magnitude of growth in equipment investment over the next 3 to 6 months. It is important to note that index values do not correspond to particular growth rates. Instead, the Momentum Monitor indices should be interpreted within the context of prior index readings and investment growth rates. For example, there are several simple rules to follow when examining the latest index values:

- 1) A rising index signals that growth in investment will accelerate from the current rate;
- 2) A falling index signals that growth in investment will decelerate from the current rate; and
- 3) No change in the index signals no meaningful change from the current growth rate.



To help the reader interpret the latest Momentum Monitor signals, a summary report for each equipment vertical follows a specific outline:

### Materials Handling Equipment:

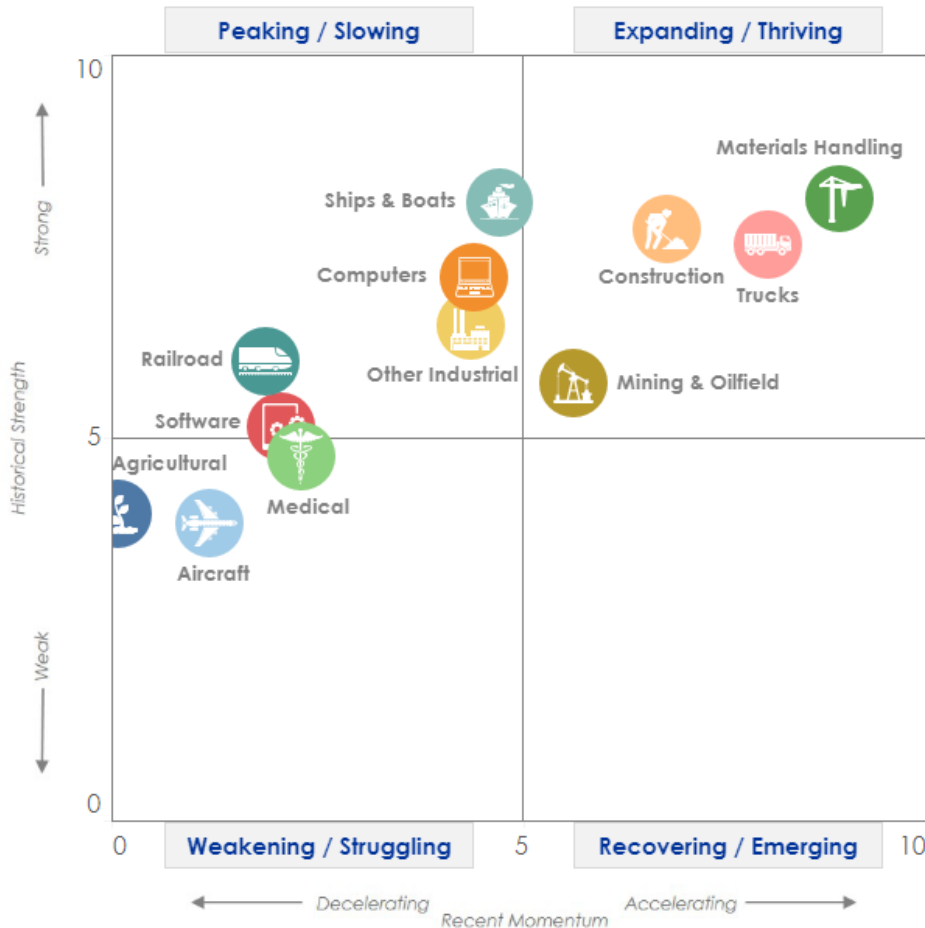
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy Uncertainty offset gains in Machinery Sales, Manufacturing Sales, and the ISM Manufacturing Suppliers Deliveries Index.
- 4 The Index's recent trend continues to indicate that growth may moderate over the next three to six months.

- 1) The first sentence reports the latest growth rate for investment in a given vertical. This provides a context for interpreting the order of magnitude of growth over the next 3 to 6 months.
- 2) The second sentence explains the latest movement in the index, indicating whether momentum is accelerating or decelerating.
- 3) The report then describes the recent movements of one or more indicators to help to explain the index's latest reading.
- 4) Finally, the report ends with an interpretation of where investment growth is heading over the next 3 to 6 months based the index's recent movement and historical strength.

# U.S. Equipment & Software Investment Momentum Monitor

## February 2019

### Momentum Monitor Sector Matrix



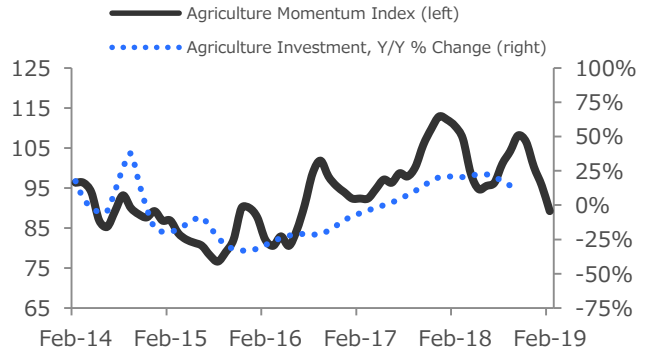
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"Recent Momentum"** represents the degree of an indicator's recent acceleration or deceleration in the past month relative to its average movement during the previous 3 months. Ratings closer to "0" represent an indicator that is rapidly decelerating, while ratings closer to "10" represent an indicator that is rapidly accelerating.
- **"Historical Strength"** represents the strength or weakness of an indicator in the past month relative to its typical level since 1999. Ratings closer to "0" represent an indicator that is weaker than average, while ratings closer to "10" represent an indicator that is stronger than average.

The matrix is comprised of four quadrants according to each vertical's recent momentum and historical strength readings. If a vertical is located in the top-left quadrant, its momentum reading is higher than average, but positive movement has slowed (and perhaps reversed) in recent months — suggesting that investment levels may fall over the next 1-2 quarters. Verticals located in the bottom-right quadrant, however, have momentum readings that are below average, but recent movement shows promise — suggesting that investment levels may rise over the next 1-2 quarters. This makes them potentially attractive targets for new short-term leasing and finance opportunities.

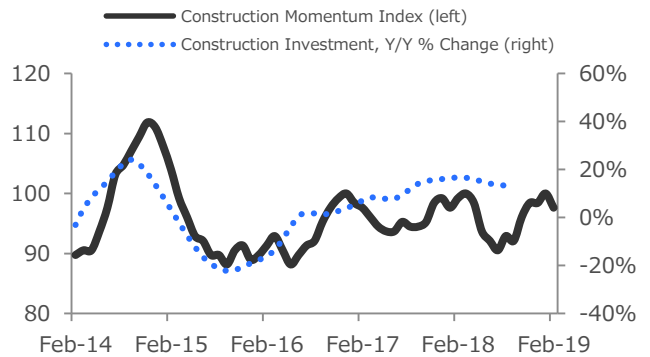
**Agriculture Machinery:**

Investment in Agricultural Machinery fell 5.9% (annualized) in Q3 2018 but is up 14% from one year ago. The Agriculture Momentum Index decreased from 95.5 (revised) in January to 89.2 in February, its lowest level since June 2016. Shipments of Farm Machinery & Equipment fell 0.6% in October, while Inventories of Meat, Poultry, & Seafood decreased 0.7%. Overall, the Index points to weaker and potentially negative agricultural machinery investment growth over the next three to six months.



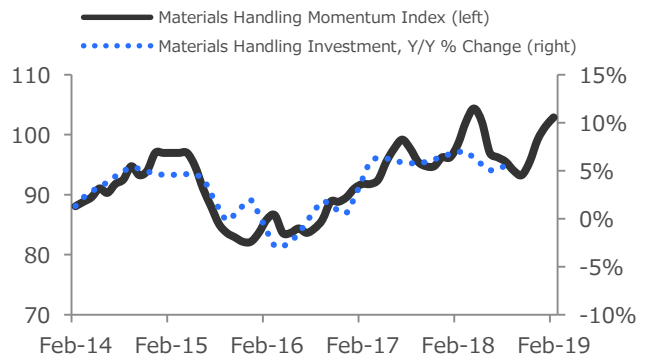
**Construction Machinery:**

Investment in Construction Machinery rose at a 4.7% annual rate in Q3 2018 and is up 13% year-over-year. The Construction Momentum Index fell from 100.0 (revised) in January to 97.6 in February. Construction Employment rose 0.7% in January, but the Consumer Sentiment Index dropped 7.2%, its sharpest decrease in over six years. Overall, the Index suggests stable growth in construction machinery investment over the next three to six months.



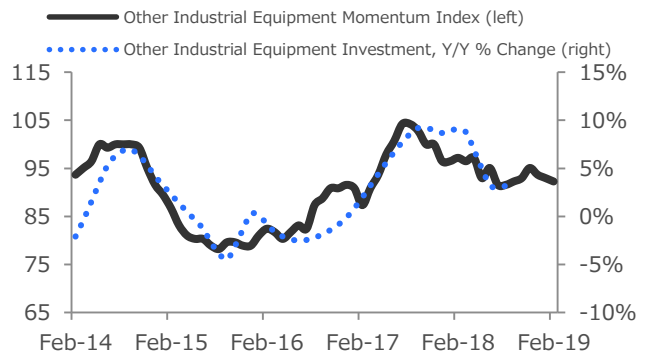
**Materials Handling Equipment:**

Investment in Materials Handling Equipment increased at a 7.2% annual rate in Q3 2018 and is up 5.9% year-over-year. The Materials Handling Momentum Index rose from 101.4 (revised) in January to 102.9 in February. Earnings in Materials Handling Equipment Manufacturing jumped 3.6% in December, while Manufacturing Employment edged up 0.1% in January. Overall, the Index points to stronger growth in materials handling equipment investment over the next two quarters.



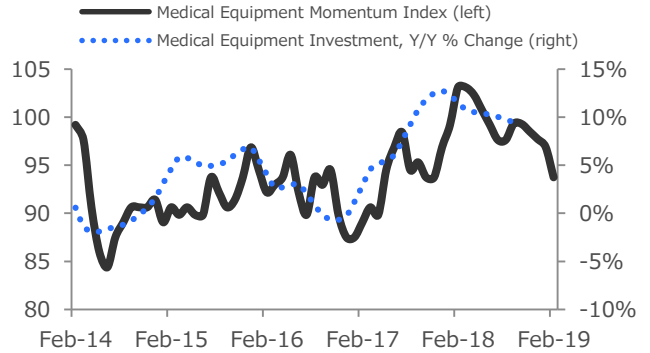
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment expanded at an 11% annual rate in Q3 2018 and is up 3.7% from a year ago. The Other Industrial Equipment Momentum Index slipped from 93.0 (revised) in January to 92.3 in February. Exports Prices of Industrial Supplies & Materials declined 3.2% in December, but the Manufacturing Purchasing Managers' Index increased to 56.6 in January and has remained above the expansionary threshold for nearly three years. Overall, the Index suggests stable growth in other industrial equipment investment over the next three to six months.



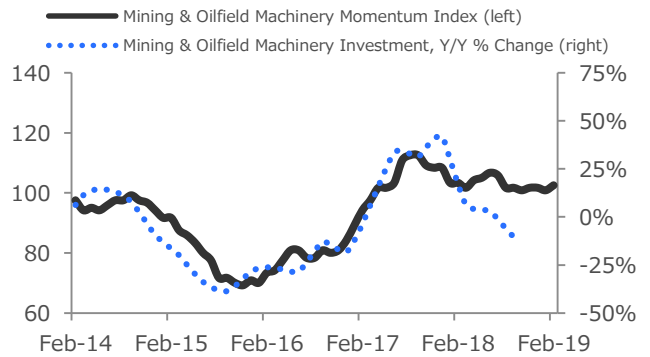
**Medical Equipment:**

Investment in Medical Equipment rose at an 11% annual rate in Q3 2018 and is up 9.4% year-over-year. The Medical Equipment Momentum Index decreased from 96.9 (revised) in January to 93.8 in February. Private Hospital Construction Spending fell 7.2% in November, and Capacity Utilization for Electrical Equipment Manufacturing edged down 0.1 percentage point to 76.6% in December. Overall, the Index points to slower growth in medical equipment investment over the next two quarters.



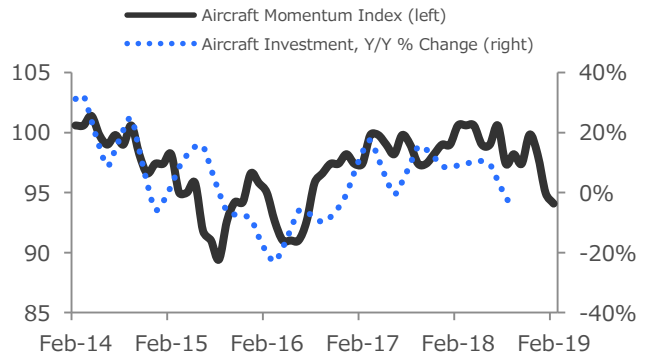
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery declined at a 23% annual rate in Q3 2018 and is down 11% year-over-year. The Mining & Oilfield Machinery Momentum Index increased from 100.8 (revised) in January to 102.5 in February. Motor Gasoline Production fell 2.1% in December, but the Bloomberg Precious Metals Index rose 3.0% in January. Overall, the Index points to a potential improvement in mining & oilfield machinery investment growth over the next three to six months.



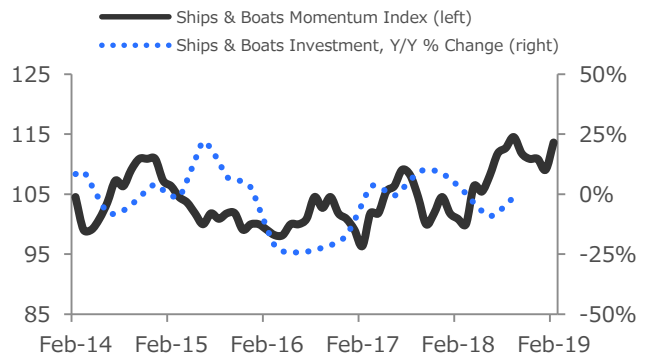
**Aircraft:**

Investment in Aircraft decreased 19% (annualized) in Q3 2018 and is down 5.7% on a year-over-year basis. The Aircraft Momentum Index moderated from 95.0 (revised) in January to 94.1 in February. Unfilled Orders of Defense Aircraft & Parts rose 2.9% in November, while the S&P 500 Volatility Index dropped 35% in January, its sharpest decline in over three years. Overall, the Index points to further weakening in aircraft investment growth over the next two quarters.



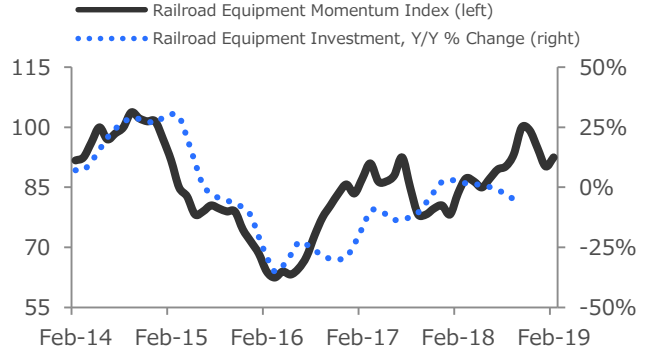
**Ships & Boats:**

Investment in Ships & Boats surged at an annual rate of 52% in Q3 2018 but edged down 1.1% year-over-year. The Ships & Boats Momentum Index increased from 109.1 (revised) in January to 113.6 in February. In December, Container Moves at Houston Ports fell 2.2%, but Industrial Production for Ship & Boat Building rose 3.0%. Overall, the Index indicates stronger growth in ships and boats investment over the next three to six months.



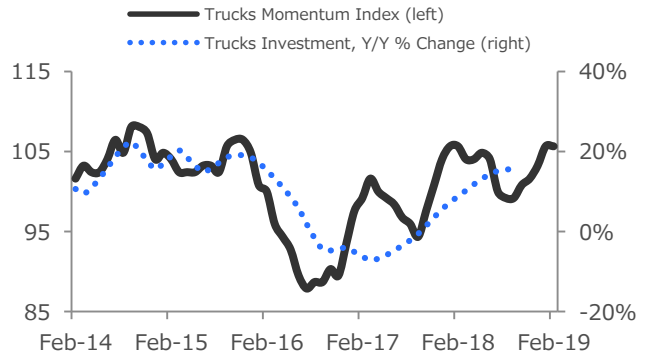
**Railroad Equipment:**

Investment in Railroad Equipment declined at a 16% annual rate in Q3 2018 and is down 5.1% year-over-year. The Railroad Equipment Momentum Index rose from 90.2 (revised) in January to 92.5 in February. Rail Carloads of Petroleum Products jumped 23% in December, but the Unemployment Rate rose 0.1 percentage point to 4% in January. Overall, the Index indicates the potential for an improvement in railroad equipment investment growth over the next three to six months.



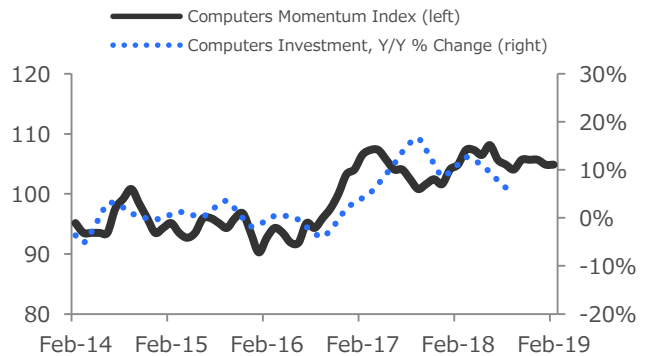
**Trucks:**

Investment in Trucks rose at a 9.4% annual rate in Q3 2018 and is up 15% from year-ago levels. The Trucks Momentum Index held steady at 105.6 from January (revised) to February. Industrial Production for Light Trucks rose 7.7% in December, while Earnings for Truck Transportation increased 0.8%. Overall, the Index suggests continued strong growth in trucks investment over the next three to six months.



**Computers:**

Investment in Computers decreased at an annual rate of 2.3% in Q3 2018 but is up 5.4% year-over-year. The Computers Momentum Index was unchanged at 104.9 from January (revised) to February. Industrial Production for Computers & Electronic Products rose 1.3% in December, but Computer Export Prices fell 0.8%, its third consecutive decrease. Overall, the Index points to stable growth in computers investment over the next two quarters.



**Software:**

Investment in Software increased at a 9.1% annual rate in Q3 2018 and is also up 9.1% year-over-year. The Software Momentum Index fell from 99.0 (revised) in January to 95.6 in February. Shipments of Computers & Related Products decreased 1.6% in November, while the Producer Price Index for Software Publishers fell 2.8% in December (the largest monthly decline in more than nine years). Overall, the Index points to weaker growth in software investment over the next three to six months.

