

May 2018

# 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.

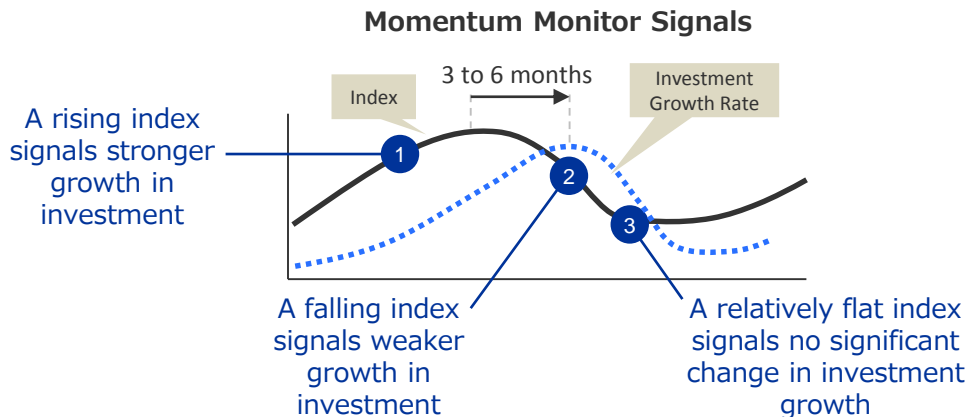
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- |                                   |                       |
|-----------------------------------|-----------------------|
| 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:

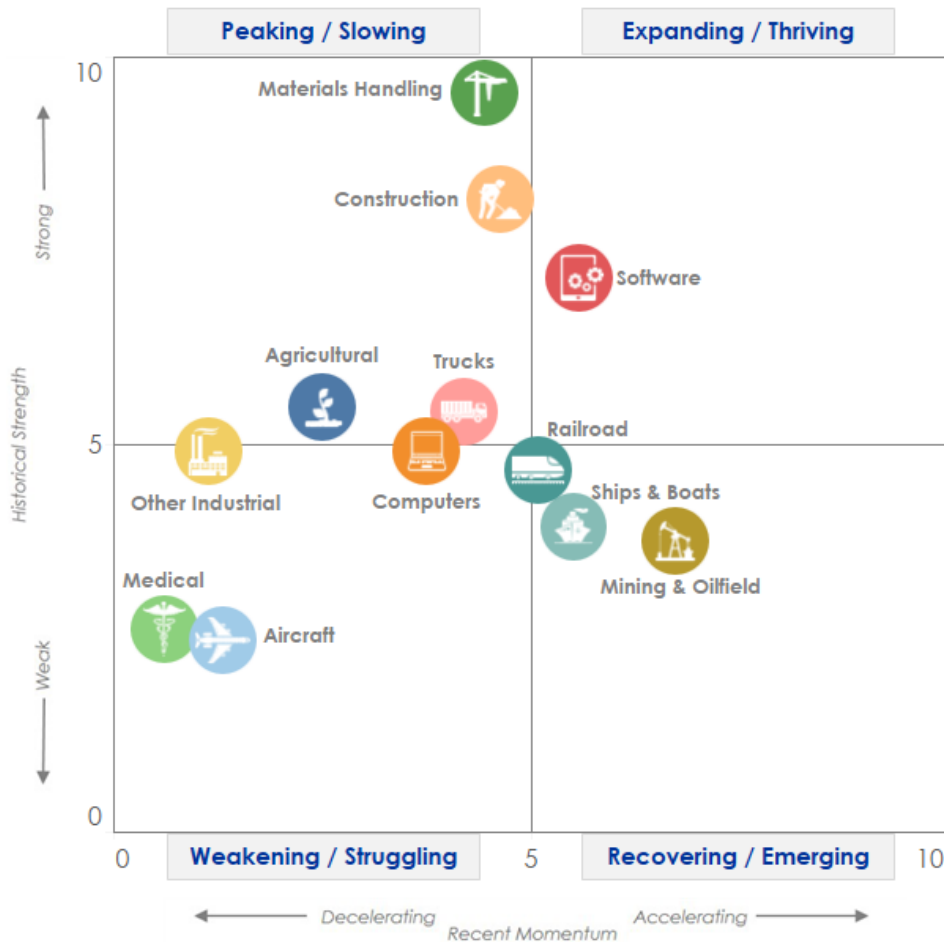
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy 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

## May 2018

### Momentum Monitor Sector Matrix



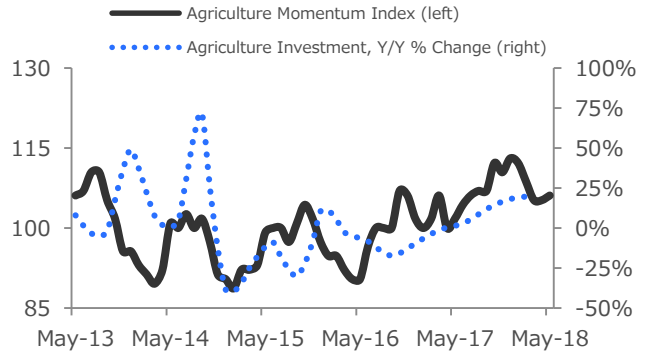
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

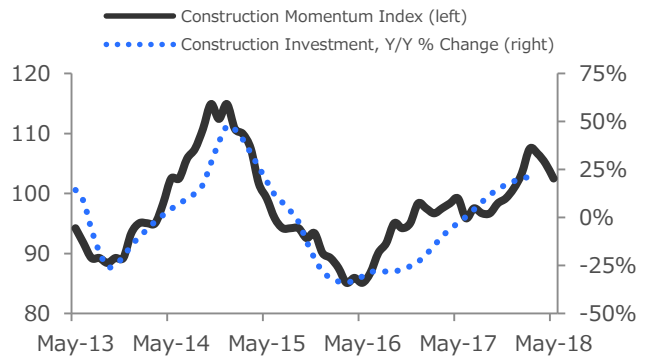
**Agriculture Machinery:**

Investment in Agricultural Machinery was essentially flat in Q1 2018 and is up 19% from one year ago. The Agriculture Momentum Index rose from 105.2 (revised) in April to 106.1 May. Broiler Exports increased 10% in March, while Average Precipitation in the Central U.S. declined 36%. Overall, the Index signals little change in agricultural machinery investment growth over the next three to six months.



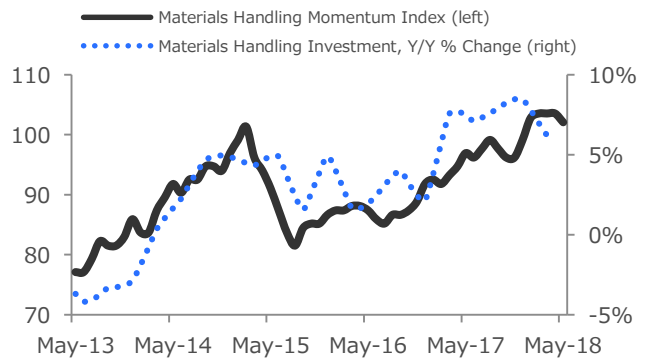
**Construction Machinery:**

Investment in Construction Machinery rose at a 27% annual rate in Q1 2018 and is up 22% year-over-year. The Construction Momentum Index fell from 105.0 (revised) in April to 102.5 in May. Construction Machinery Shipments decreased 3.6% in March, the largest monthly decline since November 2016. Overall, the Index suggests that construction machinery investment growth may have peaked, but should nonetheless remain solidly positive over the next three to six months.



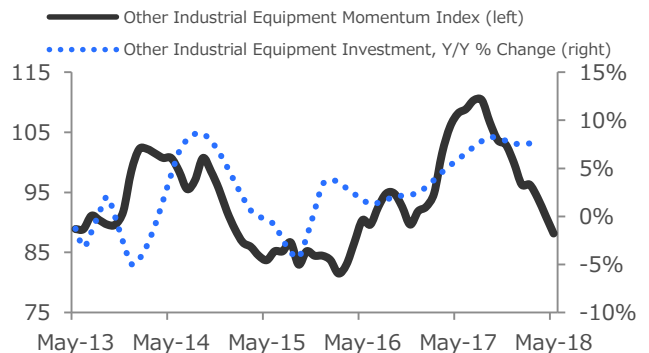
**Materials Handling Equipment:**

Investment in Materials Handling Equipment increased at a 4.8% annual rate in Q1 2018 and is up 6.2% year-over-year. The Materials Handling Momentum Index fell from 103.5 (revised) in April to 102.1 in May. Inventories of Material Handling Equipment declined 0.3% in March but Industrial Production rose 0.5%. Overall, the Index points to steady growth in materials handling equipment investment over the next two quarters.



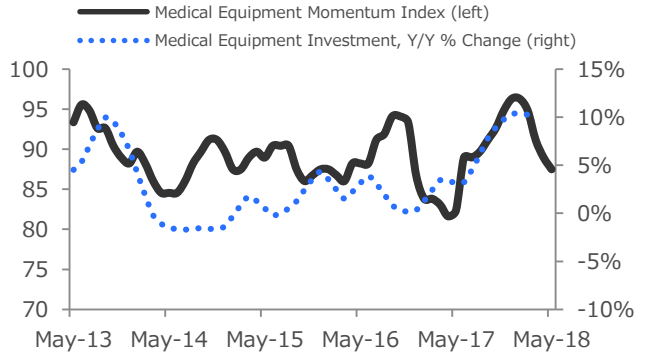
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment rose at a 3.8% annual rate in Q1 2018 and is up 7.4% from a year ago. The Other Industrial Equipment Momentum Index declined from 91.1 (revised) in April to 88.1 in May. Industrial Machinery Shipments declined 5.9% in March, its largest decline since September 2016, and the S&P Industrials Index fell 2.8% in April. Overall, the Index continues to signal a deceleration in other industrial equipment investment growth over the next three to six months.



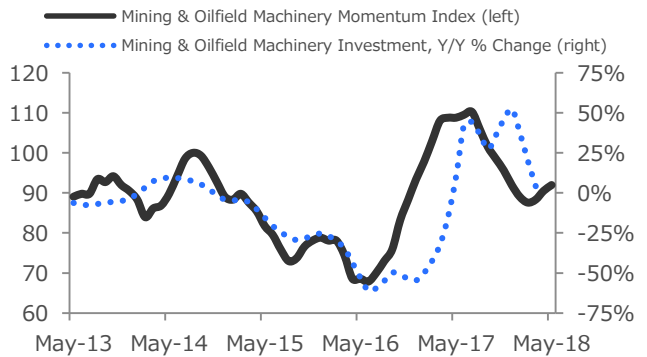
**Medical Equipment:**

Investment in Medical Equipment expanded at a 2.4% annual rate in Q1 2018 and is up 10% year-over-year. The Medical Equipment Momentum Index edged down from 89.0 (revised) in April to 87.5 in May, marking its fourth consecutive monthly decline. The Consumer Price Index for Dental Services rose 1.2% in March, but Johnson & Johnson's Market Cap fell 1.3% in April. Overall, the Index points to slower growth in medical equipment investment over the next two quarters.



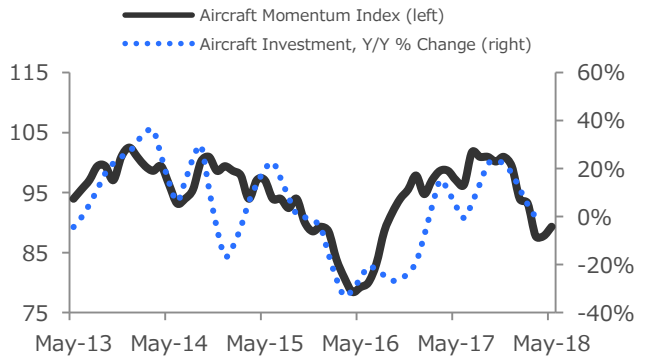
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery decreased at a 43% annual rate in Q1 2018, but is up 3.9% year-over-year. The Mining & Oilfield Machinery Momentum Index increased from 90.5 (revised) in April to 92.0 in May, the third consecutive increase after declining for seven straight months. Industrial Production for Support Activities for Mining & Drilling expanded 4.1% in March and Employment in Support Activities for Mining increased 2.1% in April. Overall, the Index appears to signal a turnaround in mining & oilfield machinery investment growth over the next three to six months.



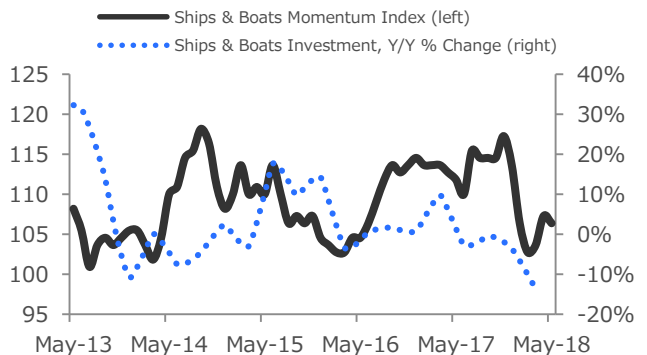
**Aircraft:**

Investment in Aircraft fell 8.8% (annualized) in Q1 2018, and is down 0.4% on a year-over-year basis. The Aircraft Momentum Index rose from 87.7 (revised) in April to 89.3 in May. Energy Consumption in the Transportation Sector fell 5.2% in January, but Exports of Civilian Aircraft jumped 49% in March. Overall, the Index continues to suggest that aircraft investment growth may soften further over the next two quarters, but recent movement in the Index is encouraging.



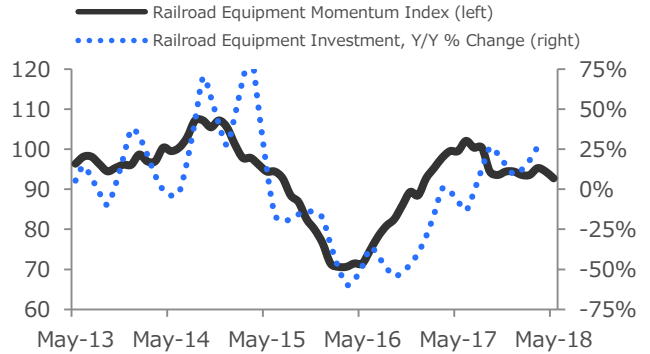
**Ships & Boats:**

Investment in Ships & Boats declined at an annual rate of 39% in Q1 2018 and is down 14% year-over-year. The Ships & Boats Momentum Index slipped from 107.3 (revised) in April to 106.4 in May. Industrial Production for Ship & Boat Building rose 0.6% in March, but the ISM Employment Index declined to 54.2 in April (though it remains well above the expansionary threshold). Overall, the Index points to weaker investment growth in ships and boats over the next three to six months.



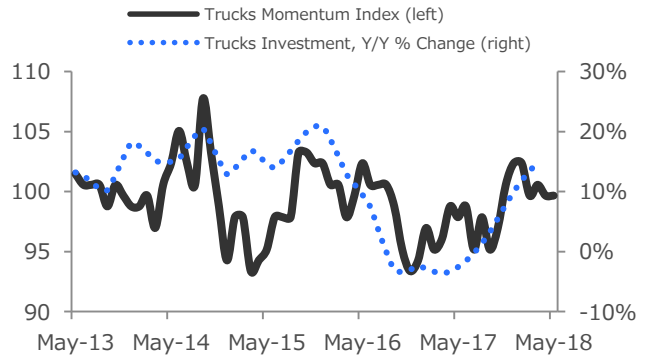
**Railroad Equipment:**

Investment in Railroad Equipment surged at a 63% annual rate in Q1 2018 and is up 27% year-over-year. The Railroad Equipment Momentum Index decreased from 94.4 (revised) in April to 92.7 in May. Industrial Production for Mining rose 1.0% in March, climbing to its highest level since February 2015. However, Crude Oil & Petroleum Product Imports rose 1.7% in April, its fifth consecutive increase. Overall, the Index signals little change in railroad equipment investment growth over the next two quarters.



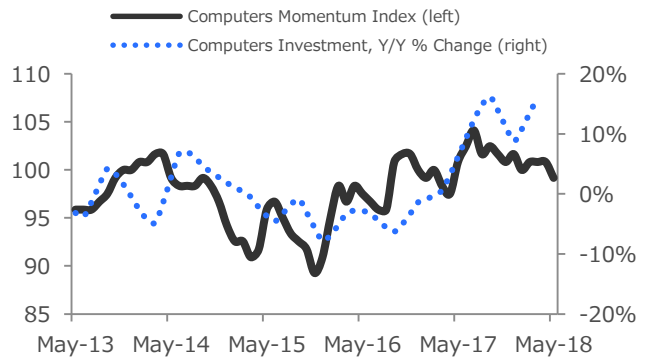
**Trucks:**

Investment in Trucks rose at a 14% annual rate in Q1 2018 and is up 15% from year-ago levels. The Trucks Momentum Index held steady at 99.7 from April (revised) to May. Capacity Utilization for Automobiles & Light Duty Motor Vehicles rose 3.9 percentage points to 84.7% in March while Average Hourly Earnings for Freight Trucking ticked up 0.5%. Overall, the Index continues to point to steady growth in trucks investment over the next three to six months.



**Computers:**

Investment in Computers increased at an annual rate of 34% in Q1 2018 and is up 16% year-over-year. The Computers Momentum Index declined from 100.8 (revised) in April to 99.2 in May. In March, the NASDAQ Computer Index edged down 0.4% while IBM's Market Cap fell 5.8%. Overall, the Index points to slower growth in computers investment over the next two quarters.



**Software:**

Investment in Software rose at a 2.9% annual rate in Q1 2018 and is up 3.8% year-over-year. The Software Momentum Index increased from 99.2 in April to 100.0 in May. Business Construction Spending increased 1.1% in March, but the Consumer Price Index for Computer Software & Accessories declined 1.4%. Overall, the Index suggests that growth in software investment may improve over the next three to six months.

