

March 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.

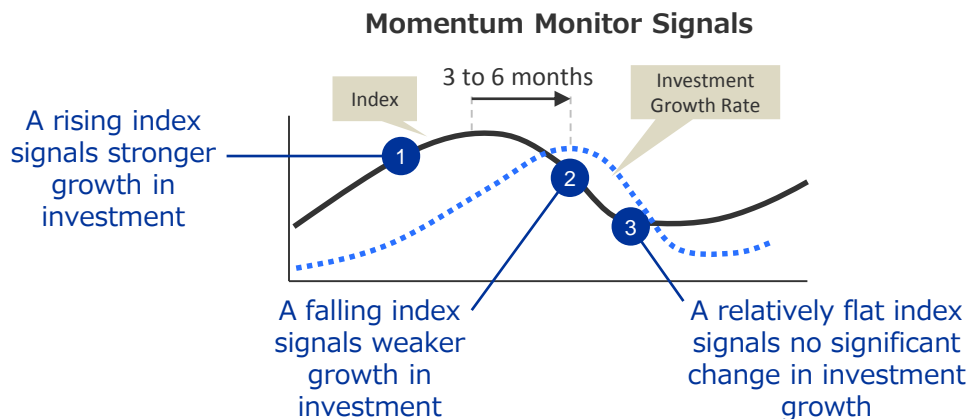
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

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

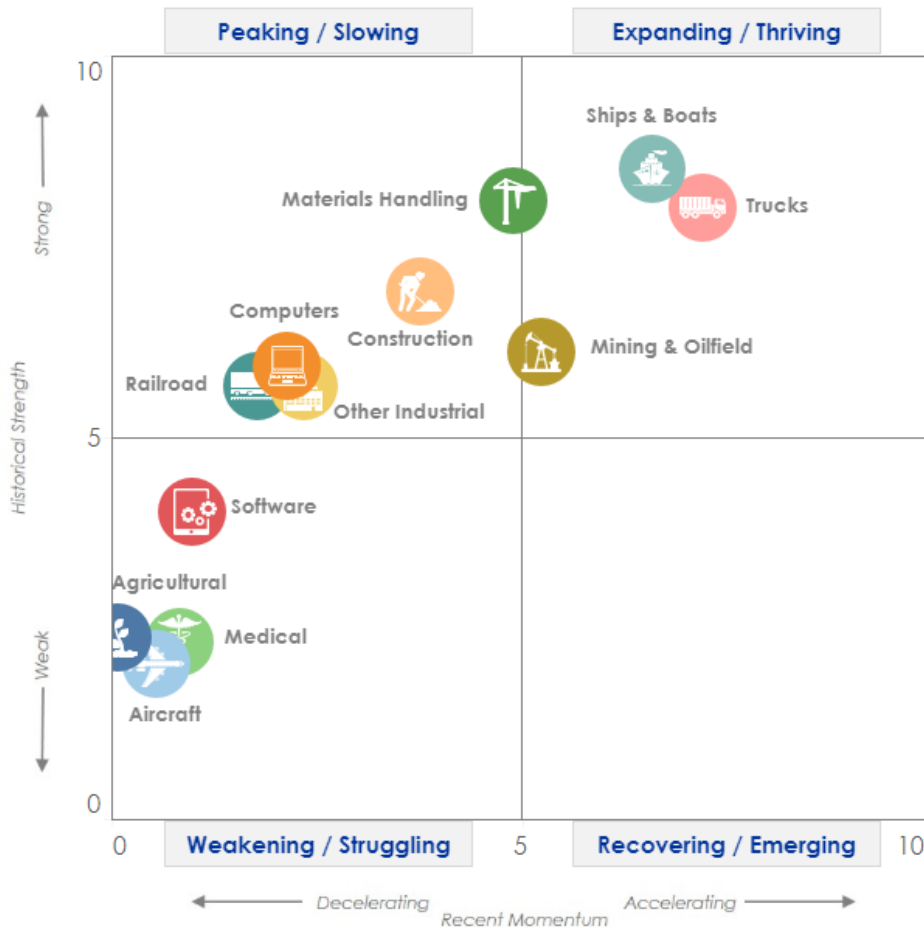
- 1) Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2) The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3) A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy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

## March 2019

### Momentum Monitor Sector Matrix



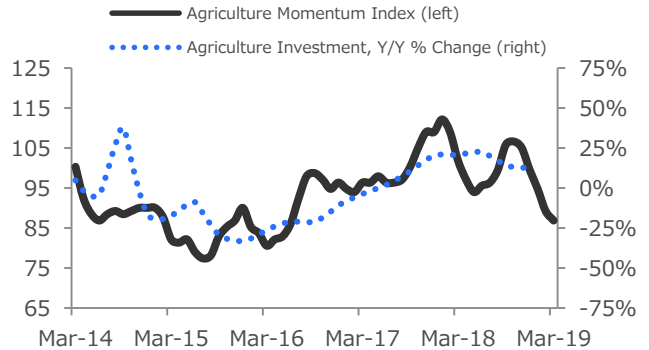
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

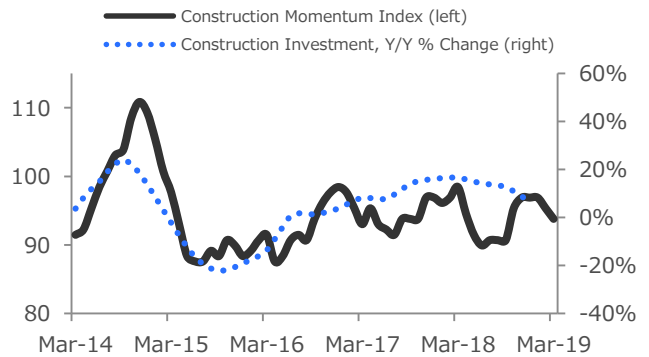
**Agriculture Machinery:**

Investment in Agricultural Machinery jumped 29% (annualized) in Q4 2018 and is up 13% from one year ago. The Agriculture Momentum Index decreased from 89.2 in February to 86.8 in March, its fifth straight monthly decline. Unmanufactured Tobacco Exports dropped 65% in November, while the ISM Manufacturing PMI fell 2.4 points to 54.2 in February (though it remains above the expansionary threshold). Overall, the Index points to weaker growth in agricultural machinery investment over the next three to six months.



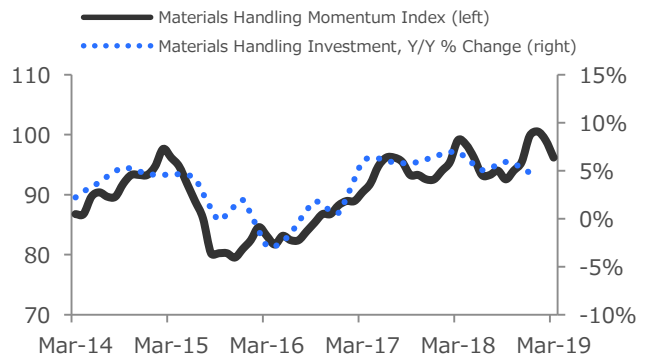
**Construction Machinery:**

Investment in Construction Machinery declined at a 5.2% annual rate in Q4 2018 but is up 6.4% year-over-year. The Construction Momentum Index fell from 95.3 (revised) in February to 93.8 in March. In January, Existing Homes For Sale rose 3.9% while Construction Employment rose 0.7%, its sharpest increase in more than three years. Overall, the Index suggests weak growth in construction machinery investment over the next three to six months.



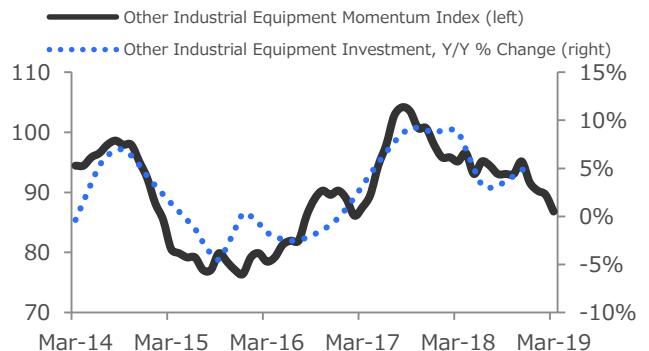
**Materials Handling Equipment:**

Investment in Materials Handling Equipment increased at a 1.6% annual rate in Q4 2018 and is up 4.8% year-over-year. The Materials Handling Momentum Index fell from 99.1 (revised) in February to 96.2 in March. Materials Handling Equipment Exports dipped 12% in November, but the Chicago Business Barometer surged 14% in February, its strongest increase in two years. Overall, the Index points to continued modest growth in materials handling equipment investment over the next two quarters.



**Other Industrial Equipment:**

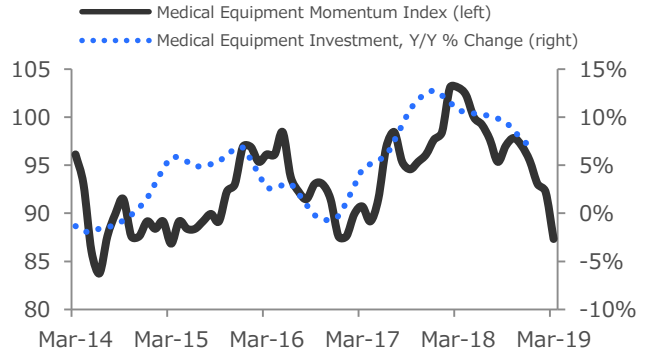
Investment in All Other Industrial Equipment expanded at a 12% annual rate in Q4 2018 and is up 5.4% from a year ago. The Other Industrial Equipment Momentum Index decreased from 89.6 (revised) in February to 86.8 in March, its lowest level in over two years. In January, Capacity Utilization for Electrical Equipment Manufacturing declined 1.9 points to 74.4%, and Industrial Production for Total Machinery fell 0.5%. Overall, the Index continues to suggest weaker and potentially stalled growth in other industrial equipment investment over the next three to six months.





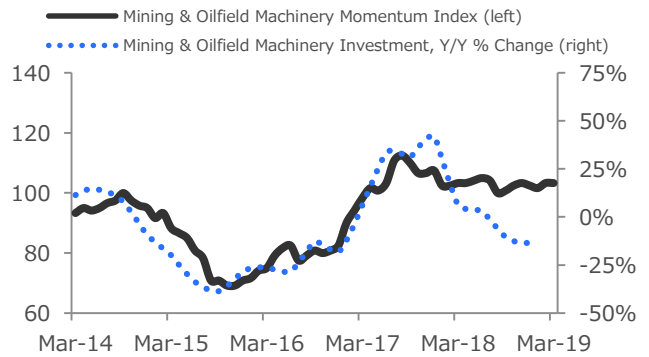
**Medical Equipment:**

Investment in Medical Equipment rose at a 5.3% annual rate in Q4 2018 and is up 7.0% year-over-year. The Medical Equipment Momentum Index fell sharply from 92.2 (revised) in February to 87.3 in March. Private Hospital Construction Spending dropped 3.8% in November, and the Consumer Price Index for Hospital & Related Services fell 0.2% in January, its first decline in a year. Overall, the Index points to slower and potentially negative growth in medical equipment investment over the next two quarters.



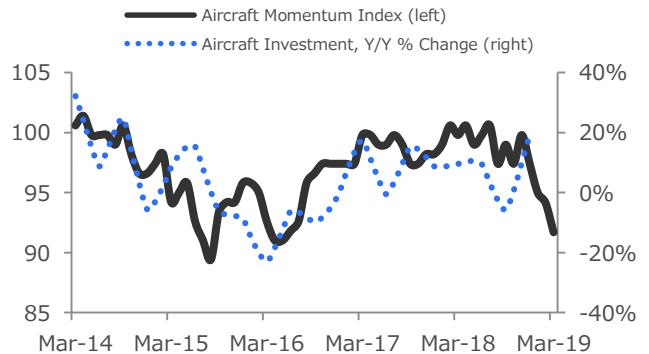
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery declined at an 8.8% annual rate in Q4 2018 and is down 13% year-over-year. The Mining & Oilfield Machinery Momentum Index held steady at 103.3 from February (revised) to March. Mining & Logging Employment rose 1.1% in January, its fastest acceleration in nearly a year, but the Bloomberg Natural Gas Sub-Index fell 1.7% in February. Overall, the Index points to potential improvement in mining & oilfield machinery investment growth over the next three to six months, though growth will likely remain weak.



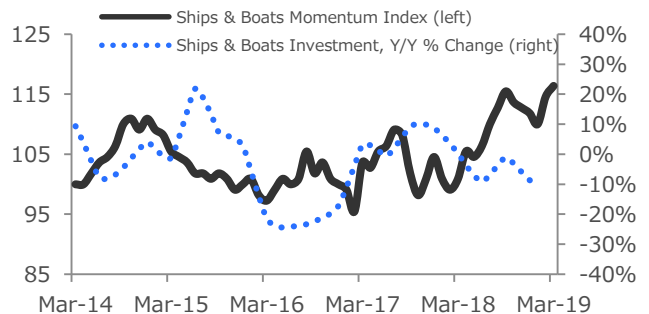
**Aircraft:**

Investment in Aircraft jumped 56% (annualized) in Q4 2018 and is up 20% on a year-over-year basis. The Aircraft Momentum Index decreased from 94.1 in February to 91.7 in March. Energy Consumption in the Transportation Sector dropped 4.3% in November, its sixth decline in a year, while the S&P 500 Volatility Index dropped 11% in February. Overall, the Index continues to signal weaker growth in aircraft investment over the next two quarters.



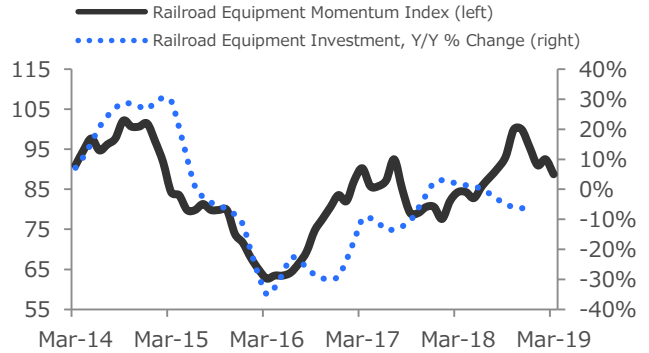
**Ships & Boats:**

Investment in Ships & Boats dropped at an annual rate of 14% in Q4 2018 and is down 8.7% year-over-year. The Ships & Boats Momentum Index increased from 114.5 (revised) in February to 116.4 in March. In January, Raw Steel Production fell 19%, but Industrial Production for Ship & Boat Building rose 0.6%. Overall, the Index suggests that investment growth in ships and boats will improve over the next three to six months.



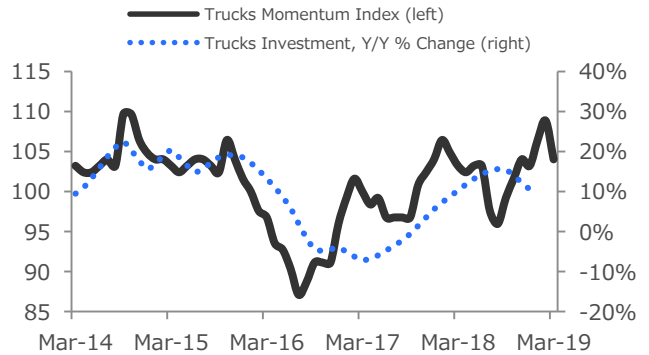
**Railroad Equipment:**

Investment in Railroad Equipment surged at a 20% annual rate in Q4 2018 but is down 6.2% year-over-year. The Railroad Equipment Momentum Index fell from 92.5 in February to 88.8 in March. In January Rail Carloads of Petroleum Products declined 15%, and Rail Carloads of Metallic Ores & Metals dropped 27%, its steepest decline in more than four years. Overall, the Index points to continued weakness in railroad equipment investment growth over the next three to six months.



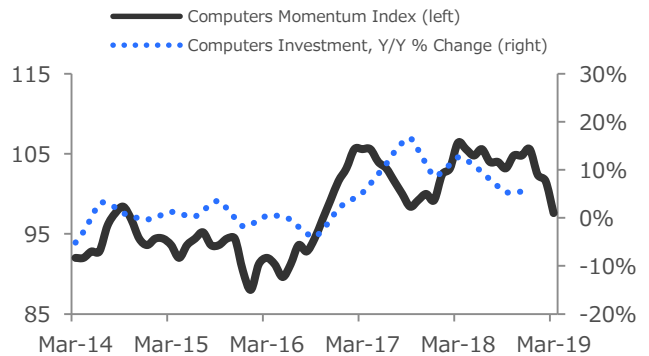
**Trucks:**

Investment in Trucks rose at a 6.7% annual rate in Q4 2018 and is up 10% from year-ago levels. The Trucks Momentum Index fell sharply from 108.9 in February (revised) to 104.0 in March. In December, Shipments of Heavy Duty Trucks rose 1.8%, but Manufacturers' Inventories of Light Trucks & Utility Vehicles decreased 2.5%. Overall, the Index continues to point to stronger growth in trucks investment over the next three to six months, but this month's sharp decline is concerning.



**Computers:**

Investment in Computers fell at an annual rate of 18% in Q4 2018 but remains up 4.6% year-over-year. The Computers Momentum Index decreased from 101.6 (revised) in February to 97.6 in March. Computer Exports fell 5.5% in November, and Industrial Production for Computer & Electronic Product Manufacturing declined 1.4% in January. Overall, the Index points to weaker growth in computers investment over the next two quarters.



**Software:**

Investment in Software increased at a 15% annual rate in Q4 2018 and is up 14% year-over-year. The Software Momentum Index fell from 96.2 (revised) in February to 93.6 in March, its lowest level since August 2015. Shipments of Computers & Related Products fell 5.2% in December, and the National Unemployment Rate rose 0.1 percentage point in January. Overall, the Index points to weaker growth in software investment over the next three to six months.

