

January 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

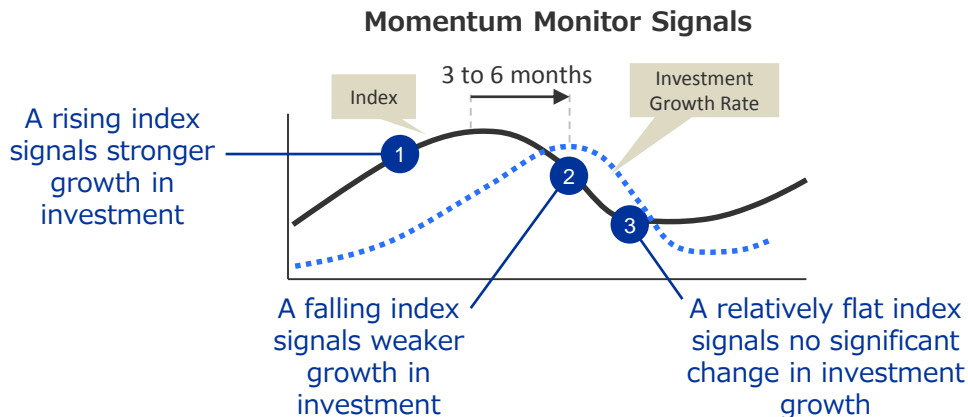
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|-----------------------------------|-----------------------|
| 1) Agriculture Machinery | 7) Aircraft |
| 2) Construction Machinery | 8) Ships and Boats |
| 3) Materials Handling Equipment | 9) Railroad Equipment |
| 4) All Other industrial Equipment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

*This month, Keybridge re-optimized the suite of Equipment and Software Investment Momentum Monitors. The re-optimization process involves updating the relative weights of the various components in each momentum monitor to reflect recent data — and, in many cases, changing one or more individual components of each index. As a result of this process, some verticals may exhibit larger-than-usual momentum shifts in this month’s report relative to prior months.

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:

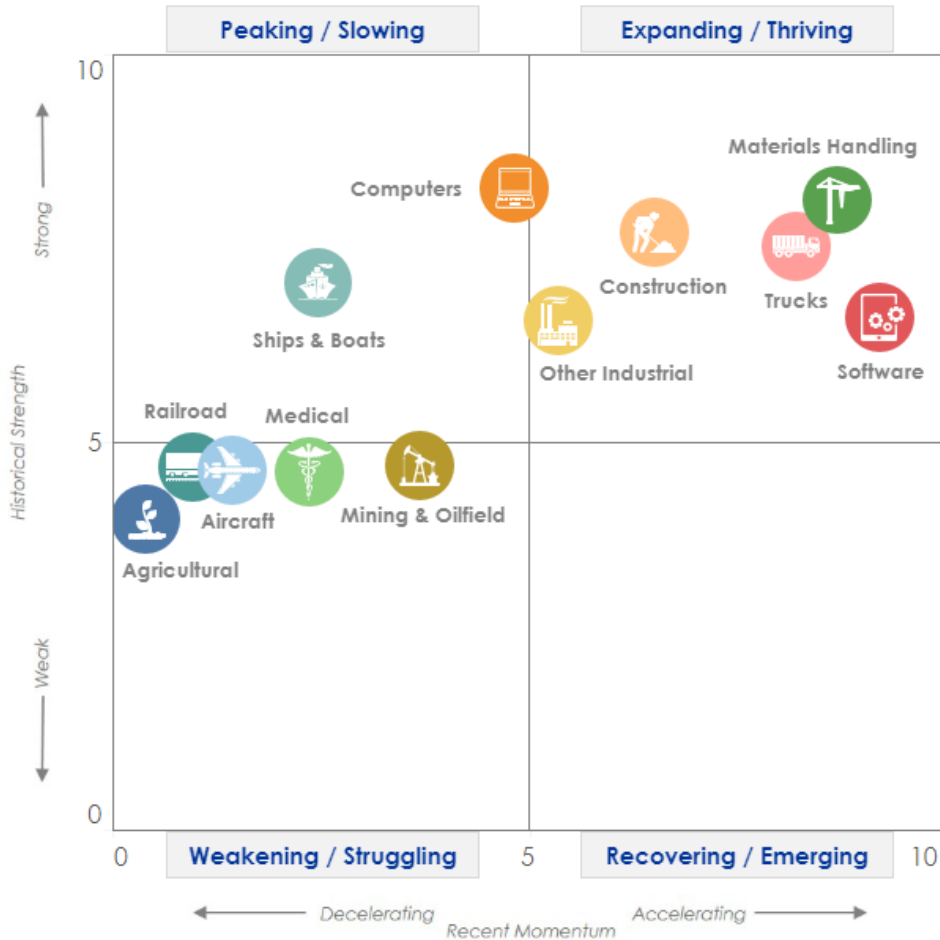
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy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

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Momentum Monitor Sector Matrix



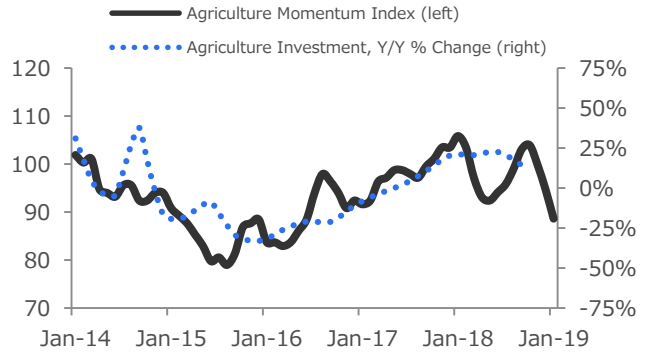
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

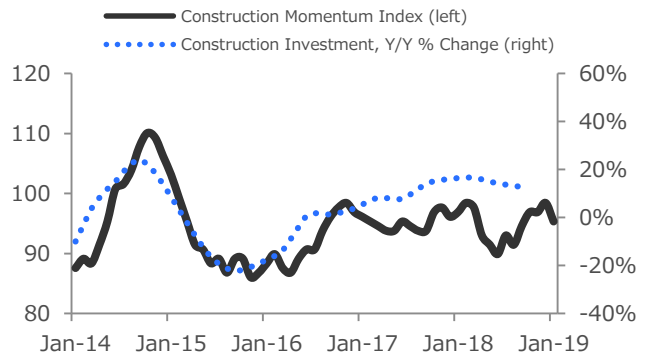
Agriculture Machinery:

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 94.6 (revised) in December to 88.6 in January, its lowest level since June 2016. Tobacco Exports dropped 18% in October, while Soybean Futures decreased 1.3% in December. Overall, the Index points to a decline in agricultural machinery investment growth over the next three quarters.



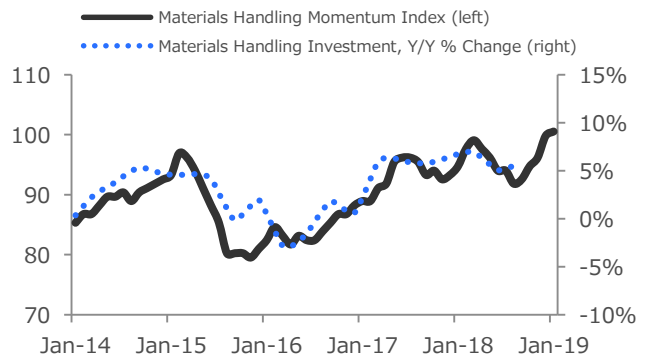
Construction Machinery:

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 98.4 in December to 95.3 in January. Shipments of Construction Machinery decreased 1.7% in October, but Construction of New Privately-Owned Housing Units edged up 0.4% in November. Overall, the Index suggests steady growth in construction machinery investment over the next three to six months.



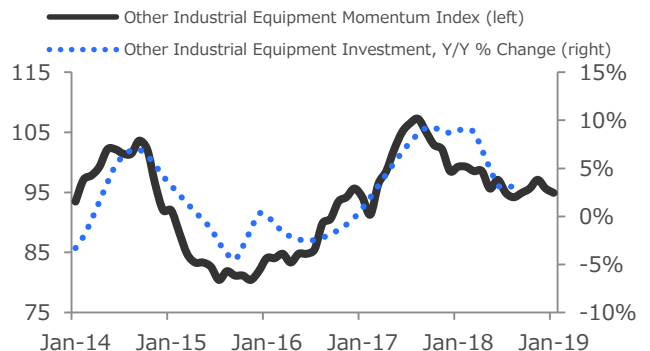
Materials Handling Equipment:

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 99.8 (revised) in December to 100.5 in January, its fifth consecutive increase. Inventories of Materials Handling Equipment expanded 1.3% in October, while Manufacturing Employment increased 0.2% in December. Overall, the Index points to moderate growth in materials handling equipment investment growth over the next two quarters.



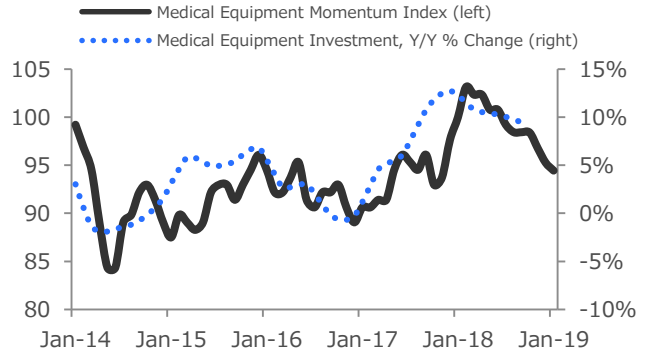
Other Industrial Equipment:

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 ticked down from 95.7 (revised) in December to 94.9 in January. Export Prices of Industrial Supplies & Materials dropped 3.0% in November, its sharpest decline in nearly three years, but Manufacturing Payrolls rose 0.2% in December. Overall, the Index points to slow but stable growth in other industrial equipment investment over the next three to six months.



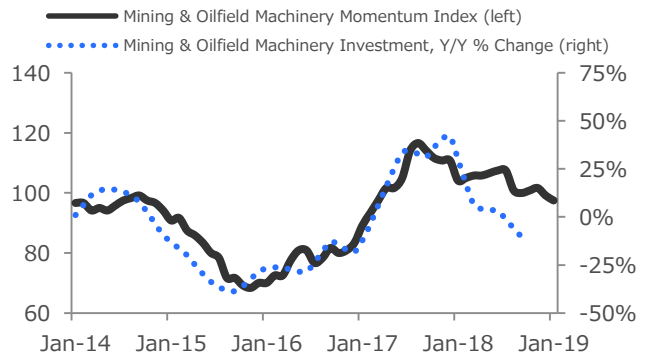
Medical Equipment:

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 95.3 (revised) in December to 94.4 in January. Spending on Private Hospital Construction slipped 0.8% in October, while Johnson & Johnson's Market Cap fell 12% in December, its first decline in seven months. Overall, the Index points to slower growth in medical equipment investment over the next two quarters.



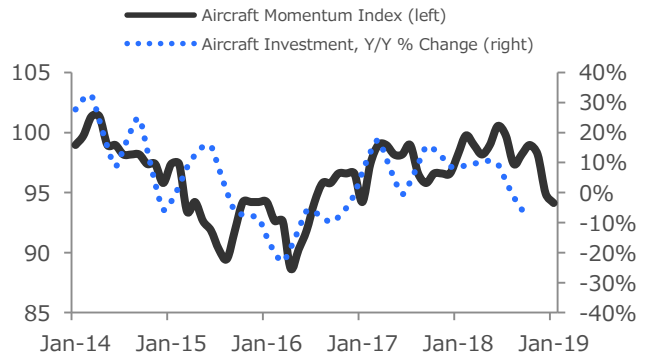
Mining & Oilfield Machinery:

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 fell from 99.2 (revised) in December to 97.5 in January. Industrial Production of Mining, Oil, & Gas Field Machinery fell 1.3% in November, its sharpest decrease since March 2017, while the Bloomberg Natural Gas Index plunged 33% in December. Overall, the Index suggests that mining & oilfield machinery investment growth will remain negative over the next three to six months.



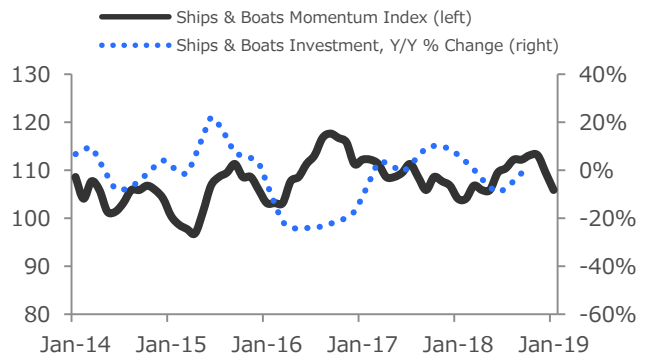
Aircraft:

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 94.9 (revised) in December to 94.1 in January. In November, Industrial Production of Aircraft & Parts fell 0.3%, while Unfilled Orders of Defense Aircraft & Parts rose 2.9%, its fourth consecutive increase. Overall, the Index points to flat or negative aircraft investment growth over the next two quarters.



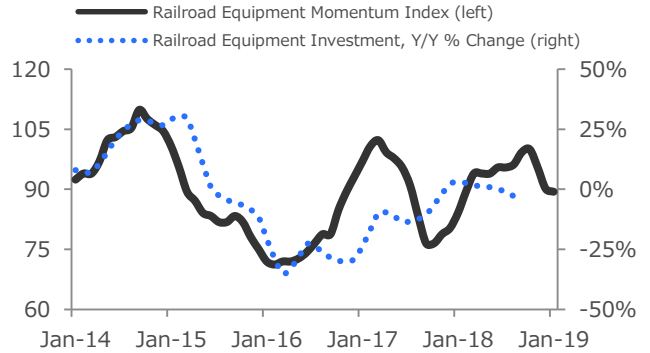
Ships & Boats:

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 fell from 109.5 (revised) in December to 105.9 in January. Raw Steel Production declined 1.3% in December, while Exports of Rice & Other Food Grains fell 8.0%. Overall, the Index indicates points to improved growth in ships and boats investment over the next three to six months, though recent movement in the Index is concerning.



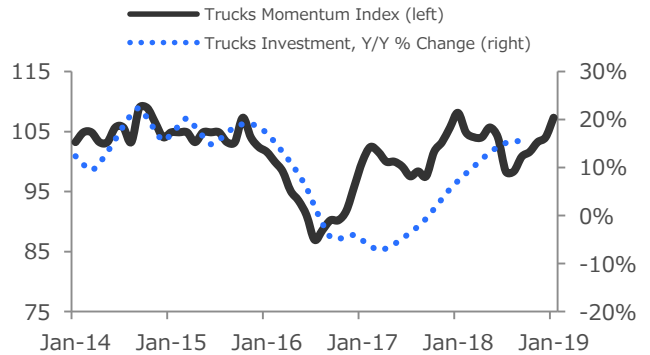
Railroad Equipment:

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 fell from 90.2 (revised) in December to 89.4 in January. Rail Carloads of Petroleum Products dropped 12% in November, while Industrial Production of Railroad Rolling Stock rose 2.1%. Overall, the Index indicates flat and potentially weaker railroad equipment investment growth over the next two quarters.



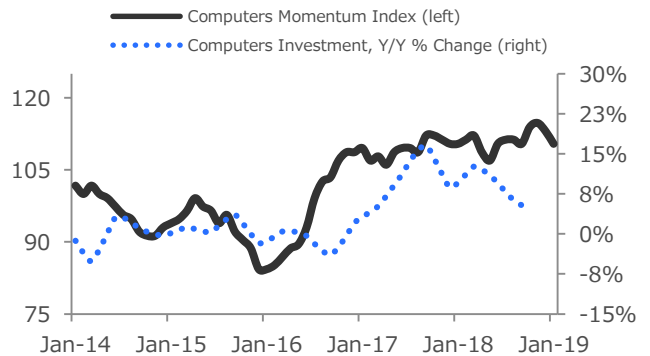
Trucks:

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 increased from 104.1 (revised) in December to 107.3 in January. Inventories of Light Trucks & Utility Vehicles edged up 0.3% in October, while Shipments of Primary Metals expanded 1.2% in November. Overall, the Index suggests that investment growth in trucks will remain solid and may strengthen 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 fell from 113.0 (revised) in December to 110.4 in January. Inventories of Computers & Electronic Products increased 1.1% in November, while Revolving Consumer Credit declined 8.8% in December. 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 up 9.1% year-over-year. The Software Momentum Index rose from 96.7 (revised) in December to 99.2 in January. Business Construction Spending increased 3.1% in October, its fourth straight monthly gain, while Shipments of Communication Equipment rose 1.1% in November. Overall, the Index points to continued solid growth in software investment over the next three to six months.

