

September 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.

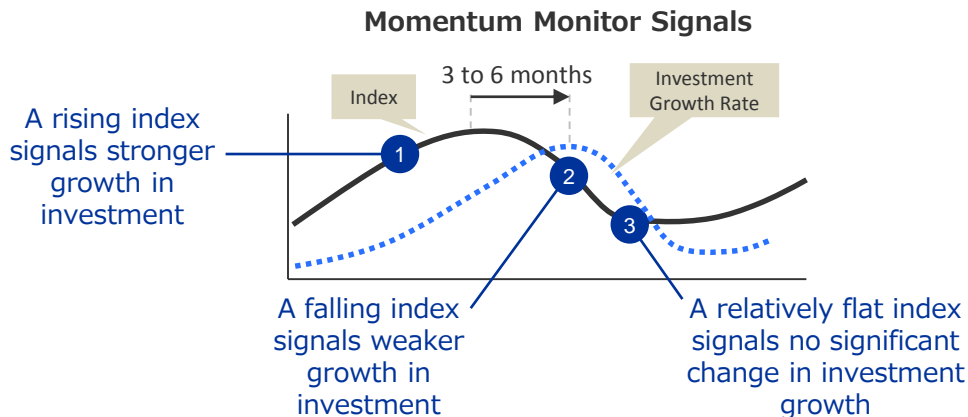
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

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

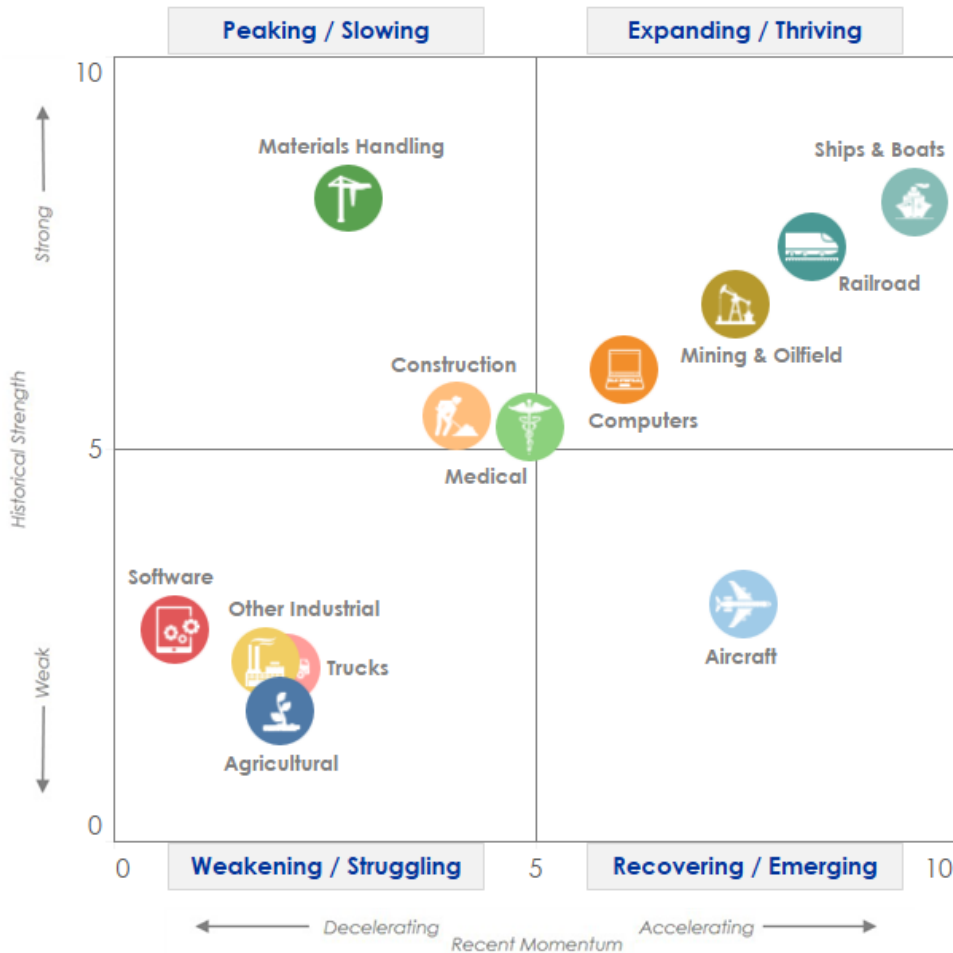
- 1) Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2) The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3) A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy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

## September 2018

### Momentum Monitor Sector Matrix



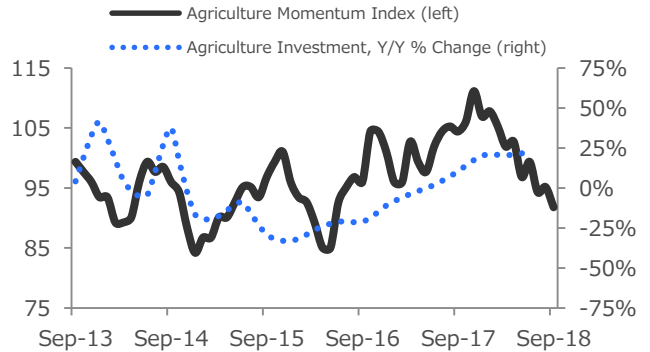
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

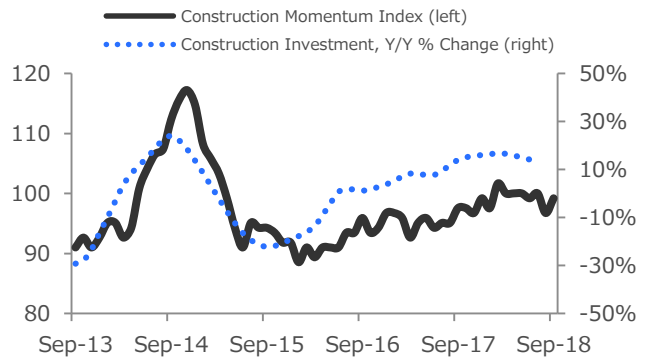
**Agriculture Machinery:**

Investment in Agricultural Machinery increased 33% (annualized) in Q2 2018 and is up 22% from one year ago. The Agriculture Momentum Index fell from 95.2 (revised) in August to 91.8 in September, its lowest level since May 2016. Capacity Utilization for Beverage & Tobacco declined 0.4% in July, its third straight decrease, and the Creighton Farm Equipment Sales Index fell 2.6% in August. Overall, the Index continues to point to a softening of agricultural machinery investment growth over the next three to six months.



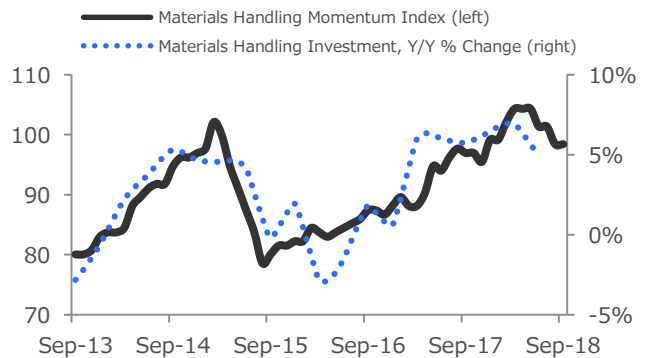
**Construction Machinery:**

Investment in Construction Machinery expanded at a 7.4% annual rate in Q2 2018 and is up 14% year-over-year. The Construction Momentum Index rose from 96.7 (revised) in August to 99.2 in September. In July, Real Consumer Spending edged up 0.2%, but For-Sale Housing Stock increased 2.0%, its strongest gain in nine months. Overall, the Index points to steady growth in construction machinery investment over the next three to six months.



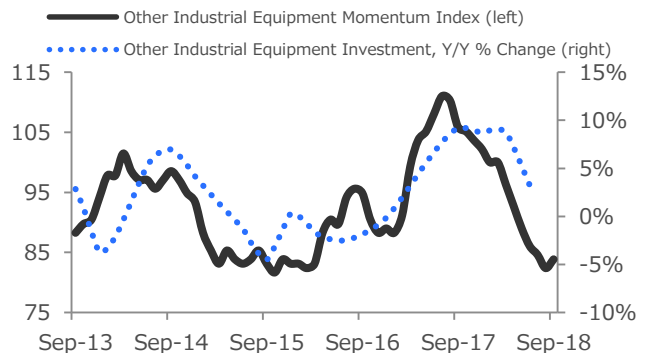
**Materials Handling Equipment:**

Investment in Materials Handling Equipment edged up at a 0.6% annual rate in Q2 2018 and is up 5.0% year-over-year. The Materials Handling Momentum Index held steady at 98.4 from August to September. Manufacturing Employment rose 0.3% in July, but the Chicago Business Barometer fell 2.9% in August. Overall, the Index points to continued slow growth in materials handling equipment investment over the next two quarters, though the growth rate may have peaked earlier this year.



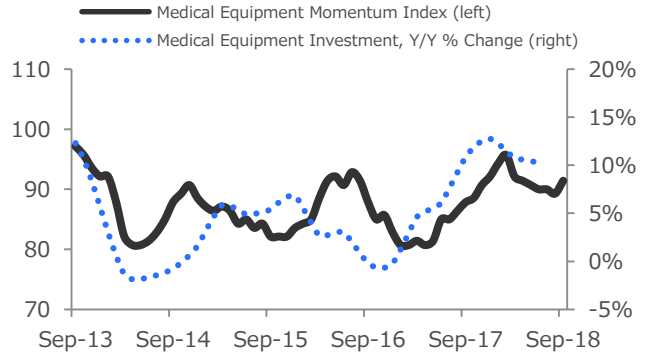
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment declined at a 5.6% annual rate in Q2 2018 but is up 3.2% from a year ago. The Other Industrial Equipment Momentum Index inched up from 82.4 (revised) in August to 83.8 in September. The Manufacturing PMI rose 5.5% in August, its strongest gain since February 2014, but the Nominal FX Index for Other Trading Partners increased 2.9%. Overall, despite the small increase this month, the Index continues to indicate weaker growth in other industrial equipment investment over the next three to six months.



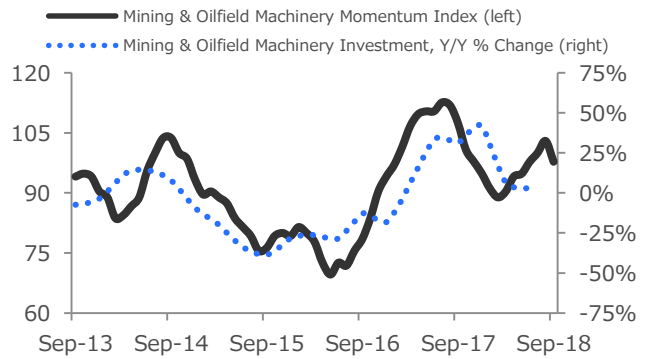
**Medical Equipment:**

Investment in Medical Equipment expanded at a 6.0% annual rate in Q2 2018 and is up 10% year-over-year. The Medical Equipment Momentum Index increased from 89.3 (revised) in August to 91.4 in September. Household Spending on Medical Services ticked up 0.1% in July, but Personal Spending on Medical Products edged down 0.2%. Overall, the Index points to generally stable growth in medical equipment investment over the next two quarters.



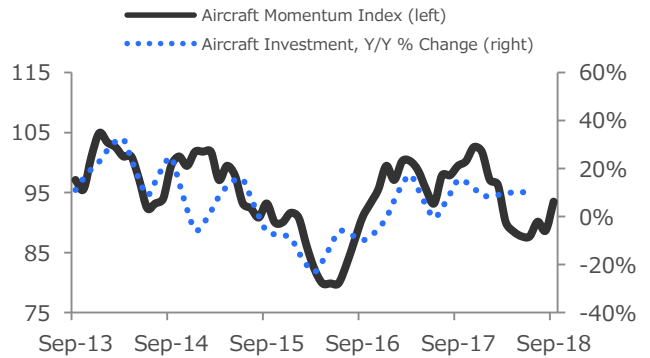
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery increased at a 24% annual rate in Q2 2018 and is up 3.1% year-over-year. The Mining & Oilfield Machinery Momentum Index fell from 103.0 (revised) in August to 97.8 in September, its first decrease in seven months. Industrial Production for Crude Petroleum & Natural Gas Extraction rose 0.6% in July, but the U.S. Economic Policy Uncertainty Index dropped 27% in August. Overall, despite the downtick this month, the Index signals a strong likelihood for improved mining & oilfield machinery investment over the next three to six months.



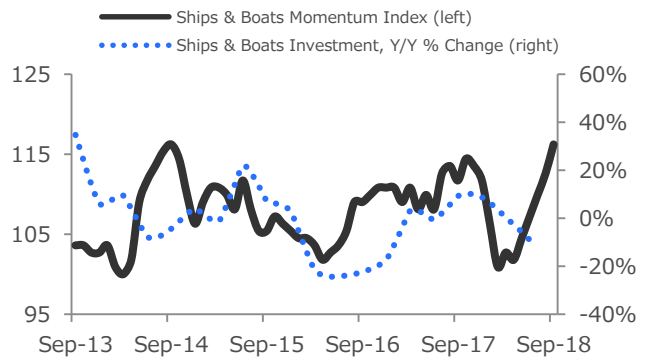
**Aircraft:**

Investment in Aircraft fell 8.8% (annualized) in Q2 2018 but is up 9.3% on a year-over-year basis. The Aircraft Momentum Index rose from 88.6 (revised) in August to 93.5 in September. Unfilled Orders for Defense Aircraft & Parts declined 0.5% in July, while the Southwest Airlines Market Cap increased 5.4% in August. Overall, the Index points to positive growth in aircraft investment over the next two quarters.



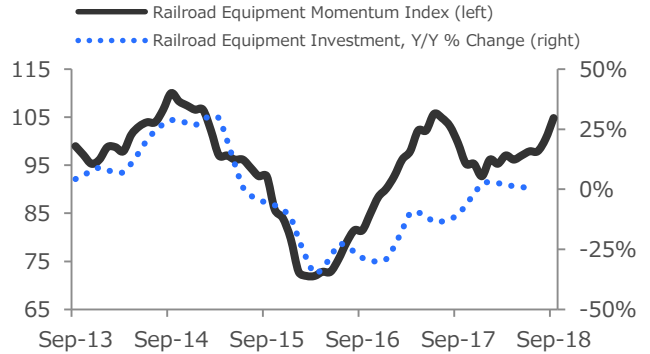
**Ships & Boats:**

Investment in Ships & Boats declined at an annual rate of 34% in Q2 2018 and is down 9.2% year-over-year. The Ships & Boats Momentum Index increased from 112.6 (revised) in August to 116.2 in September, its highest level in four years. The Producer Price Index for Non-Military Ship Repair rose 2.7% in July, its largest gain in 11 years, while the ISM Employment Index reached 58.5 in August and remains well above the expansionary threshold. Overall, the Index continues to indicate a rebound in ships and boats investment growth in the next three to six months.



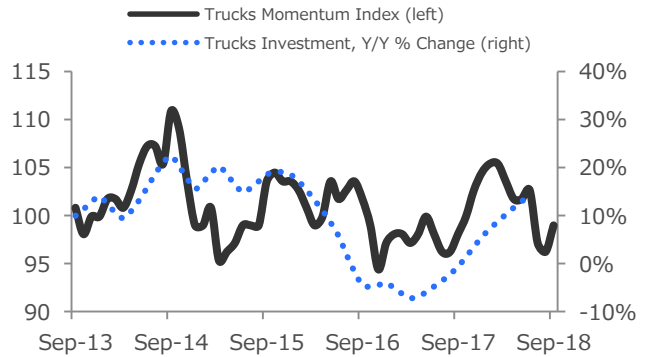
**Railroad Equipment:**

Investment in Railroad Equipment declined at a 23% annual rate in Q2 2018 and is essentially flat over the last 12 months. The Railroad Equipment Momentum Index increased from 100.5 (revised) in August to 104.8 in September. In July, Crude Oil & Petroleum Product Imports dropped 10%, while Mining Exports rose 12%, its sixth consecutive increase. Overall, the Index suggests that railroad equipment investment growth should improve over the next two quarters.



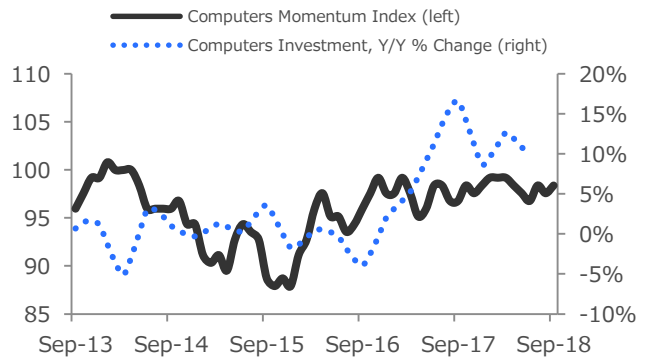
**Trucks:**

Investment in Trucks rose at a 13% annual rate in Q2 2018 and is up 14% from year-ago levels. The Trucks Momentum Index increased from 96.2 (revised) in August to 99.0 in September. Shipments of Primary Metals expanded 0.9% in July, but Industrial Production for Truck Assemblies fell 4.0%. Overall, despite an uptick this month, movement in the Index points to a potential moderation in trucks investment over the next three to six months.



**Computers:**

Investment in Computers increased at an annual rate of 17% in Q2 2018 and is up 10% year-over-year. The Computers Momentum Index ticked up from 97.6 (revised) in August to 98.4 in September. Computer Exports fell 2.4% in July, but New Orders for Computers & Related Products jumped 13%, its strongest growth in over three years. Overall, the Index points to stable growth in computers investment over the next two quarters.



**Software:**

Investment in Software rose at a 13% annual rate in Q2 2018 and is up 10% year-over-year. The Software Momentum Index edged down from 91.7 in August to 90.1 in September. Industrial Production edged up just 0.1% in July, while Exports of Travel Services rose 0.2%. Overall, the Index points to a weaker software investment growth over the next three to six months.

