

September 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.

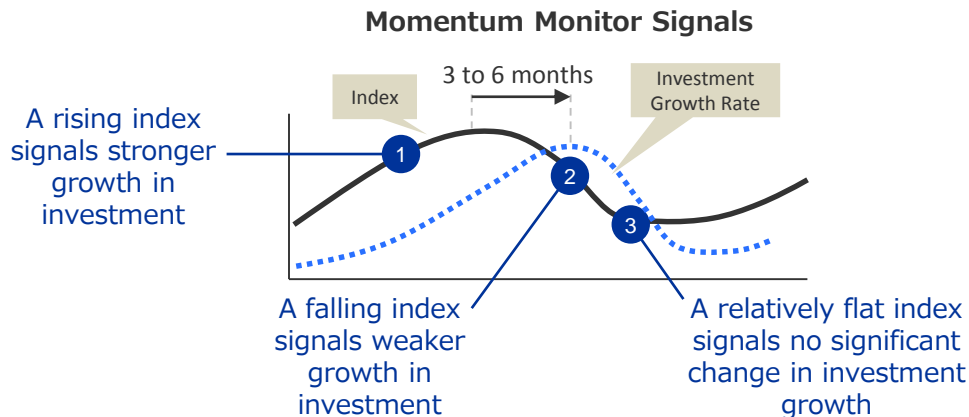
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

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

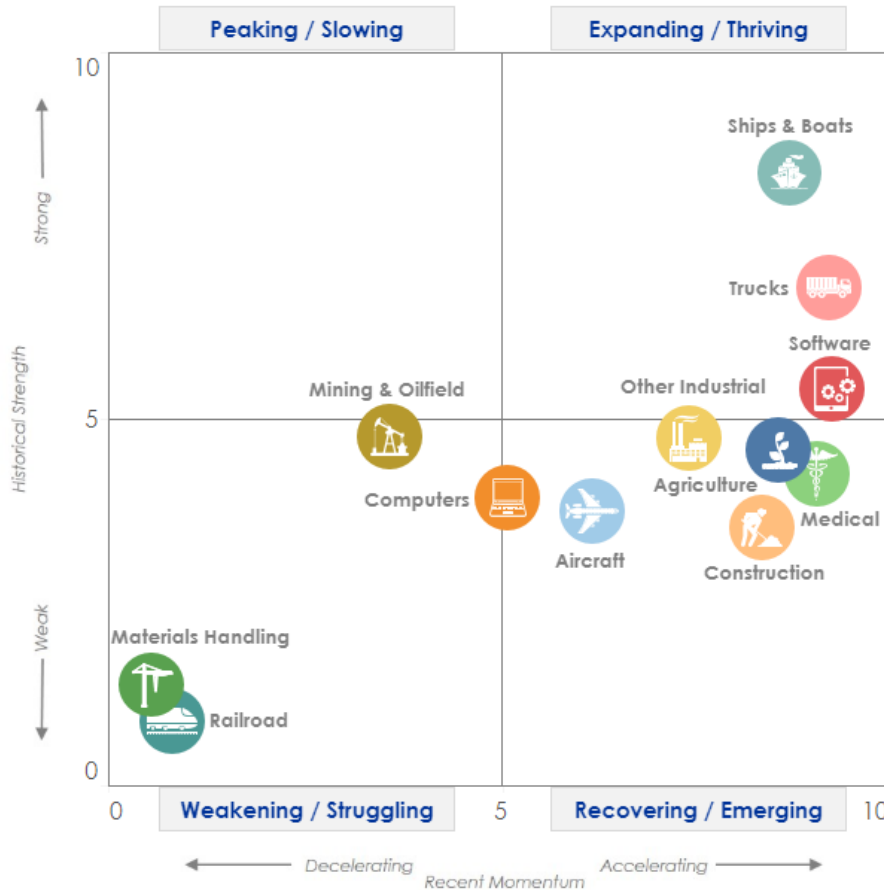
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy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

## September 2019

### Momentum Monitor Sector Matrix



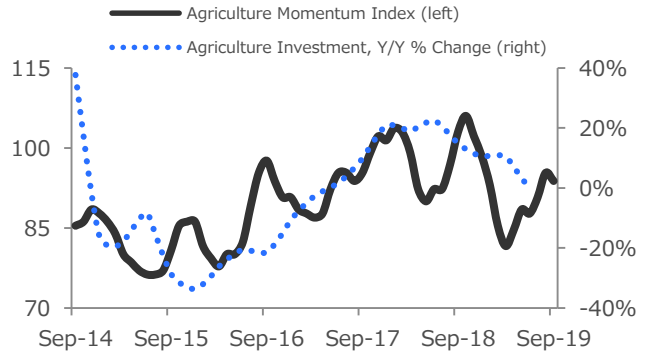
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

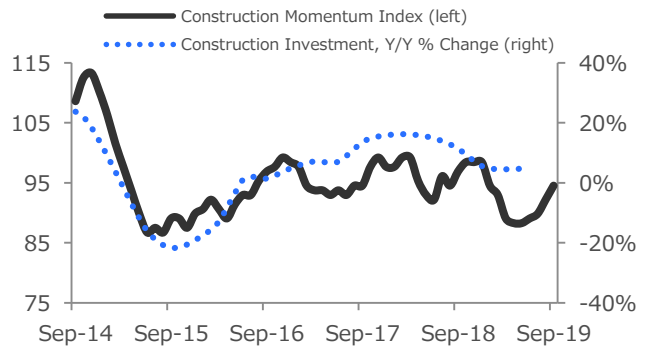
**Agriculture Machinery:**

Investment in Agricultural Machinery declined 11% (annualized) in Q2 2019 and is down 0.3% from one year ago. The Agriculture Momentum Index eased from 95.3 (revised) in August to 93.8 in September. In June, Shipments of Farm Machinery & Equipment rose 4.7% while Inventories of Farm Machinery & Equipment increased 5.1%, its strongest growth in nearly three years. Overall, the Index continues to point to a potential improvement in agricultural machinery investment growth over the next three to six months, despite this month's drop.



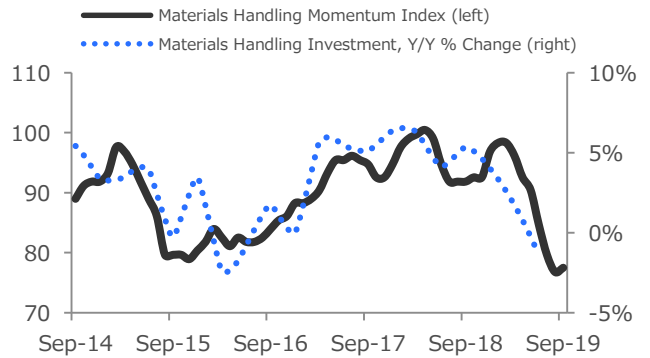
**Construction Machinery:**

Investment in Construction Machinery increased at a 14% annualized rate in Q2 2019 and is up 5.3% year-over-year. The Construction Momentum Index improved from 92.2 (revised) in August to 94.5 in September, its highest level since January. Shipments of Construction Machinery increased 2.1% in June while New Privately-Owned Houses increased 4.4% in July. Overall, the Index suggests moderate growth in construction machinery investment over the next three to six months.



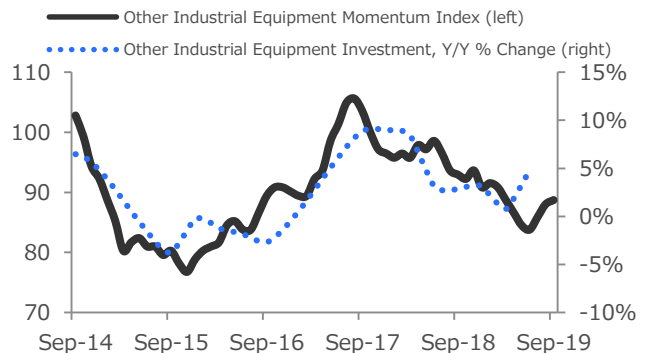
**Materials Handling Equipment:**

Investment in Materials Handling Equipment fell at an 11% annualized rate in Q2 2019 and is down 1.4% year-over-year. The Materials Handling Momentum Index edged up from 76.8 (revised) in August to 77.5 in September but remains historically weak. Materials Handling Equipment Exports dropped 17% in June, its steepest decline in more than a decade, and the Federal Funds Effective Rate fell 11% in August. Overall, the Index points to further weakening in materials handling equipment investment growth over the next two quarters.



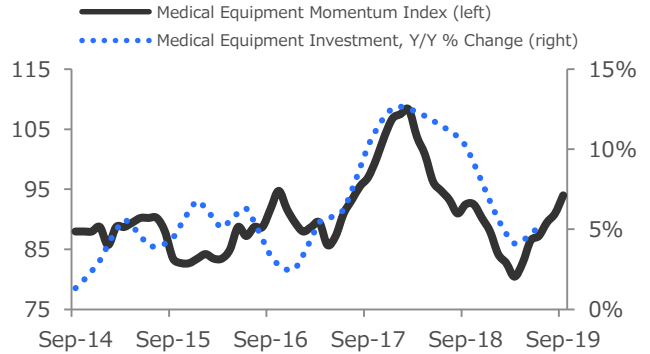
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment increased at a 9.0% annualized rate in Q2 2019 and is up 4.8% from a year ago. The Other Industrial Equipment Momentum Index ticked up from 88.0 (revised) in August to 88.7 in September. The M1 Money Supply increased 0.7% in July while the FX Other Important Trading Partners Index increased 2.9% in August, its sharpest increase in sixteen months. Overall, the Index points to modest growth in other industrial equipment investment over the next three to six months.



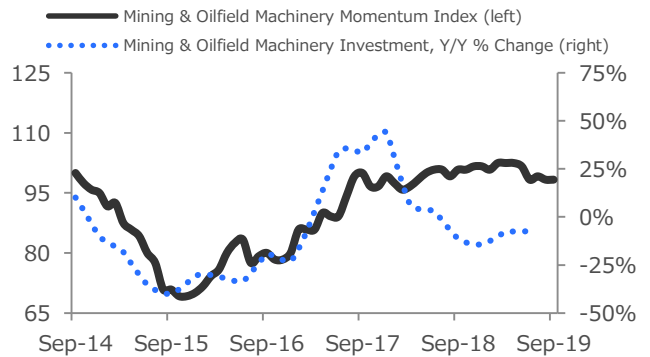
**Medical Equipment:**

Investment in Medical Equipment increased at a 10% annualized rate in Q2 2019 and is up 5.1% year-over-year. The Medical Equipment Momentum Index increased from 91.0 (revised) in August to 94.0 in September, its highest level since June 2018. In July, the Consumer Price Index for Medical Care Services rose 0.5%, while Private Hospital Construction Spending increased 3.8%. Overall, the Index points to moderate growth in medical equipment investment over the next two quarters.



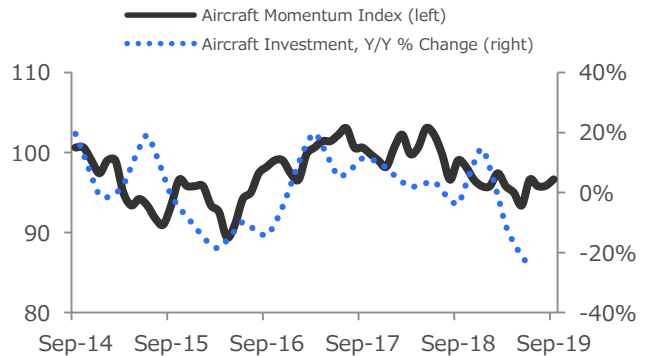
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery surged at a 32% annualized rate in Q2 2019 but is down 7.1% year-over-year. The Mining & Oilfield Machinery Momentum Index was unchanged at 98.3 from August (revised) to September. In July, Capacity Utilization for Mining, Oil, & Gas Extraction decreased 2.4 points while Mining & Logging Employment eased 0.8%, its sharpest decline in nearly two years. Overall, the Index points to continued negative year-over-year growth in mining & oilfield machinery investment over the next three to six months.



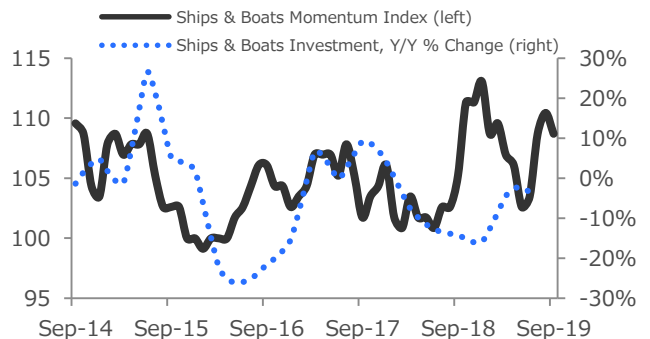
**Aircraft:**

Investment in Aircraft dropped 43% (annualized) in Q2 2019 and is 25% below year-over-year levels. The Aircraft Momentum Index inched up from 95.8 (revised) in August to 96.7 in September. Exports of Computers & Electronic Products decreased 7.1% in July, and the S&P 500 Airlines Index declined 5.2% in August. Overall, the Index points to continued negative growth in aircraft investment over the next two quarters.



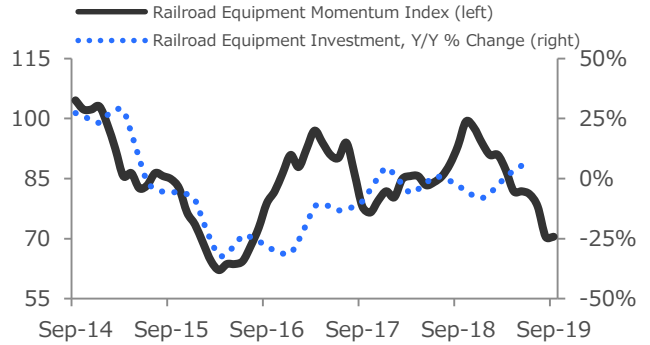
**Ships & Boats:**

Investment in Ships & Boats fell at an annualized rate of 34% in Q2 2019 and is down 3.6% year-over-year. The Ships & Boats Momentum Index slipped from 110.4 (revised) in August to 108.7 in September. The Nonmilitary Ship Building & Repairing Producer Price Index rose 1.1% in July while the Emerging Market Economies Currency Index improved 2.9% in August. Overall, despite this month's decline, the Index's elevated position and recent movement continues to point to improved growth in ships and boats investment over the next three to six months.



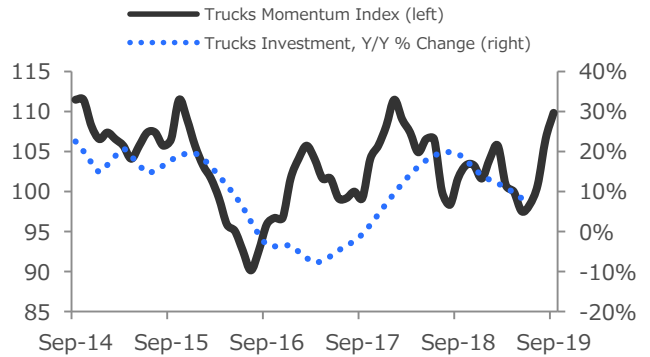
**Railroad Equipment:**

Investment in Railroad Equipment expanded at 21% annualized rate in Q2 2019 and is up 7.7% year-over-year. The Railroad Equipment Momentum Index held steady at 70.5 from August (revised) to September, remaining at its lowest level in over three years. Crude Oil & Petroleum Product Exports pulled back 13% in July, its seventh decline in the past year, and the S&P 500 Railroads Index decreased 8.0% in August. Overall, the Index continues to indicate weak and potentially negative year-over-year growth in railroad equipment investment over the next three to six months.



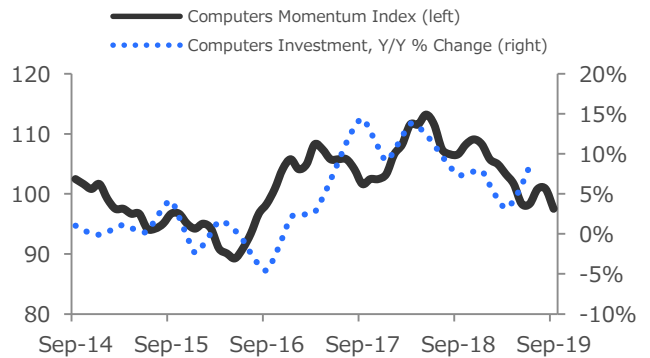
**Trucks:**

Investment in Trucks was essentially unchanged in Q2 2019 but is up 7.0% from year-ago levels. The Trucks Momentum Index increased from 106.6 in August to 109.8 in September, its highest level since the beginning of 2018. In July, Coal Production increased 5.6% while Capacity Utilization for Furniture Manufacturing edged up 0.5 point. Overall, the Index points to moderate growth in trucks investment over the next three to six months.



**Computers:**

Investment in Computers surged at an annualized rate of 36% in Q2 2019 and is up 8.6% year-over-year. The Computers Momentum Index decreased from 100.8 (revised) in August to 97.5 in September. Computer Exports decreased 3.6% in July, while the ISM Manufacturing PMI fell 2.1 points in August, its fifth consecutive monthly decline. Overall, the Index points to a potential softening in computers investment growth over the next two quarters, though growth should remain positive.



**Software:**

Investment in Software increased at a 5.2% annualized rate in Q2 2019 and is up 9.6% year-over-year. The Software Momentum Index edged up from 97.4 (revised) in August to 98.2 in September, its highest level since November. In August, Microsoft's Market Cap increased 1.2%, and the Broad Effective Exchange Rate Index rose 2.7%, its strongest improvement since May 2018. Overall, the Index points to continued solid growth in software investment over the next two quarters.

