

September 2017

# 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.

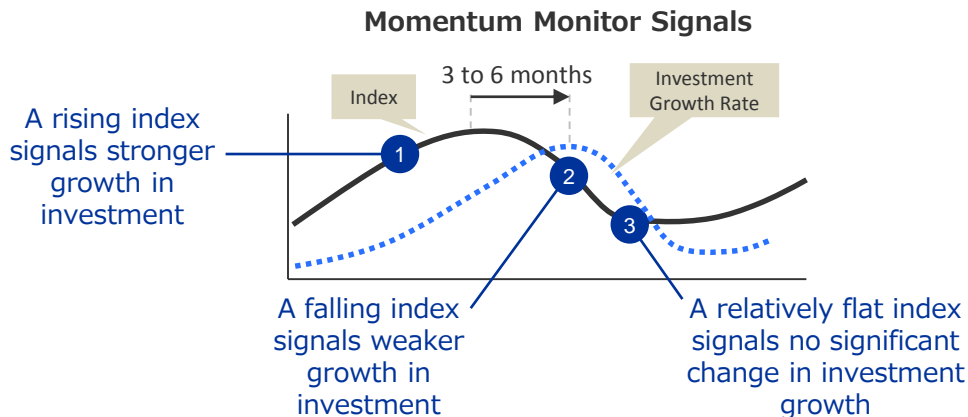
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

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

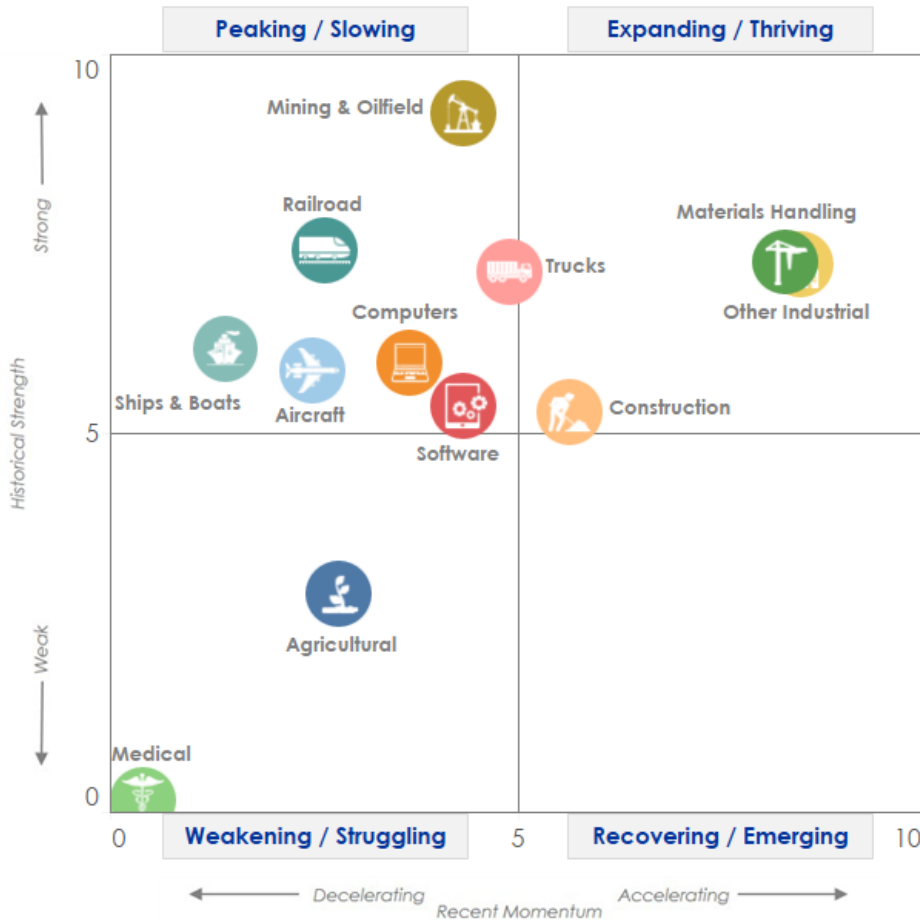
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy 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 2017

### Momentum Monitor Sector Matrix



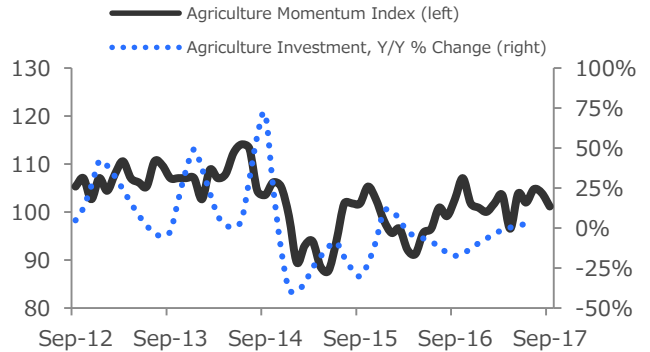
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

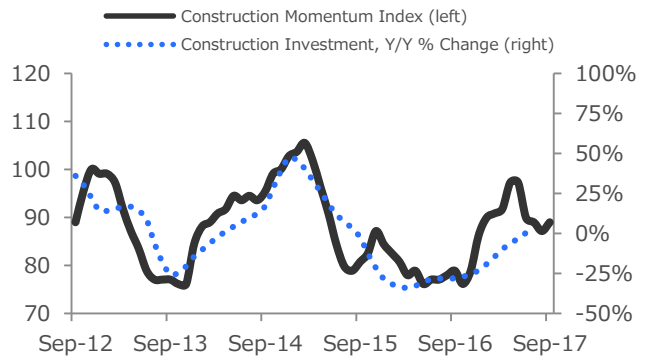
**Agriculture Machinery:**

Investment in Agricultural Machinery expanded at an average rate of 19% in Q2 2017 and is up 2.7% from one year ago. The Agriculture Momentum Index fell from 103.9 (revised) in August to 101.1 in September. In July, National Average Precipitation fell 9.9% and Lamb & Mutton Production fell 12.4%. Overall, the Index and recent movement suggest little change in agricultural machinery investment over the next three to six months.



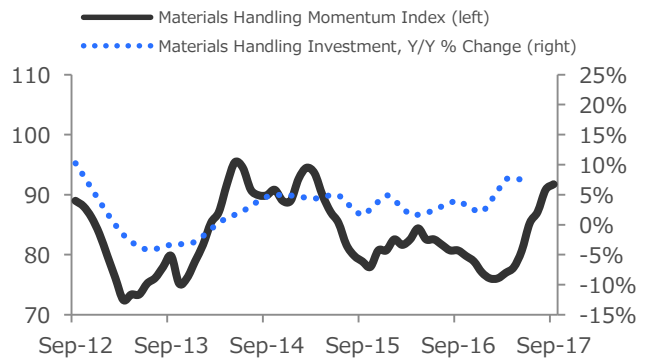
**Construction Machinery:**

Investment in Construction Machinery rose at a 27% annual rate in Q2 2017 and is up 0.5% year-over-year. The Construction Momentum Index increased from 87.2 (revised) in August to 89.0 in September. Median Months for Sale held steady in July at 2.9 (the lowest reading since December 2015), while Construction Machinery Shipments increased 2.4%. Overall, the Index points to slow year-over-year growth in construction machinery investment over the next three to six months.



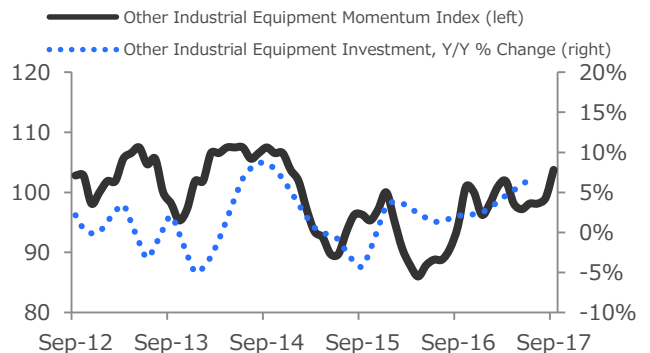
**Materials Handling Equipment:**

Investment in Materials Handling Equipment increased at a 7.3% annual rate in Q2 2017, and is up 7.1% year-over-year. The Materials Handling Momentum Index rose from 90.8 (revised) in August to 91.7 in September, its highest level in more than two years. Machinery Inventory Prices rose 1.9%, but Materials Handling Import Prices ticked up 0.4%. Overall, the Index's recent movement points to stronger materials handling equipment investment growth over the next two quarters.



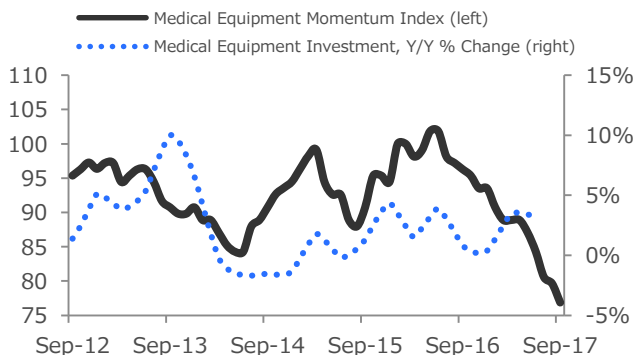
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment rose by a 15% annual rate in Q2 2017 and is up 6.7% from a year ago. The Other Industrial Equipment Momentum Index surged from 99.1 (revised) in August to 103.7 in September, its strongest reading in nearly three years. Real Manufacturing and Trade Sales rose 0.3% in June, while Durable Goods Inventories jumped 0.9% in July after surging 1.2% in June. Overall, the Index signals a strengthening in other industrial equipment investment growth over the next three to six months.



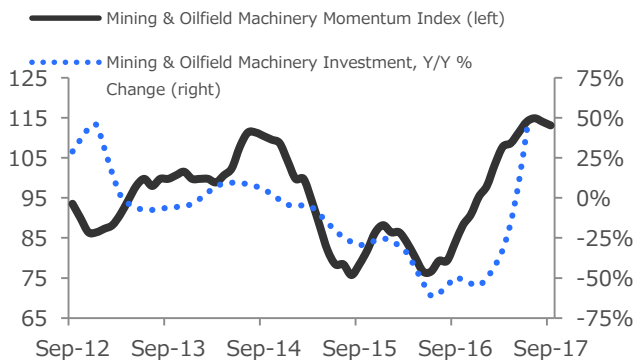
**Medical Equipment:**

Investment in Medical Equipment expanded at a 3.1% annual rate in Q2 2017 and is up 3.2% year-over-year. The Medical Equipment Momentum Index dropped from 79.6 (revised) in August to 76.9 in September, its weakest reading since 2009. The Monthly Household Estimate dropped 0.7% in June, its biggest monthly decline in at least 16 years. Overall, the Index suggests weak medical equipment investment growth over the next two quarters.



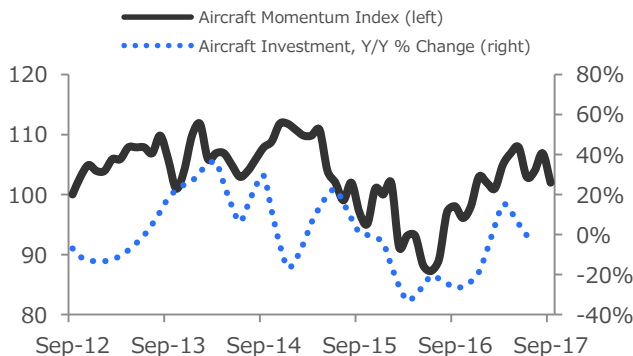
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery surged at a 51% annual rate in Q2 2017 and is up 43% year-over-year. The Mining & Oilfield Machinery Momentum Index ticked down from 110.3 (revised) in August to 109.3 in September. Industrial Production for Oil & Gas Drilling surged rose 1.0 points to 49.4, while Industrial Production for Oil & Gas Extraction increased 1.1 points to 134.5, its highest reading in two years. Overall, the Index indicates that the recent recovery in mining & oilfield machinery investment should continue over the next three to six months.



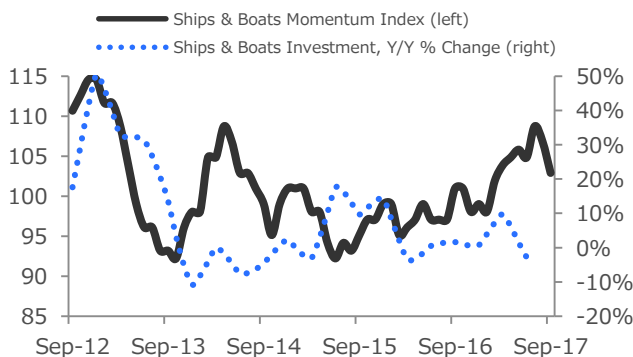
**Aircraft:**

Investment in Aircraft increased at a 6.9% annual rate in Q2 2017 but is down 0.5% on a year-over-year basis. The Aircraft Momentum Index declined from 106.9 (revised) in August to 102.0 in September. In July, Capacity Utilization: Transportation Equipment fell 1.7 percentage points to 77.3%, while the Southwest Airlines Market Cap dropped 7.0% in August. Overall, the Index's recent movement points to stable aircraft investment growth over the next two quarters.



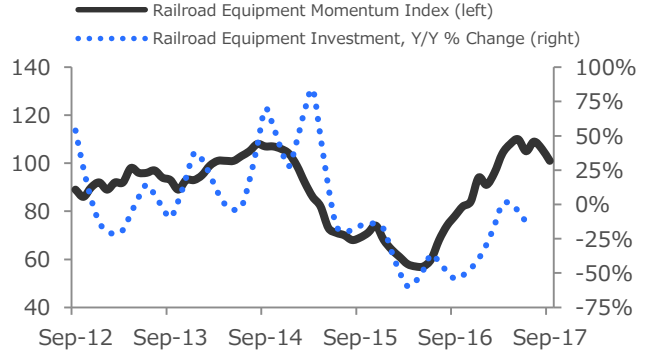
**Ships & Boats:**

Investment in Ships & Boats fell at an annual rate of 16% in Q2 2017 and is down 2.9% year-over-year. The Ships & Boats Momentum Index fell from 106.8 (revised) in August to 102.9 in September. Although Grain & Oilseed Milling Shipments ticked up 0.6% in July, Shipments of Ships & Boats dipped 1.3% in the same month. Overall, the Index points to a deceleration in ships & boats investment over the next three to six months.



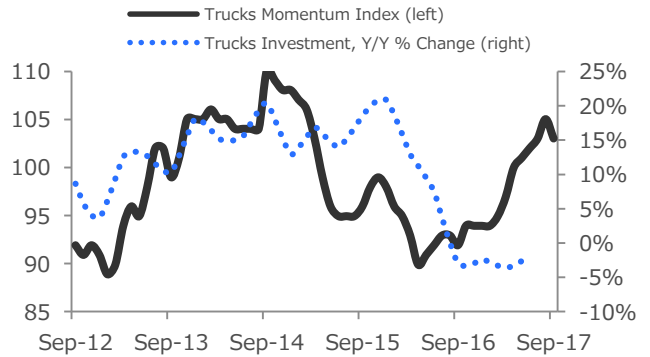
**Railroad Equipment:**

Investment in Railroad Equipment dropped at a 49% annual rate in Q2 2017 and is down 13% year-over-year. The Railroad Equipment Momentum Index declined from 106.0 (revised) in August to 101.0 in September. Mining Exports fell 14.4% in June, while Industrial Production: Raw Steel eased 1.7 points to 94.8. Overall, the Index continues to suggest that railroad equipment investment growth should improve over the next two quarters, but recent declines in the Index are worth monitoring.



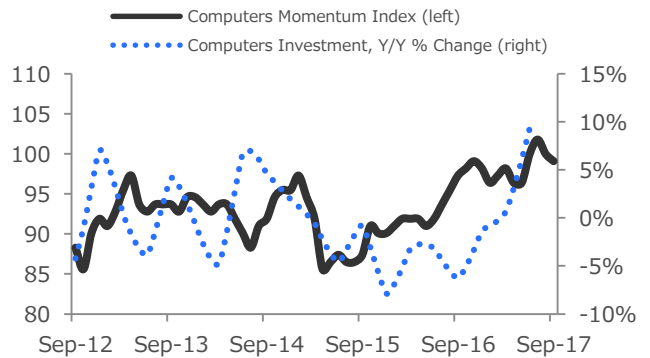
**Trucks:**

Investment in Trucks rose by a 6.4% annual rate in Q2 2017 but is down 1.6% from year-ago levels. The Trucks Momentum Index fell from 105.1 in August to 103.0 in September. In July, Inventories of Transportation Equipment rose 1.8%, while Industrial Production: Motor Vehicle Parts dropped 4.6 points to 123.0, its lowest level in more than two years. Overall, the Index shows that trucks investment growth should accelerate over the next three to six months.



**Computers:**

Investment in Computers expanded at an annual rate of 44% in Q2 2017 and is up 9.4% year-over-year. The Computers Momentum Index slipped from 100.0 (revised) in August to 99.1 in September. New Orders of Electro-medical Devices rose 4.1% in July, its largest increase in a year, while Microsoft's Market Cap rose 2.8% in August. Overall, the Index points to continued strong growth in computers investment over the next two quarters.



**Software:**

Investment in Software rose by a 7.8% annual rate in Q2 2017, and is up 5.2% year-over-year. The Software Momentum Index held steady at 92.4 from August (revised) to September. Travel Services Exports rose 2.1% in June, and the NFIB Small Business Optimism Index rose 1.6 points to 10.2 in July. Overall, the Index's recent movement suggests little change in software investment growth over the next three to six months.

