



## 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.

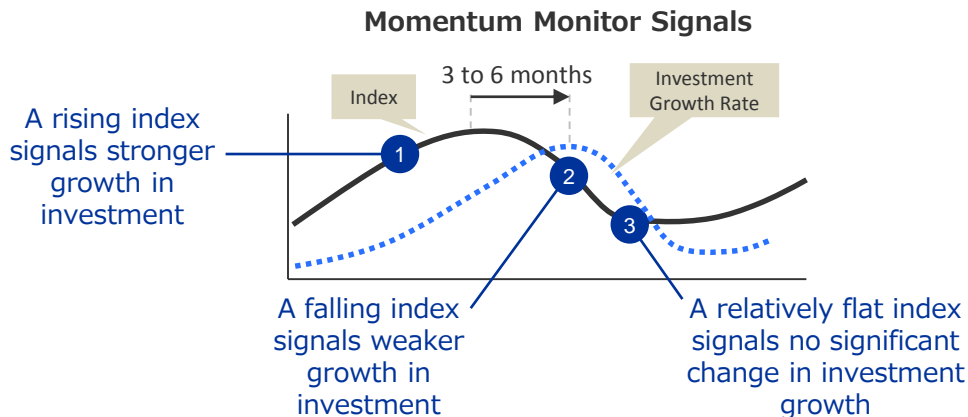
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- |                                   |                       |
|-----------------------------------|-----------------------|
| 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

## January 2020

### Momentum Monitor Sector Matrix



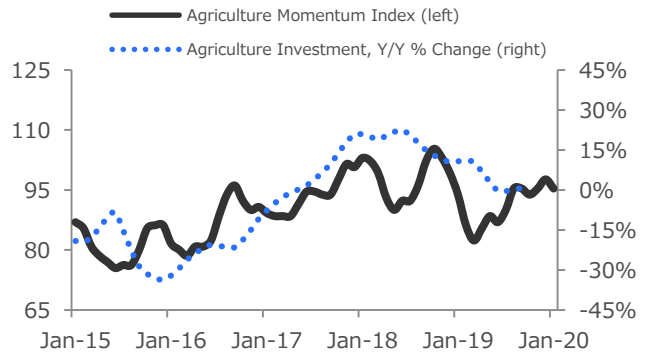
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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.

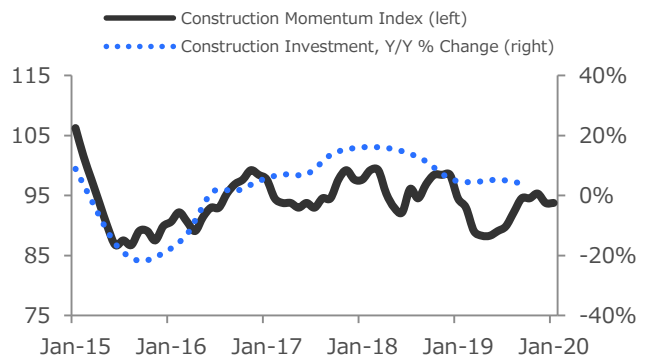
**Agriculture Machinery:**

Investment in Agricultural Machinery increased 2.0% (annualized) in Q3 2019 and is up 0.7% from one year ago. The Agriculture Momentum Index softened from 96.9 (revised) in December to 95.3 in January. Exports of Agricultural Commodities expanded 17% in October, the strongest growth in a year, while the MSCI Commodity Producers Sector Index increased 8.0% in December. Overall, the Index points to a modest improvement in agricultural machinery investment growth over the next six months.



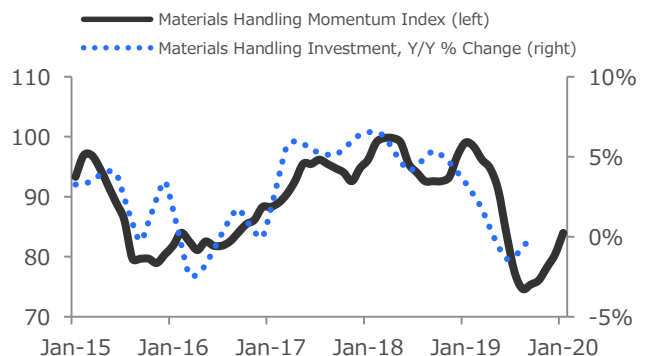
**Construction Machinery:**

Investment in Construction Machinery dropped at a 6.7% annualized rate in Q3 2019 but is up 4.0% year-over-year. The Construction Momentum Index held steady at 93.8 from December (revised) to January. In November, New Privately-Owned Houses fell 6.6%, while Consumer Spending grew 0.3%, the ninth consecutive improvement. Overall, the Index points to modest growth in construction machinery investment over the next six months.



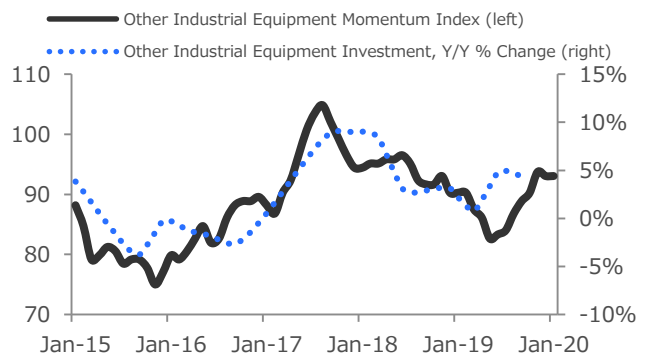
**Materials Handling Equipment:**

Investment in Materials Handling Equipment improved at an 11% annualized rate in Q3 2019 but is flat year-over-year. The Materials Handling Momentum Index increased from 80.4 (revised) in December to 84.0 in January. Primary Energy Consumption pulled back 8.0% in September, but Industrial Production expanded 1.1% in November, the fastest growth in more than two years. Overall, the Index suggests that the rebound in materials handling equipment investment growth should continue over the next two quarters.



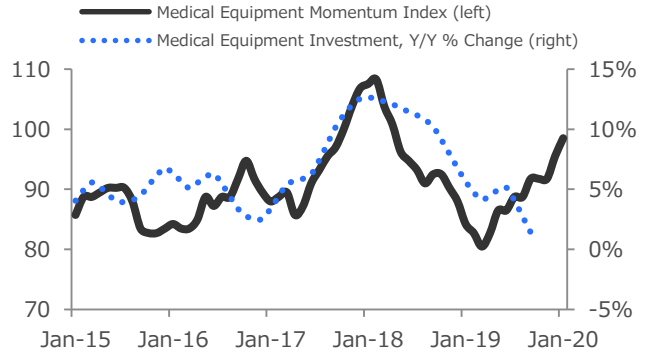
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment increased at a 4.5% annualized rate in Q3 2019 and is up 4.3% from a year ago. The Other Industrial Equipment Momentum Index held at 93.1 (revised) from December to January. In November, Manufacturing Employment expanded at its fastest pace in over two decades while the M1 Money Supply grew 0.9%. Overall, the Index points to moderate growth in other industrial equipment investment over the next six months.



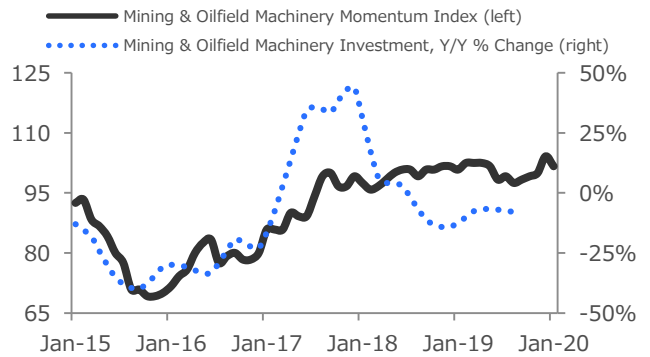
**Medical Equipment:**

Investment in Medical Equipment fell at a 5.2% annualized rate in Q3 2019 but improved 1.4% year-over-year. The Medical Equipment Momentum Index increased from 95.5 in December to 98.5 in January, the highest level since April 2018. The Consumer Price Index for Inpatient Hospital Services expanded 0.4% in November, and the S&P 500 Health Care Index grew 3.5% in December. Overall, the Index continues to point to a rebound in medical equipment investment growth over the next two quarters.



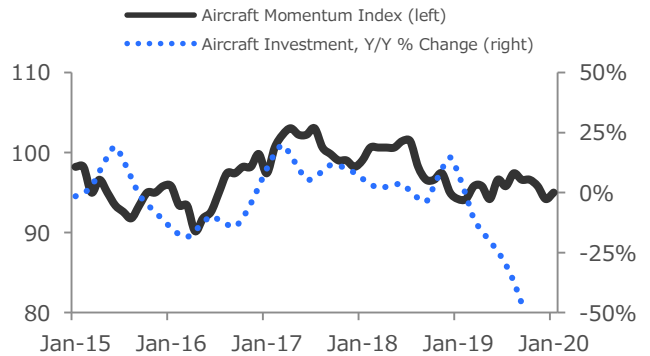
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery dropped at a 28% annualized rate in Q3 2019 and is down 8.9% year-over-year. The Mining & Oilfield Machinery Momentum Index decreased from 104.2 (revised) in December to 101.7 in January, down from a multi-year high. Capacity Utilization for Petroleum & Coal Products fell 0.9 point to 79.0% in November, the second fastest decline since September 2018, but the WTI Spot Price increased 5.2% in December. Overall, the Index points to a modest improvement in mining & oilfield machinery investment growth over the next six months.



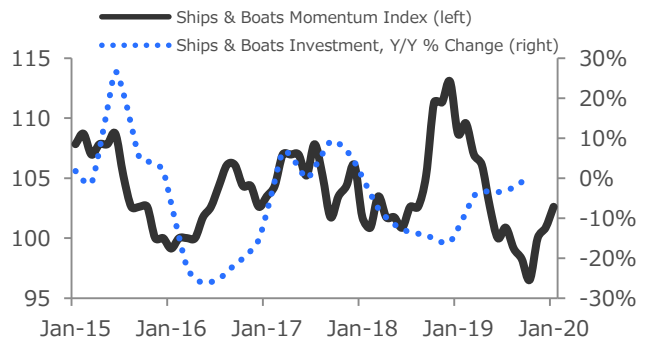
**Aircraft:**

Investment in Aircraft plummeted 82% (annualized) in Q3 2019 and is now 46% below year-over-year levels. The Aircraft Momentum Index edged up from 94.2 in December to 95.0 in January. Mexico Air Traffic fell 32% in September — the fourth double digit decline in 2019 — and Boeing Stock Returns fell 11% in December. Overall, the Index continues to suggest negative growth in aircraft investment over the next two quarters.



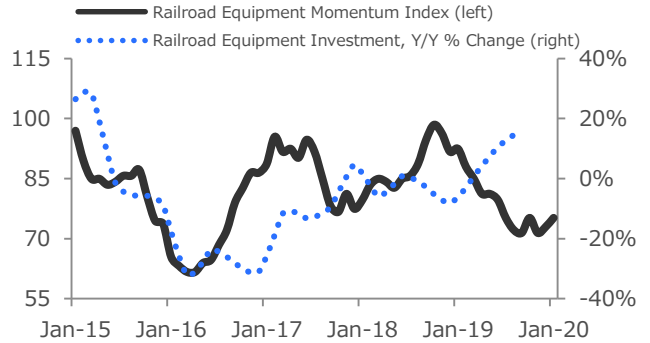
**Ships & Boats:**

Investment in Ships & Boats surged at an annualized rate of 37% in Q3 2019 but remains slightly negative (0.9%) on a year-over-year basis. The Ships & Boats Momentum Index improved from 100.9 in December to 102.6 in January. Industrial Production of Ships and Boats grew 2.6% in November, but the Manufacturing Employment Index fell 1.5 points to 45.1 in December, the lowest level since January 2016. Overall, recent movement in the Index potentially signals modest growth in ships and boats investment over the next six months.



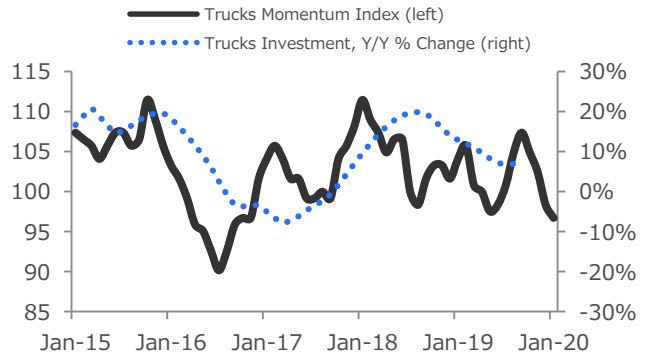
**Railroad Equipment:**

Investment in Railroad Equipment expanded at a 13% annualized rate in Q3 2019 and is up 16% year-over-year. The Railroad Equipment Momentum Index improved from 72.9 (revised) in December to 75.2 in January. Rail Transportation Employment eased 0.2% in November, while Oil & Gas Rig Counts fell 0.7% in December, the 13<sup>th</sup> consecutive monthly decline. Overall, the Index continues to indicate slower year-over-year growth in railroad equipment investment over the next six months.



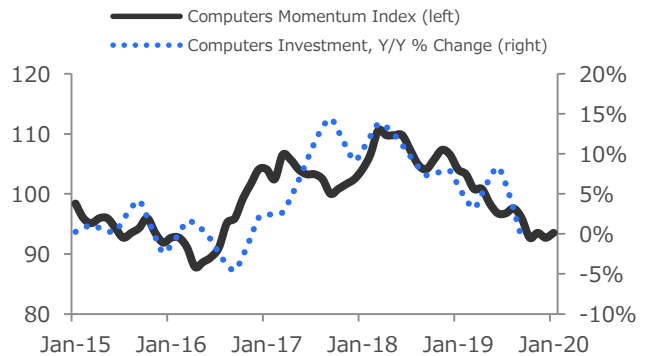
**Trucks:**

Investment in Trucks rose at a 7.0% annualized rate in Q3 2019 and is up 7.0% from year-ago levels. The Trucks Momentum Index decreased from 98.4 (revised) in December to 96.7 in January. Shipments of Light Trucks & Utility Vehicles fell 3.2% in October, while Capacity Utilization for Furniture Manufacturing fell 0.4 percentage points to 75.5% in November. Overall, the Index points to weaker growth in trucks investment over the next six months.



**Computers:**

Investment in Computers pulled back at an annualized rate of 29% in Q3 2019 and eased 0.7% year-over-year. The Computers Momentum Index ticked up from 92.7 (revised) in December to 93.5 in January, the second lowest level since mid-2016. Computer Exports decreased 2.7% in October, while the ISM Manufacturing PMI fell 0.9 points to 47.2 in December, the lowest level since the end of the Great Recession. Overall, the Index points to continued weakness in computers investment growth over the next two quarters.



**Software:**

Investment in Software improved at a 10% annualized rate in Q3 2019 and is up 10% year-over-year. The Software Momentum Index ticked up from 98.2 in December to 98.3 in January. Shipments of Computers & Related Products grew 9.1% in November, the sharpest improvement since mid-2018, while the S&P 500 Software & Services Index increased 2.1% in December. Overall, the Index points to continued strength in software investment growth over the next two quarters.

