



February 2020

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 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 an approximate 6month 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 highfrequency 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
- 2) Construction Machinery
- 3) Materials Handling Equipment
- 4) All Other industrial Equipment
- 5) Medical Equipment
- 6) Mining & Oilfield Machinery

- Aircraft
- 8) Ships and Boats
- 9) Railroad Equipment
- 10) Trucks
- 11) Computers
- 12) Software

Reoptimized Momentum Monitor Forecasts

Each January, Keybridge reexamines the composition of its 12 Equipment and Software Investment Momentum Monitor indices. This process involves adjusting the weighting scheme of the investment indicators that comprise each index and, in some cases, swapping out one or more indicators. The result is a reoptimized suite of indices that maximize correlation with investment trends (including identification of investment "turning points" over the last two decades) while avoiding false signals and ensuring a lead time of approximately two quarters.



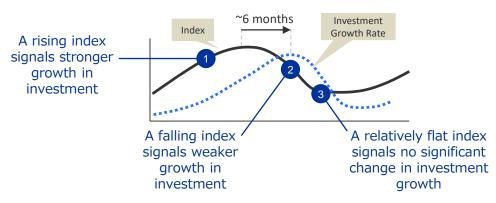


How to Read the Monitor

Each Momentum Monitor index provides a signal of the direction and magnitude of growth in equipment investment over the next six 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. 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.

Momentum Monitor Signals



To help the reader interpret the latest Momentum Monitor signals, a summary report for each equipment vertical follows a specific outline:

Materials Handling Equipment:

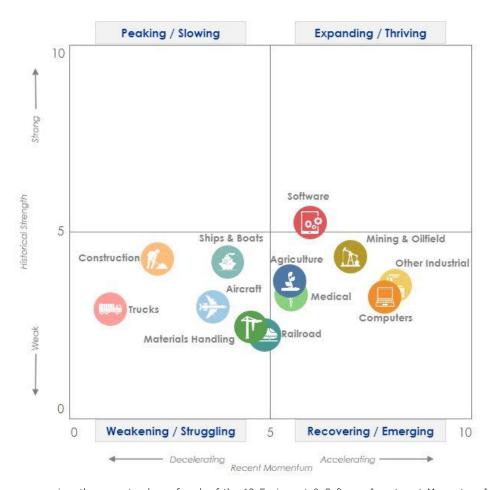
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year. 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March. 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy Uncertainty 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 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 six 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, report ends the interpretation of where investment growth is heading over the next six months based the index's recent movement and historical strength.





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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):

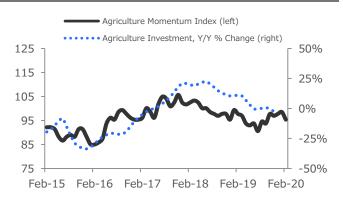
- "Recent Momentum" represents the degree of an indicator's recent acceleration or deceleration in the past month relative to its
 average movement during the previous 3 months. Ratings closer to "0" represent an indicator that is rapidly decelerating, while ratings
 closer to "10" represent an indicator 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 two 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 two quarters. This makes them potentially attractive targets for new short-term leasing and finance opportunities.



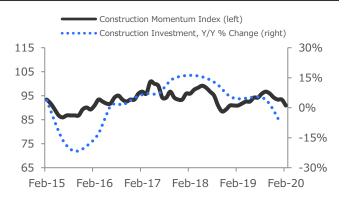
Agriculture Machinery:

Investment in Agricultural Machinery decreased 2.9% (annualized) in Q4 2019 and is down 3.8% from one year ago. The Agriculture Momentum Index fell from 98.5 (revised) in January to 95.3 in February. Exports of Poultry Broilers decreased 1.3% in November, while the MSCI Commodity Producers Sector Index dropped 7.7% in January. Overall, the Index points to continued weak growth in agricultural machinery investment over the next six months.



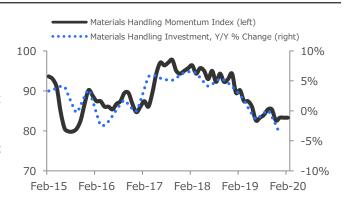
Construction Machinery:

Investment in Construction Machinery dropped at a sharp 32% annualized rate in Q4 2019 and is down 5.4% year-over-year. The Construction Momentum Index fell from 93.4 (revised) in January to 90.9 in February, the lowest level in a year. Shipments of Construction Machinery decreased 5.9% in November, though New Privately-Owned Homes Under Construction increased 2.0% in December. Overall, the Index points to continued weakness in construction machinery investment growth over the next six months.



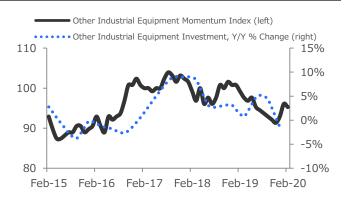
Materials Handling Equipment:

Investment in Materials Handling Equipment fell at a 13% annualized rate in Q4 2019 and dropped 3.9% year-over-year. The Materials Handling Momentum Index held steady at 83.3 from January (revised) to February. In November, Inventories of Materials Handling Equipment eased 0.9%, while Shipments of Materials Handling Equipment decreased 0.6%. Overall, the Index points to continued weakness in materials handling equipment investment growth over the next six months.



Other Industrial Equipment:

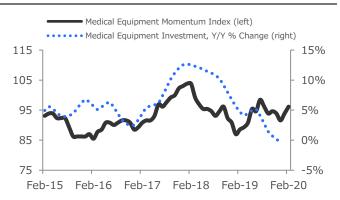
Investment in All Other Industrial Equipment fell at a 13% annualized rate in Q4 2019 and eased 1.5% from a year ago. The Other Industrial Equipment Momentum Index slipped from 96.1 (revised) in January to 95.3 in February. In November, Shipments of Industrial Machinery grew 5.6%, but Durable Goods Inventories fell 0.9%. Overall, the Index points to modest growth in other industrial equipment investment over the next two quarters.





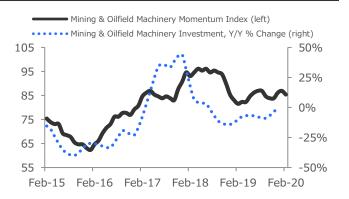
Medical Equipment:

Investment in Medical Equipment fell at a 5.6% annualized rate in Q4 2019 and edged down 0.3% year-over-year. The Medical Equipment Momentum Index increased from 93.9 in January (revised) 96.2 in February. The Consumer Price Index for Medical Care expanded 0.6% in December, and Johnson & Johnson Market Cap grew 2.1% in January. Overall, the Index points to improved growth in medical equipment investment growth over the next six months.



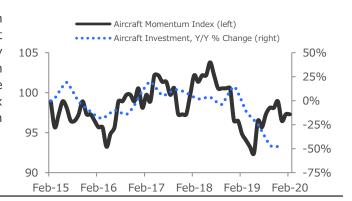
Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery improved at an 18% annualized rate in Q4 2019 but edged down 0.2% year-over-year. The Mining & Oilfield Machinery Momentum Index softened from 86.9 (revised) in January to 85.4 in February. Inventories of Oil & Gas Machinery fell 1.8% in November, and the Brent Spot Price declined 15% in January. Overall, the Index suggests modest growth in mining and oilfield machinery investment over the next six months.



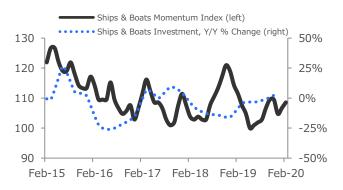
Aircraft:

Investment in Aircraft surged at an 119% (annualized) in Q4 2019 but is 45% below year-ago levels. The Aircraft Momentum Index held steady at 97.3 from January (revised) to February. Consumer Spending on Recreational Aircraft eased 1.6% in December, and the S&P 500 Airlines Index fell 5.2%. Overall, the Index continues to suggest negative aircraft investment growth over the next six months.



Ships & Boats:

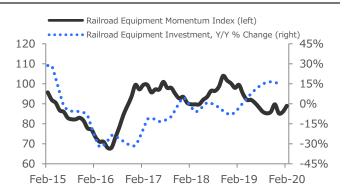
Investment in Ships & Boats grew at an annualized rate of 9.4% in Q4 2019 and increased 3.6% year-over-year. The Ships & Boats Momentum Index improved from 106.7 (revised) in January to 108.6 in February. In January, the Other Important Trading Partners Currency Index pulled back 27%, but the Consumer Sentiment Index inched up 0.5 point to 99.8. Overall, Index points to continued weakness in ships and boats investment growth over the next six months.





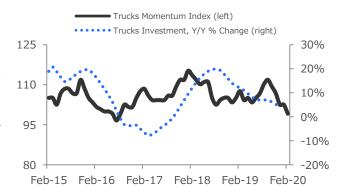
Railroad Equipment:

Investment in Railroad Equipment contracted at a 6.0% annualized rate in Q4 2019 but is up 15% year-over-year. The Railroad Equipment Momentum Index improved from 86.0 (revised) in January to 89.0 in February. Crude Oil & Petroleum Product Imports rose 5.9% in December, while the Bloomberg Petroleum Sub-Index dropped 15% in January. Overall, the Index suggests that growth in railroad equipment investment is likely to slow over the next two quarters.



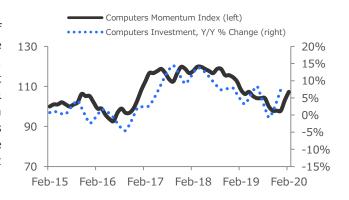
Trucks:

Investment in Trucks inched up at a 0.8% annualized rate in Q4 2019 and is up 4.2% from year-ago levels. The Trucks Momentum Index decreased from 102.5 (revised) in January to 99.2 in February, marking the lowest level since mid-2016. In December, Industrial Production of Light Trucks dropped 8.9%, while Coal Production fell 1.2%. Overall, the Index points to further weakening growth in trucks investment over the next six months.



Computers:

Investment in Computers surged at an annualized rate of 29% in Q4 2019 and is up 7.6% year-over-year. The Computers Momentum Index increased from 103.1 (revised) in January to 107.3 in February, the strongest reading in a year. Capacity Utilization for Computer & Electronic Product Manufacturing improved 0.7 point in December to 73.3%, but New Orders for Computers dropped 9.7%. Overall, the Index points to moderate growth in computers investment over the next six months.



Software:

Investment in Software improved at a 12% annualized rate in Q4 2019 and is up 10% year-over-year. The Software Momentum Index remained at 96.4 from January (revised) to February. In January, the ZEW Current Economic Situation Indicator expanded 18%, while Microsoft's Market Cap grew 7.6%. Overall, the Index points to continued strength in software investment growth over the next six months.

