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 an approximate 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 10–20 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  
2) Construction Machinery  
3) Materials Handling Equipment  
4) All Other industrial Equipment  
5) Medical Equipment  
6) Mining & Oilfield Machinery  
7) Aircraft  
8) Ships and Boats  
9) Railroad Equipment  
10) Trucks  
11) Computers  
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 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. 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 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, the report ends with an interpretation of where investment growth is heading over the next six months based the index’s recent movement and historical strength.
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 increased 28% (annualized) in Q4 2020 and is up 14% from one year ago. The Agriculture Momentum Index edged down from 110.8 (revised) in February to 109.3 in March. In December, Exports of Poultry Broilers fell by 5.2%, while Unmanufactured Tobacco Exports fell by 44.8%. Overall, the Index’s current position suggests that agriculture machinery investment growth should remain robust over the next one to two quarters.

**Construction Machinery:**
Investment in Construction Machinery expanded 19% (annualized) in Q4 2020 but was 8.1% below its year-ago level. The Construction Momentum Index eased from 100.8 (revised) in February to 97.5 in March. In January, New Homes Not Yet Under Construction and for Sale grew by 17.4%, while Privately Owned Homes Under Construction edged up by 0.6%. Overall, the Index’s elevated position suggests that construction machinery investment growth could return to positive territory over the next 3-6 months.

**Materials Handling Equipment:**
Investment in Materials Handling Equipment grew at a 28% annualized rate in Q4 2020 and was up 8.0% year-over-year. The Materials Handling Momentum Index fell from 93.0 (revised) in February to 90.2 in March, the second highest level in two years. In January, Inventories of Materials Handling Equipment rose by 4.4%, while Private Warehouse Construction Spending grew by 2.4%. Overall, the Index’s position suggests that materials handling equipment investment growth should remain solid over the next 1-2 quarters.

**Other Industrial Equipment:**
Investment in All Other Industrial Equipment rose 22% (annualized) in Q4 2020 but was 1.9% below year-ago levels. The Other Industrial Equipment Momentum Index eased from 117.5 in February (revised) to 115.9 in March, the second highest reading since mid-2011. In February, Average Weekly Earnings for Production & Non-Supervisory Employees fell by 1.0%, while Manufacturing Employment inched up 0.2%. Overall, the elevated position of the Index suggests that other industrial equipment investment growth should return to positive territory in the next three to six months.
**Medical Equipment:**
Investment in Medical Equipment rose 22% (annualized) in Q4 2020 and was up 19% year-over-year. The Medical Equipment Momentum Index ticked up from 101.5 (revised) in February to 102.3 in March, the highest level in over 7 years. In January, Capacity Utilization for Electrical Equipment Manufacturing increased by 2.3% and Consumer Price Index for Medical Services increased by 0.9%. Overall, the Index points to robust medical equipment investment growth over the next two quarters.

**Mining & Oilfield Machinery:**
Investment in Mining & Oilfield Machinery increased 15% (annualized) in Q4 2020 but is down 18% compared to a year ago. The Mining & Oilfield Machinery Momentum Index eased from 93.1 (revised) in February to 89.2 in March, still the highest reading in over two years. Mining & Logging Employment declined by 1.5% in February, while the WTI price of crude oil jumped 18%. Overall, the Index points to improving mining & oilfield equipment investment growth over the next six months, though Y/Y growth will likely remain negative.

**Aircraft:**
Investment in Aircraft surged 343% (annualized) in Q4 2020 but was 29% below year-ago levels. The Aircraft Momentum Index improved from 111.1 (revised) in February to 112.8 in March, marking another 10-year record high. Capacity Utilization increased 0.9% in January and the Market Cap of Southwest Airlines surged 32.3% in February. Given the sharp rise in the Index, Aircraft investment growth could return to positive territory over the next six months.

**Ships & Boats:**
Investment in Ships & Boats rose at an annualized rate of 4.4% in Q4 2020 but fell 0.3% year-over-year. The Ships & Boats Momentum Index was unchanged at 108.5 from February (revised) to March. While The Emerging Market Economies Exchange Rate Index increased 1.4%, the University of Michigan Consumer Sentiment Index fell by 2.8% in February. Overall, the Index points to modest growth in ships & boats investment over the next 3–6 months.
**Railroad Equipment:**

Investment in Railroad Equipment fell 12% (annualized) in Q4 2020 and was down 5.1% year-over-year. The Railroad Equipment Momentum Index fell from 103.7 (revised) in February to 98.3 in March. In February, Crude Oil and Petroleum Products Exports fell by 28.7 percentage points and Rail Carloads of Metallic Ores & Metals fell by 15.1%. Overall, the Index’s elevated position suggests that railroad equipment investment growth will rebound to positive territory in the next three to six months.

**Trucks:**

Investment in Trucks surged 58% (annualized) in Q4 2020 but was down 8.1% from year-ago levels. The Trucks Momentum Index fell from 131.9 (revised) in February to 124.4 in March. Capacity Utilization for Furniture Manufacturing rose by 2.0% and Shipments of Primary Metals increased by 2.8% in January. The current position of the Index points to improving trucks investment growth over the next one to two quarters.

**Computers:**

Investment in Computers jumped 8.6% (annualized) in Q4 2020 and was up 24% year-over-year. The Computers Momentum Index decreased from 116.0 (revised) in February to 112.8 in March, the lowest level since October. In January, Capacity Utilization for Computer & Electronic Product Manufacturing fell by 0.3% and Computers & Electronic Products Exports declined by 9.6%. Overall, the Index suggests that computers investment growth may decelerate over the next one to two quarters but should remain solidly in positive territory.

**Software:**

Investment in Software rose 7.2% (annualized) in Q4 2020 and grew 5.0% from a year prior. The Software Momentum Index was mostly unchanged from 100.6 (revised) in February to 100.7 in March. In January, M1 Money Supply rose by 2.6% while Prices for Computer Software & Accessories declined by 1.2%. The Index continues to suggest that software investment growth will accelerate over the next three to six months.