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:

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 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 on 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 fell 19% (annualized) in Q1 2020 and is down 9.0% from one year ago. The Agriculture Momentum Index fell sharply from 91.2 in May to 85.6 in June. In April, Exports of Poultry Broilers dropped 14%, while Export Prices of Food, Feed, and Beverages eased 2.6%. Overall, the Index suggests continuing negative growth in agricultural machinery investment growth over the next six months.

Construction Machinery:
Investment in Construction Machinery pulled back 21% (annualized) in Q1 2020 and fell 15% year-over-year. The Construction Momentum Index fell sharply from 90.9 (revised) in May to 83.5 in June, the lowest level in over five years. Housing Starts in the Western U.S. cratered 43% in April, and the Commercial Property Price Index eased 0.7% in May. Overall, the Index points to further contraction in construction machinery investment over the next two quarters.

Materials Handling Equipment:
Investment in Materials Handling Equipment fell at a 13% annualized rate in Q1 2020 and is down 6.3% year-over-year. The Materials Handling Momentum Index declined from 78.6 (revised) in May to 76.5 in June. In April, Shipments of Materials Handling Equipment decreased 5.2%, and Industrial Production plummeted 11%, the steepest monthly decline in the metric’s 101-year history. Overall, the Index suggests continued weakness in materials handling equipment investment over the next six months.

Other Industrial Equipment:
Investment in All Other Industrial Equipment fell at a 4.2% annualized rate in Q1 2020 and decreased 1.4% from a year ago. The Other Industrial Equipment Momentum Index declined sharply from 88.9 (revised) in May to 81.0 in June. Machinery Industrial Production nosedived 11% in April, and the Economic Policy Uncertainty Index spiked 31% in May. Overall, the Index points to further negative investment growth in other industrial equipment over the next two quarters.
Medical Equipment:
Investment in Medical Equipment slipped 0.1% (annualized) in Q1 2020 but edged up 0.6% year-over-year. The Medical Equipment Momentum Index ticked up from 88.5 (revised) in May to 89.3 in June. New Orders of Nondefense Capital Goods dropped 35% in March, and Capacity Utilization for Electrical Equipment Manufacturing fell 4.4 points to 68.9% in April. Overall, the Index points to continued weakness in medical equipment investment growth over the next six months, though there is heightened uncertainty in this vertical due to the pandemic’s uncertain trend.

Mining & Oilfield Machinery:
Investment in Mining & Oilfield Machinery improved at a 43% annualized rate in Q1 2020 and rose 14% compared to a year ago. The Mining & Oilfield Machinery Momentum Index cratered from 69.2 (revised) in May to 60.8 in June, the lowest level on record. In April, Motor Gasoline Production dropped 26%, while Mining, Oil, and Gas Field Machinery Inventories eased 1.4%. Overall, the Index points to a sharp drop in mining & oilfield investment activity over the next six months.

Aircraft:
Investment in Aircraft decreased 0.9% (annualized) in Q1 2020 and is 32% below year-ago levels. The Aircraft Momentum Index decreased from 101.8 (revised) in May to 98.2 in June. Shipments of Non-Defense Aircraft & Parts plummeted 59% in April, the sharpest drop on record, while the S&P 500 Volatility Index declined 19% in May. Overall, the Index points to continued weakness in aircraft investment growth over the next three to six months.

Ships & Boats:
Investment in Ships & Boats fell at an annualized rate of 9.0% in Q1 2020 and is down 6.9% year-over-year. The Ships & Boats Momentum Index fell sharply from 106.7 (revised) in May to 98.1 in June, the lowest level in nearly a decade. In April, the Exports of Ships, Boats, and Floating Structures to China cratered 74% while Ships & Boats Shipments declined 11%. Overall, investment in ships & boats is likely to contract further in the coming two quarters.
**Railroad Equipment:**
Investment in Railroad Equipment surged 42% (annualized) in Q1 2020 and is up 27% year-over-year. The Railroad Equipment Momentum Index decreased from 73.5 (revised) in May to 67.3 in June, a multi-year low. In May, Rail Transportation Employment eased 1.4%, and Oil and Gas Rig Counts pulled back 32%. Overall, the Index continues to suggest that growth in railroad equipment investment will pull back over the next two quarters.

**Trucks:**
Investment in Trucks plummeted at a 39% annualized rate in Q1 2020 and is down 12% from year-ago levels. The Trucks Momentum Index fell again in June to 81.5, down from 86.6 (revised) in May. In April, Industrial Production of Light Trucks cratered 99%, while Coal Production dropped 17%. Overall, the Index continues to point to a severe contraction in trucks investment over the next six months.

**Computers:**
Investment in Computers plunged 21% (annualized) in Q1 2020 and is down 0.6% year-over-year. The Computers Momentum Index eased from 111.5 (revised) in May to 109.4 in June. New Orders of Defense Search & Navigation Equipment increased 1.0% in April, but the University of Michigan Consumer Sentiment Index fell 4.2 points to 65.9 in May. Overall, despite this month’s decline, the Index continues to point to potential improvement in computers investment growth over the next six months.

**Software:**
Investment in Software expanded at a 9.2% annualized rate in Q1 2020 and is up 8.5% year-over-year. The Software Momentum Index slipped from 91.5 (revised) in May to 89.0 in June, the lowest reading since May 2009. In April, Revolving Consumer Credit Outstanding fell 4.3%, while the NFIB Small Business Survey Capital Expenditure Sub-Index dropped 14%. The Index points to weaker growth in software investment, however, the increase in work-from-home policies in Q2 suggests that software may fare better than other equipment verticals over the remainder of the year.