



July 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 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.



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:

- 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.
 The Index's recent trend continues to indicate that growth may moderate over the next six months.
- 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.





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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.



WEYBRIDGE Public Policy Economics

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 ticked up from 87.3 (revised) in June to 88.1 in July. In May, the PayNet SBDI 31-90 Days Past Due surged 13%, while Soybeans and Other Oil Seeds Exports eased 1.0%. Overall, the Index points to continued 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 declined from 81.8 (revised) in June to 76.9 in July, the lowest level in over five years. New Homes for Sale surged 15% in May, and the June Commercial Property Price Index is down 11% from February. Overall, the Index points to a continued contraction in construction machinery investment over the next two quarters.

Materials Handling Equipment:

Investment in Materials Handling Equipment declined at a 13% annualized rate in Q1 2020 and is down 6.4% yearover-year. The Materials Handling Momentum Index fell from 71.4 (revised) in June to 64.0 in July, a multi-year low. Inventories of Materials Handling Equipment declined 2.3% in May, and the ZEW Dow Jones Survey plummeted 175% in June. Overall, the Index suggests continued negative growth in materials handling equipment investment over the next six months.

Other Industrial Equipment:

Investment in All Other Industrial Equipment decreased at a 4.3% annualized rate in Q1 2020 and dropped 1.4% from a year ago. The Other Industrial Equipment Momentum Index decreased further from 80.2 (revised) in June to 78.6 in July. Domestic Manufacturing & Trade Sales pulled back 11.4% in April, and Machinery Industrial Production fell 1.2% in May. Overall, the Index points to a steeper drop in industrial equipment investment over the next two quarters.











Medical Equipment:

Investment in Medical Equipment slipped 0.2% (annualized) in Q1 2020 but inched up 0.5% year-overyear. The Medical Equipment Momentum Index dropped from 89.3 in June to 84.0 in July. In May, Capacity Utilization for Electrical Equipment Manufacturing dropped 1.4 points to 66.3%, and Appliances & Components Industrial Production decreased 2.0%. Overall, the Index points to stagnant and potentially negative growth in medical equipment investment over the next six months, though the pandemic trajectory continues to inject unusual uncertainty into this vertical.

Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery surged at a 44% annualized rate in Q1 2020 and rose 14% compared to a year ago. The Mining & Oilfield Machinery Momentum Index declined from 62.8 (revised) in June to 58.1 in July, the lowest level on record. Capacity Utilization for Mining, Oil, & Gas Extraction pulled back 4.9 points to 87.7% in May, and Mining & Logging Employment decreased 1.6% in June. Overall, the Index points to a contraction in mining & oilfield investment activity over the next six months.

Aircraft:

Investment in Aircraft eased 0.9% (annualized) in Q1 2020 and is 32% below year-ago levels. The Aircraft Momentum Index fell from 99.1 (revised) in June to 95.6 in July. The Passenger Transportation Services Index plummeted 85% in April, while Shipments of Non-Defense Aircraft & Parts plummeted 21% in May. Overall, the Index points to continued negative growth in aircraft investment 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 remained at 98.1 from June to July, holding at its lowest level in nearly a decade. In May, Exports of Ships, Boats, and Floating Structures to China and Houston Shipping Container Traffic were down 4.5% and 13% from February levels, respectively. Overall, investment in ships & boats is likely to continue to pull back in the coming two quarters.











Public Policy Economic

Railroad Equipment:

Investment in Railroad Equipment surged 50% (annualized) in Q1 2020 and is up 29% year-over-year. The Railroad Equipment Momentum Index decreased from 68.1 (revised) in June to 62.7 in July, the lowest level on record. In June, Rail Transportation Employment eased 1.7%, and Oil and Gas Rig Counts pulled back 17%. Overall, the Index continues to suggest that growth in railroad equipment investment will weaken significantly 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 nosedived from 80.7 (revised) in June to 68.9 in July, a multi-year low. In May, Coal Production dropped 5.1%, and Manufacturers' Inventories of Light Trucks & Utility Vehicles is down 14% from pre-pandemic levels. Overall, the Index continues to point to a steep drop 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 109.3 (revised) in June to 106.2 in July. In June, Capacity Utilization for Computer & Electronic Product Manufacturing eased 0.5 point to 67.8%, but the ISM Manufacturing PMI improved 9.5 points 52.6. Overall, despite recent declines, the Index's position suggests potential improvement in computers investment growth over the next six months.

Software:

Investment in Software expanded at a 7.2% annualized rate in Q1 2020 and is up 8.0% year-over-year. The Software Momentum Index inched up from 88.9 (revised) in June to 90.5 in July. The NFIB Interest Rate Paid on Short-Term Loans by Small Businesses Index fell 1.2 points to 4.6% in May, while the June Richmond Fed Spending on Equipment or Software Conditions Index is down 16 points from February. The Index points to slower (but positive) growth in software investment in the coming three to six months.







