U.S. Equipment & Software Investment Momentum Monitor

CONTACT INFORMATION:

Kelli Nienaber, Executive Director
Equipment Leasing & Finance Foundation
knienaber@elfaonline.org
www.leasefoundation.org

Jeff Jensen, Senior Director
Keybridge LLC
jjensen@keybridgedc.com
www.keybridgedc.com
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 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

A Note Regarding Impact of COVID-19 on Momentum Monitors

The U.S. Equipment & Software Investment Momentum Monitors are comprised of a suite of industry-specific indicators that have a historical track record of successfully forecasting movement trends in investment levels. While each tool was constructed to identify turning points in the investment cycle with a 6-month lead, the suddenness and severity of the COVID-19 pandemic’s effect on U.S. economic activity has not yet been fully reflected in many of the underlying indicators. As a result, we expect that index readings will weaken substantially as additional data become available in the coming weeks.
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 decreased 6.0% (annualized) in Q1 2020 and is down 5.7% from one year ago. The Agriculture Momentum Index held steady at 91.2 from April (revised) to May. Lamb & Mutton Production pulled back 10% in February, and Agricultural Machinery Industrial Production dropped 4.8% in March. Overall, the Index suggests continued weakness 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 remained at 93.4 from April to May. New Homes for Sale jumped 24% in March, while the Conference Board Consumer Confidence Index plummeted 90 points to 76.4 in April, the sharpest drop on record. Overall, the Index points to continued negative growth in construction machinery investment over the next two quarters.

Materials Handling Equipment:
Investment in Materials Handling Equipment fell at a 6.8% annualized rate in Q1 2020 and is down 4.8% year-over-year. The Materials Handling Momentum Index held steady at a multi-year low of 79.2 from April (revised) to May. Inventories of Materials Handling Equipment decreased 1.2% in February, and Industrial Production plummeted 5.4% in March, the largest monthly decline since 1946. Overall, the Index suggests continued contraction in materials handling equipment investment over the next six months.

Other Industrial Equipment:
Investment in All Other Industrial Equipment fell at a 7.3% annualized rate in Q1 2020 and decreased 2.2% from a year ago. The Other Industrial Equipment Momentum Index fell sharply from 95.3 (revised) in April to 89.0 in May, the lowest level since mid-2015. Nonfarm Payrolls dropped 0.5% in March, and the ISM Manufacturing PMI cratered 7.6 points to 41.5 in April, the lowest level in over a decade. Overall, the Index points to negative investment growth in other industrial equipment over the next two quarters.
Medical Equipment:
Investment in Medical Equipment increased at an 1.5% annualized rate in Q1 2020 and edged up 0.9% year-over-year. The Medical Equipment Momentum Index fell from 93.1 (revised) in April to 89.3 in May. In March, Medical Equipment and Supplies Industrial Production decreased 1.6%, and Consumer Spending on Professional Medical Services pulled back 25%. Overall, the Index points to stagnant growth in medical equipment investment over the next six months, though the investment picture could change quickly depending on how the public health situation unfolds.

Mining & Oilfield Machinery:
Investment in Mining & Oilfield Machinery improved at a 50% annualized rate in Q1 2020 and rose 15% compared to a year ago. The Mining & Oilfield Machinery Momentum Index fell from 81.5 (revised) in April to 74.6 in May, the lowest level since August 2016. In March, Motor Gasoline Production dropped 13%, and Crude Oil Production decreased 5.3%. Overall, the Index points to a steep decline in mining & oilfield investment activity over the next six months.

Aircraft:
Investment in Aircraft dropped 28% (annualized) in Q1 2020 and is 37% below year-ago levels. The Aircraft Momentum Index inched down from 100.8 (revised) in April to 99.9 in May. In March, Consumer Spending on Pleasure Aircraft fell 26%, while Industrial Production of Aerospace Transportation Equipment declined 8.1%. Overall, while the Index points to a potential improvement in aircraft investment growth, the Index does not yet reflect the near-standstill in air travel that has occurred since mid-March. Aircraft investment is likely to remain weak for the next two quarters.

Ships & Boats:
Investment in Ships & Boats fell at an annualized rate of 14% in Q1 2020 and is down 8.3% year-over-year. The Ships & Boats Momentum Index decreased from 106.5 in April (revised) to 103.7 in May. In April, the University of Michigan Consumer Sentiment Index fell sharply by 17 points to 71.8, and the ISM Manufacturing Employment Sub-Index plummeted 16 points to 27.5. Overall, investment in ships & boats is likely to contract further due to reduced global trade driven by COVID-19.
**Railroad Equipment:**
Investment in Railroad Equipment surged 56% (annualized) in Q1 2020 and is up 30% year-over-year. The Railroad Equipment Momentum Index decreased from 81.3 (revised) in April to 76.6 in May, a multi-year low. Crude Oil and Petroleum Products Imports decreased 3.2% in March, and Oil and Gas Rig Counts pulled back 42% in April. Overall, the Index continues to suggest that growth in railroad equipment investment will pull back over the next two quarters.

![Railroad Equipment Momentum Index](image)

**Trucks:**
Investment in Trucks declined at a steep 35% annualized rate in Q1 2020 and is down 10% from year-ago levels. The Trucks Momentum Index fell again in May to 89.8, down from 94.1 (revised) in April. Industrial Production of Light Trucks fell 37% in March, while Capacity Utilization for Furniture Manufacturing declined 7.8 percentage points to 69.5%. Overall, the Index continues to point to a sharp contraction in trucks investment over the next six months.

![Trucks Momentum Index](image)

**Computers:**
Investment in Computers plunged 30% (annualized) in Q1 2020 and is down 3.4% year-over-year. The Computers Momentum Index decreased from 115.6 in April to 112.5 in May. New Orders of Defense Search & Navigation Equipment edged up 0.7% in February, and Computer Export Prices rose 3.4% in March. Overall, despite this month’s decline, the Index continues to point to a potential improvement in computers investment growth over the next six months.

![Computers Momentum Index](image)

**Software:**
Investment in Software expanded at an 8.2% annualized rate in Q1 2020 and is up 8.3% year-over-year. The Software Momentum Index slipped from 94.0 (revised) in April to 92.4 in May, a multi-year low. In March, the NFIB Small Business Survey Capital Expenditure Plans Sub-Index fell 19%, and Shipments of Computers & Related Products decreased 3.4%. Overall, the Index points to softening growth in software investment over the next six months, though widespread adoption of work-from-home policies may not be fully captured by the Index and could insulate this vertical in the months ahead.

![Software Momentum Index](image)