



August 2019

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 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 a 3 to 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 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
- Ships and Boats 8)
- 9) Railroad Equipment
- 10) Trucks
- 11) Computers
- 12) Software



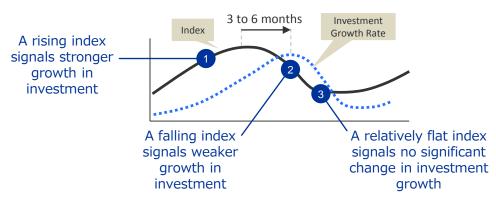


How to Read the Monitor

Each Momentum Monitor index provides a signal of the direction and magnitude of growth in equipment investment over the next 3 to 6 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 three to 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 3 to 6 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 3 to 6 months based the index's recent movement and historical strength.





U.S. Equipment & Software Investment Momentum Monitor August 2019

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):

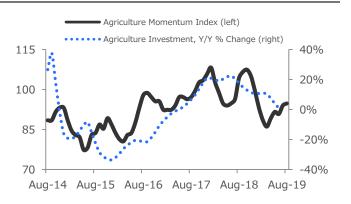
- "Recent Momentum" represents the degree of an indicator's recent acceleration or deceleration in the past month relative to its
 average movement during the previous 3 months. Ratings closer to "0" represent an indicator that is rapidly decelerating, while ratings
 closer to "10" represent an indicator 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 1-2 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 1-2 quarters. This makes them potentially attractive targets for new short-term leasing and finance opportunities.



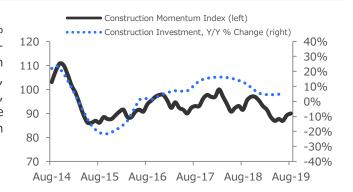
Agriculture Machinery:

Investment in Agricultural Machinery fell 7.2% (annualized) in Q2 2019 but is up 0.8% from one year ago. The Agriculture Momentum Index ticked up from 93.9 (revised) in July to 94.7 in August. Unmanufactured Tobacco Exports surged more than 350% in May, their largest increase in decades, while Shipments of Farm Machinery & Equipment increased 4.7% in June. Overall, the Index continues to point to positive growth in agricultural machinery investment over the next three to six months.



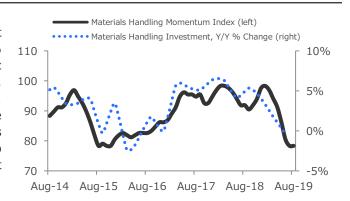
Construction Machinery:

Investment in Construction Machinery rose at a 14% annualized rate in Q2 2019 and is up 5.3% year-over-year. The Construction Momentum Index edged up from 89.2 (revised) in July to 90.0 in August. In June, Shipments of Construction Machinery increased 2.1%, but Public Construction Spending fell 3.7%. Overall, the Index suggests continued weak growth in construction machinery investment over the next three to six months.



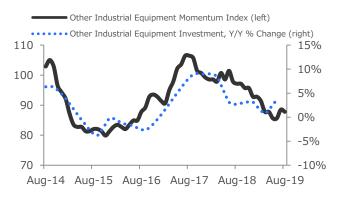
Materials Handling Equipment:

Investment in Materials Handling Equipment decreased at a 7.3% annualized rate in Q2 2019 and is down 0.4% year-over-year. The Materials Handling Momentum Index held steady at 78.4 from July (revised) to August, remaining at its lowest level since November 2015. Primary Energy Consumption fell 12% in April, and the Chicago Business Barometer declined 11% in July, its steepest drop since January. Overall, the Index points to continued weakness in materials handling equipment investment over the next two quarters.



Other Industrial Equipment:

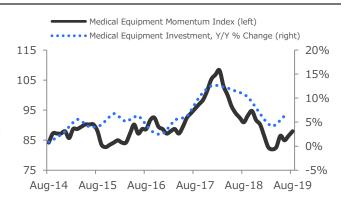
Investment in All Other Industrial Equipment increased at a 4.2% annualized rate in Q2 2019 and is up 3.7% from a year ago. The Other Industrial Equipment Momentum Index eased from 88.5 (revised) in July to 87.8 in August. In June, Capacity Utilization for Electrical Equipment Manufacturing decreased 0.9 point to its second-lowest level since March 2010, and Industrial Production for Total Machinery dropped 1.0%. Overall, the Index continues to point to weak and potentially stalled growth in other industrial equipment investment over the next three to six months.





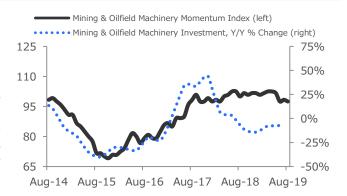
Medical Equipment:

Investment in Medical Equipment increased at a 15% annualized rate in Q2 2019 and rose 6.3% year-over-year. The Medical Equipment Momentum Index improved from 86.5 (revised) in July to 88.0 in August. The Consumer Price Index for Dental Services increased 1.1% in June, its strongest growth since February 2018, and Medtronic's Market Cap rose 4.7% in July. Overall, the Index continues to point to moderate growth in medical equipment investment over the next two quarters.



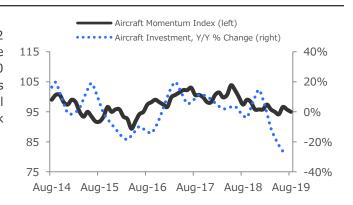
Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery surged at a 31% annualized rate in Q2 2019 but is down 7.2% year-over-year. The Mining & Oilfield Machinery Momentum Index decreased from 98.3 (revised) in July to 97.5 in August. Industrial Production for Mining, Oil, & Gas Machinery decreased 1.7% in June, and the Bloomberg Natural Gas Sub-Index dropped 2.2% in July for the eighth consecutive month. Overall, the Index suggests continued weak growth in mining & oilfield machinery investment over the next three to six months.



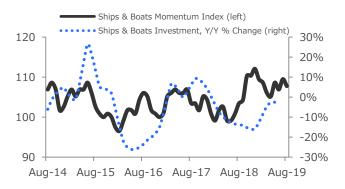
Aircraft:

Investment in Aircraft declined 49% (annualized) in Q2 2019 and is down 27% on a year-over-year basis. The Aircraft Momentum Index eased from 95.8 in July to 95.0 in August. Exports of Computers & Electronic Products decreased 2.8% in June, while Boeing Stock Returns fell 6.3% in July. Overall, the Index points to continued weak growth in aircraft investment over the next two quarters.



Ships & Boats:

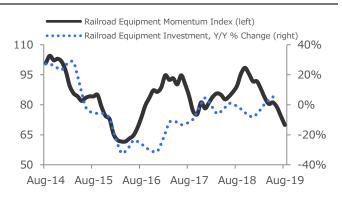
Investment in Ships & Boats fell at an annualized rate of 35% in Q2 2019 and is down 4.2% year-over-year. The Ships & Boats Momentum Index decreased from 109.5 (revised) in July to 107.8 in August. Rice & Other Food Grains Exports increased 11% in May, but the Manufacturing Employment Index fell 5.1% in July, its sixth monthly decline in the past 10 months. Overall, the Index's elevated position suggests the potential for a modest improvement in ships and boats investment growth over the next three to six months.





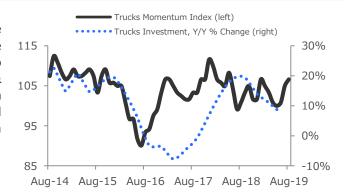
Railroad Equipment:

Investment in Railroad Equipment expanded at an 19% annualized rate in Q2 2019 and is up 7.2% year-over-year. The Railroad Equipment Momentum Index dropped from 74.4 in July to 69.9 in August, its third consecutive decline and lowest level in over three years. Industrial Production for Railroad Rolling Stock pulled back 3.0% in June, its eight decline in the past year, and Rail Carloads of Petroleum Products fell 5.4% in July. Overall, the Index continues to point to weaker and potentially negative growth in railroad equipment investment over the next three to six months.



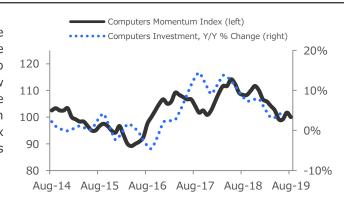
Trucks:

Investment in Trucks increased at a 2.8% annualized rate in Q2 2019 and is up 7.7% from year-ago levels. The Trucks Momentum Index increased from 105.0 in July to 106.6 in August. In June, Shipments of Light Trucks & Utility Vehicles rose 6.7%, their sharpest increase in a year, while New Orders for Trailers & Parts increased 1.0%. Overall, the Index points to moderate growth in trucks investment over the next three to six months.



Computers:

Investment in Computers increased at an annualized rate of 18% in Q2 2019 and is up 4.9% year-over-year. The Computers Momentum Index eased from 101.7 in July to 100.0 in August, remaining near multi-year lows. New Orders for Computers decreased 1.8% in June, and the ISM Manufacturing PMI fell 0.5 point in July, its eighth monthly decline in the past year. Overall, the Index indicates slow but positive growth in computers investment over the next two quarters.



Software:

Investment in Software rose at a 7.5% annualized rate in Q2 2019 and is up 10% year-over-year. The Software Momentum Index rose from 97.4 (revised) in July to 98.2 in August, its highest level since October. In July, IBM's Market Cap increased 7.5%, and the S&P 500 Software & Services Index rose 2.2%. Overall, the Index points to continued solid growth in software investment over the next two quarters.

