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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

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<th>1) Agriculture Machinery</th>
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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.

<table>
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<th>Momentum Monitor Signals</th>
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<td>A rising index signals stronger growth in investment</td>
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<td>~6 months</td>
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<td>A falling index signals weaker growth in investment</td>
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<td>Investment Growth Rate</td>
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<td>A relatively flat index signals no significant change in investment growth</td>
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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) 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 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 surged 146% (annualized) in Q3 2020 and is up 4.2% from one year ago. The Agriculture Momentum Index jumped from 92.6 (revised) in October to 97.9 in November, the highest level in three years. Exports of Poultry Broilers improved 4.5% in August, and the M1 Money Supply rose 2.1% in September. Overall, the Index’s elevated position and recent movement suggest that agricultural machinery investment growth should accelerate over the next six months.

Construction Machinery:
Investment in Construction Machinery rose 43% (annualized) in Q3 2020 but is down 19% year-over-year. The Construction Momentum Index improved from 83.5 in October to 86.0 in November, though remains historically weak. In September, Housing Permits fell 15%, and the Commercial Property Price Index was down 14 points from February levels. Overall, although the Index has improved from recent lows, its historically weak level suggests soft growth in construction machinery investment over the next 3-6 months.

Materials Handling Equipment:
Investment in Materials Handling Equipment expanded at a 39% annualized rate in Q3 2020 but was down 1.1% year-over-year. The Materials Handling Momentum Index increased from 72.3 (revised) in October to 75.0 in November. Inventories of Materials Handling Equipment eased 1.0% in August, while Export Prices of Materials Handling Equipment decreased 1.4% in September. Overall, the Index points to a potential improvement in materials handling equipment investment growth over the next six months.

Other Industrial Equipment:
Investment in All Other Industrial Equipment grew 8.0% (annualized) in Q3 2020 but was 8.7% below year-ago levels. The Other Industrial Equipment Momentum Index rebounded sharply from 90.6 (revised) in October to 99.2 in November. Nonfarm Payrolls improved 0.5% in September, while Terex Market Cap surged 27% in October. Overall, the Index points to a bounce-back in other industrial equipment investment growth over the next 1-2 quarters.
Medical Equipment:
Investment in Medical Equipment increased 40% (annualized) in Q3 2020 and was up 13% year-over-year. The Medical Equipment Momentum Index rose from 91.6 in October to 95.4 in November. New Orders of Nondefense Capital Goods rose 7.7% in August, while Consumer Prices for Physician's Services eased 0.3% in September. Overall, the Index points to solid growth in medical equipment investment over the next six months.

Mining & Oilfield Machinery:
Investment in Mining & Oilfield Machinery pulled back at a 42% annualized rate in Q3 2020 and fell 19% compared to a year ago. The Mining & Oilfield Machinery Momentum Index rose from 71.9 (revised) in October to 78.9 in November, though remains below pre-pandemic lows. In October, WTI Cushing Spot Price declined 11%, and Brent Spot Price dropped 9.9%. Overall, the Index suggests the potential for improved mining & oilfield investment growth over the next six months, but Y/Y growth is likely to remain negative.

Aircraft:
Investment in Aircraft surged 409% (annualized) in Q3 2020 but was 43% below year-ago levels. The Aircraft Momentum Index increased from 96.5 (revised) in October to 98.2 in November. However, in August, Spacecraft Exports to Mexico pulled back 43%, and Imports of Civilian Aircraft dropped 35%. Despite recent improvements, the Index suggests continued negative year-over-year growth in aircraft investment over the next six months.

Ships & Boats:
Investment in Ships & Boats jumped at an annualized rate of 177% in Q3 2020 but is down 6.0% year-over-year. The Ships & Boats Momentum Index inched up from 99.1 (revised) in October to 100.0 in November. Exports of Ships, Boats, and Floating Structures to China nosedived 71% in August, but the University of Michigan Consumer Sentiment Index improved 1.4 points to 81.8. Overall, the Index points to continued weakness in ships & boats investment growth over the next two quarters, though recent movement is encouraging and a return to positive Y/Y growth is not out of the question.
Railroad Equipment:
Investment in Railroad Equipment improved 5.0% (annualized) in Q3 2020 and is up 4.1% year-over-year. The Railroad Equipment Momentum Index improved from 78.2 (revised) in October to 82.1 in November. In September, Crude Oil and Petroleum Products Imports improved 3.6%, but Industrial Production of Energy eased 1.0%. Overall, the Index points to improved railroad equipment investment growth over the next 3-6 months.

Trucks:
Investment in Trucks surged 317% (annualized) in Q3 2020 but was down 18% from year-ago levels. The Trucks Momentum Index surged from 96.6 in October to 106.8 in November. Earnings for Freight Trucking improved 1.4% in August, however, Industrial Production of Light Trucks dropped 9.7% in September. Overall, the Index points to a continued bounce-back in trucks investment growth over the next two quarters, though Y/Y growth may remain negative until 2021.

Computers:
Investment in Computers jumped 41% (annualized) in Q3 2020 and is up 25% year-over-year. The Computers Momentum Index jumped from 108.4 in October to 115.8 in November. Sales of Computers & Computer Peripheral Equipment & Software grew 7.1% in August, while the ISM Manufacturing PMI rose 3.9 points to 59.3. Overall, the Index suggests that computers investment growth should remain historically strong over the next six months.

Software:
Investment in Software improved 2.6% (annualized) in Q3 2020 and is up 3.4% from a year ago. The Software Momentum Index rose from 91.2 (revised) in October 94.5 in November. In September, NFIB Interest Rate Paid on Short-Term Loans increased 0.3 point to 5.1%, and the NFIB Small Business Survey Capital Expenditure Sub-Index rose 2 points to 28, in line with pre-pandemic levels. The Index continues to suggest that software investment growth will strengthen over the next two quarters.