

November 2017

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 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 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.

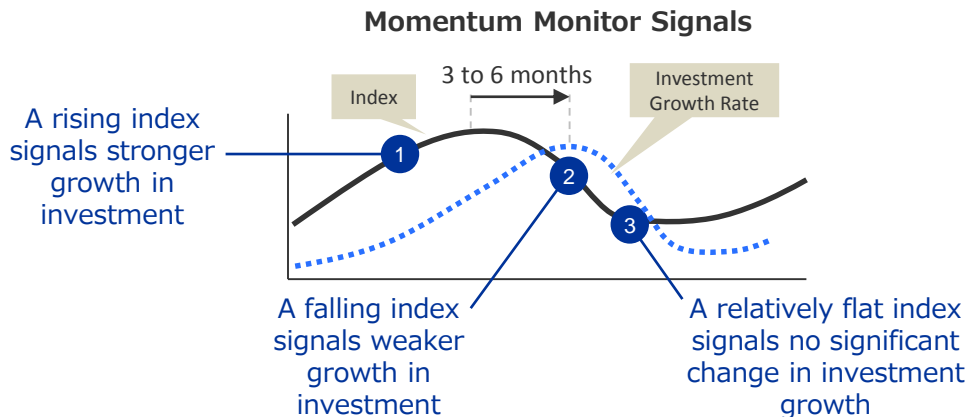
U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- | | |
|-----------------------------------|-----------------------|
| 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 |

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. 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:

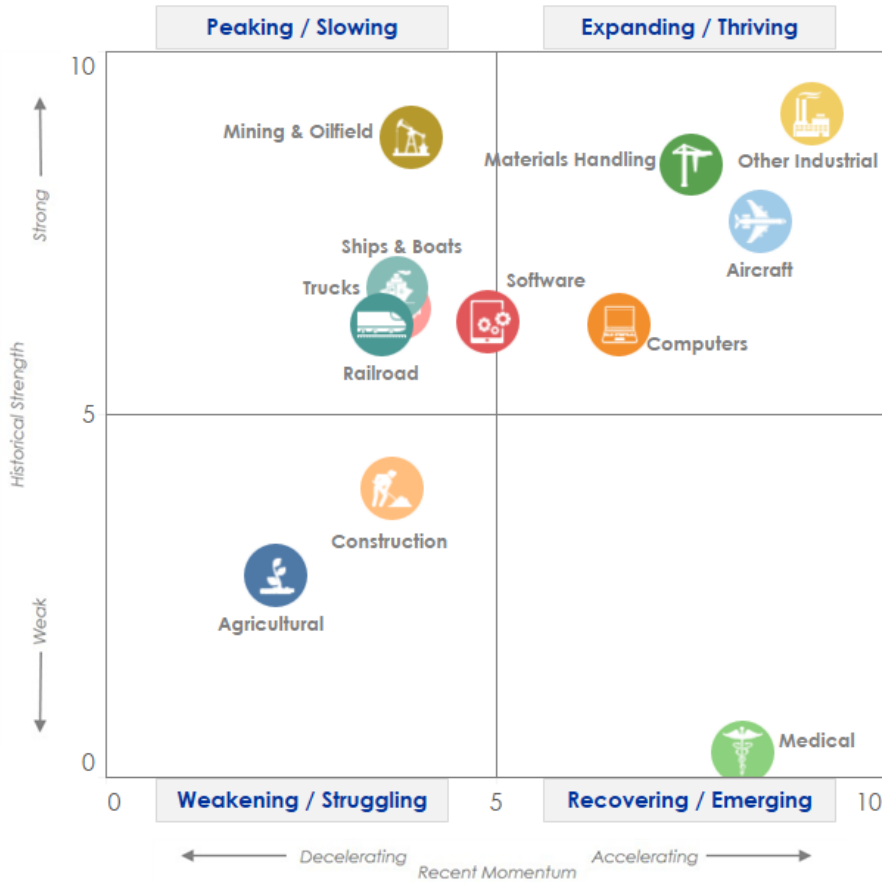
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy 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 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, the report ends with an interpretation of where investment growth is heading over the next 3 to 6 months based the index's recent movement and historical strength.

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Momentum Monitor Sector Matrix



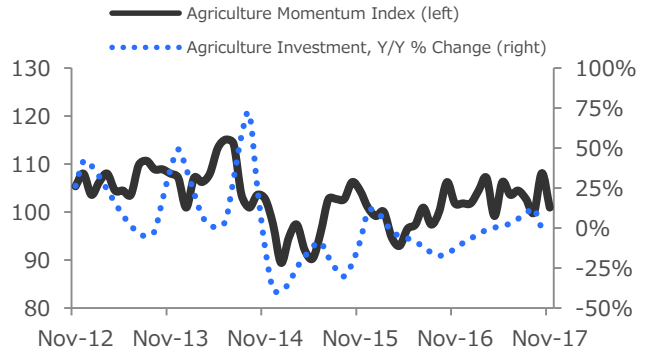
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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 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.

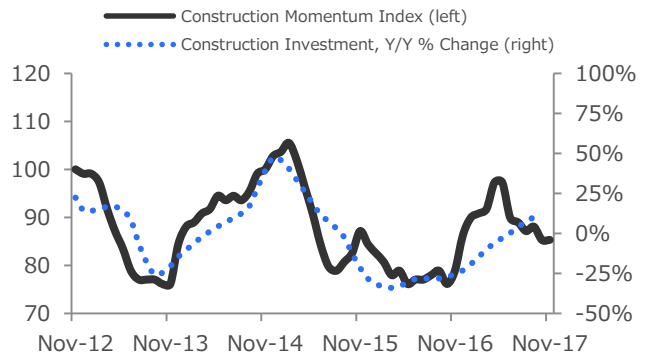
Agriculture Machinery:

Investment in Agricultural Machinery expanded at an average rate of 26% in Q3 2017 and is up 12% from one year ago. The Agriculture Momentum Index fell sharply from 108.1 (revised) in October to 100.9 in November. Chicken Production declined 14%, and the Real Exchange Rate for Agricultural Imports fell for the fifth consecutive month. Overall, the Index's current position and recent movement point to little change in agricultural machinery investment over the next three to six months.



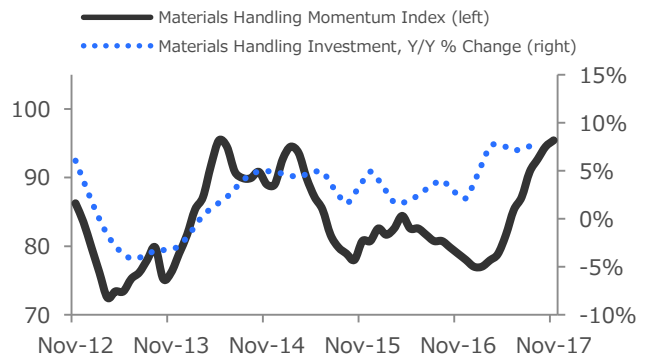
Construction Machinery:

Investment in Construction Machinery expanded at a modest 1.2% annual rate in Q3 2017 and is up 10% year-over-year. The Construction Momentum Index held steady at 85.3 from October (revised) to November. West Housing Starts increased 16% and Median Months for Sale rose by a tenth to 3.2 months. Overall, the Index's movement in recent months points to a moderation in construction machinery investment over the next three to six months.



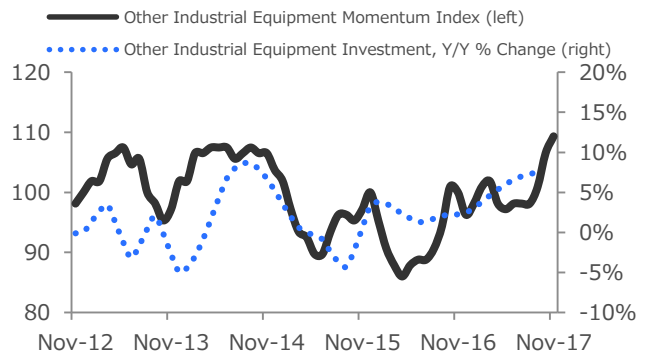
Materials Handling Equipment:

Investment in Materials Handling Equipment increased at a 5.9% annual rate in Q3 2017, and is up 7.8% year-over-year. The Materials Handling Momentum Index ticked up from 94.5 (revised) in October to 95.4 in November, its highest level since May 2014. ISM Manufacturing: Supplier Deliveries fell 4.7% in October after increasing 13% in September, while the ISM Chicago Business Barometer rose 1.5%. Overall, the Index points to a continued strengthening in materials handling equipment investment in the next two quarters.



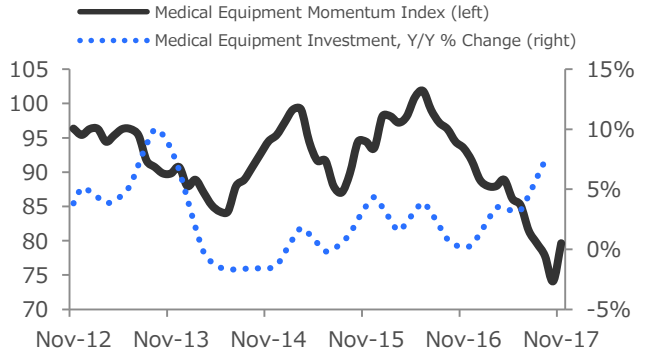
Other Industrial Equipment:

Investment in All Other Industrial Equipment rose by a 5.3% annual rate in Q3 2017 and is up 7.5% compared to a year ago. The Other Industrial Equipment Momentum Index rose from 106.5 (revised) in October to 109.3 in November, its strongest reading in nearly six years. Real Manufacturing and Trade Sales and Average Weekly Earnings: Production & Nonsupervisory both rose 0.3%. Overall, the Index signals a strengthening in other industrial equipment investment growth over the next three to six months.



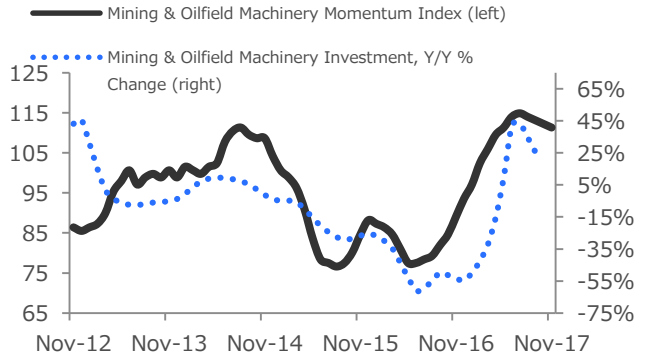
Medical Equipment:

Investment in Medical Equipment expanded at a 15% annual rate in Q3 2017 and is up 7.4% year-over-year. The Medical Equipment Momentum Index rose from 74.1 (revised) in October to 79.6 in November, improving for only the second time in 17 months. The Monthly Household Estimate rose 0.4% in September, while CPI Medical: Physicians Services was flat on the year. Overall, the Index's current position and recent movement points to continued weakness in medical equipment investment growth over the next two quarters.



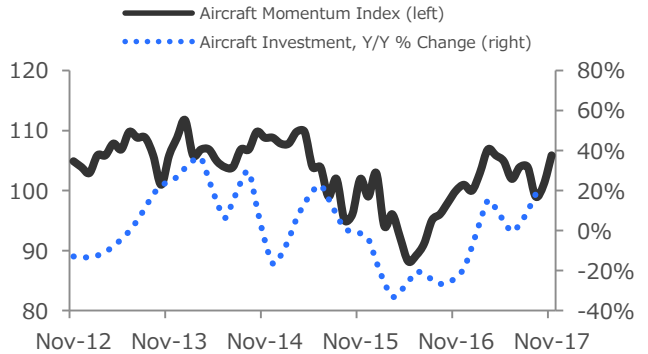
Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery increased at a 13% annual rate in Q3 2017 and is up 25% year-over-year. The Mining & Oilfield Machinery Momentum Index dipped from 112.3 (revised) in October to 111.4 in November (its fourth consecutive monthly decline). Oil & Petroleum Product Imports fell 13% in September and the WTI Spot Price rose to \$54.36 in October, a two-year high. However, Mining & Logging Employment: Production & Nonsupervisory fell 1.0%. Overall, the Index continues to signal strength in mining & oilfield machinery investment over the next three to six months, although growth rates may have peaked.



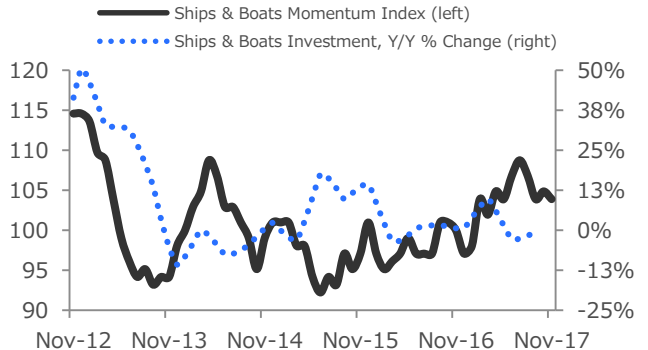
Aircraft:

Investment in Aircraft surged at a 54% annual rate in Q3 2017 and is up 18% on a year-over-year basis. The Aircraft Momentum Index increased from 101.0 (revised) in October to 105.9 in November. The Transportation Services Index for Freight rose 1.9 points, but Inventories of Defense Capital Goods dipped 1.5%. Overall, the Index indicates little change in aircraft investment growth over the next two quarters.



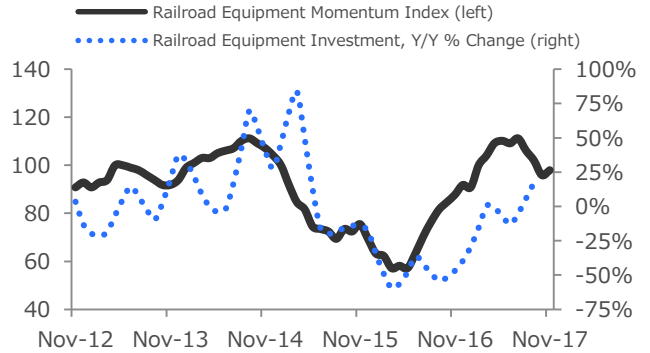
Ships & Boats:

Investment in Ships & Boats fell at an annual rate of 6.7% in Q3 2017 and is down 0.8% year-over-year. The Ships & Boats Momentum Index slipped from 104.9 (revised) in October to 103.9 in November. Shipments of Ships & Boats dipped 0.6% in September, while Inventories of Ships & Boats rose 3.9%. Overall, the Index signals little change in ships & boats investment growth over the next three to six months.



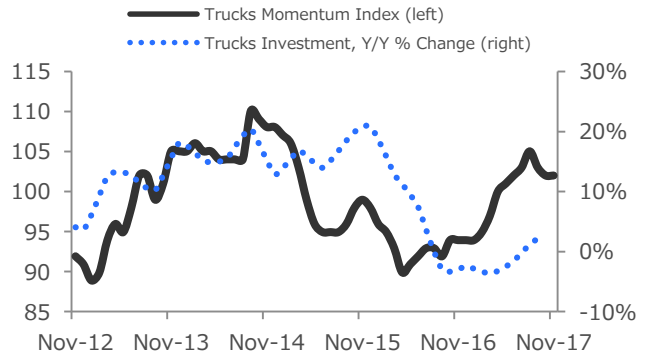
Railroad Equipment:

Investment in Railroad Equipment rebounded at a 145% annual rate in Q3 2017 and is up 18% year-over-year. The Railroad Equipment Momentum Index rose from 95.9 (revised) in October to 98.0 in November. Mining Exports surged 30.3% in September, their largest gain since 2006. Meanwhile, Crude Oil Exports rebounded 222%, their largest-ever gain after a historic drop last month in the aftermath of Hurricane Harvey. Overall, the Index signals that railroad equipment investment should remain solid over the next two quarters, though growth rates could moderate.



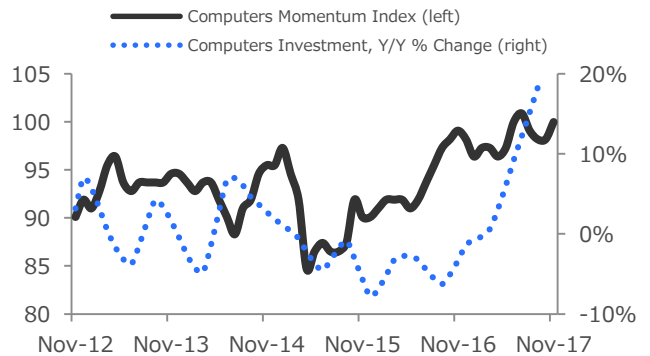
Trucks:

Investment in Trucks was essentially unchanged in Q3 2017 and is up 2.2% from year-ago levels. The Trucks Momentum Index held steady at 102.0 from October (revised) to November. Although the ISM Manufacturing Index fell to 58.7, October marks its thirteenth consecutive month above the expansionary threshold. Overall, the Index's current position and recent movement signals that trucks investment growth should improve over the next three to six months.



Computers:

Investment in Computers expanded at an annual rate of 36% in Q3 2017 and is up 18% year-over-year. The Computers Momentum Index increased from 98.2 (revised) in October to 100.0 in November. Shipments of Consumer Goods rose 0.9%, while Microsoft's Market Cap surged 12% to 641.7 billion in October. Overall, the Index points to continued strength in computers investment growth over the next two quarters.



Software:

Investment in Software rose by a 6.7% annual rate in Q3 2017, and is up 5.1% year-over-year. The Software Momentum Index slipped from 94.2 (revised) in October to 93.3 in November. Real Personal Consumption Expenditures rose 0.6%, but the NFIB Small Business Optimism Index dropped 2.3 points to 103.0. Overall, the Index's recent movement suggests little change in software investment growth over the next three to six months.

