

March 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 |

NEW FEATURE IN THE MOMENTUM MONITOR REPORT

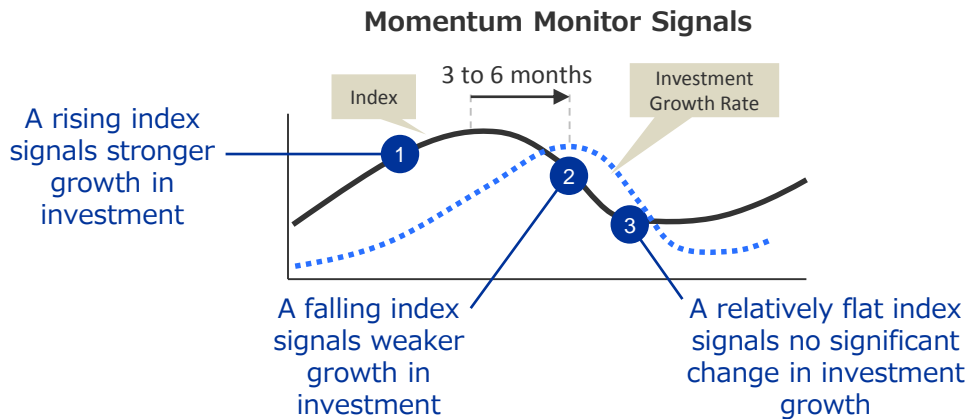
Last month, Keybridge and the Foundation introduced a new feature to the U.S. Equipment & Software Investment Momentum Monitor. The “Momentum Monitor Sector Matrix” is a customized data visualization that provides greater detail on our short-term investment expectations for each equipment vertical, both historically and relative to other verticals. Specifically, the Sector Matrix depicts each vertical on a 2 x 2 matrix based on both Recent Momentum (x-axis) and Historical Strength (y-axis). This capability makes it a better tool than the horizontal bar chart (sometimes called the “heat map”) that has traditionally accompanied these reports, as the heat map only reflected the current reading relative to the long-term average. Additional detail on how to read and interpret the new Sector Matrix can be found on page 4 of this report.

The Sector Matrix and heat map will be published concurrently in the March Momentum Monitor report, as well as the first quarterly update to the 2017 Equipment Leasing & Finance U.S. Economic Outlook (scheduled to be published in April). Beginning in May, the heat map will no longer appear in either publication.

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:

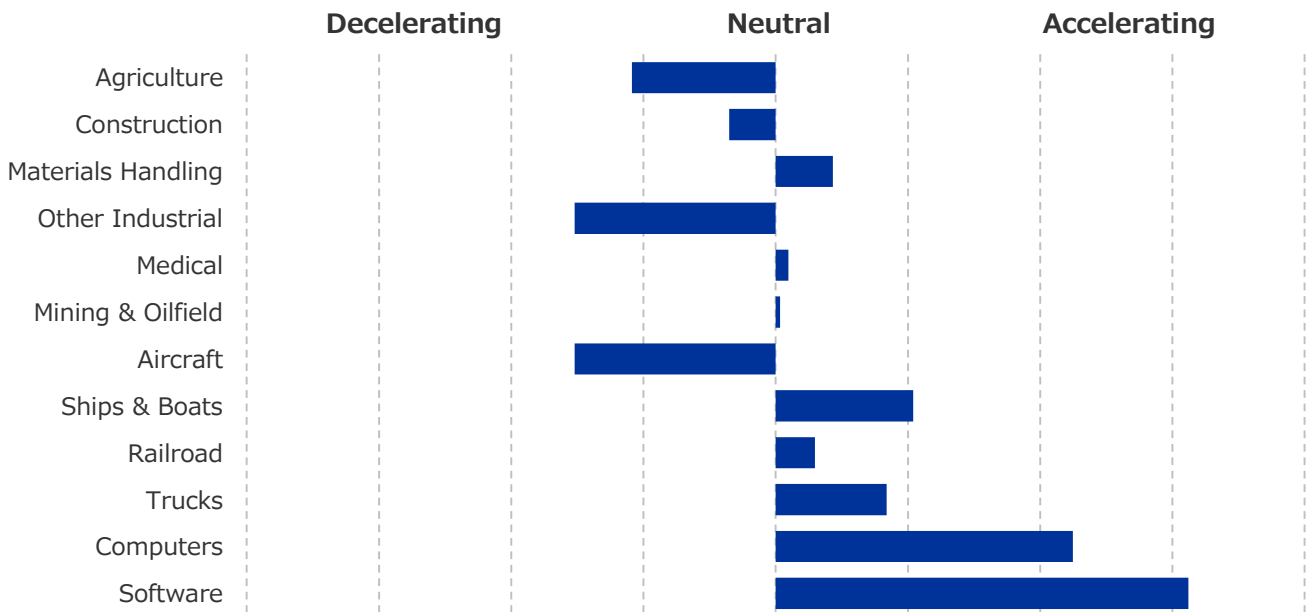
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy 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.

U.S. Equipment & Software Investment Momentum Monitor

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Equipment Vertical Momentum Relative to 10-Year Historical Average

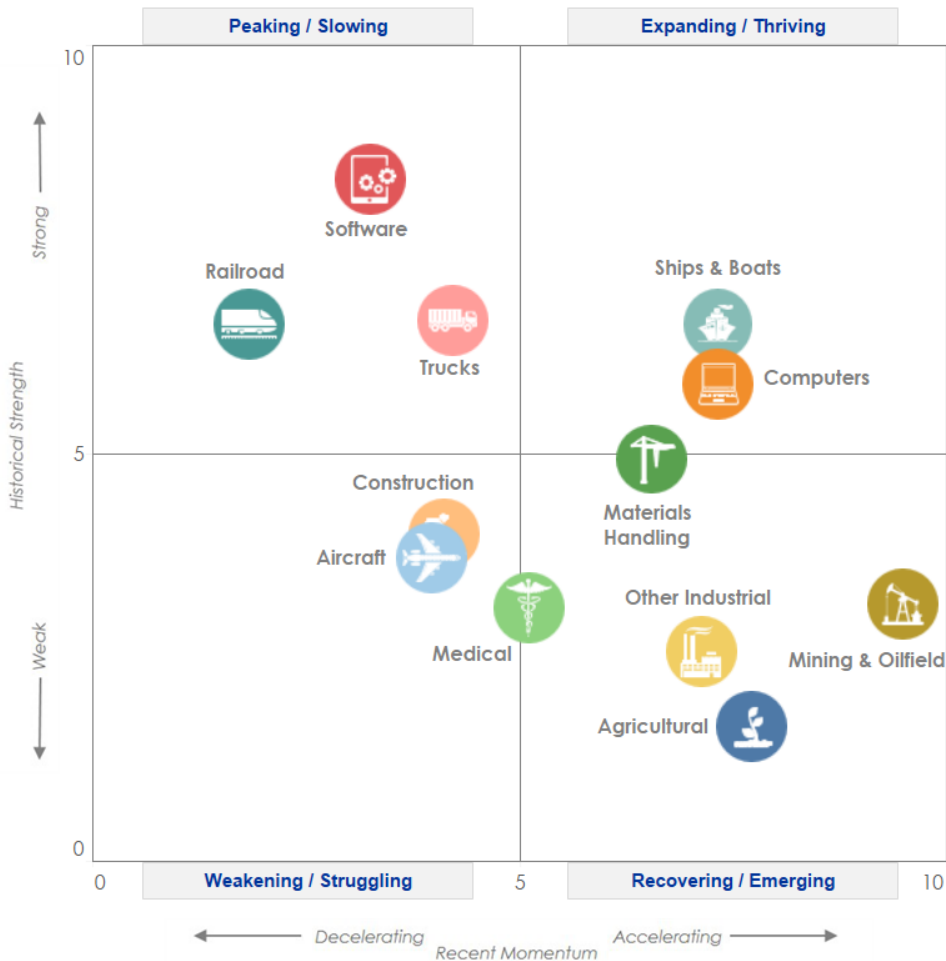


The chart above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices relative to the index values for each quarter over the last 10 years. Verticals for which momentum is below the 10-year median are “decelerating,” verticals for which momentum is near the 10-year median are “neutral,” and verticals for which momentum is near the 10-year maximum are “accelerating.” Note that the current momentum trend for each vertical may differ from the current investment volume. For example, a vertical for which the level of investment activity is low — but which is exhibiting signs of a comeback in the near future based on the momentum suggested by its leading indicators — will be labeled “accelerating” (and vice-versa).

U.S. Equipment & Software Investment Momentum Monitor

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Momentum Monitor Sector Matrix



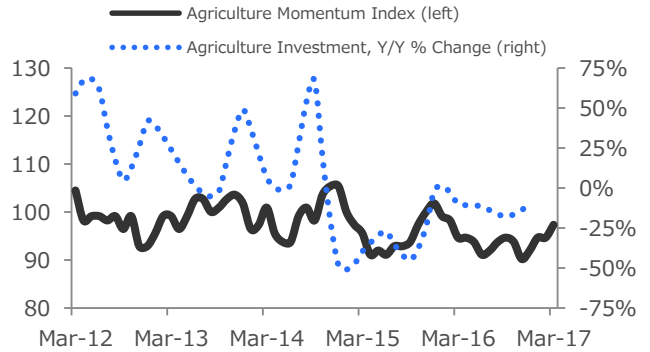
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- "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 last 3 months 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 leasing and finance opportunities.

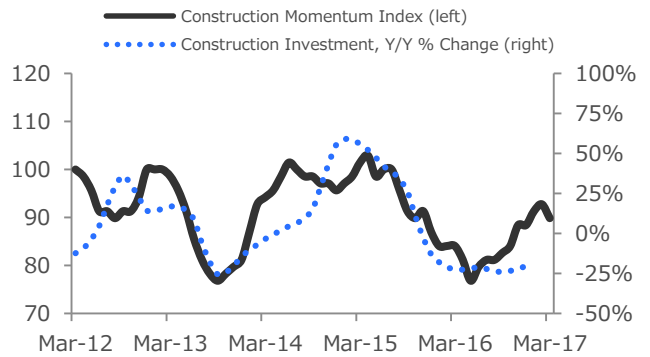
Agriculture Machinery:

Investment in Agricultural Machinery contracted at an annual rate of 1.1% in Q4 2016 and is down 10.1% from one year ago. The Agriculture Momentum Index rose from 94.6 (revised) in February to 97.3 in March. In December, Durable Goods Inventories rose 2.2% (the largest jump since January 2013), while Farm Machinery Inventories increased 3.2%. Overall, the Index suggests that the ongoing weakness in agricultural machinery investment should continue over the next three to six months.



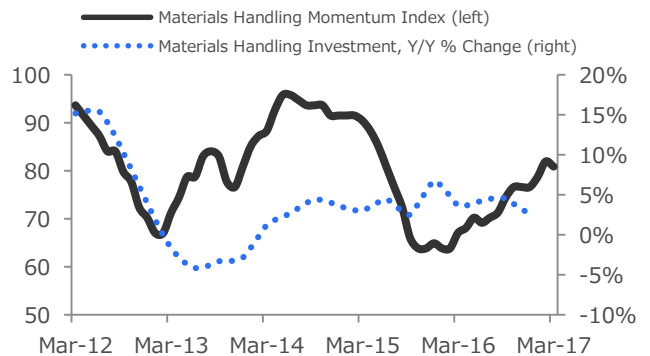
Construction Machinery:

Investment in Construction Machinery fell at a 5.6% annual rate in Q4 2016 (the seventh straight decline), and is down 20.4% year-over-year. The Construction Momentum Index declined from 92.8 (revised) in February to 89.9 in March. Housing Starts in the West plummeted 41.3% in January, and Construction Machinery Shipments fell 1.4% in December to their lowest level since April 2010. Overall, the Index continues to suggest stronger construction machinery investment growth over the next two quarters.



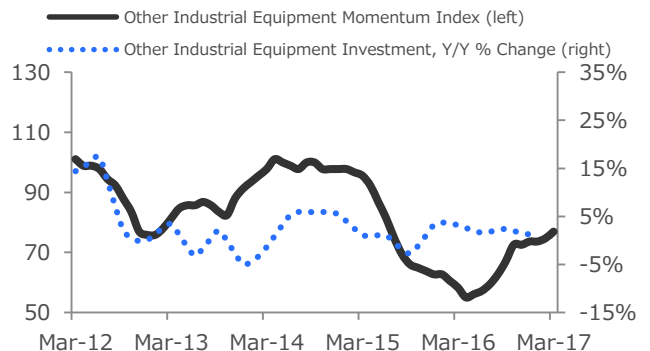
Materials Handling Equipment:

Investment in Materials Handling Equipment rose by a 4.0% annual rate in Q4 2016, and is up 2.7% year-over-year. The Materials Handling Momentum Index decreased from 81.9 (revised) in February to 80.9 in March. In December, Real Manufacturing & Trade Sales rose 1.5%, the biggest one-month surge since November 2012. Overall, the Index points to improving investment growth in materials handling equipment over the next three to six months.



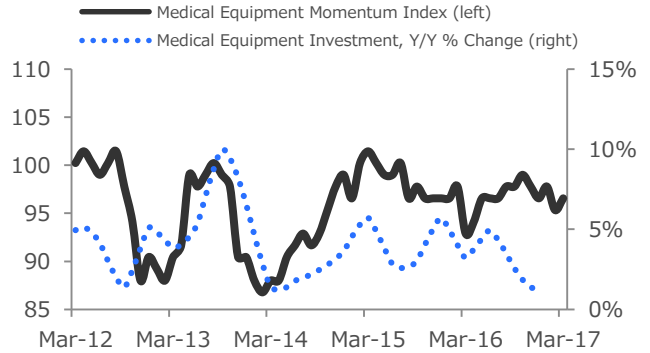
Other Industrial Equipment:

Investment in All Other Industrial Equipment increased by a 4.9% annual rate in Q4 2016 and is up 1.2% from a year ago. The Other Industrial Equipment Momentum Index rose from 74.7 (revised) in February to 76.9 in March, its highest level in almost two years. In February the ISM Manufacturing Index rose 1.7 points to 57.7, its strongest reading since August 2014, while M1 increased 2.0% in January. Overall, the Index's recent movement suggests little change in other industrial equipment investment growth over the next three to six months.



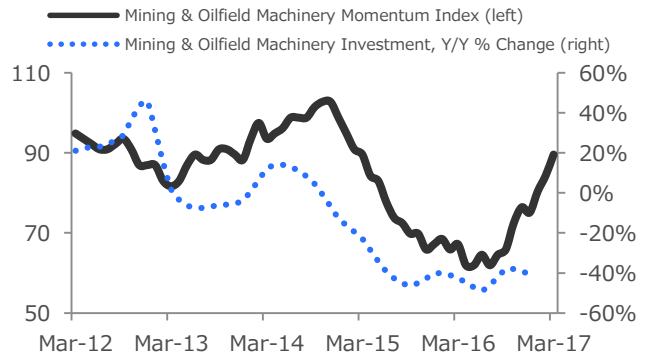
Medical Equipment:

Investment in Medical Equipment expanded at a 6.8% annual rate in Q4 2016 and is up 1.3% year-over-year. The Medical Equipment Momentum Index increased from 95.3 (revised) in February to 96.6 in March. In January, Education & Health Services added 24,000 jobs, continuing a steady rise in employment. Overall, the Index points to continued slow growth in medical equipment investment over the next three to six months.



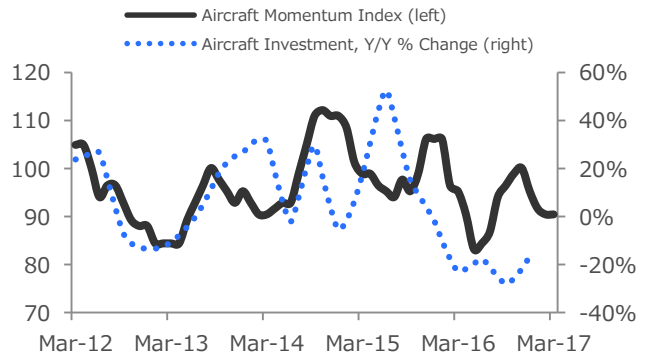
Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery declined at a 40.5% annual rate in Q4 2016 and is down 40.8% year-over-year. The Mining & Oilfield Machinery Momentum Index jumped from 84.3 (revised) in February to 89.6 in March, its strongest reading since March 2015. Oil & Gas Machinery Inventories jumped 2.6% in December, the largest one-month change since September 2014, while the Oil Rig Count rose 58 to 583 in January. Overall, the Index points to turnaround in mining & oilfield investment growth over the next two quarters.



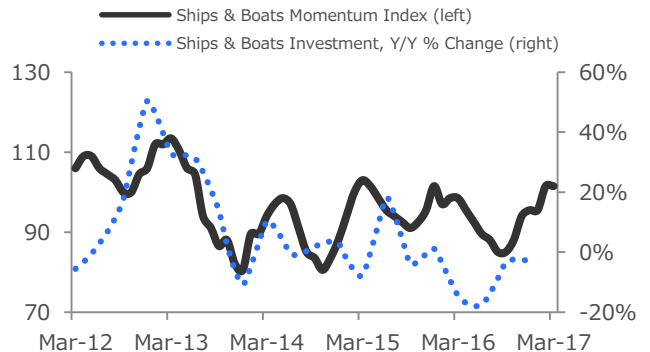
Aircraft:

Investment in Aircraft fell at a 13.4% annual rate in Q4 2016 and remains down 16.5% on a year-over-year basis. The Aircraft Momentum Index held steady at 90.5 from February (revised) to March. The ISM Non-Manufacturing New Orders Index climbed 2.6 points to 61.2 in February (its strongest reading in over a year), but both Capacity Utilization and Industrial Production ticked down in January. Overall, the Index's current reading and recent movement point to continued weakness in aircraft investment growth over the next three to six months.



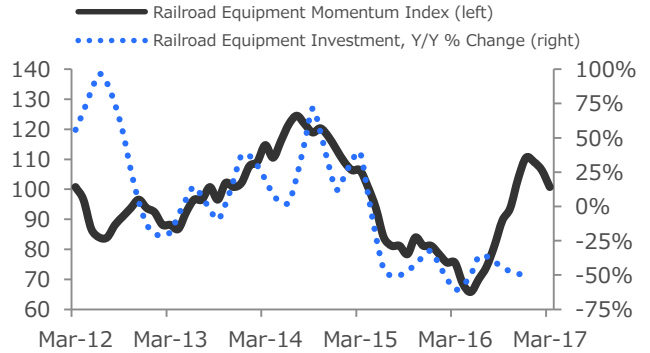
Ships & Boats:

Investment in Ships & Boats rose at an annual rate of 12.1% in Q4 2016, but is down 2.8% year-over-year. The Ships & Boats Momentum Index held steady at 101.5 from February (revised) to March. Mobile Home Shipments surged 18.6% but Raw Steel Production plummeted 38.4%, the greatest jump and drop in the last 17 years. Overall, the Index points to improvement in ships & boats investment growth over the next three to six months.



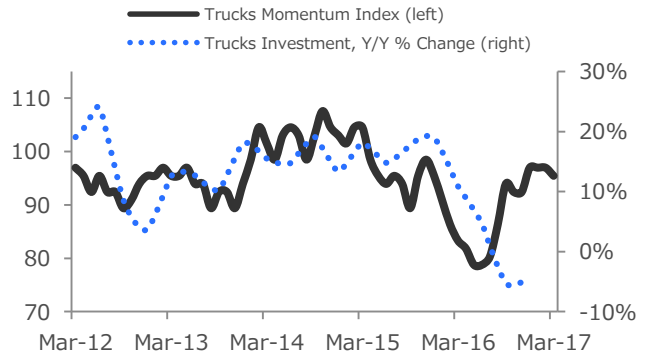
Railroad Equipment:

Investment in Railroad Equipment decreased at a 36.4% annual rate in Q4 2016 and is down 49.9% year-over-year. The Railroad Equipment Momentum Index dropped from 106.3 (revised) in February to 100.7 in March. Although Machine Tool Orders rose 23.4%, Average Weekly Hours ticked down and Petroleum Carloads fell 42.2%. Despite the recent decline, the Index continues to point to a strong rebound in railroad equipment investment growth over the next two quarters.



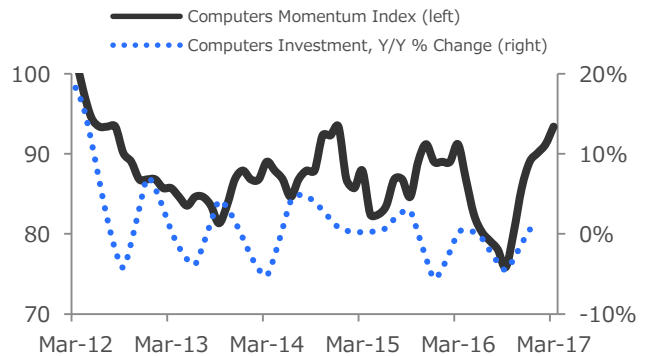
Trucks:

Investment in Trucks expanded at a 12.0% annual rate in Q4 2016 but is down 4.1% from year-ago levels. The Trucks Momentum Index decreased from 97.0 (revised) in February to 95.5 in March. In February the ISM Manufacturing Index rose 1.7 points to 57.7, its strongest reading since August 2014. Overall, the Index continues to signal a pickup in trucking investment growth over the next two quarters.



Computers:

Investment in Computers fell at an annual rate of 9.2% in Q4 2016 but is up 0.5% year-over-year. The Computers Momentum Index rose from 91.2 in February to 93.4 in March. Shipments of Consumer Goods jumped 4.0% in December, the biggest increase since June 2009; however, Defense Communication Equipment Shipments declined 9.2%. Overall, the Index continues to point to a strong rebound in computers investment growth over the next three to six months.



Software:

Investment in Software rose by a 3.1% annual rate in Q4 2016, and is up 5.4% year-over-year. The Software Momentum Index declined from 106.4 (revised) in February to 105.0 in March. In February the ISM Non-Manufacturing Employment Index ticked up 0.5 points, but was offset by a 1.7% decline in the Producer Price Index for Software Publishers in January. Overall, the Index's elevated position indicates that software investment growth should remain healthy over the first two quarters of 2017, but growth may moderate in the second half of the year.

