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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 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
- 2) Construction Machinery
- 3) Materials Handling Equipment
- 4) All Other industrial Equipment
- 5) Medical Equipment
- 6) Mining & Oilfield Machinery

- 7) Aircraft
- 8) Ships and Boats
- 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. 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.



#### 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:

- 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.
  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.
- The report then describes the specific indicators driving the latest index value. This allows readers to understand the key drivers of the outlook.
- 4) Finally, the report ends with an interpretation of where investment growth is heading over the next 3 to 6 months.





## 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).



#### Agriculture Machinery:

Investment in Agricultural Machinery declined at an annual rate of 20.1% in Q1 2016, and is now down 7.9% from one year ago. The Agriculture Momentum Index dipped from 94.5 (revised) in April to 93.6 in May, its lowest level since October 2015. While Agricultural Equipment Sales and Cattle Exports both surged 50%, Shipments of Farm Machinery and Food & Feed Export Prices declined for the second straight month. Overall, the Index indicates that investment growth will likely remain weak relative to historical norms in the next three to six months.

#### **Construction Machinery:**

Investment in Construction Machinery contracted at a 18.3% annual rate in Q1 2016, and is down 20.6% yearover-year, its sharpest drop since Q3 2013. The Construction Momentum Index fell from 81.2 (revised) in April to 78.3 in May, its lowest reading since late 2013. Multifamily Housing Permits decreased 20% in March, and Consumer Sentiment declined to a seven-month low. Overall, the Index continues to suggest weak (and potentially negative) investment growth over the next three to six months.

#### Materials Handling Equipment:

Investment in Materials Handling Equipment fell at a 6.8% annual rate in Q1 2016, yet remains up 4.2% yearover-year. The Materials Handling Momentum Index rose from 66.0 (revised) in April to 68.1 in May. The ISM Manufacturing Supplier Deliveries Index slipped to its lowest level since 2012, yet Economic Policy Uncertainty eased for the second consecutive month. Overall, the Index's recent movement and current level suggests that investment growth may begin to rebound but will likely remain relatively weak over the next three to six months.

#### **Other Industrial Equipment:**

Investment in All Other Industrial Equipment slipped at a 0.4% annual rate in Q1 2016, but remains up 7.6% yearover-year. The Other Industrial Equipment Momentum Index eased from 57.1 (revised) in April to 56.0 in May its lowest level in more than six years. Shipments of Industrial Machinery fell 8%, and Industrial Production for Machinery dropped to a five-year low in March. Overall, the Index's recent movement and low position continue to suggest that investment growth is likely to weaken over the next three to six months.











#### **Medical Equipment:**

Investment in Medical Equipment decreased at a 2.7% annual rate in Q1 2016 and is up 3.9% year-over-year (its slowest pace in two years). The Medical Equipment Momentum Index was unchanged at 94.9 (revised) from April to May. The S&P Global Healthcare Index rose nearly 3%; however, New Orders of Non-Defense Capital Goods dropped 8%. Overall, the Index points to somewhat weaker medical equipment investment over the next three to six months.

#### Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery dropped at a 30.5% annual rate in Q1 2016 (the seventh straight decline) and is now down 39.8% year-over-year. The Mining & Oilfield Machinery Momentum Index fell from 65.1 (revised) in April to 62.4 in May, an all-time low. Inventories, New Orders, and Shipments of Oil & Gas Field Machinery all fell from the prior month. In particular, Shipments neared a ten-year low. Overall, the Index points to continued weak investment in mining & oilfield machinery over the next three to six months.

#### Aircraft:

Investment in Aircraft contracted at a 42.4% annual rate in Q1 2016 and is down 20.6% on a year-over-year basis, the largest annual decline since 2009. The Aircraft Momentum Index fell sharply from 90.4 (revised) in April to 84.3 in May — a nearly three-year low. Industrial Production, Capacity Utilization, and the Freight Transportation Services Index all declined from the previous month. Overall, the Index continues to suggest weak aircraft investment growth over the next three to six months.

#### Ships & Boats:

Investment in Ships & Boats declined at an annual rate of 4.6% in Q1 2016, yet remains up 4.4% year-over-year. The Ships & Boats Momentum Index decreased from 92.4 (revised) in April to 86.4 in May, a new post-recession low. The ISM Manufacturing Employment Index remained in contractionary territory, Shipments of Ships & Boats fell 5%, and Industrial Production for Consumer Energy Products slipped 1%. Overall, the Index suggests that ships & boats investment growth is likely to weaken (and potentially turn negative) over the next three to six months.











#### **Railroad Equipment:**

Investment in Railroad Equipment plummeted at an 68.9% annual rate in Q1 2016, and is now down 55.0% year-over-year, an all-time low. The Railroad Equipment Momentum Index fell from 68.7 (revised) in April to 64.3 in May — its lowest level in nearly seven years. Petroleum Carloads dropped 22% in March, while Coal Production decreased for the seventh straight month. Overall, the Index's extremely low position suggests continued negative growth in railroad equipment investment over the next three to six months.

#### Trucks:

Investment in Trucks dipped at a 2.3% annual rate in Q1 2016 but remains up 5.1% year-over-year. The Trucks Momentum Index slid from 78.8 (revised) in April to 74.2, the sixth consecutive decline. A nearly 9% decline in Housing Starts and a 2% drop in Industrial Production for Energy Materials offset a 3% rise in New Orders of Motor Vehicles. Overall, the Index's recent movement suggests a continued slowdown in truck investment growth over the next three to six months.

#### **Computers:**

Investment in Computers rebounded at an annual rate of 12.1% in Q1 2016 and is up 4.5% year-over-year, its fastest pace since Q3 2013. The Computers Momentum Index fell from 85.6 (revised) in April to 82.4 in May. While Shipments of Defense Communications Equipment rebounded nearly 20%, Shipments of Electronic Computers decreased 13%. Overall, the Index points to a potential moderation in computer investment growth over the next six months.

#### Software:

Investment in Software grew at a 2.5% annual rate in Q1 2016, and is up 2.2% year-over-year. The Software Momentum Index held steady at 99.8 (revised) from April to May, maintaining a four-year high. The S&P 500 Internet Software & Services Index declined 3%, yet the ISM Non-Manufacturing Employment Index indicated stronger service-sector hiring. Overall, the Index continues to suggest solid growth in software investment over the next three to six months.







