

January 2023

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 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.

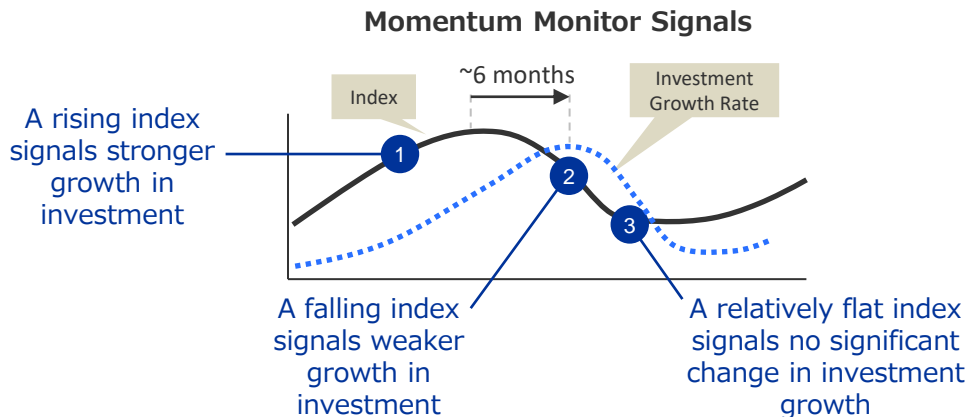
U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- | | |
|-----------------------------------|-----------------------|
| 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 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.



To help the reader interpret the latest Momentum Monitor signals, a summary report for each equipment vertical follows a specific outline:

Materials Handling Equipment:

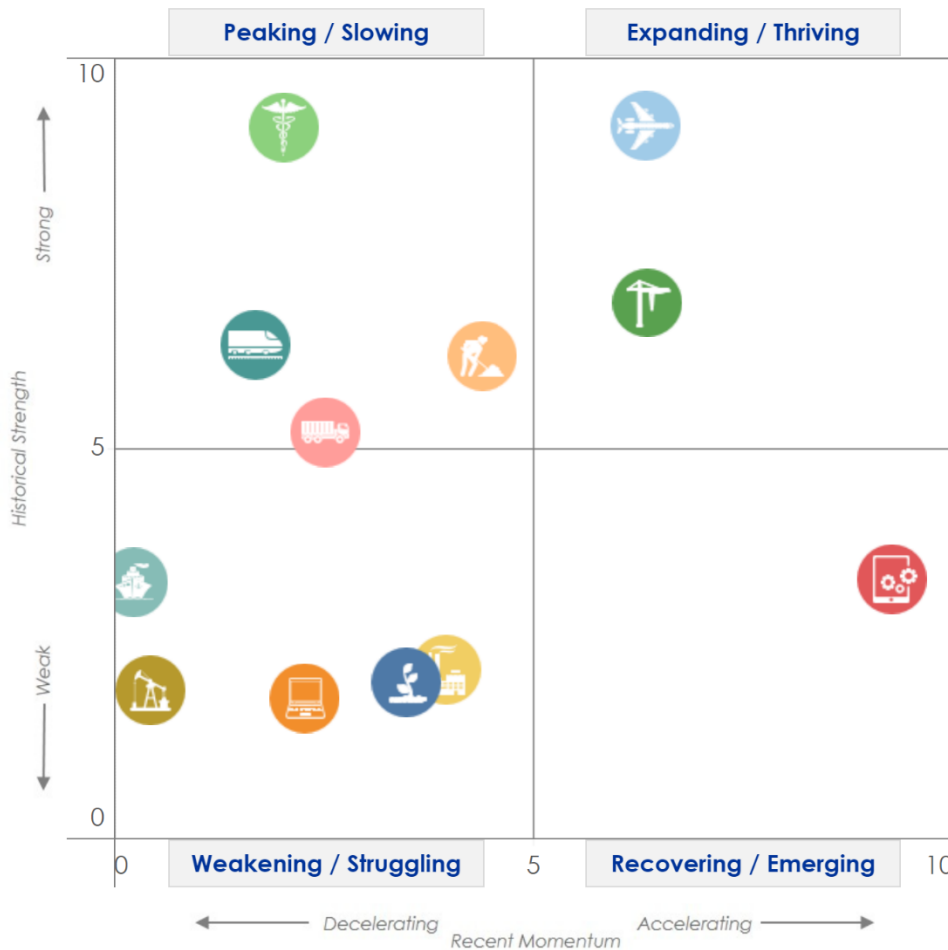
- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy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

U.S. Equipment & Software Investment Momentum Monitor

January 2023

Momentum Monitor Sector Matrix



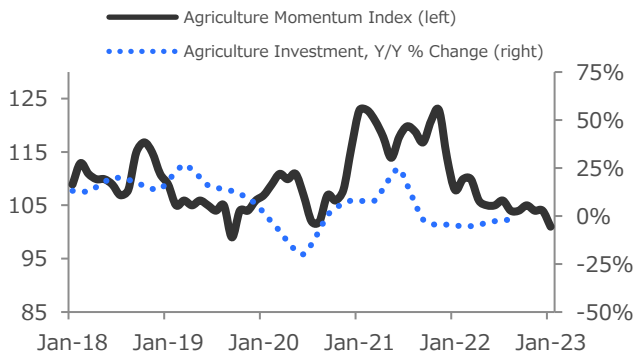
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"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 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.

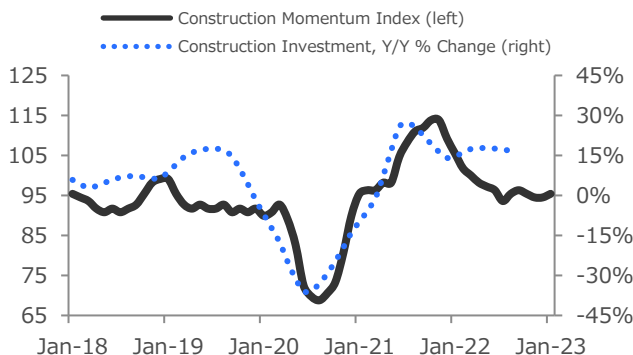
Agriculture Machinery:

Investment in Agricultural Machinery fell 11% (annualized) in Q3 2022 and was down 2.4% from one year ago. The Agriculture Momentum Index dropped from 104.0 in December (revised) to 101.0 in January. The Federal Funds Rate rose 50 basis points in December while Agricultural Machinery Industrial Production fell 3.9% in November. Overall, the Index's position and recent movement suggest that agriculture machinery investment growth will likely remain weak over the coming six months.



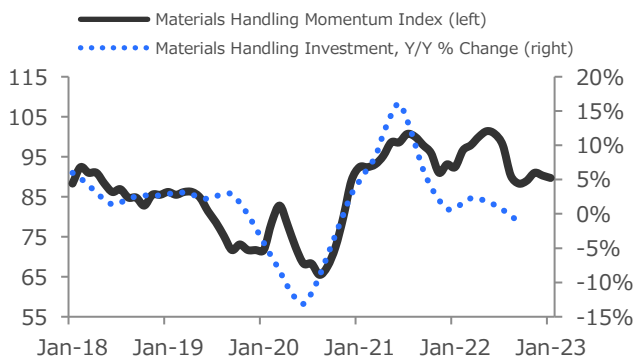
Construction Machinery:

Investment in Construction Machinery jumped 16% (annualized) in Q3 2022 and was 17% above its year-ago level. The Construction Momentum Index edged up from 94.5 in December (revised) to 95.4 in January. In November, Months Inventory of Existing Homes rose 27% and Privately Owned Homes Under Construction were flat. Overall, the Index's position suggests that construction machinery investment growth is likely to slow over the coming two quarters.



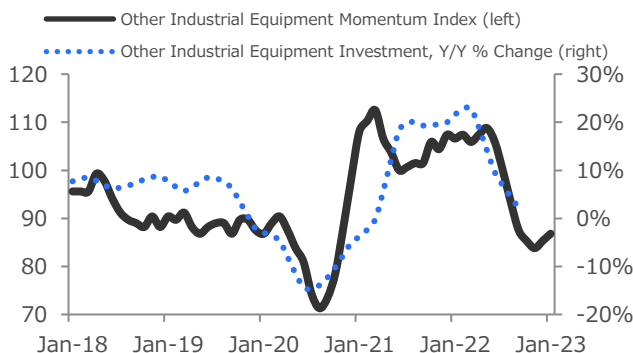
Materials Handling Equipment:

Investment in Materials Handling Equipment dropped 7.9% (annualized) in Q3 2022 and was 1.1% below year-ago levels. The Materials Handling Momentum Index dipped from 90.3 in December (revised) to 89.7 in January. In November, Durable Manufacturing Industrial Production dipped 0.6% and Inventories of Durable Goods fell 0.2%. Overall, the Index's recent movement and position suggest that materials handling equipment investment growth is unlikely to improve over the next two quarters.



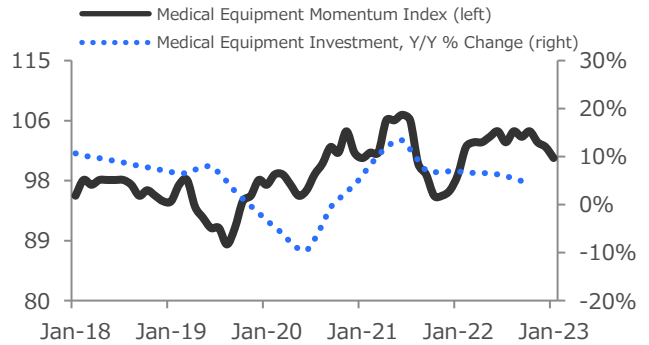
Other Industrial Equipment:

Investment in All Other Industrial Equipment fell at a 13% (annualized) rate in Q3 2022 but was up 2.1% Y/Y. The Other Industrial Equipment Momentum Index increased from 85.3 in December (revised) to 86.8 in January. The Nominal Emerging Marketing Economies Exchange Rate Index fell 1.1% in December while Machinery Industrial Production dipped 0.2% in November. Overall, the Index's position and recent movement suggest that other industrial equipment investment growth may continue to slow over the coming six months.



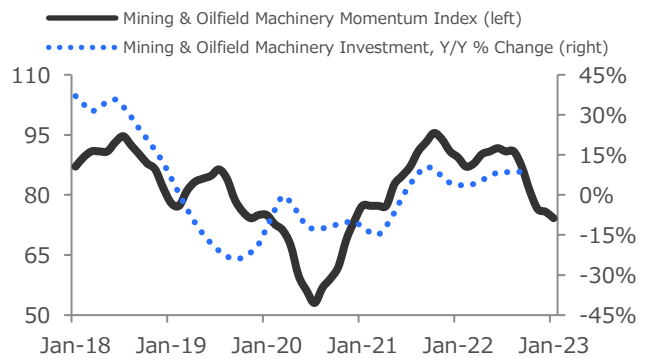
Medical Equipment:

Investment in Medical Equipment dropped 1.4% (annualized) in Q3 2022 but was up 4.9% year-over-year. The Medical Equipment Momentum Index eased from 102.4 in December to 100.8 in January. In November, Industrial Production for Miscellaneous Medical Equipment & Supplies fell 1.2% and Capacity Utilization for Electrical Equipment Manufacturing dropped 2.5%. Overall, the Index's position and recent movement suggest that medical equipment investment growth will likely sidewind over the coming six months.



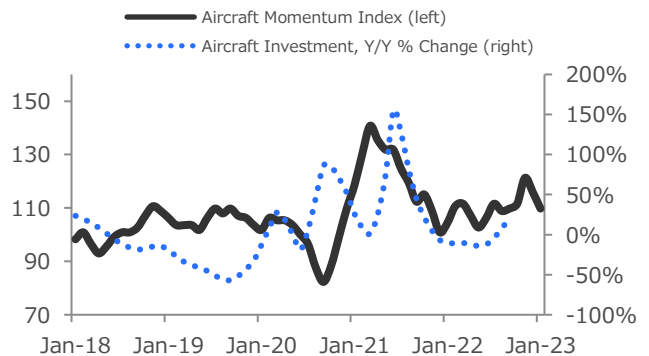
Mining & Oilfield Machinery:

Investment in Mining & Oilfield Machinery rose 14% (annualized) in Q3 2022 and was 8.7% above year-ago levels. The Mining & Oilfield Machinery Momentum Index slipped from 75.8 in December to 74.2 in January. Capacity Utilization for Natural Gas Distribution rose 0.2% in November while the Brent Spot Price dropped 3.3% in December. The current position and recent movement of the Index suggest that mining & oilfield machinery investment growth may decelerate over the coming two quarters.



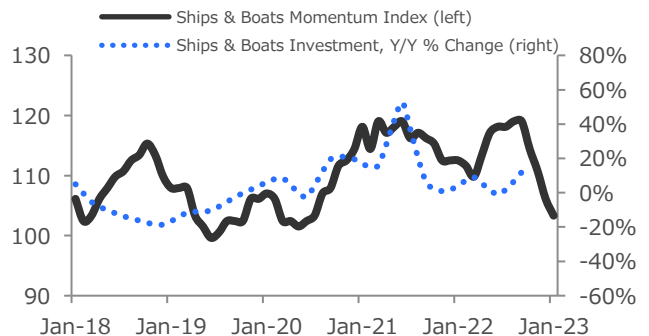
Aircraft:

Investment in Aircraft surged at a 296% (annualized) rate in Q3 2022 and was 22% above year-ago levels. The Aircraft Momentum Index dropped from 116.0 in December (revised) to 109.8 in January. In December, the S&P 500 Volatility Index increased 5.3% and Aircraft Departures to Canada and Mexico rose 6.3%. Overall, the Index's position and recent movement suggest that aircraft investment growth is likely to remain robust over the coming two quarters.



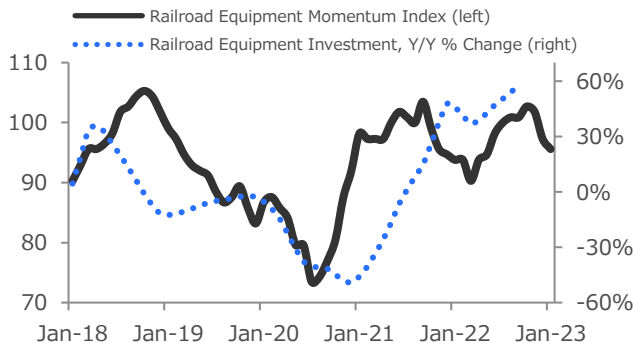
Ships & Boats:

Investment in Ships & Boats jumped at an annualized rate of 31% in Q3 2022 and was 12% above its year-ago level. The Ships & Boats Momentum Index fell from 106.1 in December (revised) to 103.3 in January. Industrial Production of Ships and Boats fell 1.5% in November while the ICE U.S. Dollar Index dropped 2.3% in December. Overall, the Index's position and recent movement suggest that ships & boats investment growth may decelerate over the coming six months.



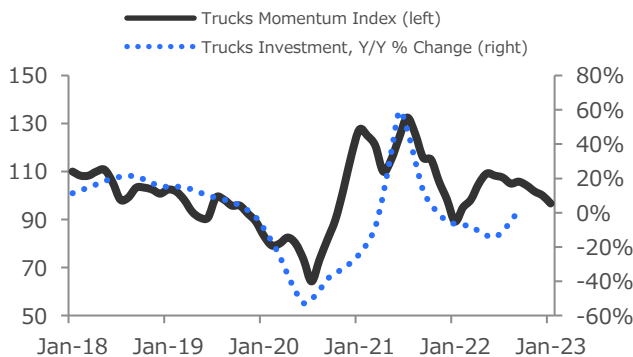
Railroad Equipment:

Investment in Railroad Equipment increased 116% (annualized) in Q3 2022 and was up 58% year-over-year. The Railroad Equipment Momentum Index eased from 97.3 in December (revised) to 95.6 in January. Rail Carloads of Petroleum Products dipped 0.4% in December while Railroad Rolling Stock Industrial Production fell 4.3% in November. Overall, the current position and recent movement of the Index suggest that railroad equipment investment may have peaked and could start decelerating in the coming six months.



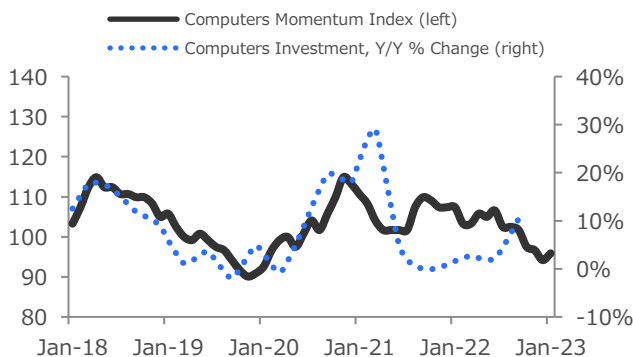
Trucks:

Investment in Trucks rose 43% (annualized) in Q3 2022 and was 1.7% above year-ago levels. The Trucks Momentum Index dropped from 100.0 in December (revised) to 96.7 in January. In November, Coal Production fell 5.7% while Industrial Production of Light Trucks also fell 5.7%. Overall, the position and recent movement of the Index indicate that trucks investment is unlikely to accelerate over the coming two quarters.



Computers:

Investment in Computers surged 39% (annualized) in Q3 2022 and was up 11% year-over-year. The Computers Momentum Index rose from 94.2 in December (revised) to 95.9 in January. Total Revolving Debt increased 0.9% in October and the Conference Board Consumer Confidence Index increased 6.8% in December. Overall, the Index's position and recent movement suggest that computers investment growth is unlikely to accelerate further over the coming six months.



Software:

Investment in Software rose 15% (annualized) in Q3 2022 and was up 12% from a year prior. The Software Momentum Index improved from 94.2 in December (revised) to 96.6 in January. IBM's share price fell 5.4% in December and Non-Residential Construction Spending increased 1.7% in November. Overall, the Index's position and Recent movement suggest that software investment should remain in positive territory over the coming two quarters.

