2018
Equipment Leasing & Finance U.S. Economic Outlook

EQUIPMENT LEASING & FINANCE
FOUNDATION
Your Eye on the Future

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SUMMARY

Equipment & Software Investment Outlook: Equipment and software investment growth is expected to strengthen in 2018 after expanding at a solid pace in 2017. A strong labor market, elevated business confidence levels, and healthy credit conditions should build on the economic momentum experienced in 2017, while tax cuts and a firming oil sector will likely offer additional boosts to growth. However, a rising interest rate environment could weaken lending activity as the year progresses. Overall, investment in most equipment verticals should remain solid in 2018. Over the next three to six months:

- Agricultural Machinery investment growth may slow somewhat;
- Construction Machinery investment growth should remain strong;
- Materials Handling Equipment investment growth should remain solid;
- All Other Industrial Equipment investment growth may decelerate;
- Medical Equipment investment growth may have peaked and is likely to decline;
- Mining & Oilfield Machinery investment growth may weaken but remain positive;
- Aircraft investment growth may soften;
- Ships & Boats investment growth is expected to decline;
- Railroad Equipment investment growth may decline modestly;
- Trucks investment growth should remain solidly positive;
- Computers investment growth should remain solid; and
- Software investment growth should remain steady.

U.S. Capital Investment & Credit Markets: Despite a slight increase in financial stress, U.S. credit conditions remain relatively strong. Supply and demand saw little change from last quarter, though private sector loan growth weakened. The Federal Reserve is expected to raise its benchmark interest rate three to four times in 2018, which may cause loan growth to decline further as higher interest rates push businesses toward cash financing. Overall, however, capital spending should remain on solid footing.

Overview of the U.S. Economy: The U.S. economy appears to be in good shape in 2018, as tailwinds from 2017 are carried over and several headwinds faced in previous years have faded. The labor market will continue to firm and should lead to increased consumer spending, while business investment will likely be a major bright spot in the coming year as tax cuts and a lighter regulatory touch encourage capex spending. Overall, the economy should grow at a relatively strong pace over the course of the year, despite what appears to be a softer-than-anticipated first quarter.

Bottom Line for the Equipment Finance Sector: After solid growth in 2017, equipment and software investment will likely continue to strengthen in 2018. Business investment is expected to expand robustly, and stable credit conditions should foster an environment conducive to growth. Overall, we expect the economy to grow 2.7% in 2018 (unchanged from our annual outlook), while equipment and software investment is projected to expand 8.5% (down from 9.1% in our annual outlook).

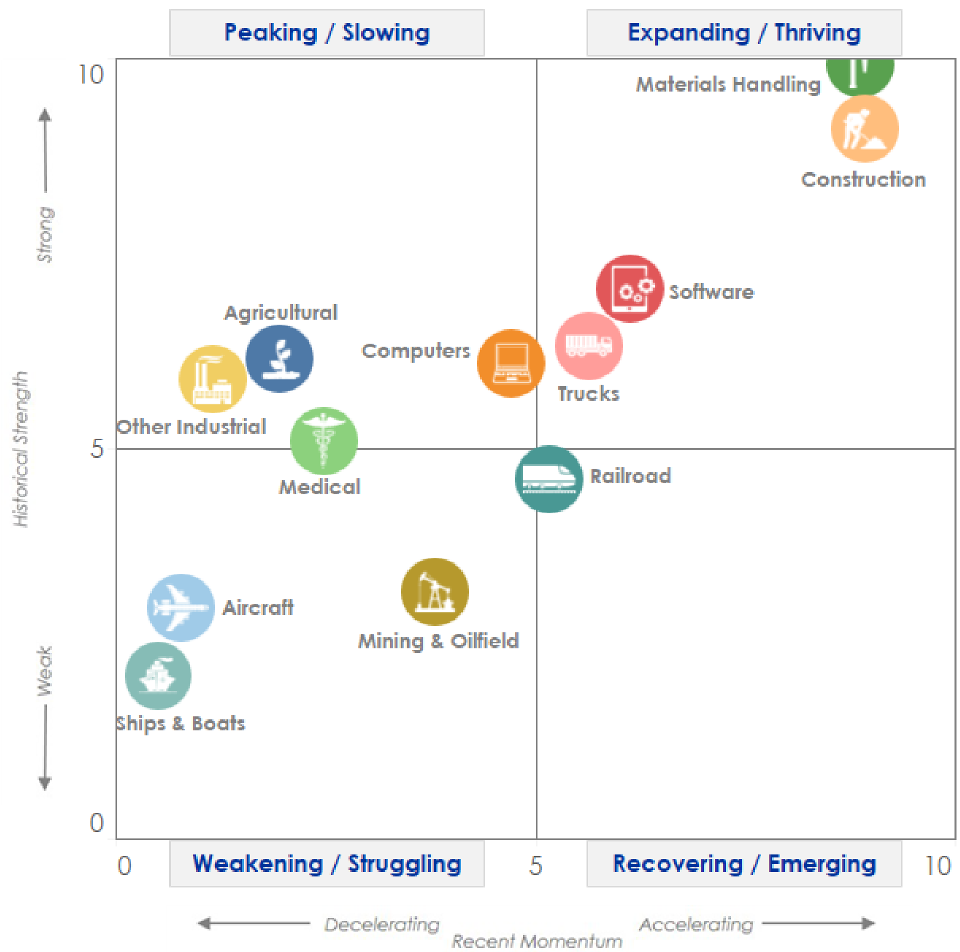
EQUIPMENT & SOFTWARE INVESTMENT OUTLOOK

We expect equipment and software investment to expand by 8.5% in 2018. Though investment growth is expected to moderate slightly in Q1 compared to the previous quarter, we anticipate a strong rebound in Q2, followed by solid investment growth in the second half of the year. As illustrated in the Momentum Monitor Sector Matrix below, momentum readings are at or above the long-term historical average (y-axis) in 8 of 12 verticals, and recent momentum (x-axis) accelerated in 5 of 12 verticals.

Foundation-Keybridge U.S. Equipment & Software Investment Momentum Monitor

*For more information on how to interpret the Momentum Monitor, please refer to the Appendices on pages 18–19.

Momentum Monitor Sector Matrix

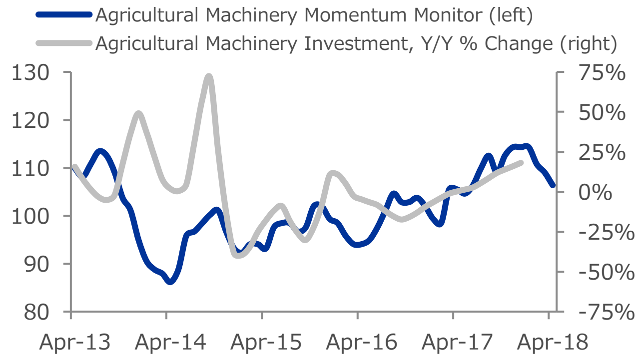


The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

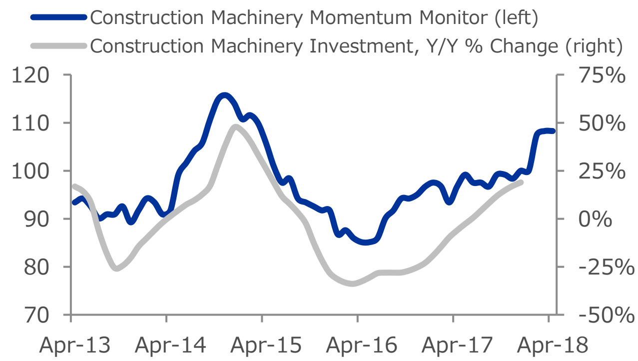
- "Recent Momentum" indicates a vertical's recent acceleration or deceleration in the past month relative to its average movement during the previous 3 months. Ratings closer to "0" indicate rapid deceleration, while ratings near "10" represent rapid acceleration.
- "Historical Strength" reflects a vertical's strength 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 consists of four quadrants based on readings for each vertical's recent momentum and historical strength. If a vertical falls 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 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.

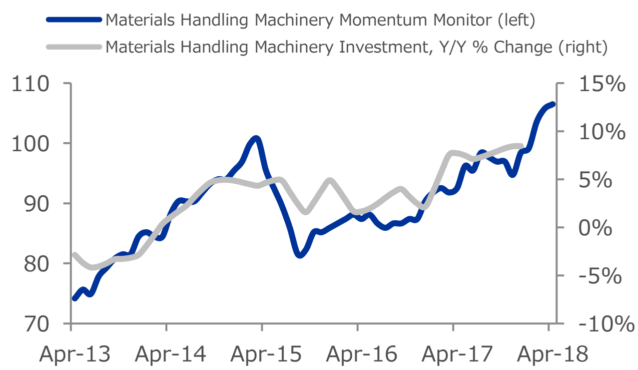
Agricultural Machinery: Investment in Agricultural Machinery expanded at an annual rate of 37% in Q4 2017 and is up 18% from one year ago. The Agriculture Machinery Momentum Index decreased from 109.0 (revised) in March to 106.4 in April. Broiler Exports fell 4.0% in January, while Lamb & Mutton Production declined 5.6% in February. Overall, the Index suggests that agricultural machinery investment growth may slow somewhat over the next three to six months.



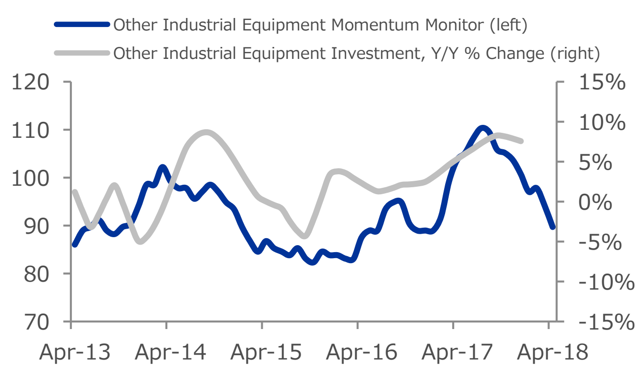
Construction Machinery: Investment in Construction Machinery surged at an annual rate of 27% in Q4 2017 and is up 19% year-over-year. The Construction Momentum Index held steady at 108.3 from March (revised) to April. Construction Employment jumped 0.9% in February, the largest monthly gain since March 2007, but For-Sale Housing Stock rose 2.0%. Overall, the Index points to continued strength in construction machinery investment growth over the next three to six months.



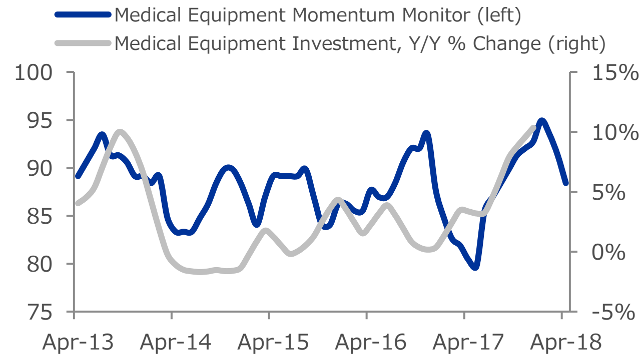
Materials Handling Equipment: Investment in Materials Handling Equipment rose at a 6.7% annual rate in Q4 2017 and is up 8.5% year-over-year. The Materials Handling Momentum Index increased from 105.8 (revised) in March to 106.5 in April. Inventories of Material Handling Equipment rose 1.7% in January and Industrial Production rose 0.9% in February. Overall, the Index points to sustained healthy growth in materials handling equipment investment over the next two quarters.



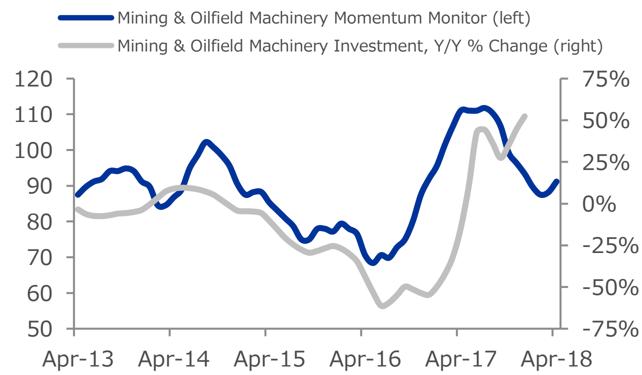
Other Industrial Equipment: Investment in All Other Industrial Equipment increased at a 3.4% annual rate in Q4 2017 and is up 7.6% from a year ago. The Other Industrial Equipment Momentum Index fell from 94.1 (revised) in March to 89.7 in April and has declined eight of the last nine months since peaking last summer. The S&P Industrials Index fell 2.8% in March, while the Manufacturing PMI fell to 59.3 but remains above the expansionary threshold. Overall, the Index's recent movement points to a deceleration in other industrial equipment investment over the next three to six months.



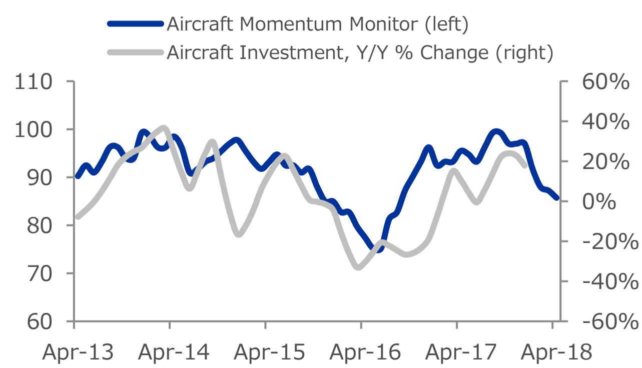
Medical Equipment: Investment in Medical Equipment rose at an 18% annual rate in Q4 2017 and is up 10% year-over-year. The Medical Equipment Momentum Index fell from 91.3 (revised) in March to 88.4 in April. Household Spending on Medical Services decreased 0.8% in February, while Johnson & Johnson's Market Cap dropped 6.1%, its largest decline since August 2015. Overall, the Index suggests that medical equipment investment growth may have peaked and will likely decline over the next three to six months.



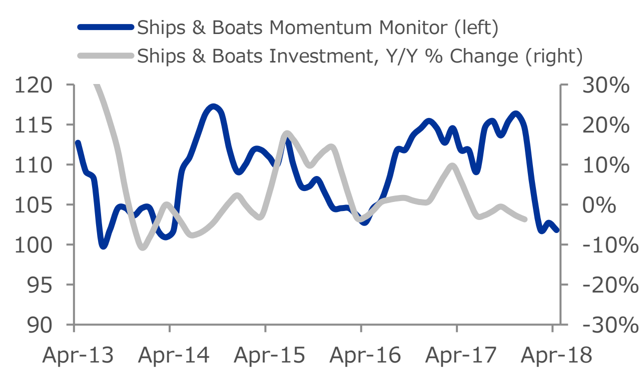
Mining & Oilfield Machinery: Investment in Mining & Oilfield Machinery expanded at an 11% annual pace in Q4 2017 and is up 52% from one year ago, its largest year-over-year gain since Q1 2006. The Mining & Oilfield Machinery Momentum Index improved from 88.2 (revised) in March to 91.2 in April. Industrial Production for Mining and Oilfield Machinery rose 1.8% in February, while Industrial Production for Support Activities for Mining and Drilling jumped 6.7%. Overall, despite improving this month, the Index's movement in recent months points to the potential for weaker growth in mining & oilfield machinery investment over the next two quarters.



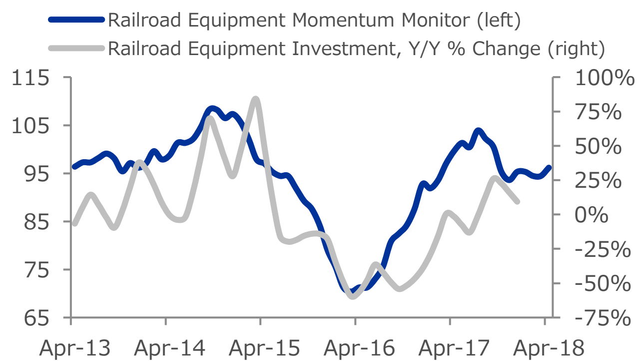
Aircraft: Investment in Aircraft fell at a 42% annual pace in Q4 2017 but is up 18% year-over-year. The Aircraft Momentum Index ticked down from 87.2 (revised) in March to 85.7 in April, its fourth consecutive monthly decline. The VIX jumped 47% in February, but Exports of Civilian Aircraft fell 33% in January. Overall, the Index's recent movement suggests that aircraft investment growth may soften over the next three to six months.



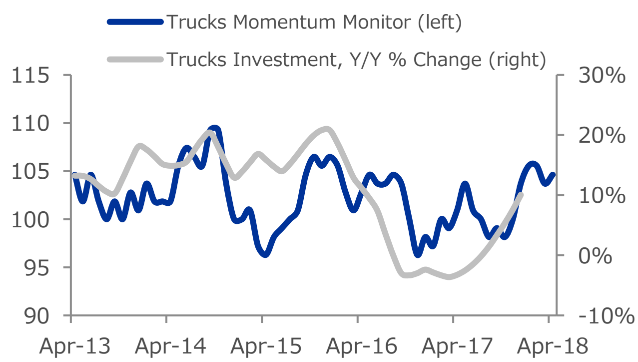
Ships & Boats: Investment in Ships & Boats rose at an annual rate of 12% in Q4 2017 but is down 3.7% year-over-year. The Ships & Boats Momentum Index edged down from 102.7 (revised) in March to 101.8 in April. In February, Industrial Production for Ship & Boat Building rose 3.9%, but Industrial Production for Energy Consumer Products fell 6.2%. Overall, the Index points to a decline in ships & boats investment growth over the next two quarters.



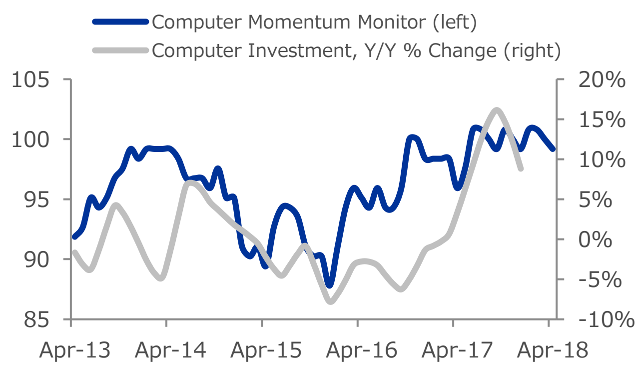
Railroad Equipment: Investment in Railroad Equipment declined at a 4.3% annual rate in Q4 2017 but is up 9.3% year-over-year. The Railroad Equipment Momentum Index increased from 94.4 (revised) in March to 96.2 in April. Industrial Production for Mining jumped 3.5% in February, the largest monthly gain in over seven years. However, Crude Oil & Petroleum Product Imports rose 4.2% in February. Overall, the Index's movement in recent months points to the potential for a modest decline in railroad equipment investment growth over the next three to six months.



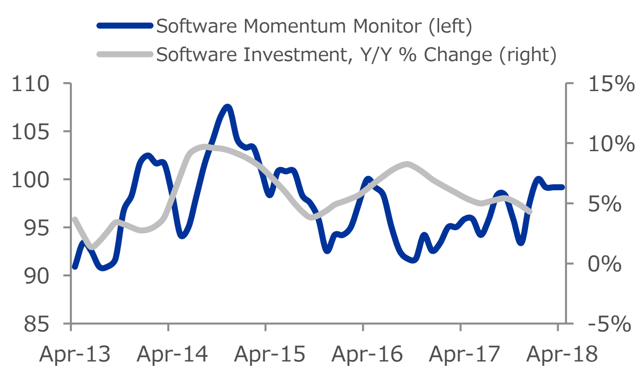
Trucks: Investment in Trucks surged at a 37% annual rate in Q4 2017 and is up 10% from year-ago levels. The Trucks Momentum Index rose from 103.7 (revised) in March to 104.6 in April. Gas & Diesel Oil Production declined 7.2% in January but was offset in part by a 0.3% decrease in Average Hourly Earnings for Freight Trucking. Overall, the Index's recent movement points to continued growth in trucking investment over the next three to six months.



Computers: Investment in Computers decreased at a 25% annual pace in Q4 2017 but is up 8.8% year-over-year. The Computers Momentum Index slipped from 100.0 (revised) in March to 99.2 in April. Defense Communication Equipment Shipments rose 5.1% in January, but the NASDAQ Computer Index fell 3.9% in March, the largest decline in nearly two years. Overall, the Index signals little change in computers investment growth over the next two quarters.



Software: Investment in Software fell at a 2.2% annual rate in Q4 2017 but is up 4.3% year-over-year. The Software Momentum Index held steady at 99.2 from March (revised) to April. Business Construction Spending jumped 6.5% in February, but the Consumer Price Index for Computer Software & Accessories fell 3.2%, its largest decline since May 2016. Overall, the Index suggests stable investment growth in software over the next three to six months.



Equipment & Software Investment Annual Growth Forecast

Year-on-Year % Growth Rates

Sector	10-Year Historical Average	Last 4 Quarters	Next 4 Quarters
Agricultural Machinery	5.2%	18.1%	5 to 12%
Construction Machinery	-2.1%	18.9%	10 to 17%
Materials Handling Equipment	2.1%	8.5%	10 to 16%
Other Industrial Equipment	1.1%	7.6%	0 to 6%
Medical Equipment	1.9%	10.3%	3 to 10%
Mining & Oilfield Equipment	-3.4%	52.4%	10 to 20%
Aircraft	-0.1%	17.8%	4 to 12%
Ships & Boats	-1.4%	-3.7%	-4 to 4%
Railroad Equipment	2.9%	9.3%	5 to 15%
Trucks	6.6%	10.1%	7 to 13%
Computers	1.6%	8.8%	8 to 14%
Software	4.4%	4.3%	2 to 6%

Source: Macrobond Financial, Keybridge (forecasts)

U.S. Capital Investment and Credit Markets

Capital spending experienced solid growth in 2017, and record-high business confidence levels point to another strong year for equipment and software investment. Credit market conditions remain generally healthy, though private sector loan growth has moderated in recent months, in part due to rising interest rates and increased cash flow from tax reform that have combined to push some businesses toward cash financing.

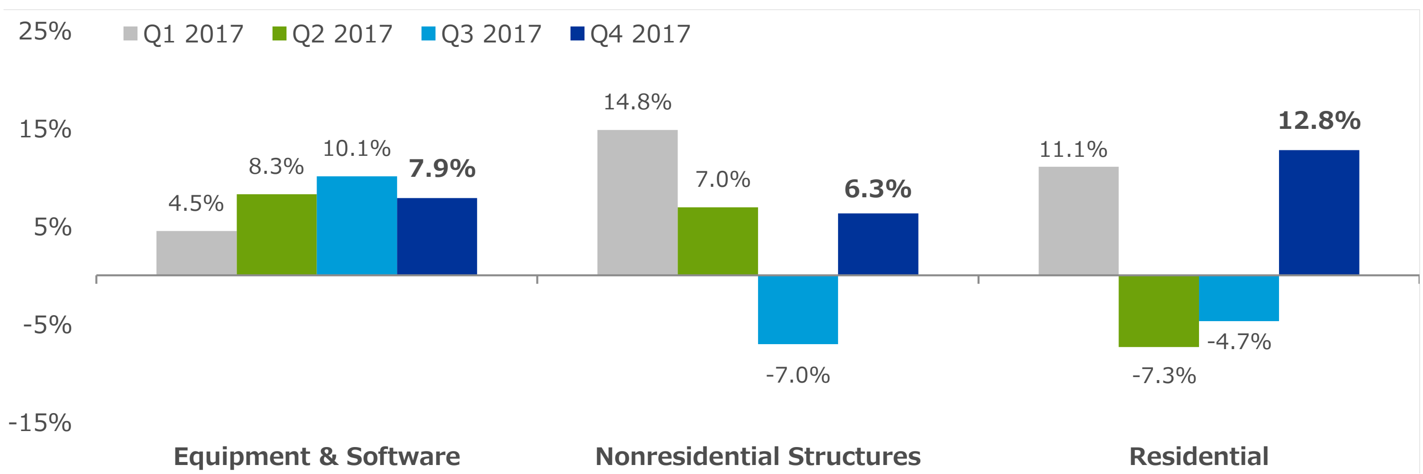
Overall, we expect equipment and software investment to expand by 8.5% in 2018, which would mark the strongest growth since 2012. We also anticipate that sustained economic growth and an increasingly tight labor market will continue to put upward pressure on inflation, leading the Federal Reserve to lift its benchmark interest rate three more times in 2018, for a total of four rate hikes over the year.

Recent Trends in U.S. Capital Investment

Equipment and software investment grew at a 7.9% annualized rate in the fourth quarter of 2017, marking its seventh straight quarter of expansion. Nonresidential structures grew at a 6.3% annualized rate after a 7.0% decline in Q3, while residential investment surged by 12.8% annualized.

Investment Growth Rates

Quarter-on-Quarter, Seasonally Adjusted Annualized Growth Rate



Source: Macrobond Financial

- **Equipment Leasing and Financing:** New business volume in the equipment leasing and finance industry is off to a strong start in 2018. The ELFA Monthly Leasing and Finance Index ("MLFI-25") for February was up 31% from year-ago levels, and year-to-date new business volume climbed to a record high. Despite strong growth in new business volume, portfolio performance continues to show little sign of financial stress, as 30-day delinquencies fell three tenths of a percent to 1.60% in February (though they are slightly above year-ago levels). Charge-offs fell to 0.28% in February, the lowest level in over two years.

  The Foundation's Monthly Confidence Index for the Equipment Finance Industry ("MCI-EFI") fell one point in March to 72.2, but remains well above its 2017 average of 66.7. Confidence climbed to an all-time high in January, likely reflecting optimism over the tax reform bill passed in December. Industry executives noted that while tax reform continues to bolster confidence levels, it has generated some confusion among customers over whether to lease or buy equipment going forward, which has delayed sales. Executives also noted that elevated confidence levels suggest that businesses are looking to expand, which should increase the demand for leasing and finance products.

Looking ahead, we expect that industry growth should remain strong through the first half of 2018. However, recently-imposed tariffs could push key trading partners to retaliate in kind, which may threaten growth benefits from tax reform and strong economic momentum (see "Economic Headwinds" section for more on this development).

- **Equipment Verticals:** Equipment and software investment saw solid growth in the fourth quarter of 2017. Of the 12 equipment verticals tracked by the Foundation, eight experienced positive annualized growth, and six posted double-digit gains, including Trucks (+37%), Agricultural Machinery (+37%), Construction Machinery (+27%), Medical Equipment (+18%), Ships & Boats (+12%), and Mining & Oilfield Machinery (+11%). Four equipment verticals saw declines in investment growth, including Aircraft (-42%) and Computers (-25%).

  Looking forward, we expect the majority of equipment verticals to post solid investment growth over coming months, though recent movements in momentum indices suggest that investment growth may wane in certain industries, including medical equipment, ships & boats, aircraft, and other industrial equipment.

- **Other Factors:** Industrial sector data continue to signal strong health and solid growth. Industrial production rose 0.9% to 106.5 in February, reaching its highest level in over three years. Similarly, capacity utilization increased from 77.0% in January to 77.7% in February and stands at its highest reading since April 2015 — though it still remains below the 80% expansionary threshold that has historically led to a positive shock to capex spending. Shipments and new orders of durable goods both improved in February as well: shipments (a leading indicator of same-quarter business activity) rose 0.9% in February and have increased in nine of the last ten months, while new orders (a leading indicator of next-quarter business activity) increased 3.1% in February and are up 9.1% over the last 12 months. Furthermore, the ISM Purchasing Managers' Index (PMI) stands at 59.3 as of March, which is 1.5 points below its prior reading but is still quite strong by historical standards and a positive signal for the U.S. manufacturing sector. However, the U.S. trade deficit widened in January and has expanded consistently since August, despite a weaker dollar. Recent friction with key trading partners could pose a threat to industrial activity later this year if a full-blown trade war materializes.

Recent Trends in Credit Markets

Credit market conditions remain relatively strong. Supply and demand for credit are largely unchanged, notwithstanding a moderate decrease in supply for commercial real estate ("CRE") credit and a moderate decrease in demand for residential real estate credit. Although private sector loan growth has slowed, continued strength in overall business investment conditions suggest that cash financing is playing a larger role in driving capex spending growth. Financial stress ticked up slightly but remains at healthy levels.

Summary of Credit Conditions

Factor	Conditions Compared With Last Quarter
Supply	Little Change
Demand	Little Change
Financial Stress	Slight Increase

- **Credit Supply & Pricing:** On balance, credit supply conditions experienced little change in the fourth quarter of 2017, although slight shifts occurred for certain loan types. In the January Fed Loan Officer Survey, banks reported a moderate tightening of standards on CRE loans, particularly for multifamily residential properties and loans for construction and land development. However, standards were unchanged for residential real estate ("RRE") loans. In addition, credit supply conditions for commercial and industrial loans ("C&I") loans loosened, particularly for lending to large and mid-sized firms. Banks indicated that the primary motivation for easing standards on C&I loans was more aggressive competition from other banks and nonbank lenders. Meanwhile, standards for consumer loans were essentially unchanged across all major loan categories.

- **Credit Demand:** Credit demand was mostly unchanged in Q4 2017. Although banks reported modestly stronger demand for C&I loans from small firms in the January Fed Loan Officer Survey, demand from mid-sized and large firms was stable. Likewise, demand for consumer loans was mostly unchanged (with the exception of slightly weaker demand for autos), while demand for CRE loans weakened. RRE loans saw an across-the-board softening of demand for all residential mortgages categories.

  All else equal, one would expect that an environment of steady credit supply, low interest rates, and record-level business confidence should lead to significant increases in business lending. However, business demand for credit has been fairly flat for the last year, and C&I lending has actually decelerated from 12.9% year-over-year growth in January 2015 to 1.2% in February 2018. Rather than a sign of private sector nervousness about the economy or unwillingness to invest, this lending deceleration may reflect an increased propensity to finance new investment with cash or equity over loans and leasing. The combination of rising interest rates and increased business cash flow following passage of the Tax Cuts and Jobs Act of 2017 is driving this trend. As interest rates continue to rise this year and businesses take stock of the new tax law, it seems likely that business investment will remain strong, but credit demand may continue to slip.

  A similar story exists on the consumer lending side. Consumer confidence and sentiment remain near historic highs; for example, the Conference Board's Consumer Confidence Index for March was at 127.7, above 88% of all readings since 1967. In addition, household debt-to-income ratios remain manageable and consumers do not appear to be overly leveraged. However, over the coming months, most consumers will see their pay checks increase due to a combination of wage growth and tax reform, while rising interest rates will result in higher servicing costs for credit card debt (as most credit cards APRs are variable rate). The combination of these two trends may drive consumers to finance more of their spending using cash (or debit) rather than debt in the coming months.

- **Financial Stress:** Financial stress has risen modestly over the last quarter but remains near historic lows. The Kansas City Fed Financial Stress Index increased from -0.82 in January to -0.44 in February, but continues to signal low financial stress. Likewise, the St. Louis Fed Financial Stress Index improved from a previous low of -1.6 last November to -1.0 in March but remains well below its historical average. Lease delinquencies ticked up to 1.02% in Q4 2017 and have risen gradually over the last three years, consistent with the current stage of the business cycle. In contrast, loan delinquencies have declined for the last 18 months, falling from 1.6% in Q2 2016 to 1.17% in Q4 2017. Neither metric signals an imminent deterioration in credit conditions.

- **Other Factors:** Ten-year Treasury yields rose steadily over the first quarter, notwithstanding a recent drop. After beginning the year at 2.40%, yields climbed to nearly 3% in mid-February before falling back to 2.74% at the end of March. The general upward trend in Q1 is likely a function of an improved near-term growth outlook for the United States relative to other advanced economies and expectations of higher corporate and consumer spending in the wake of tax reform — the combination of which may push the Fed to raise interest rates sooner than some expected. In contrast, the recent fall in

Treasury yields can be attributed to a surge in stock market volatility (see "Economic Headwinds" section), which has driven a flight to safety toward U.S. bonds.

Update on Fed Policy

Jerome Powell was sworn in as Fed Chairman in early February, replacing Janet Yellen. Though he is considered slightly more "hawkish" than Yellen (meaning he is more inclined to support higher interest rates and tighter credit conditions to stave off inflation), Powell is expected to generally follow Yellen's path of slow and steady interest rate increases and a gradual unwinding of the Fed's balance sheet.

Consistent with expectations, the Federal Reserve raised its benchmark interest rate by 25 basis points in March, bringing the upper bound to 1.75%. The Fed currently anticipates two more rate increases in 2018 in an effort to keep inflation in check without stifling growth. However, we expect that solid economic momentum and an historically tight labor market will yield growing inflationary pressures and result in three additional rate increases, bringing the total number of rate hikes to four in 2018.

OVERVIEW OF THE U.S. ECONOMY

U.S. economic momentum remains solid, as tailwinds that emerged in late 2017 appear to be carrying over, while several headwinds that plagued the economy in 2016 and early 2017 have faded. The labor market is historically strong and appears likely to continue to firm, which should help to drive consumer spending (particularly if wage growth accelerates, as expected). Business investment, a drag on economic growth in 2016 and early 2017, will likely be a major bright spot in 2018. While oil sector woes dampened industrial activity until roughly one year ago, today a firming oil sector combines with surging business confidence, lower tax rates, and lighter touch regulation to encourage capex spending across most business sectors. Overall, solid growth in Q4 2017 (+2.9%) leaves the economy well-positioned for continued expansion at a moderate-to-strong pace for at least the next two quarters.

Heightened business confidence and a healthy investment climate will be a boon to the equipment finance industry. Although the implications of the new tax law on the industry are still not entirely clear — and the prospect of increased corporate and small business cash flow could dampen the appetite for lease financing — the industry is still likely to benefit from the general rising tide of strong economic growth.

Overall, we project the U.S. economy to grow 2.7% in 2018 — consistent with our last forecast, and above last year's 2.3% growth rate. Real investment in equipment and software is expected to rise 8.5% in 2018, down slightly from our previous forecast, but well above last year's 4.9% expansion.

Recent Trends in the U.S. Economy

The U.S. economy should see solid growth throughout 2018. Business investment is benefiting from a host of tailwinds, including robust business confidence, increased cash flow resulting from tax cut legislation, strong international growth, and a resurgent energy sector. Consumer spending appears set to post solid growth, as consumer confidence remains high, unemployment is at historic lows, and household debt levels are mostly healthy. Moreover, for the first time in several years, the public sector should make positive contributions to GDP growth as federal, state, and local spending are all set to increase. One disappointment thus far in 2018 has been residential investment, which faces most of the same headwinds that have plagued the housing sector for the past several quarters and now must also contend with rising interest rates that may discourage homebuying. Other potential several headwinds and risks to U.S. growth include stock market volatility, trade tensions, and the potential for inflation and interest rates to rise faster than consensus forecasts.

Indicator	Recent Activity
Consumption	Consumer spending expanded 4.0% (annualized) in Q4 2017.
Equipment & Software Investment	Equipment & software investment rose 7.9% (annualized) in Q4, marking the seventh straight quarter of growth.
Residential Investment	Residential investment increased 12.8% (annualized) in Q4 after contracting for two straight quarters.
Government Expenditures	Government expenditures expanded 3.0% (annualized), the largest increase in more than two years.
Net Exports	Net exports declined, as exports rose 7.0% (annualized) in Q4, but imports jumped 14.1% (annualized).

- **GDP:** The U.S. economy expanded at a 2.9% annualized pace in the fourth quarter of 2017, bringing GDP growth to 2.3% for the year. Personal consumption expenditures accelerated to a 4.0% pace in Q4, the fastest rate in three years, while nonresidential fixed investment grew by a solid 6.8%. Business investment growth was driven by a strong increase in equipment & software investment (+7.9%) and an improvement in structures investment (+6.3%), which declined sharply in Q3. Residential investment surged by 12.8% after two consecutive quarters of decline, while government spending expanded 3.0%, reflecting the largest increase in federal spending since mid-2010.

- **Inflation:** Inflationary pressures remain relatively low, at least for now. Headline inflation accelerated slightly in February to a 2.2% annualized pace from 2.1% in January, while core inflation (which excludes volatile food and energy prices) held steady at 1.8% annualized growth for the third straight month. Although a jump in annual wage growth to 2.9% in January led to worries about mounting inflation, wage growth retreated to 2.6% in February, easing fears. On the other hand, oil prices continue to slowly rise (the WTI spot price has climbed to roughly $65 as of late March), and the combination of a tight labor market and rising energy prices should put upward pressure on inflation. The Federal Reserve's rate hike schedule should keep inflation from ramping up significantly in the near term, but inflation is something to closely monitor in the months ahead.
- **Growth Forecasts:** The *Economist* Poll of Forecasters for March estimated 2.8% GDP growth for 2018, up one tenth from its February forecast. Similarly, the Wall Street Journal consensus forecasts 2.9% growth for 2018, while the Federal Reserve's March "central tendency" forecast ranged from 2.6–3.0%.

Economic Tailwinds

Business investment is likely to be the leading component of the U.S. economy in 2018, as tax cuts add to an already optimistic environment for capex spending. Government spending is expected to pivot from growth detractor to growth contributor this year, driven by increased federal spending. Meanwhile, the U.S. labor market remains exceptionally strong, an indication of a healthy economy that should help keep consumer spending buoyant. However, a byproduct of this strength is that businesses are likely to find it increasingly difficult to hire qualified workers and may face pressure to increase wages to retain current employees.

- **Healthy Business Investment:** Business investment increased 4.7% over the course 2017, its strongest annual growth since 2014, and record high business confidence levels among both small and large firms reflect an optimistic outlook for the year ahead. Business investment appears poised to contribute strongly to economic growth again in 2018: Industrial Production rose to a three-year high in February, and the ISM Purchasing Managers' Index continues to signal increasing manufacturing activity. In addition, billions of dollars in savings from recent tax cuts and the administration's deregulatory agenda should support another year of robust capital spending.
- **Continued Labor Market Growth:** The labor market continues to be a bright spot in the U.S. economy. Total nonfarm payroll employment increased 313,000 in February, the strongest monthly gain in over a year despite a 17-year low unemployment rate. Payroll gains averaged 182,000 per month in 2017, which is slightly weaker than the 195,000 average monthly increase in 2016 but still very solid this late in the business cycle. Strong job gains have even pulled some individuals off the sidelines and back into the labor market, as evidenced by an increase in the labor force participation rate to 63% in February. As the economy continues to add jobs and the labor market continues to tighten, employers should feel increasing pressures to raise wages in order to attract and retain talent — which, in turn, would likely increase consumer spending.

- **Government Spending Revival:** Over the past two years, the public sector has generally had a neutral to negative effect on GDP growth. That trend appeared to reverse in the fourth quarter, when government spending added 0.51 percentage points to GDP growth (out of a total 2.9% growth), its greatest contribution since Q2 2015. Both federal and state/local government drove this effect, adding 0.20 percentage points and 0.31 percentage points, respectively. Recent data suggest government spending should continue to boost growth in the first quarter and throughout 2018. Public construction spending rose 1.6% in February compared to a year prior, with particularly strong year-on-year growth for public spending on nonresidential commercial, office, and public safety construction. In addition, the recently-passed $1.3 trillion federal budget includes spending increases in several areas, particularly defense. All else equal, a modest to moderate increase in government spending is good for short- and medium-term growth, contributing directly to GDP and in some cases paving the way for future growth through investment in necessary public works and infrastructure. However, the combination of spending increases and tax cuts will almost certainly lead to larger deficits, which many economists expect will inhibit economic growth down the road.

Economic Headwinds

The housing market continues to suffer from a host of headwinds that will likely persist in 2018, even as the U.S. economy continues to churn. At the same time, stock market volatility stems from market uncertainty about a host of downside risks — including the possibility of a global trade war.

- **Weak Residential Investment:** U.S. residential investment expanded just 1.8% over the course of 2017, the slowest annual growth since 2011. The housing market faced numerous headwinds during 2017, including record-high lumber costs, increasingly scarce skilled workers, and shortages of available lots. Although these pressures appeared to lift in the fourth quarter as residential investment jumped nearly 13% (SAAR), this increase was likely a byproduct of recovery efforts from hurricanes Harvey and Maria. Indeed, housing starts remain 4% below year-ago levels, and the housing market continues to face several obstacles, including rising interest rates (which may push some potential homeowners out of the market) and trade frictions that could significantly raise the cost of key inputs (e.g., steel, aluminum, and lumber).
- **Stock Market Volatility:** Large declines in most major stock indices in early February and late March have provoked worries that the market, which has grown rapidly since late 2016, may be in for a continued or deeper correction in 2018. Despite strong short-term economic fundamentals for the U.S. economy that should continue to drive higher market returns, investors appear jittery over the possibility that the latest trade tensions may result in an all-out trade war (see below), that the Fed may accelerate its interest rate hikes over the coming months (which, all else equal, will hurt equities), and that tech stocks — the primary drivers of this bull market — will decline as political scrutiny over tech company practices intensifies. Another factor to watch is the Fed's efforts to unwind its quantitative easing program, which may push up yields on long-term Treasuries and potentially lead to a sell-off: the faster this process occurs (and the more public attention it gets), the more likely the effect occurs. All else equal, stock market volatility is likely to remain high throughout 2018.
- **Trade Tensions:** On March 8, the Trump administration announced its intention to impose tariffs of 25% on steel and 10% on aluminum imports. The announcement was followed two weeks later by plans to introduce $60 billion of tariffs on China, along with tighter restrictions on Chinese M&A activity and technology transfers. Although the steel and aluminum tariffs will have a significant impact on the United States' domestic metals market, the immediate macroeconomic effects of the tariffs are likely to be limited due to metals' relatively small share of the U.S. economy and the last-minute exemption of most major U.S. trading partners. However, we believe these actions are early signals of the dismantling of the current

global trading system, which could pose a major headwind to U.S. growth. China's own trade actions over the past several years — including forced technology transfer from major U.S. firms and its "Made in China 2025" initiative to unseat U.S. technological dominance — likewise contribute to this deterioration in global trade relations. Overall, the emerging trade confrontation between the U.S., China, and other major economies carries significant downside risk, may disrupt firm activity and supply chains, and will likely result in escalating retaliatory measures over the next several months or years.

Additional Factors to Watch

Tax cuts will likely contribute to strong growth in 2018, although the micro-level distributional effects are ambiguous. Meanwhile, markets are keeping an eye on the potential for rising inflation and interest rates in the coming months.

- **Tax Cuts Takes Effect:** The Tax Cuts and Jobs Act of 2017, passed in December, came into effect on the first of the year. Its major provisions include a 21% corporate tax rate (down from 35%), a one-time rate of 8% for repatriation of overseas profits, a 20% deduction for pass-through entities, and the reduction or elimination of several deductions. Most economic analyses estimate that the legislation will result in a modest to moderate boost to GDP growth of 0.2 to 0.5 percentage points resulting from the increased corporate and individual cash flow, which could free up cash for growth-promoting activities like business investment, share repurchases, wage increases, and stock buybacks. However, the thousands of new tax provisions — which are still being analyzed and interpreted by tax, legal, and accounting experts — mean that the effects on industries or individual companies are still unclear. The equipment leasing industry may benefit from the boost to growth and corporate cash flow as well as the 100% bonus depreciation, but these effects may be partially offset by the possibility that the legislation will encourage more cash financing of business investment. In the medium-long term, the legislation may also cause interest rates and inflation to rise faster than expected (see below).
- **Inflation Watch:** For the past several years, banks, other businesses, and consumers have all grown accustomed to U.S. inflation hovering around 2%, a rate that has persisted since the Great Recession. However, at this stage of the business cycle, there is an increased likelihood that inflationary pressures will build over the course of 2018. A tight labor market tends to drive faster wage gains, as workers' bargaining power increases, which then generally feeds into pricing consumer and producer prices. With unemployment at only 4.1% and persistently strong job gains likely to push the rate down further, many economists expect wage growth to pick up. Year-on-year average hourly earnings for manufacturing production and non-supervisory workers, a leading indicator of overall wage gains, accelerated to 3.3% in February, significantly above the 2.3% rate seen less than six months ago. Bond markets continue to anticipate 2% inflation over the medium term, meaning that a sudden inflation acceleration would cause a sharp market reaction. That shift would have big implications for the equipment finance industry, as faster inflation will drive up market interest rates (see next).
- **Interest Rates:** Since the Fed began to "normalize" interest rates in December 2015, its rate hike schedule has been generally gradual and predictable, with a calm market response and bond yields increasing with the Federal Funds Rate. However, there is good reason to expect that interest rates will rise faster in 2018 than the current consensus of three rate hikes of 25 basis points each. If inflation begins to accelerate (see above), the Fed will be compelled to compress its rate increase schedule to combat those pressures and prevent the economy from overheating. An already strong U.S. investment climate, combined with strong fiscal stimulus coming from the recent tax cut law and budget deal, has the potential to overheat the economy and drive a rapid increase in bond yields. There is also reason to believe that the newest members of the Federal Open Market Committee (FOMC) who set Fed policy are more hawkish and thus more inclined to

pursue faster monetary normalization (i.e., higher interest rates) than previous committees. An unexpected rise in interest rates would have numerous effects on the equipment finance industry, affecting the industry's spreads, profitability, customer demand, and the probability of a recession. While describing these effects is beyond the scope of this economic outlook, the Foundation will release a white paper on this very topic in summer 2018.

Projections for Key Economic Indicators

Indicator	2016	2017	2018 Quarterly Estimates				2018e
			Q1e	Q2e	Q3e	Q4e	
Real GDP (SAAR %)	1.5%	2.3%	2.1%	3.2%	3.0%	2.8%	2.7%
Real Investment in Equipment & Software (SAAR %)	-0.9%	4.9%	7.0%	10.5%	7.3%	5.0%	8.5%
Inflation (year-on-year %)	1.3%	2.1%	2.2%	2.3%	2.4%	2.5%	2.5%
Federal Funds Target Rate (upper bound, end of period)	0.75%	1.50%	1.75%	2.00%	2.25%	2.50%	2.50%
10-year Treasury Rate (end of period)	2.5%	2.4%	2.74%	2.90%	3.15%	3.25%	3.25%
Total Payroll Growth (in thousands)	+2,344	+2,188	+700	+450	+375	+325	+1,850

Note: SAAR% refers to the annualized rate of change in seasonally adjusted data from one quarter to the next, which is the Bureau of Economic Analysis' standard method for reporting growth in the national accounts data.

QUARTERLY DATA

Indicator	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4
Real Gross Domestic Product (SAAR %)									
GDP	0.5%	0.6%	2.2%	2.8%	1.8%	1.2%	3.1%	3.2%	2.9%
Consumer Spending	2.7%	1.8%	3.8%	2.8%	2.9%	1.9%	3.3%	2.2%	4.0%
Gross Private Fixed Investment	-6.2%	-4.0%	-2.7%	2.4%	8.5%	-1.2%	3.9%	7.3%	4.7%
Inv: Equipment & Software	-2.0%	-8.1%	2.0%	0.0%	1.8%	4.5%	8.3%	10.1%	7.9%
Inv: Agricultural Machinery	-24.0%	-32.3%	2.1%	-11.3%	9.7%	-3.9%	19.2%	24.4%	36.5%
Inv: Construction Machinery	-24.3%	-38.4%	-17.1%	-30.5%	-0.7%	15.9%	27.3%	6.8%	26.9%
Inv: Materials Handling Equipment	12.2%	-7.3%	8.9%	3.1%	4.5%	14.0%	7.2%	6.2%	6.7%
Inv: All Other Industrial Equipment	4.6%	-4.0%	6.2%	1.9%	6.1%	4.4%	14.4%	8.4%	3.4%
Inv: Medical Equipment	10.1%	-8.3%	3.9%	-1.5%	8.0%	3.6%	3.1%	17.3%	18.3%
Inv: Mining & Oilfield Machinery	-18.7%	-48.2%	-92.2%	93.3%	-45.9%	162.7%	51.2%	22.6%	10.6%
Inv: Aircraft	-56.0%	-55.3%	91.6%	-23.2%	-33.3%	78.9%	6.9%	73.5%	-41.9%
Inv: Ships & Boats	32.1%	-31.9%	37.9%	-13.9%	27.8%	-4.5%	-15.1%	-5.5%	12.2%
Inv: Railroad Equipment	-44.1%	-88.2%	-9.3%	-26.5%	69.5%	-10.1%	-48.9%	225.0%	-4.3%
Inv: Trucks	4.2%	0.7%	-2.2%	-13.7%	6.8%	-4.3%	6.8%	4.5%	37.3%
Inv: Computers	-21.0%	-4.5%	3.4%	-1.0%	-3.1%	3.5%	43.9%	26.1%	-25.4%
Inv: Software	7.0%	9.4%	10.3%	6.4%	2.1%	4.8%	6.8%	8.2%	-2.2%
Credit Conditions									
Nonfinancial Sector Debt (% of SAAR GDP)	62.7%	63.4%	63.6%	63.9%	64.5%	65.3%	65.5%	65.5%	66.0%
Loan Delinquency Rate	1.0%	1.5%	1.6%	1.6%	1.6%	1.5%	1.4%	1.3%	1.2%
Lease Delinquency Rate	0.8%	0.9%	1.0%	1.0%	1.1%	1.0%	1.0%	1.0%	1.0%
Net Tightening of C&I Loan Standards	7.4%	8.2%	11.6%	8.5%	1.5%	1.4%	-2.8%	-3.9%	-8.5%

Note: SAAR% refers to the annualized rate of change in seasonally adjusted data from one quarter to the next, which is the Bureau of Economic Analysis' standard method for reporting growth in the national accounts data.

MONTHLY DATA

Indicator	2017										2018		
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Employment													
Change in Total Payrolls (thousands)	73	175	155	239	190	221	14	271	216	175	239	313	-
Change in Private Payrolls (thousands)	68	174	165	220	188	208	16	277	217	174	238	287	-
Unemployment Rate	4.5%	4.4%	4.3%	4.3%	4.3%	4.4%	4.2%	4.1%	4.1%	4.1%	4.1%	4.1%	-
Business Activity													
Industrial Production	102.7	103.7	103.7	103.8	103.6	103.2	103.2	104.8	105.3	105.7	105.5	106.5	-
Capacity Utilization	75.5%	76.2%	76.2%	76.2%	76.1%	75.7%	75.7%	76.8%	77.0%	77.3%	77.0%	77.7%	-
PMI Composite Index	56.6	55.3	55.5	56.7	56.5	59.3	60.2	58.5	58.2	59.3	59.1	60.8	59.3
NFIB Small Business Optimism Index	104.7	104.5	104.5	103.6	105.2	105.3	103.0	103.8	107.5	104.9	106.9	107.6	-
Consumer Activity													
Consumer Confidence	124.9	119.4	117.6	117.3	120.0	120.4	120.6	126.2	128.6	123.1	124.3	130.0	127.7
Personal Consumption (M/M % Chg)	0.7%	0.1%	0.3%	0.1%	0.2%	0.0%	0.6%	0.2%	0.5%	0.3%	-0.2%	0.0%	-
Retail Sales (M/M % Chg)	0.0%	0.3%	0.0%	-0.1%	0.5%	-0.1%	2.0%	0.7%	0.8%	-0.1%	-0.1%	-0.1%	-
Lending Activity													
C&I Loans (M/M % Chg)	-0.6%	0.4%	0.1%	0.2%	0.1%	0.2%	0.5%	0.0%	-0.1%	0.1%	0.2%	0.1%	-
MLFI-25 New Business Volume (Bil.$)	8.9	7.9	7.7	9.8	7.9	7.8	8.7	8.4	7.5	12.8	6.9	7.7	-
MLFI-25 Avg Losses as a % of Net Rec.	0.68%	0.38%	0.47%	0.38%	0.35%	0.44%	0.40%	0.41%	0.42%	0.48%	0.34%	0.28%	-
MLFI-25 Credit Approval Ratio	74.5%	75.9%	77.0%	75.9%	76.0%	75.3%	74.0%	74.6%	73.6%	77.6%	76.9%	74.2%	-
Interest Rates (% avg of period)													
Fed Funds Target Rate (Lower Bound)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.5
1-Year Treasury Rate	1.01	1.04	1.12	1.20	1.22	1.23	1.28	1.40	1.56	1.70	1.80	1.96	2.06
3-Year Treasury Rate	1.59	1.44	1.48	1.49	1.54	1.48	1.51	1.68	1.81	1.96	2.15	2.36	2.42
10-Year Treasury Rate	2.48	2.30	2.30	2.19	2.32	2.21	2.20	2.36	2.35	2.40	2.58	2.86	2.84
30-Year Treasury Rate	3.08	2.94	2.96	2.80	2.88	2.80	2.78	2.88	2.80	2.77	2.88	3.13	3.09
AAA Corporate Bond Yield	4.01	3.87	3.85	3.68	3.70	3.64	3.63	3.60	3.57	3.51	3.55	3.82	3.87
BAA Corporate Bond Yield	4.68	4.57	4.55	4.37	4.39	4.31	4.30	4.32	4.27	4.22	4.26	4.51	4.64
Prices													
Headline Inflation (Y/Y % Chg)	2.4	2.2	1.9	1.6	1.7	1.9	2.2	2.0	2.2	2.1	2.1	2.2	-
Core Inflation (Y/Y % Chg)	2.0	1.9	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.8	1.8	-
Oil Price (West Texas Int., $/barrel)	50.54	49.31	48.29	46.02	50.21	47.26	51.67	54.36	57.40	60.46	64.82	61.43	64.87

About the Outlook

The Equipment Leasing & Finance Foundation (the Foundation) recognizes that with the wide variety and increasing complexity of economic data available to the public, the best way to utilize key equipment investment data is to have it all in one place, where business leaders can access it easily and quickly, thus assisting them in making the best business decisions.

The Foundation partnered with Keybridge LLC to produce this economic outlook, highlighting key trends in equipment investment and placing them in the context of the broader U.S. economic climate. The outlook report also includes an analysis of domestic capital spending as well as an evaluation of how capital spending is affected by various related and exogenous factors, both currently and in the foreseeable future. Additionally, the outlook includes custom leading indicators for 12 equipment and software verticals. The Foundation-Keybridge U.S. Equipment & Software Investment Momentum Monitor, described below, is published monthly.

This Q2 report is the first update to the 2018 Annual Outlook, and two more quarterly updates will follow in July and October. This research was guided by a steering committee of dedicated industry volunteers who gave their time and expertise by providing comments and suggestions throughout the development of the report.

About the Momentum Monitor

Business leaders require actionable forward-looking intelligence to make strategic decisions. Accordingly, the Foundation commissioned Keybridge LLC to develop a series of custom leading indicators for the equipment sector. The Foundation-Keybridge Equipment & Software Investment Momentum Monitor consists of indices for 12 equipment and software investment verticals. These indices are designed to identify turning points in their respective investment cycles with a 3-6 month lead time.

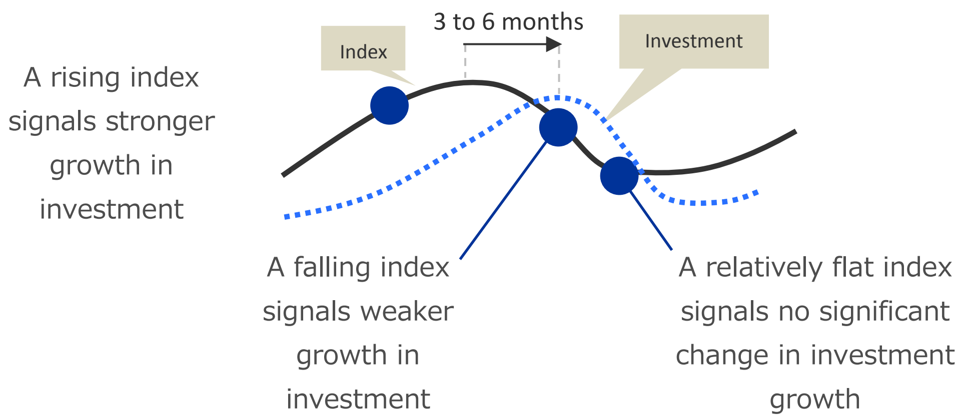
The Momentum Monitor is based on Keybridge's extensive research which shows that not all movements in economic data are reliable signals of future economic trends. Keybridge has operationalized its research by constructing indices, each comprised of 15–20 high-frequency indicators. These indicators undergo 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.

How to Read the Momentum 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:
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 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.

About Keybridge

Keybridge is a public policy economics consulting firm. Keybridge provides analytical support and strategic advice to a select clientele that includes Fortune 500 companies, global financial firms, G-7 governments, premier industry associations, and non-profit organizations. Keybridge's experience and expertise make it uniquely suited to assist organizations that frequently operate at the interface of business, economics, and public policy.

Founded in 2001, Keybridge's mission is to provide balanced, credible, and timely technical analysis and strategic insights that inform business decisions and drive public policy debates. Our dedication to the principles of sound analysis, clear communication, and unmatched client service guide our work and serve as the foundation of our success.

Keybridge's senior staff is comprised of experts with distinguished academic credentials and extensive experience in the areas of economics and public policy. On a day-to-day basis, Keybridge principals work closely with clients to develop strategy and conduct timely analysis. For longer-term projects and highly specialized topics, the firm leverages its network of advisers — including world-class experts in the fields of econometrics, energy, and finance — to build project teams tailored to clients' unique needs.

Keybridge provides clients with access to a full suite of analytical services, including macroeconomic risk assessments, econometric modeling studies, policy impact studies, qualitative policy evaluations, and survey design and analysis. For clients requiring regular consultations, Keybridge offers on-going strategic advisory services in the areas of macroeconomic trends and risks, international trade and finance, and energy and environmental economics. Keybridge also assembles and manages inter-disciplinary teams of experts to conduct thought leadership projects to assist clients with building competitive advantages or reforming policy debates through the development, sharing, and application of innovative ideas. Keybridge's principals are regularly asked to present research and share insights with economic, financial, and policy audiences around the world, including corporate strategic planning committees, congressional committees, and international conferences.

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