



2017

Q2 Update — April

Equipment Leasing & Finance U.S. Economic Outlook



EQUIPMENT LEASING & FINANCE

FOUNDATION

Your Eye on the Future

TABLE OF CONTENTS

Summary	1
Equipment & Software Investment Outlook	2
Foundation-Keybridge U.S. Equipment & Software Investment Momentum Monitor	2
Equipment & Software Investment Annual Growth Forecast	7
U.S. Capital Investment and Credit Markets	8
Recent Trends in Capital Investment.....	8
Recent Trends in Credit Markets	9
Update on Fed Policy	11
Overview of the U.S. Economy	12
Recent Trends in the U.S. Economy	12
Economic Tailwinds	13
Economic Headwinds	14
Additional Factors to Watch	15
Projections for Key Economic Indicators	16
Appendix	17
Quarterly Data	17
Monthly Data	18
About the Outlook	19
About the Momentum Monitor	19
How to Read the Momentum Monitor	20
About Keybridge.....	21

SUMMARY

Equipment & Software Investment Outlook: Equipment and software investment growth is expected to improve in 2017 after a lackluster 2016, driven by strong gains in business confidence and robust residential housing investment. While the industrial sector continues to lag, strong labor markets, firming wages, stable energy prices, and improved economic prospects overseas should provide a positive growth environment for U.S. businesses. Most equipment verticals should expect their growth outlook to improve relative to last year:

- Agriculture Machinery investment growth should remain sluggish over the next two quarters.
- Construction Machinery investment growth is likely to accelerate over the next three to six months.
- Materials Handling Equipment investment is likely to grow at a slow but stable pace over the next three to six months.
- All Other Industrial Equipment investment growth should improve over the next three to six months.
- Medical Equipment investment growth may slow over the next three to six months.
- Mining & Oilfield Machinery investment growth should improve over the next three to six months.
- Aircraft investment growth may strengthen over the next three to six months.
- Ships & Boats investment growth is expected to expand in the next three to six months.
- Railroad Equipment investment growth should rebound over the next three to six months.
- Trucks investment growth should strengthen over the next two quarters.
- Computers investment growth may modestly improve over next three to six months.
- Software investment growth is likely to remain stable or slow modestly over the next three to six months.

U.S. Capital Investment & Credit Markets: U.S. credit conditions remain solid overall, with little change from last quarter in consumer and business credit demand, and a slight downtick in credit supply as banks tighten lending standards. Business demand for credit remains generally weak, but may revive over the next two quarters. Meanwhile, growth in consumer credit demand has slowed since last quarter, despite record-high consumer confidence. The Federal Reserve has raised interest rates twice since the last Outlook, and will likely increase rates two or three more times this year.

Overview of the U.S. Economy: The U.S. economy appears to be on solid footing, despite an underwhelming finish to 2016 and slow start in 2017. Labor markets remain strong, which underlies healthy consumer spending, gradually accelerating wage growth, and mounting inflationary pressures. Business investment and manufacturing activity continue to lag, but industry confidence indices point to an improved investment picture during the second half of the year. Government spending is likely to have a neutral effect on economic growth this year, while exports may struggle — although an improved international growth story may help increase demand for U.S. manufacturing goods. While a strong growth surge is unlikely, the U.S. economy seems to be on track for moderate growth after a sluggish 2016.

Bottom Line for the Equipment Finance Sector: Equipment and software investment should improve in 2017, as renewed business confidence and firming energy prices lift the potential for business investment and capex spending while reducing uncertainty. The growth experienced in Q4 2016 marked the first positive quarter after a year of contraction and leaves the equipment finance sector well-positioned for a decent rebound in 2017. We project 2.5% GDP growth this year (slightly above consensus estimates), while equipment and software investment is projected to expand by 2.8%.

EQUIPMENT & SOFTWARE INVESTMENT OUTLOOK

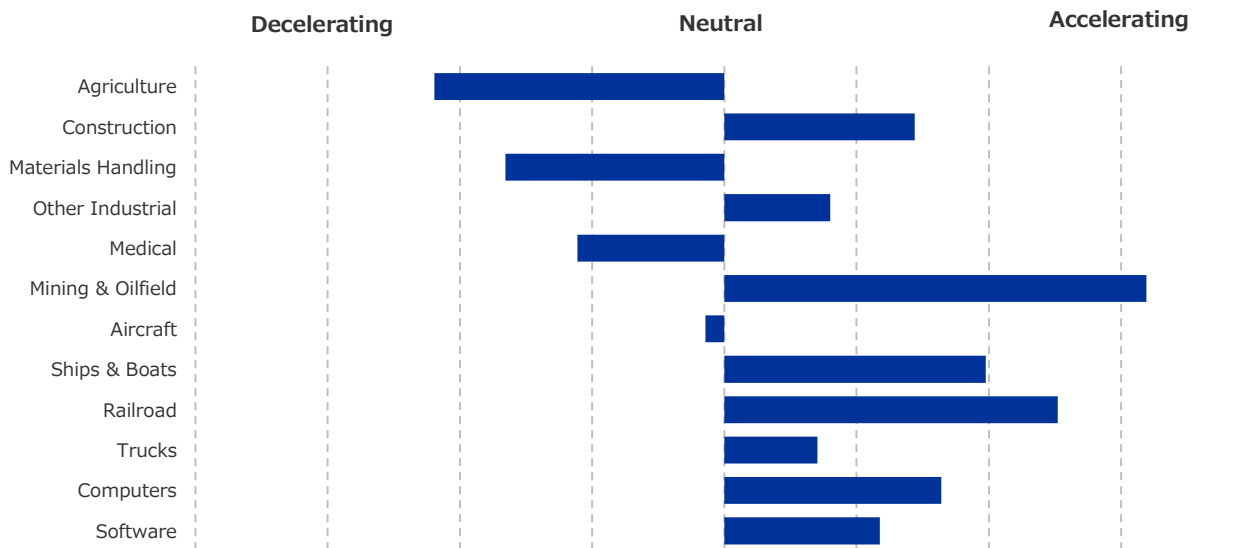
We anticipate that equipment and software investment will grow by 2.8% in 2017, a significant improvement on last year’s contraction (-1.1%). Despite some continued sluggishness in the industrial sector overall, investment in most equipment verticals is set to expand over the coming months, as firming oil prices and an improved business investment environment help to keep growth buoyant.

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 19–20.

**This month, Keybridge re-optimized the suite of Equipment and Software Investment Momentum Monitors. The re-optimization process, which was last performed in 2015, involves updating the relative weights of the various components in each momentum monitor to reflect recent data — and, in many cases, changing some of the individual components of each index. As a result of this process, some verticals may exhibit larger-than-usual momentum shifts in this month’s report relative to prior months.

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).

NEW FEATURE IN THE QUARTERLY ECONOMIC OUTLOOK

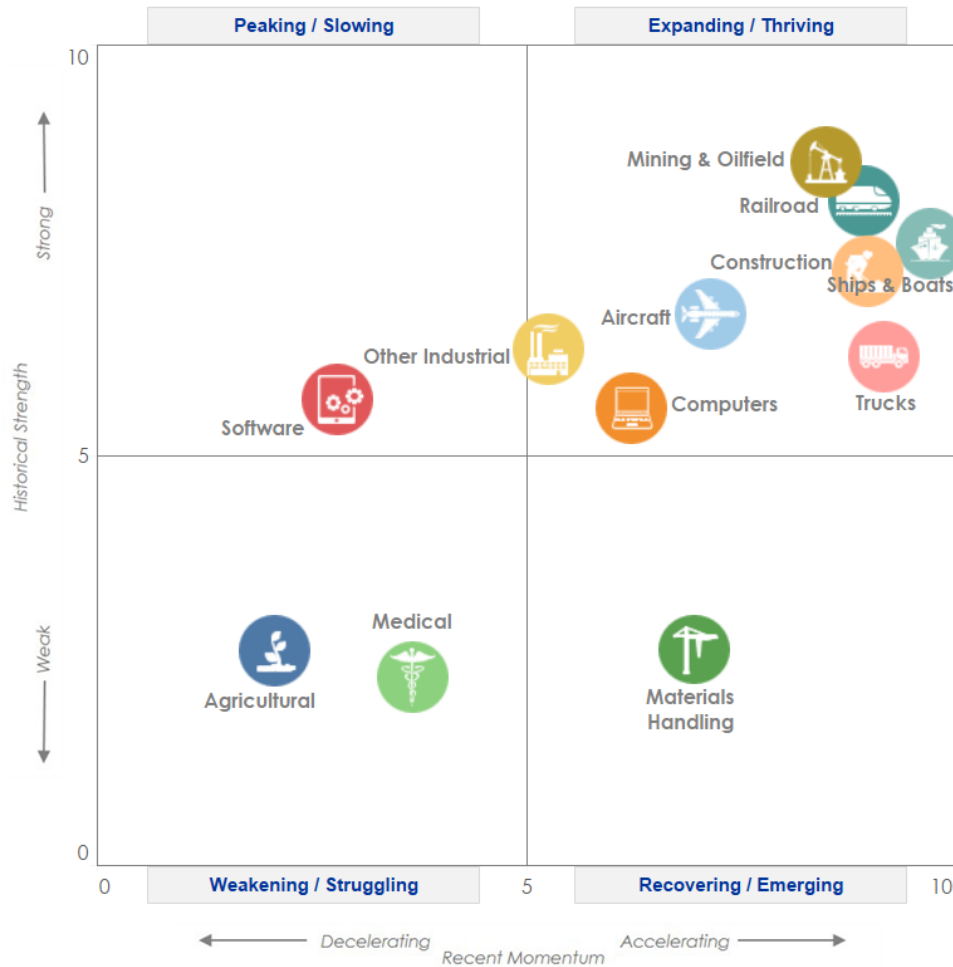
In February, Keybridge and the Foundation introduced a new feature to the U.S. Equipment & Software Investment Momentum Monitor. The “Momentum Monitor Sector Matrix” (see next page) is a customized data visualization that provides greater detail on our short-term investment expectations for each equipment vertical — both historically and relative to other verticals. Specifically, the Sector Matrix depicts each vertical on a 2 x 2 matrix based on its Recent Momentum (x-axis) and Historical Strength (y-axis). This capability makes it a better tool than the traditional “heat map” chart seen above, 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 3 of this report.

Beginning next month, the new Sector Matrix will replace the heat map, and the heat map will be discontinued.

U.S. Equipment & Software Investment Momentum Monitor

April 2017

Momentum Monitor Sector Matrix

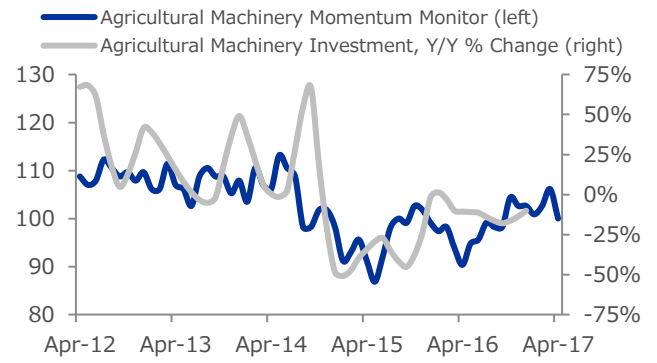


The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

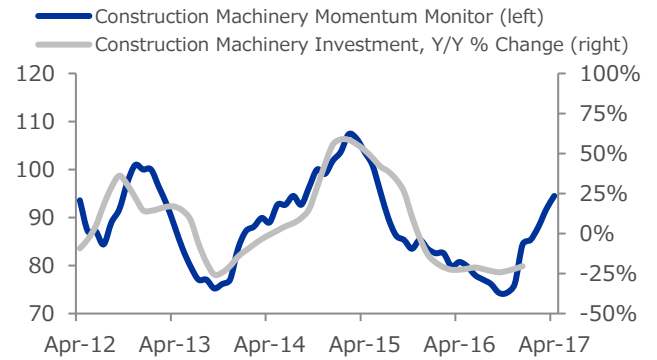
- "Recent Momentum" represents the degree of an indicator's recent acceleration or deceleration in the past month relative to its average movement during the previous 3 months. Ratings closer to "0" represent an indicator that is rapidly decelerating, while ratings closer to "10" represent an indicator that is rapidly accelerating.
- "Historical Strength" represents the strength or weakness of an indicator in the past month relative to its typical level since 1999. Ratings closer to "0" represent an indicator that is weaker than average, while ratings closer to "10" represent an indicator that is stronger than average.

The matrix is comprised of four quadrants according to each vertical's recent momentum and historical strength readings. If a vertical is located in the top-left quadrant, its momentum reading is higher than average, but positive movement has slowed (and perhaps reversed) in recent months — suggesting that investment levels may fall over the next 1-2 quarters. Verticals located in the bottom-right quadrant, however, have momentum readings that are below average, but recent movement shows promise — suggesting that investment levels may rise over the next 1-2 quarters. This makes them potentially attractive targets for new short-term leasing and finance opportunities.

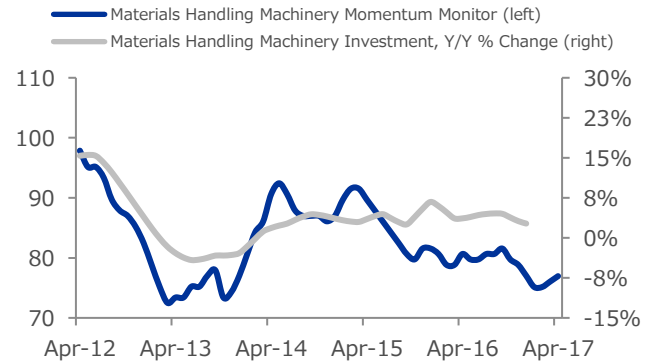
Agricultural Machinery Investment in Agricultural Machinery contracted at an annual rate of 1.2% in Q4 2016 and is down 10.1% from one year ago. The Agriculture Momentum Index declined from 106.1 (revised) in March to 100.0 in April. In January, National Average Precipitation jumped 17.8%. However, Production of Lamb & Mutton, Pork, and Poultry all dropped substantially in February. Overall, the Index's recent movement suggests continued sluggishness in agricultural machinery investment over the next three to six months.



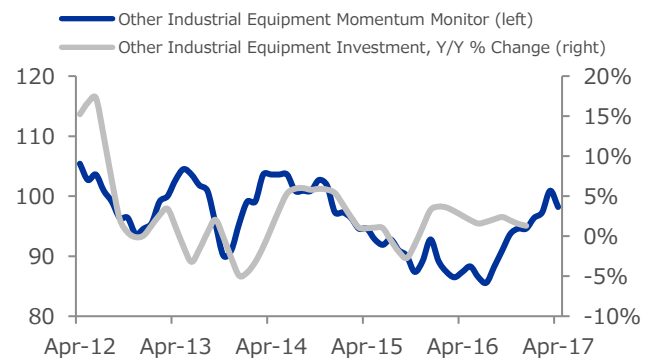
Construction Machinery: Investment in Construction Machinery fell at a 5.7% annual rate in Q4 2016 (the seventh straight decline), and is down 20.4% year-over-year. However, the Construction Momentum Index rose from 91.7 (revised) in March to 94.5 in April, its highest level since June 2015. Construction Machinery Shipments rose 2.6% in February, but For-Sale Housing Stock increased 8.5%. Overall, the Index continues to indicate that construction machinery investment will improve over the next three to six months.



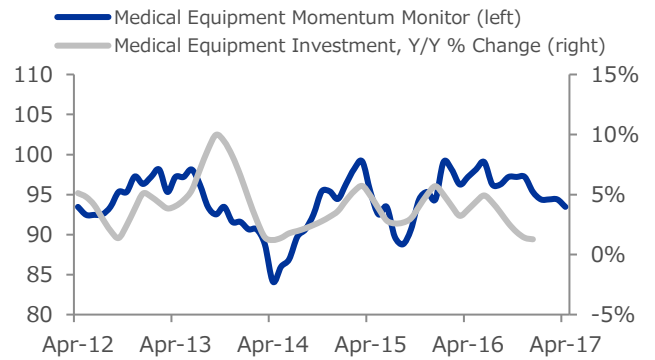
Materials Handling Equipment: Investment in Materials Handling Equipment rose by a 4.0% annual rate in Q4 2016, and is up 2.7% year-over-year. The Materials Handling Momentum Index ticked up from 76.1 (revised) in March to 77.0 in April. In March, the Dow Jones Industrials Balance dropped 18.3 points, but Machinery Inventory Prices rose 1.5% in February. Overall, the Index's current position and recent movement point to slow but stable growth in materials handling investment over the next two quarters.



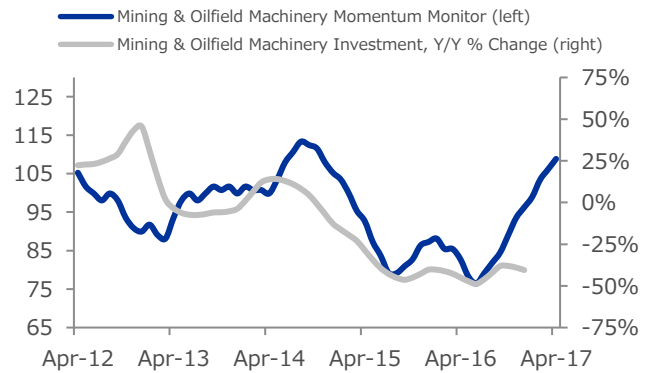
Other Industrial Equipment: Investment in All Other Industrial Equipment increased by a 5.3% annual rate in Q4 2016 and is up 1.3% from a year ago. The Other Industrial Equipment Momentum Index decreased from 100.9 (revised) in March to 98.2 in April. In February, Manufacturing added 28,000 jobs and Average Weekly Earnings ticked up 0.2% from the previous month. Overall, the Index continues to point to improved investment growth in industrial equipment over the next three to six months.



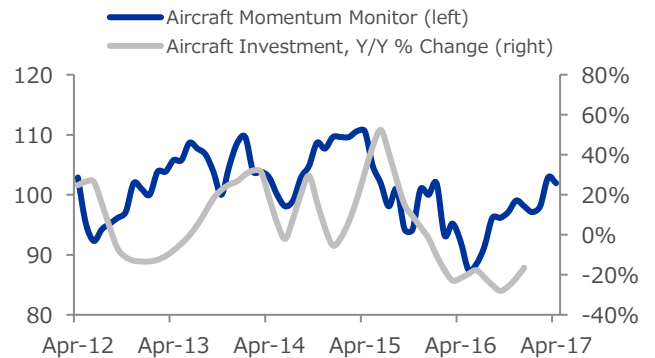
Medical Equipment: Investment in Medical Equipment expanded at a 6.8% annual rate in Q4 2016 and is up 1.3% year-over-year. The Medical Equipment Momentum Index ticked down from 94.4 in March (revised) to 93.5 in April. In February, the Export Price Index for Medical Equipment rose 1.0%, the largest month-on-month increase in four years. Overall, the Index's recent movement signals continued slow growth in medical equipment investment over the next three to six months.



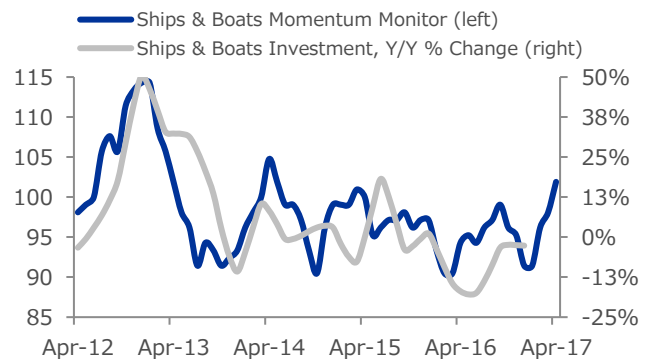
Mining & Oilfield Machinery: Investment in Mining & Oilfield Machinery declined at a 39.3% annual rate in Q4 2016 and is down 40.5% year-over-year. The Mining & Oilfield Machinery Momentum Index rose from 106.1 (revised) in March to 108.8 in April. In February, Industrial Production for Oil & Gas Drilling rose 6.6%, while Mining & Logging Employment for Production & Non-supervisory Workers added 9,000 jobs. Overall, the Index's position and recent movement point to improvements in mining & oilfield machinery investment over the next two quarters.



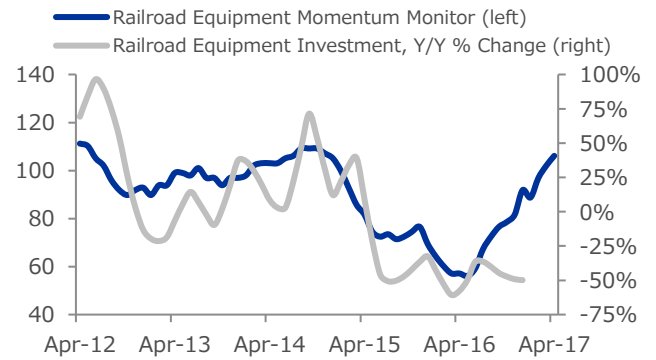
Aircraft: Investment in Aircraft fell at a 13.4% annual rate in Q4 2016 and remains down 16.5% on a year-over-year basis. The Aircraft Momentum Index slipped from 102.9 (revised) in March to 101.9 in April. Shipments of Non-Defense Aircraft fell 4.5%, partially offsetting a 1.2% rise in Inventories of Defense Capital Goods. Overall, the Index points to improved aircraft investment growth over the next three to six months.



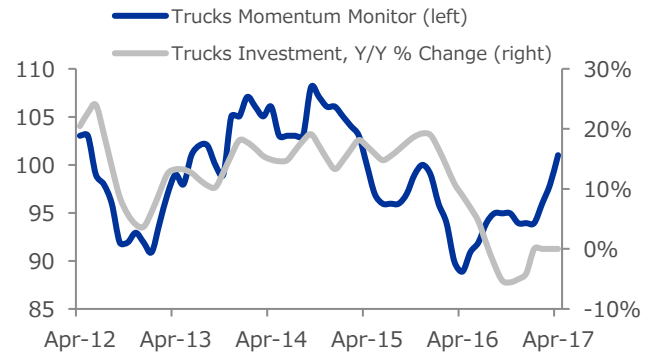
Ships & Boats: Investment in Ships & Boats rose at an annual rate of 12.6% in Q4 2016, but is down 2.7% year-over-year. The Ships & Boats Momentum Index increased from 98.1 (revised) in March to 101.9 in April, its strongest reading in over two years. Grain Exports rose 14.9% in January, but Port of LA Container Traffic declined 24.3% in February. Overall, the Index's current position and recent movement suggest that ships & boats investment may strengthen moderately over the next two quarters.



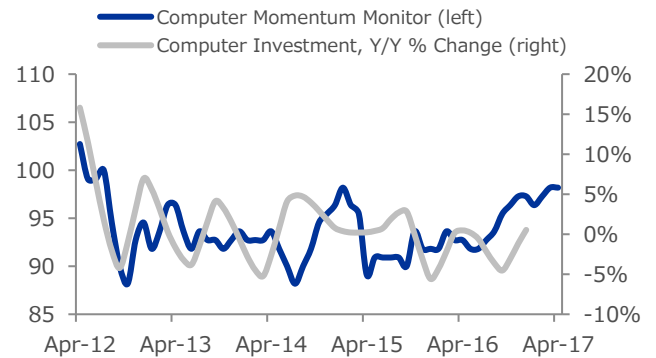
Railroad Equipment: Investment in Railroad Equipment decreased at a 36.3% annual rate in Q4 2016 and remains down 49.9% year-over-year. The Railroad Equipment Momentum Index jumped from 102.0 (revised) in March to 106.1 in April. Mining Exports increased 10.3%, Capacity Utilization for Oil & Gas Extraction ticked up to 94.82%, and Crude Oil Exports rose 4.1%. Overall, the Index points to a rebound in railroad equipment investment over the next three to six months.



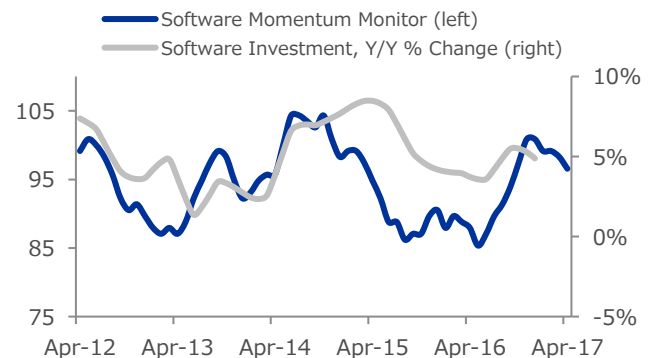
Trucks: Investment in Trucks expanded at a 12.0% annual rate in Q4 2016 but is down 4.1% from year-ago levels. The Trucks Momentum Index rose from 98.0 (revised) in March to 101.0 in April. The ISM Manufacturing Index ticked down to 57.2 in March, but continues to signal a solid expansion. However, Inventories of Transportation Equipment fell 1.5% in February, after a significant 6.2% drop the previous month. Overall, the Index suggests that investment in trucks will strengthen over the next three to six months.



Computers: Investment in Computers fell at an annual rate of 9.2% in Q4 2016, but is up slightly (0.5%) year-over-year. The Computers Momentum Index held steady at 98.2 from March (revised) to April. In January, Appliance & Electronic Retail Sales dropped 38.0, but Computer Export Prices rose in February. Overall, the Index's recent movement suggests that growth in computers investment may improve modestly over the next two quarters.



Software: Investment in Software rose by a 0.9% annual rate in Q4 2016, and is up 4.9% year-over-year. The Software Momentum decreased from 98.3 (revised) in March to 96.6 in April. Despite a small downtick in February, the NFIB Small Business Optimism Index remains at a historic high level of 105.3. Overall, the Index suggests stable or slightly slower 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 Average	Last 4 Quarters	Next 4 Quarters
Agricultural Machinery	4.6%	-10.1%	-6 to 4%
Construction Machinery	4.2%	-20.4%	0 to 8%
Materials Handling Equipment	1.2%	2.7%	0 to 6%
Other Industrial Equipment	1.4%	1.2%	1 to 8%
Medical Equipment	3.6%	1.3%	1 to 5%
Mining & Oilfield Equipment	-0.1%	-40.8%	-10 to 5%
Aircraft	7.2%	-16.5%	-5 to 5%
Ships & Boats	4.2%	-2.8%	0 to 6%
Railroad Equipment	5.3%	-49.9%	0 to 12%
Trucks	17.7%	-4.1%	4 to 12%
Computers	3.6%	0.5%	2 to 6%
Software	4.3%	5.4%	2 to 6%

Source: Macrobond Financial, Keybridge (forecasts)

U.S. CAPITAL INVESTMENT AND CREDIT MARKETS

Capital spending will likely grow at a moderate pace in 2017, driven by substantial improvements in both business and consumer confidence, rising production levels of durable goods, and stable oil prices. After contracting for most of last year, equipment and software investment increased modestly in Q4 2016 and appears likely to resume a growth trajectory in 2017, particularly if elevated business confidence leads to increased business investment. Credit market conditions are mostly unchanged from 2016 and unlikely to inhibit business investment or the equipment finance industry. Overall, we anticipate that equipment and software investment will expand by 2.8% in 2017.

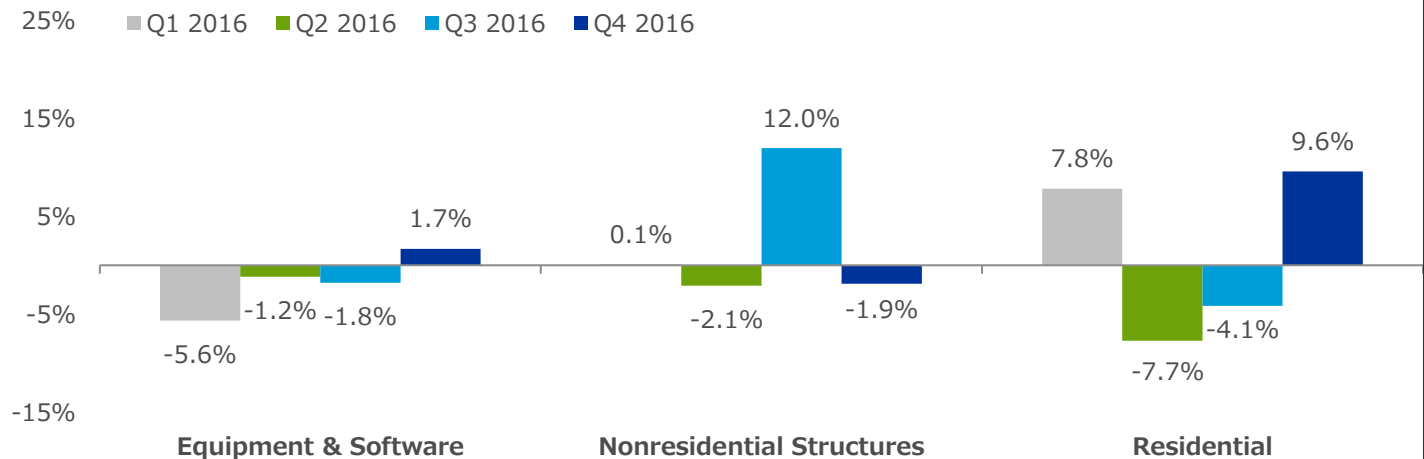
After raising interest rates in December, the Fed raised rates again in mid-March and expressed an appetite for multiple additional rate hikes over the remainder of the year to combat rising inflation. Depending on economic growth and inflation trends, we anticipate two or three additional rate hikes in 2017, totaling 50 to 75 basis points.

Recent Trends in U.S. Capital Investment

Equipment and software investment grew at a 1.7% annualized rate in the fourth quarter of 2016, the first increase after four consecutive quarters of contraction. Nonresidential structures posted a -1.9% annualized decline in Q4. However, residential investment surged at a 9.6% annualized pace, a strong rebound after two disappointing quarters.

Investment Growth Rates

Quarter-on-Quarter, Seasonally Adjusted Annualized Growth Rate



Source: Macrobond Financial

- Equipment Leasing and Financing:** The equipment finance industry has had a slow start to 2017. The [ELFA Monthly Leasing and Finance Index \("MLFI-25"\)](#) for February reported new business volume at \$5.9 billion, down 4.8% from January and 3.3% below year-ago levels. Year-to-date, cumulative new business volume is up just 0.5% compared to 2016. On the other hand, portfolio performance remains relatively strong: 30-day delinquencies are at 1.50% (down 0.20 percentage points from January and roughly level with year-ago levels), and charge-offs also ticked down to 0.38%.

In March, the Foundation's [Monthly Confidence Index for the Equipment Finance Industry \("MCI-EFI"\)](#) eased 1.1 points to 71.1, but is still well above its 2016 average of 55.0 after a post-election surge brought the index to an all-time high in January. Industry executives expressed strong optimism about the demand for equipment financing over the next several

months, and expectations regarding business conditions, access to capital, and hiring all increased in March. Recent movement in the index is likely driven by confidence that the new Congress and Trump administration will be more supportive of pro-growth policies, including regulatory and tax reform. So far, this confidence has not been reflected in actual new business volume, however, which could mean that sustaining the confidence rally will hinge on the federal government’s ability to deliver on these business-friendly policies.

Looking ahead, we expect that industry performance will improve in 2017 relative to last year. While the sharp increase in industry confidence has not yet been reflected in new business volume, we anticipate that equipment investment will improve in the second half of the year.

- Equipment Verticals:** Equipment investment growth was mixed in Q4 2016, as six equipment verticals experienced positive investment growth and six saw declines. Ships & Boats and Trucks were the two fastest-growing verticals at 12.6% and 12.0% (annualized), respectively. Conversely, despite posting positive investment growth in Q3 2016 for the first time in over two years, Mining & Oilfield fell by 39.3% (annualized) in Q4. Railroad investment also disappointed, posting -36.3% annualized growth. However, with oil prices stabilized in the \$45–55 range and growing signs of recovery in the oil and gas sectors, the Momentum Monitor Index for both these equipment verticals points to improved investment growth in the next three to six months.
- Other Factors:** Recent industrial sector data point to a tepid growth outlook, with upside potential in the second half of the year. Industrial production was unchanged in February (103.7) but is up slightly (+0.3%) on the year, while capacity utilization slipped to 75.9% and remains well below its long run average of 79.9%. Durable goods shipments, a solid indicator for current-quarter industrial sector growth, ticked up just 0.3% in February after falling in January. However, new orders of durable goods, a leading indicator of next-quarter sector growth, rose 1.7% in February after a strong (+2.3%) increase in January. The U.S. dollar remains historically strong, providing a headwind for domestic manufacturers who are consequently less able to compete in international markets. Overall, the U.S. industrial and manufacturing sectors should expect modest growth in the first half of 2017 and potentially stronger growth in the second half.

Recent Trends in Credit Markets

Credit market conditions have remained steady over the past several months. On balance, lending standards were little changed for commercial firms, households, and consumers in Q4 2016. Consumer credit demand slightly decreased, while business demand for credit moderately increased, a trend that reflects improvements in business investment growth and business confidence in recent months. Financial stress remains low. Finally, the Federal Reserve recently announced two interest rate hikes of 25 basis points each in December 2016 and March 2017, and has signaled a strong possibility of multiple additional rate increases this year.

- Credit Supply & Pricing:** On balance, credit supply tightened modestly in Q4 2016. According to the January Fed Loan Officer Survey, banks left their standards on commercial and industrial (“C&I”) and residential real estate (“RRE”) loans largely unchanged, but tightened standards on commercial real estate (“CRE”) loans. Banks indicated mixed changes in standards for consumer loans in

Summary of Credit Conditions

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

the same period: a moderate fraction reported tightening auto loan lending standards and a modest fraction reported tightening lending standards on their credit cards, while lending standards on other consumer loans were unchanged. Two sets of special questions included in the report indicate that banks expect the asset quality of both C&I loans and RRE home-purchase loans to improve, while that of most major CRE loan categories should remain unchanged.

- **Credit Demand:** Credit demand has experienced modest growth over the past quarter, for both consumers and businesses. Annualized growth in consumer deposits and loans slowed to 2.8% in January, compared to a 6.3% growth rate over the last year. In the January Fed Loan Officer Survey, banks cited slightly weaker demand for RRE and consumer loans, but consumer credit demand may strengthen if recent gains in consumer confidence lead to increased spending. In March, the Conference Board's Consumer Confidence Index jumped to 125.6 (its strongest reading since December 2000), while the University of Michigan Consumer Sentiment and Bloomberg Consumer Comfort Indices also rose significantly over the last quarter.

Recent growth in credit demand for businesses has also been slow, but a pickup may be on the horizon. The January Fed Loan Officer Survey acknowledged that banks saw little change, on balance, in demand for C&I loans from large and middle-market firms. Meanwhile, a moderate net fraction of banks reported that inquiries for lines of credit increased in the fourth quarter. Despite near universal month-on-month increases in C&I loans over the past ten years, growth in C&I loans dropped in February and December, and year-on-year growth decelerated from 8.8% in October to 5.2% in February. The Thomson Reuters/PayNet Small Business Lending Index ("SBLI") also fell by 8% drop in January, but remains 4.4% above its year-ago levels and well above its historical average. Recent surges in business confidence may presage increased business investment and demand for credit in mid-2017. The National Federation of Independent Business ("NFIB") Small Business Optimism Index currently stands at 105.3, well above the index's historical (97.3) and 2016 (95.3) averages. The Business Roundtable's CEO Economic Outlook Index surged 19 points to 93.3 in Q1, its highest level since Q2 2014. These trends point to a bolstered sense of confidence within the business community, likely attributable to the pro-business policies promoted by the new administration. The extent to which this renewed confidence results in new business investment and credit demand in 2017 will likely depend on how many of these policies are implemented.

- **Financial Stress:** Financial stress decreased in both the fourth quarter of 2016 and the first quarter of 2017. The St. Louis Fed Financial Stress Index, already historically low in the latter half of 2016, continued to fall in December, January, and February. Following the same trend of increasing consumer confidence, the Kansas City Fed Financial Stress Index declined from its Q4 2016 levels, falling from -0.33 in November to -0.61 in February. The loan and lease delinquency rates — measured as the share of all loans and leases that are delinquent, respectively — slightly increased between Q3 and Q4, with the loan delinquency rate ticking up to 1.59 percent and the lease delinquency rate rising from to 1.08 percent. Overall, financial markets remain healthy.
- **Other Factors:** 10-year Treasury yields have jumped since the presidential election to around 2.4% at the end of March, well above the 2016 average of 1.84%. Following the pricing of a March rate increase into the bond market, the yield on 10-year treasury bonds increased to 2.61%, its highest close since late 2014. However, there may be reason anticipate a slight drop-off in future treasury yields. Specifically, uncertainty surrounding tax and healthcare reform have raised questions about whether the Trump administration will be able to enact a variety of business-friendly reforms that require Congressional approval. The resulting moderation of equity markets could drive investors to treasuries, thus lowering yields. Further, amid the growing popularity of far-right candidates in several EU countries and the opening of Brexit negotiations,

European political uncertainty may further drive demand for U.S. treasuries and dampen yields. However, these downward pressures should be largely outweighed by the promise of future short-term rate hikes from the Fed. Multiple additional rate increases are expected over the remainder of the year, which would apply upward pressure on 10-year treasury yields.

Update on Fed Policy

Recent announcements from the Federal Reserve support the expectation of three or four interest rate increases for 2017. In mid-March, the Fed opted to lift short-term interest rates by 25 basis points for the third time since the recession, to between 0.75 and 1 percent. Though reassured by a strengthening economy, the Fed has indicated that it does not share the same degree of optimism as investors and business executives. However, expectations of continued tightness in the labor market (at 4.7%, the current unemployment rate suggests that the economy is at or near full employment) and mounting inflation will likely compel the Fed to continue raising interest rates, in keeping with its dual mandate.

OVERVIEW OF THE U.S. ECONOMY

In 2017, the U.S. economy is likely to experience moderate growth, as strong labor markets, healthy consumer spending, and improved business investment are partially offset by lagging contributions from government spending and trade. Ongoing tightening in the labor market should continue to drive up wages and income growth, which should contribute to healthy gains in consumer spending and residential investment. Meanwhile, surging business optimism may be a leading indicator of a turnaround in business investment this year after an exceptionally weak 2016, and should lead to faster economic growth for the year. However, recent political developments show that the U.S. economy is unlikely to get a boost from federal government spending, and a stubbornly strong U.S. dollar is likely to hold back U.S. net exports.

GDP growth came in at a respectable but uninspiring 2.1% annual rate in Q4 2016, and is likely to disappoint at a sub-2% pace in Q1 2017. However, there are reasons to be optimistic about growth for the remainder of the year. Consumer spending (the main driver of GDP growth) has been solid and is likely to remain so; the international economic environment has improved considerably despite headwinds on the issue of trade policy; and a lighter regulatory touch from the federal government should reduce both costs and uncertainty for businesses weighing investment decisions.

Overall, we project the U.S. economy to grow 2.5% in 2017 — similar to 2014 and 2015, but a significant improvement on 2016 growth.

Recent Trends in the U.S. Economy

We expect economic growth in 2017 to be driven by two key factors: a continuation of moderately strong consumer spending (aided by a tightening labor market and solid disposable income growth) and significant improvements in business and residential investment growth. However, export growth may disappoint due to a persistently strong dollar that weighs on U.S. competitiveness overseas and lingering downside risks to international trade. The effect of government spending on the economy depends largely on the outcome of tax and budget deals in Congress, but our baseline estimate supposes that government spending will have a roughly neutral effect on GDP. Assuming oil prices remain stable and wage growth continues to gradually accelerate, inflationary pressures will strengthen over the course of the year.

Indicator	Recent Activity
Consumption	Consumer spending maintained a healthy growth rate of 3.5% (annualized) in Q4 2016.
Equipment & Software Investment	Equipment & software investment increased 1.7% (annualized), the first quarter of growth in over a year.
Residential Investment	Residential investment spiked 9.6%, following two consecutive quarters of contraction.
Government Expenditures	Government expenditures ticked up 0.2%, with decreased federal spending (down 1.2%) offset by higher state and local spending (up 1.0%).
Net Exports	Net exports fell, as exports dropped 4.5% (annualized) in Q4 2016 while imports jumped 9.0% (annualized).

- Q1 GDP:** The U.S. economy grew at an annualized rate of 2.1% in the fourth quarter of 2016, a downgrade from 3.5% annualized growth in the previous quarter. The most significant growth was experienced by business investment, which expanded 9.4% (annualized), the category's largest single-quarter increase since Q1 2015. Robust business investment growth was anchored by a modest increase in nonresidential fixed investment (+0.9% annualized) and a significant jump in residential investment (+9.6% annualized).

Consumer spending continued to expand at a healthy rate (3.5% annualized), capping off three consecutive quarters of annualized growth at 3% or above. Government spending expanded by just 0.2% annualized, held back by a 3.6% reduction in federal defense spending. Annual defense spending has fallen by 4.1%, 2.1%, and 0.7% in the last three years, respectively.

- **Inflation:** The headline inflation rate has steadily increased since the middle of last year. Last July, the unadjusted year-on-year inflation rate was just 0.8%; it has since increased to 2.7% and may continue to rise throughout 2017. Meanwhile, the personal consumption expenditure price index (the Fed's preferred inflation measure) topped 2% at the end of March for the first time in five years. One factor to watch is oil prices, which have remained relatively constant at \$50/barrel thus far in 2017 after dropping below \$30 a year ago. If oil prices remain at their current levels for 2017, it will place additional upward pressure on inflation. Another important factor will be the labor market, as the combination of a sub-5% unemployment rate, healthy monthly job growth, and near-record low initial unemployment claims should drive up wages to 3% year-on-year nominal growth throughout 2017 — providing even more upward pressure on inflation.
- **Growth Forecasts:** The *Economist* Poll of Forecasters for March estimated 2.3% GDP growth for 2017, a slight upgrade from the 2.2% growth figure cited in February. Similarly, the Federal Reserve's March "central tendency" forecast was in the range of 2.0%-2.2%, consistent with its previous estimate of 1.9%-2.3% growth in December 2016.

Economic Tailwinds

Bolstered by a tightening labor market and healthy consumer spending, improved growth in international markets, and the potential for broad-based domestic regulatory reform, the U.S. economy has reason for cautious optimism in 2017.

- **Strong Labor Market:** Several indicators raise expectations that the labor market will continue to tighten. In February, non-farm payrolls experienced a robust increase of 235,000, above the consensus estimate of 190,000. The strong showing in February follows a January BLS employment report that cited a similar uptick in employment, with nonfarm payrolls growing by 238,000. Unemployment is currently at 4.7%, which is in line with the Fed's range for full employment. The four-week moving average of seasonally adjusted new jobless claims remains low (254,250), while the U-6 unemployment rate (which includes part-time workers and those who are marginally attached to the labor force), has hovered around 9.2% since the end of 2016. Looking ahead, we expect the labor market to remain strong, with solid job gains continuing to drive increases in wages and disposable income and boosting consumer spending.
- **Green Shoots in the Global Economy:** Following several years of stunted global economic vitality, international markets (including both wealthy and developing nations) are poised to enjoy a year of above-average growth. The manufacturing sector has emerged as a particularly well-performing segment of the global economy, as the Eurozone Manufacturing PMI rose to 56.2 in March — the highest reading since early 2011. In addition, the European Commission's economic sentiment index is at its highest level in six years and well above its long-term average. Outside of Europe, the IMF predicts that China's annual growth rate will slow to around 6% over the next 5 years, but most experts expect India to grow at rates exceeding 7% in the medium term and are also optimistic about the growth prospects elsewhere in southeast Asia. Finally, some economies that were plagued by recession and inflation in 2016 appear to be improving. Inflation in Russia, for example, fell to 4.6% in February (down from a peak of 16.9% in early 2015), and Russian manufacturing activity expanded for six consecutive months before slipping in February. Renewed buoyancy in the international economy should provide a

lift to the U.S. economy in 2017 via increased demand for U.S. exports, although a historically strong dollar could offset some of these gains.

- **Domestic Regulatory Reform:** Despite concerns regarding the Trump administration's ability to enact certain aspects of its policy agenda, the prospect of regulatory reform that would lower business operating costs and reduce market uncertainty has been a key driver in rising business optimism and is already underway. Several regulations finalized near the end of the President Obama's term have been rescinded under the rarely-used Congressional Review Act, while the administration has taken steps to delay or revisit other regulations that have not yet been implemented. In addition, President Trump recently signed an executive order establishing a "one in, two out" regulatory policy, which would require most regulatory agencies to identify two or more deregulatory actions for each new significant regulation they promulgate. Perhaps more importantly, the executive order also establishes a framework for a regulatory budget to be implemented in future years, which provides the Office of Management and Budget with a new tool to manage regulatory costs across the federal government. While the executive order exempts some agencies (including many financial industry regulators) and does not apply to all regulations, it represents a significant step toward reducing the overall regulatory burden on U.S. businesses.

In addition to taking actions on specific regulations through the Congressional Review Act, many political observers expect Congress to pursue "process-based" regulatory reforms, such as requiring increased transparency, more opportunity for the public to comment on proposed rules, mandatory use of cost-benefit analyses for major rules issued by all federal agencies, and requiring agencies to develop "prospective retrospective review" plans that put measures in place to measure a rule's economic impact after it is implemented. These reforms would likely require 60 votes in the Senate, but many of these reforms have garnered bipartisan support in the past and could be added to a larger infrastructure spending bill.

Economic Headwinds

Though there are reasons to be optimistic about 2017 growth, risks associated with weak export growth and industrial sector sluggishness should temper expectations.

- **Persistent Trade Deficit:** Despite a decline in February, the U.S. trade deficit continues to grow steadily. Year-to-date, the trade deficit stands 3.1% above its level in the same period of 2016. Over the last several quarters, the United States has struggled to maintain positive net exports. Other than a one-time surge in soybean exports in the third quarter of 2016, net exports have consistently failed to contribute significantly to overall GDP growth, and have often shaved off several tenths. The country's negative trade balance stems in part from the persistent strength of the U.S. dollar, which makes U.S. exports less competitive. As the dollar shows no immediate signs of weakening, the U.S. trade balance may remain an issue of concern throughout the year.

The negative trade story also draws from a global political backlash against free trade. The World Trade Organization ("WTO") reports that countries continue to apply new trade restrictions at a historically fast pace, while the removal of trade restrictions has slowed to a trickle. A global trade slowdown will make it increasingly difficult for the United States to boost export growth, as countries turn inward and become more reluctant to buy U.S. products. If the new administration follows through on promises to renegotiate longstanding trade deals like the North American Free Trade Agreement ("NAFTA") and impose tariffs on certain U.S. imports, U.S. exporters may have less access to high-growth emerging markets. In 2017, the baseline forecast for U.S. export growth is modestly negative, with significant downside risks resulting from an uncertain trade policy outlook.

- **Ongoing Industrial Sector Sluggishness:** Recent data suggest that the industrial sector may continue to underwhelm, and while early signs indicate that 2017 will be a better year for U.S. manufacturers and the goods-producing sectors of the economy than last year, it is also unlikely to be a year of breakout growth. Industrial production, an index-based metric for output in the manufacturing, mining, and utilities sectors, was 103.7 in February — a middling reading on par with values seen in 2015 and 2016. Capacity utilization, which measures the extent to which an economy's total productive capacity is being used, currently stands at 75.9% — down from a year ago and on the lower end of the range experienced over the last three years. These data suggest that there is extra slack in the U.S. economy, which in turn points to weaker investment growth in the industrial sector. Since the Great Recession, capacity utilization has never broken above 80% (which is historically the level at which firms tend to reinvest in additional equipment to increase production capacity), and this disappointing pattern is likely to continue this year. Expectations of continued dollar strength also contribute to industrial sector weakness, as U.S. manufacturers are less able to compete in global markets.

Additional Factors to Watch

In addition to tailwinds and headwinds listed above, several other factors are set to affect economic performance for 2017.

- **Business and Consumer Confidence:** Both business and consumer optimism have skyrocketed in the last three months. Numerous confidence measures — including the NFIB Small Business Optimism index, which leaped from 94.9 the month before the November election to 105.3 in February; and The Conference Board's index of consumer confidence, which surged in March to its highest level since 2000 — all point to growing optimism about the U.S. economy. However, although these "soft" measures are normally considered to be reasonably reliable leading indicators of the U.S. economy, thus far they are at odds with "hard" economic data released in 2017. Recent reports on retail sales, personal income and outlays, wholesale trade, light vehicle sales, and other major releases have disappointed (although job growth has been a notable exception), and as a result, models that emphasize hard economic data rather than confidence metrics are less optimistic about the U.S. economy. For example, the Atlanta Fed's *GDPNow* forecast currently projects that Q1 growth will be a modest 1.2% (annualized). A report from Morgan Stanley reaffirms this puzzling gap between hard and soft data. Citing the Bloomberg U.S. Economic Surprise Index, the analysis contends that there has never been such a large discrepancy between reported economic optimism and hard data on the direction of the U.S. economy. Nonetheless, confidence indexes may still serve as early leading indicators of developing trends that could trigger a growth resurgence during the second half of the year — particularly if the new administration and Congress deliver on growth-promoting policy promises such as tax and regulatory reform and increased infrastructure spending.
- **Government Gridlock:** Congress's recent failure to repeal and replace the Affordable Care Act increases uncertainty about the future of other policy priorities, including comprehensive tax reform and a new infrastructure plan. Despite expectations that a Republican sweep would reduce legislative gridlock, the inability to pass the American Health Care Act in the House of Representatives highlights stark ideological differences within the Republican Party that could disrupt future legislative efforts. Congress is now likely to take up tax reform, which many political observers expect could be complicated by a variety of factors, including internal disagreements about a "border adjustment tax" that would likely benefit U.S. manufacturers and exporters but harm U.S. retailers.
- **Construction Spending:** While many observers are optimistic about construction spending in 2017 (a stance supported by the current reading of the Foundation-Keybridge Construction Investment Momentum Monitor), recent industry performance has mostly disappointed. Construction spending fell at a seasonally adjusted annualized rate of 1.0% in

January after falling 0.2% in December, although these declines were offset somewhat by a 0.8% increase in February. Much of the decline was driven by significant reductions in public construction spending, but private spending growth has been mostly flat.

A variety of factors make it difficult to assess the outlook for construction spending. Demand for commercial real estate has been weak, but may pick up throughout 2017 with rising business confidence and investment. Residential housing demand shows signs of persistent strength, as firming wages and income trends bring homeownership within reach for a wider set of the U.S. population. However, supply continues to lag demand (which has been strong for at least a year), and both housing starts and housing permits (traditionally reliable leading indicators of residential construction investment) have fallen short of many observers' expectations. Some experts point to the problem of labor shortages due to tightening labor markets and, increasingly, immigration restrictions, while others cite lot scarcity and the rising cost of building materials. If these constraints are successfully navigated, the construction sector is set to expand, driven by healthy residential sector demand.

Projections for Key Economic Indicators

Indicator	2015	2016	2017 Quarterly Estimates				2017e
			Q1	Q2	Q3e	Q4e	
Real GDP (SAAR %)	2.6%	1.6%	1.5%	3.3%	3.1%	3.3%	2.5%
Real Investment in Equipment & Software (SAAR %)	4.2%	-1.1%	3.8%	4.6%	5.2%	5.5%	2.8%
Inflation (year-on-year %)	0.1%	1.3%	2.6%	2.6%	2.7%	2.8%	2.7%
Federal Funds Target Rate (lower bound, end of period)	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.50%
10-year Treasury Rate (end of period)	2.3%	2.5%	2.4%	2.65%	2.90%	3.15%	3.15%
Total Payroll Growth (in thousands)	+2,713	+2,240	+673	+610	+570	+525	+2,378

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	2014	2015				2016			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real Gross Domestic Product (SAAR %)									
GDP	2.3%	2.0%	2.6%	2.0%	0.9%	0.8%	1.4%	3.5%	2.1%
Consumer Spending	4.6%	2.4%	2.9%	2.7%	2.3%	1.6%	4.3%	3.0%	3.5%
Gross Private Fixed Investment	2.6%	9.9%	1.0%	2.0%	-2.3%	-3.3%	-7.9%	3.0%	9.4%
Inv: Equipment & Software	-5.3%	9.1%	1.1%	6.7%	-1.2%	-5.6%	-1.2%	-1.8%	1.7%
Inv: Agricultural Machinery	-93.4%	-9.4%	22.0%	23.7%	-31.3%	-36.9%	15.1%	-9.1%	-1.2%
Inv: Construction Machinery	242.8%	21.5%	-20.1%	-24.2%	-22.6%	-23.6%	-14.0%	-35.2%	-5.7%
Inv: Materials Handling Equipment	-5.0%	8.2%	7.6%	-0.1%	11.6%	-3.8%	10.2%	0.8%	4.0%
Inv: All Other Industrial Equipment	-13.6%	-3.4%	15.8%	-7.4%	9.9%	-4.0%	9.1%	-4.5%	5.3%
Inv: Medical Equipment	1.6%	4.5%	-1.6%	7.8%	12.5%	-4.9%	5.1%	-1.4%	6.8%
Inv: Mining & Oilfield Machinery	-53.6%	-32.3%	-54.2%	-42.4%	-28.8%	-42.4%	-70.9%	23.1%	-39.3%
Inv: Aircraft	-10.6%	48.2%	27.3%	3.6%	-52.4%	-43.5%	64.5%	-39.5%	-13.4%
Inv: Ships & Boats	-10.4%	57.3%	31.8%	-54.1%	9.8%	-19.6%	14.7%	-13.6%	12.6%
Inv: Railroad Equipment	-64.2%	63.0%	-93.6%	111.0%	-5.0%	-81.2%	-57.1%	22.5%	-36.3%
Inv: Trucks	2.1%	37.5%	13.4%	20.6%	6.5%	3.7%	-10.1%	-18.9%	12.0%
Inv: Computers	3.9%	-17.1%	15.1%	12.7%	-26.1%	4.9%	11.9%	-4.2%	-9.2%
Inv: Software	7.4%	8.6%	6.0%	-0.8%	3.3%	7.6%	4.5%	6.6%	0.9%
Credit Conditions									
Nonfinancial Sector Debt (% of SAAR GDP)	64.8%	65.3%	65.5%	66.0%	66.9%	68.1%	68.3%	68.4%	69.1%
Loan Delinquency Rate	0.7%	0.8%	0.8%	0.9%	1.0%	1.5%	1.6%	1.6%	1.6%
Lease Delinquency Rate	0.7%	0.7%	0.8%	0.8%	0.8%	0.9%	1.0%	1.0%	1.1%
Net Tightening of C&I Loan Standards	-10.5%	-5.5%	-5.3%	-7.0%	7.4%	8.2%	11.6%	8.5%	1.5%

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	2016												2017
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Employment													
Change in Total Payrolls (thousands)	225	153	43	297	291	176	249	124	164	155	238	235	-
Change in Private Payrolls (thousands)	189	158	17	269	249	143	223	132	178	150	221	227	-
Unemployment Rate	5.0%	5.0%	4.7%	4.9%	4.9%	4.9%	4.9%	4.8%	4.6%	4.7%	4.8%	4.7%	-
Business Activity													
Industrial Production	102.5	102.9	102.8	103.1	103.2	103.1	103.0	103.2	103.0	103.8	103.6	103.7	-
Capacity Utilization	75.4%	75.6%	75.6%	75.8%	75.9%	75.8%	75.6%	75.8%	75.6%	76.0%	75.9%	75.9%	-
PMI Composite Index	51.7	50.7	51.0	52.8	52.3	49.4	51.7	52.0	53.5	54.5	56.0	57.7	57.2
NFIB Small Business Optimism Index	92.6	93.6	93.8	94.5	94.6	94.4	94.1	94.9	98.4	105.8	105.9	105.3	-
Consumer Activity													
Consumer Confidence	96.1	94.7	92.4	97.4	96.7	101.8	103.5	100.8	109.4	113.3	111.6	116.1	125.6
Personal Consumption (M/M % Chg)	0.0%	0.7%	0.2%	0.4%	0.3%	-0.1%	0.5%	0.3%	0.2%	0.4%	-0.2%	-0.1%	-
Retail Sales (M/M % Chg)	-0.2%	1.2%	0.2%	0.7%	0.1%	0.0%	1.0%	0.8%	0.2%	1.0%	0.6%	0.1%	-
Lending Activity													
C&I Loans (M/M % Chg)	1.6%	0.9%	0.7%	0.2%	0.3%	-0.2%	0.9%	0.8%	0.3%	-0.2%	0.1%	-0.1%	-
MLFI-25 New Business Volume (Bil.\$)	8.1	7.3	6.8	10.0	7.0	7.7	9.4	8.2	6.4	12.1	6.2	5.9	-
MLFI-25 Avg Losses as a % of Net Rec.	0.51%	0.31%	0.33%	0.65%	0.38%	0.44%	0.46%	0.37%	0.40%	0.42%	0.43%	0.38%	-
MLFI-25 Credit Approval Ratio	77.7%	78.2%	76.5%	78.1%	75.9%	76.9%	76.6%	77.3%	76.0%	77.4%	75.4%	74.8%	-
Interest Rates (% avg of period)													
Fed Funds Target Rate (Lower Bound)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.75
1-Year Treasury Rate	0.66	0.56	0.59	0.55	0.51	0.57	0.59	0.66	0.74	0.87	0.83	0.82	1.01
3-Year Treasury Rate	1.04	0.92	0.97	0.86	0.79	0.85	0.90	0.99	1.22	1.49	1.48	1.47	1.59
10-Year Treasury Rate	1.89	1.81	1.81	1.64	1.50	1.56	1.63	1.76	2.14	2.49	2.43	2.42	2.48
30-Year Treasury Rate	2.68	2.62	2.63	2.45	2.23	2.26	2.35	2.50	2.86	3.11	3.02	3.03	3.08
AAA Corporate Bond Yield	3.82	3.62	3.65	3.50	3.28	3.32	3.41	3.51	3.85	4.06	3.92	-	-
BAA Corporate Bond Yield	5.13	4.79	4.68	4.53	4.22	4.24	4.31	4.38	4.70	4.83	4.66	-	-
Prices													
Headline Inflation (Y/Y % Chg)	0.9%	1.1%	1.0%	1.0%	0.8%	1.1%	1.5%	1.6%	1.7%	2.1%	2.5%	2.7%	-
Core Inflation (Y/Y % Chg)	2.2%	2.1%	2.2%	2.2%	2.2%	2.3%	2.2%	2.1%	2.1%	2.2%	2.3%	2.2%	-
Oil Price (West Texas Int., \$/barrel)	36.94	45.98	49.10	48.27	41.54	44.68	47.72	46.83	49.41	53.75	52.75	54.00	50.54

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 2016 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

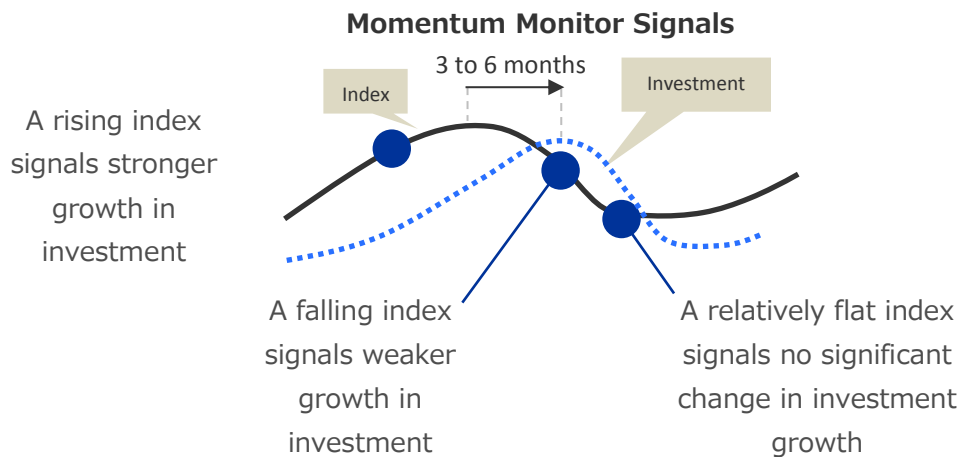
Business leaders require actionable forward-looking intelligence to make strategic decisions. Accordingly, the Foundation commissioned Keybridge LLC to develop a series of custom leading indicators for the equipment sector. The [Foundation-Keybridge Equipment & Software Investment Momentum Monitor](#) 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 three-to-six 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.

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.



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 interdisciplinary 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.

