ALGER

Inspired by Change, Driven by Growth.

Capital Markets: Observations and Insights

Party Without the Punch?

Spring 2018

Party Without the Punch?

In what is a long-standing analogy, the Fed provides the punch at the economic party to keep executives and investors happy, but when the Fed raises interest rates and takes away the proverbial punchbowl, the party becomes much less fun (and profitable).

After many years of economic expansion, short-term interest rates around the world are now rising. In addition, global central bank balance sheets are likely to peak in the next year and then begin to contract.

As interest rates rise, there will likely be broad implications for asset classes as well as specific sectors and securities. In mid-2016, amid the craze for income-generating investments, we asked whether investors were "Searching for Yield and Asking for Trouble?" in our capital markets update. Since then, bond-like equity sectors such as telecommunications and real estate have generated negative returns, dramatically underperforming the broader market.

Now, the press is full of headlines regarding the outlook for interest rates and their impact. In our view, there is too much fear from an equity perspective and not enough anxiety in bonds and real estate.

So how will this tightening cycle play out? How do you have fun at a party where the punch is being removed? On the pages that follow we'll try and answer those questions, but in short, our view is don't party too hard and aim to have fun at either a lively shindig or a quiet get-together. In investing, that means focusing on innovation rather than the economic cycle.

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Key Observations

- Monetary conditions are tightening but **stocks and the economy should be able to absorb moderate increases in interest rates**
- **Business spending has begun to accelerate** and outpace the broader economy, driven by strong earnings growth, tax reform, solid business confidence, and accommodative lending conditions
- Leading indicators suggest **the economy will continue to expand** and **corporate profits will continue to rise**

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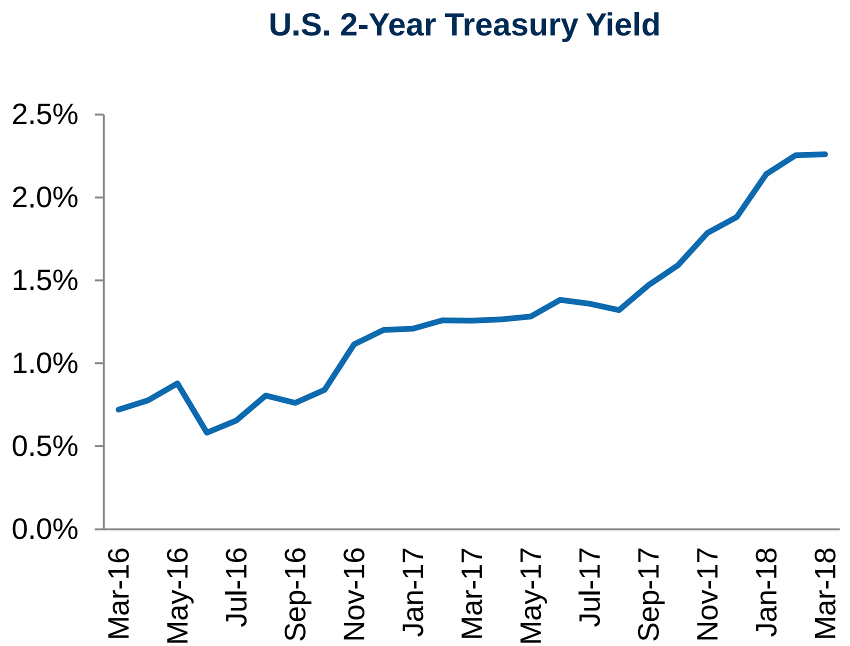
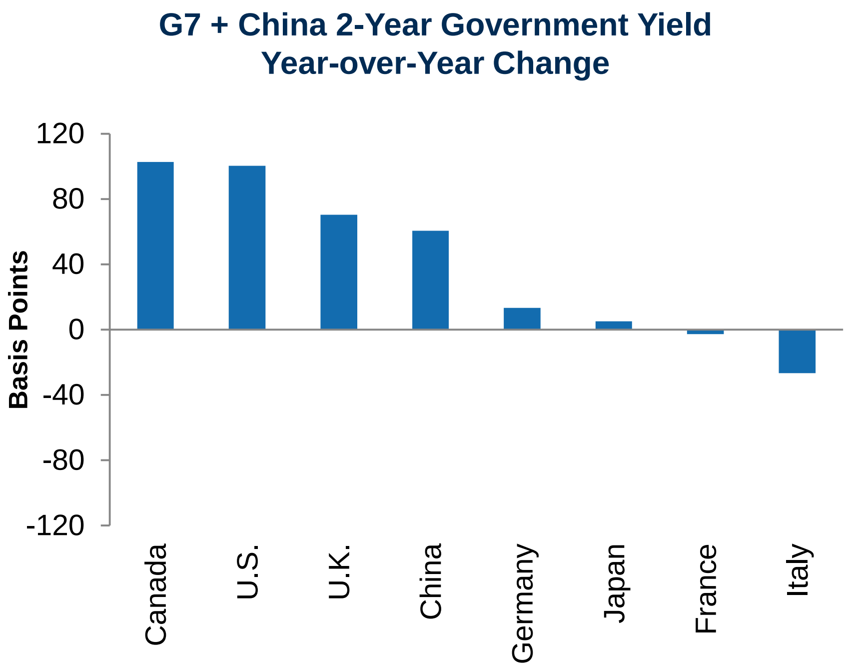
Tightening Underway

- As the Federal Reserve normalizes policy…
- …It is driving short-term interest rates higher

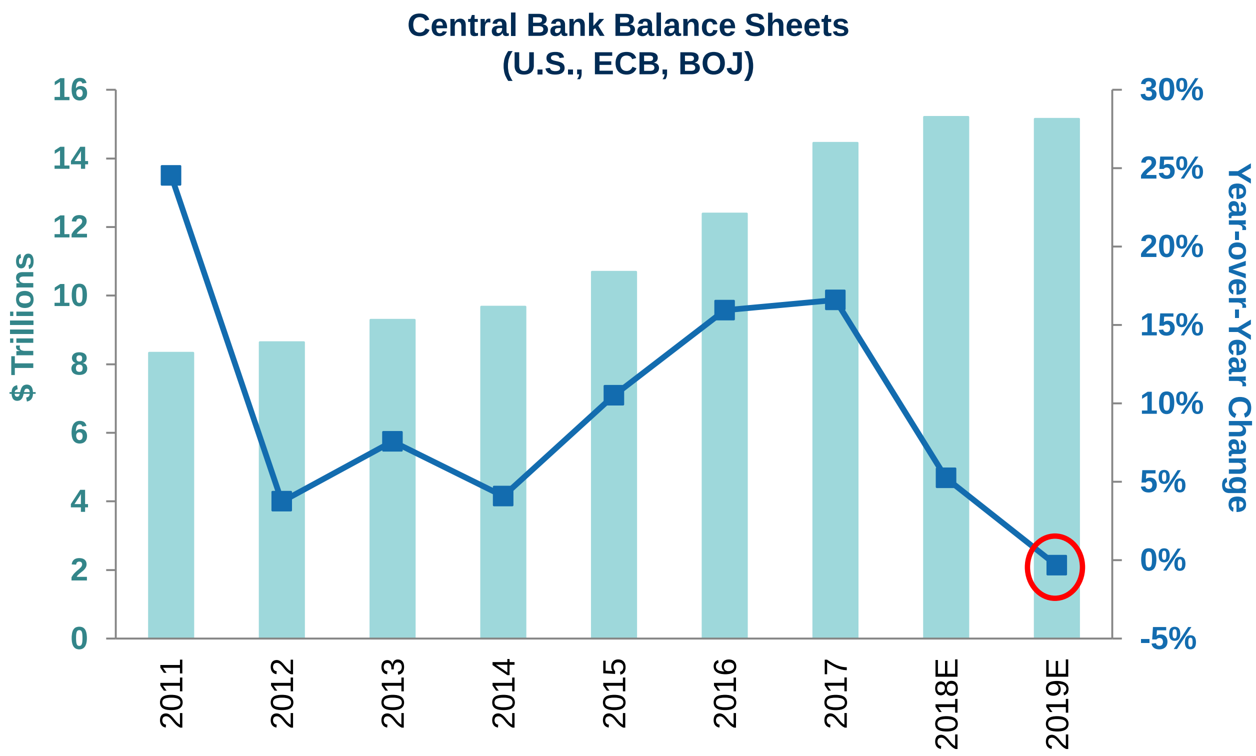
- This is largely a worldwide phenomenon…
- ...Because of the interconnectedness of the global economies





Source: FactSet as of 3/29/18.

- Global central banks are moving from monetary stimulus and quantitative easing (i.e., bond buying) to monetary tightening and fiscal stimulus (i.e., bond selling/issuance)
- Inflation is rising as the economy is now operating above its potential (i.e., tight asset/labor utilization)



Central banks are ending extremely accommodative policy

Source: Evercore ISI as of March 2018.

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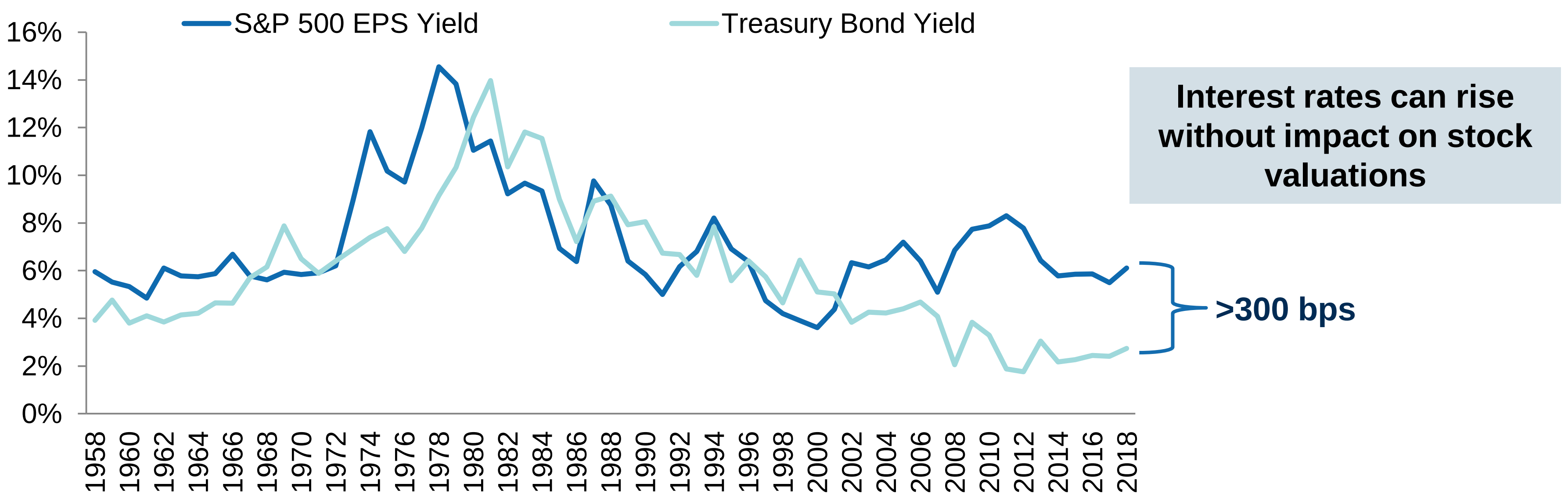
Addressing Rising Rate Concerns – Valuation

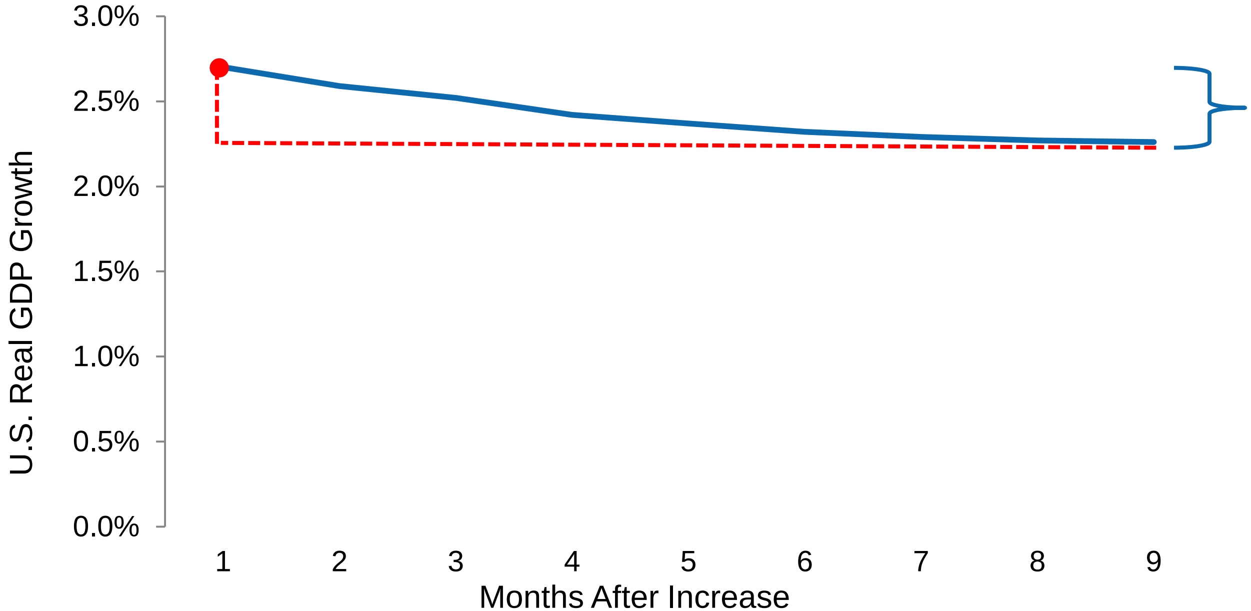
- Concern: will rising interest rates weigh on P/E multiples?
- Our take: P/Es never priced in how low interest rates had become (see gap below) so we believe earnings multiples may not suffer when rates rise



Source: FactSet, Federal Reserve, and S&P, as of 3/31/18.

- Concern: will rising interest rates slow economic growth?
- Our take: the Fed is tightening slowly (approximately 75bps per year) and given the impact shown below, the economy can likely absorb modest increases in interest rates like those we have experienced

Estimated Impact of 100bps Increase in the Federal Funds Rate



Modest increases in interest rates are manageable and unlikely to result in recession

Source: Current real GDP growth is based on 2018 FactSet consensus. Effect of 100bps increase in Fed Funds rate is based on output gap impact shown in FRB/US Model (November 2014 VAR version).

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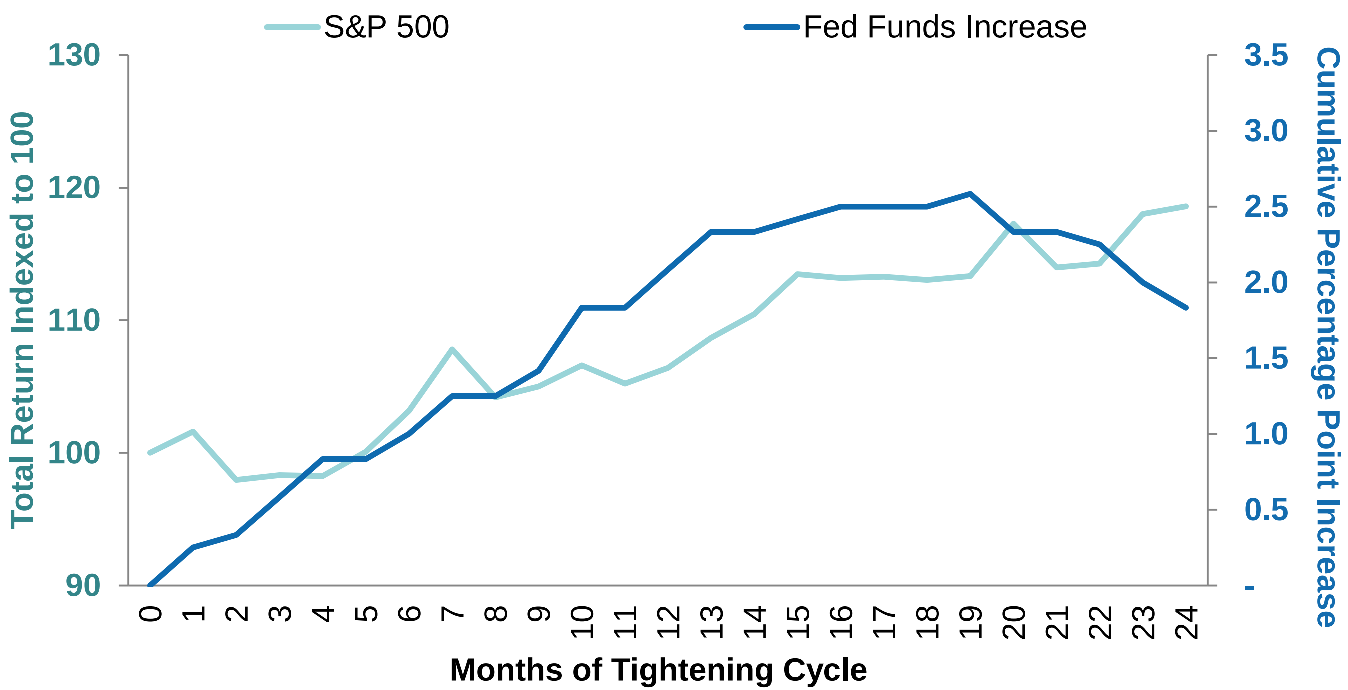
Fed Tightening Not That Scary

- The stock market has historically risen with the Federal Funds rate



In the past several tightening periods, stocks have actually increased alongside the Fed Funds rate

Source: FactSet. Monthly average of past two-year tightening cycles beginning in January 1994, May 1999 and May 2004. S&P 500 is based on total return.

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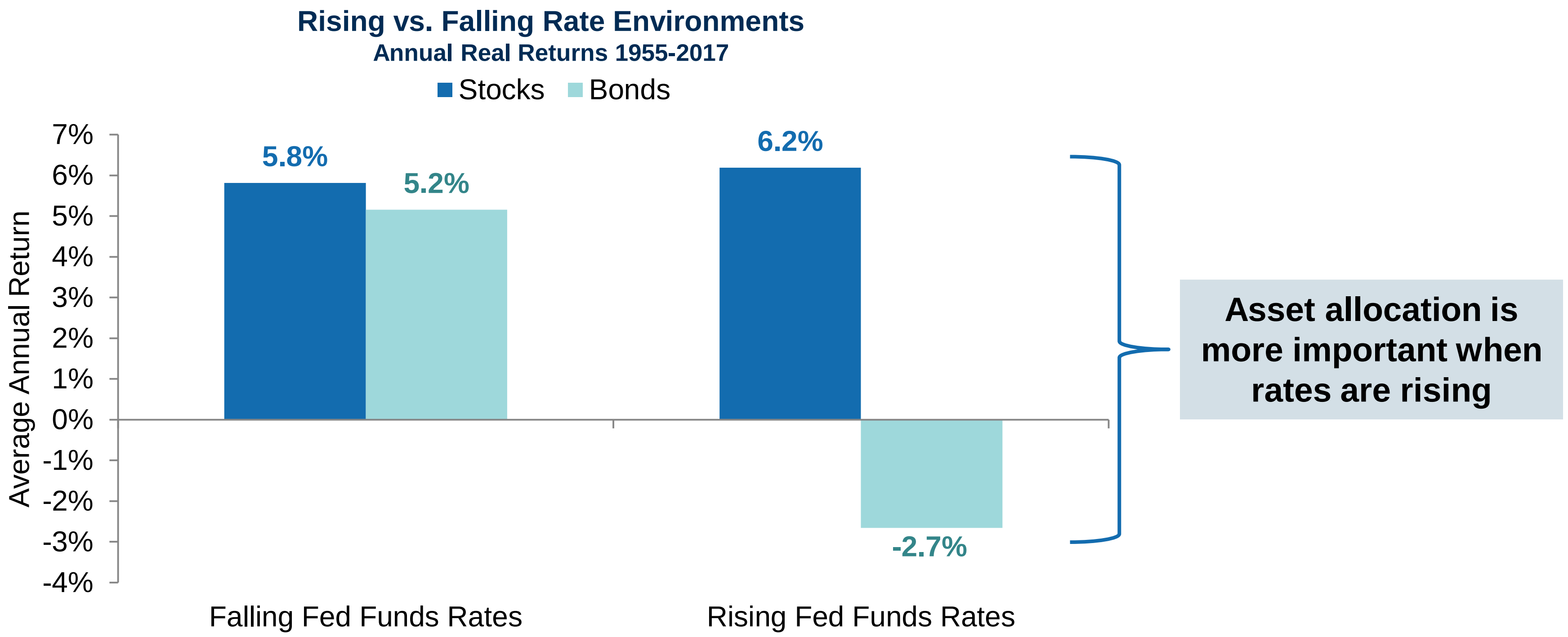
Different Performance Regime

- What worked in a falling rate environment may not work going forward

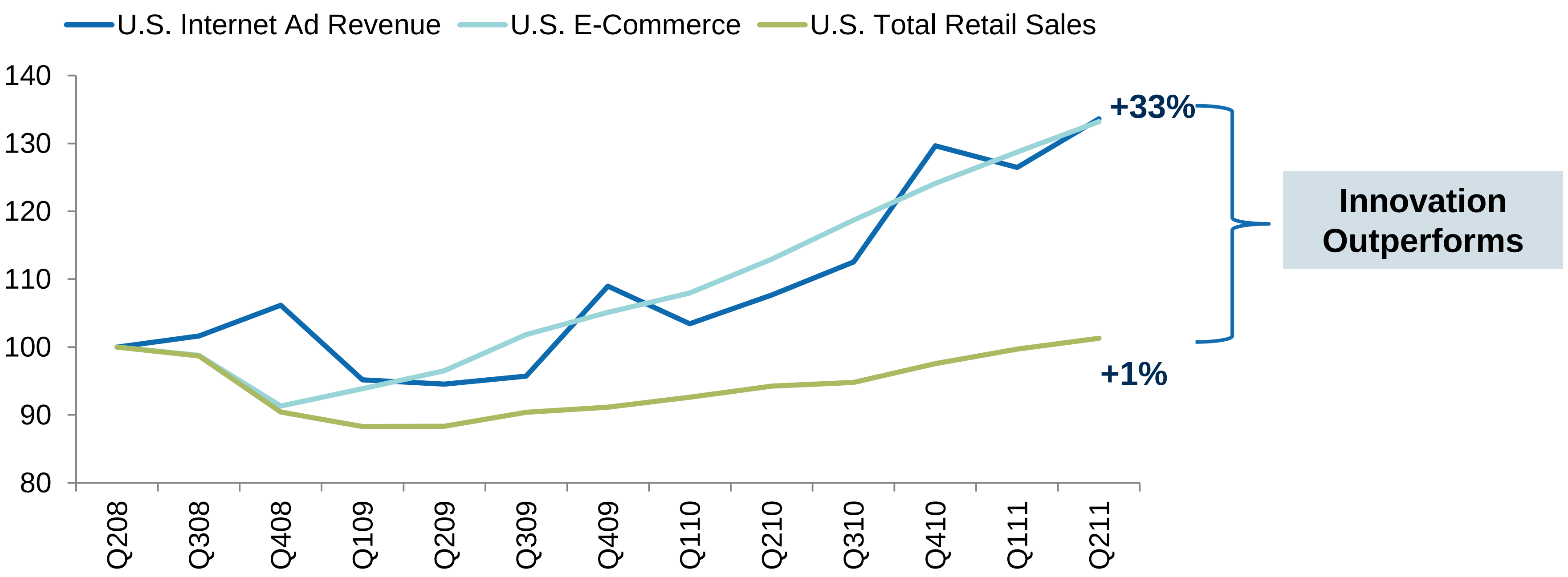


Source: FactSet and Aswath Damodaran. "Stocks" is the S&P 500. "Bonds" is the constant maturity U.S. 10-year Treasury bond return. Real return is calculated as nominal less 3 month U.S. T-bill return annually. Return over the period is calculated using a simple average of annual returns.

Innovation Grows Through Downturns

- If the global economy does ultimately weaken as a result of prolonged interest rate increases…
- …Invest with a focus on innovation because it has outpaced difficult economic environments

Innovative Areas of the Economy Outperformed Even in the Global Financial Crisis



Source: FactSet.

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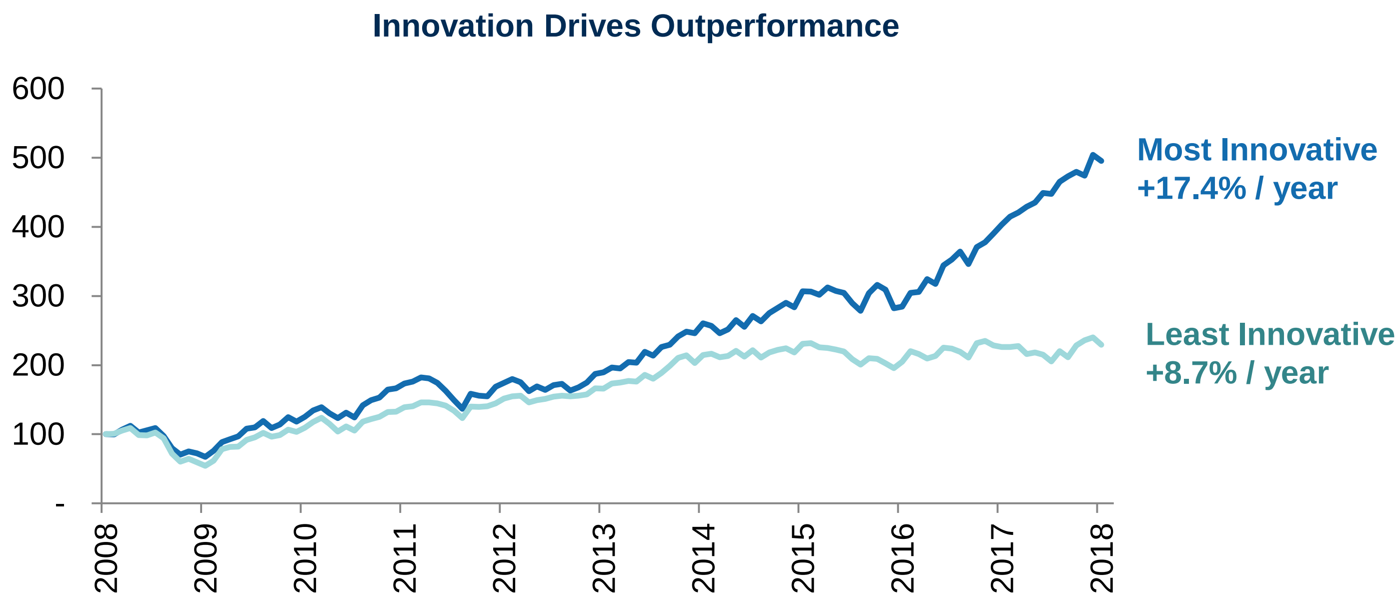
Innovative Companies Often Outperform

- Studies have shown, and our research demonstrates, that the most innovative companies grow their sales, earnings, and stock prices faster*

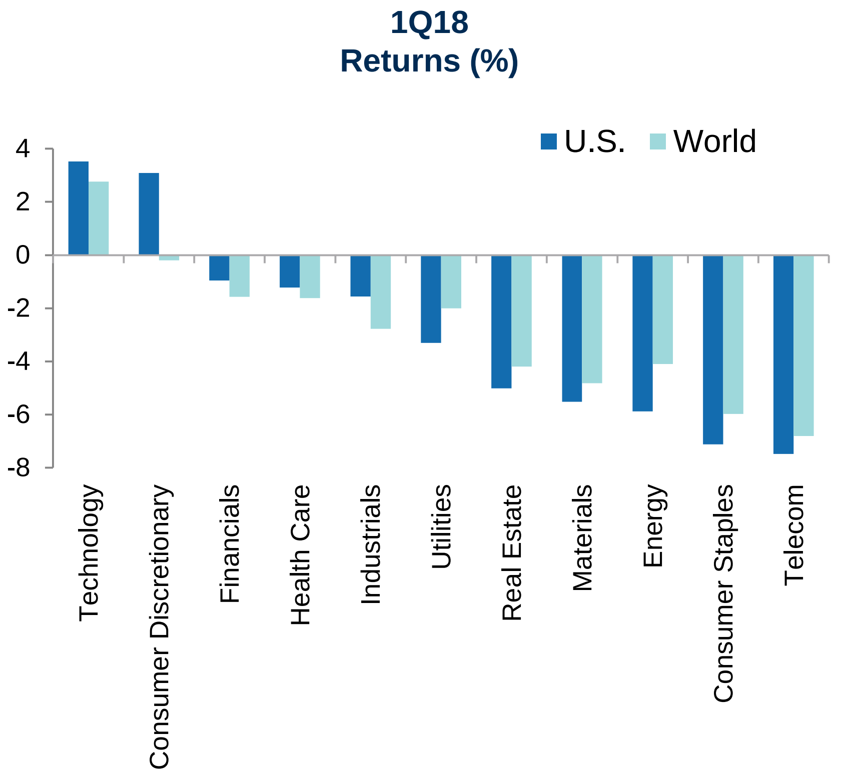


Source: FactSet. Most/least innovative stock performance is derived from highest and lowest S&P 1500 quintiles based on R&D as % of sales, normalized for market value, using one month returns for 10 years ending January 31, 2018. *Baruch Lev and Suresh Radhakrishnan, "The Stock Market Valuation of R&D Leaders."

Performance

Tech Leads Again

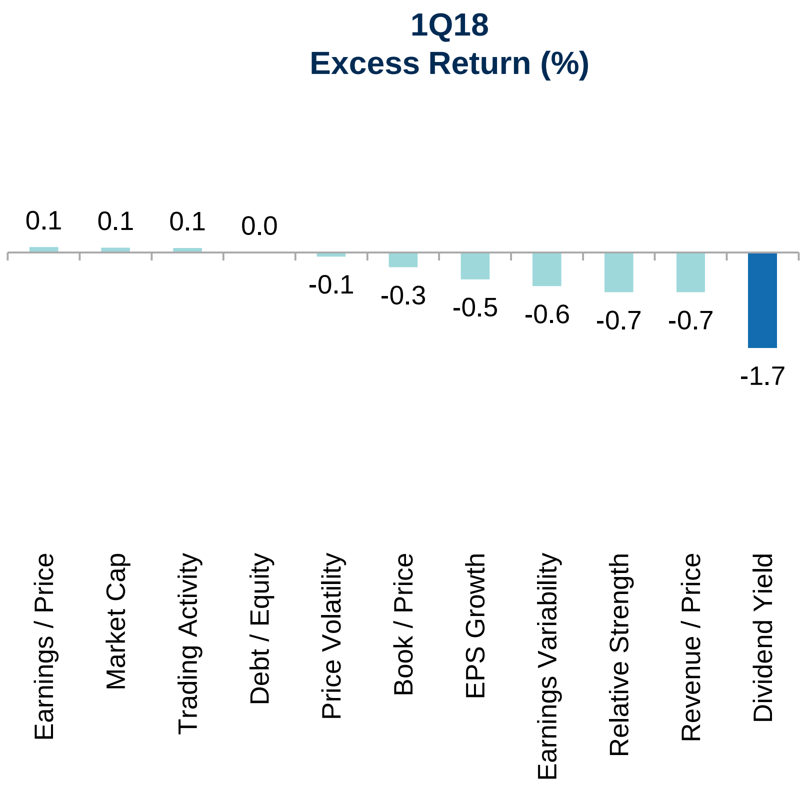
- Technology's outperformance in 1Q18 was due to solid fundamentals as the sector had a very strong earnings season with the best revenue results relative to expectations*

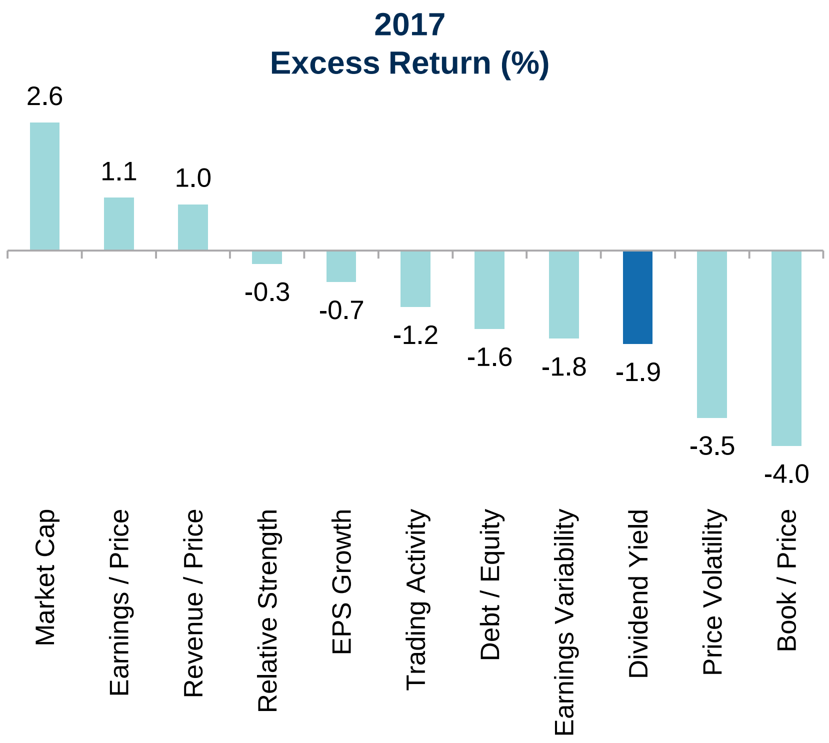


Source: FactSet as of 3/31/18. U.S. represented by S&P 500 and World represented by MSCI AC World Index in local currency.*For the 4Q17 earnings season reported in 1Q18 based on the percentage of companies exceeding estimates.

Performance
Yield Punished

- In 1Q18, rising interest rates continued to put pressure on high dividend yielding stocks, driving underperformance of that factor



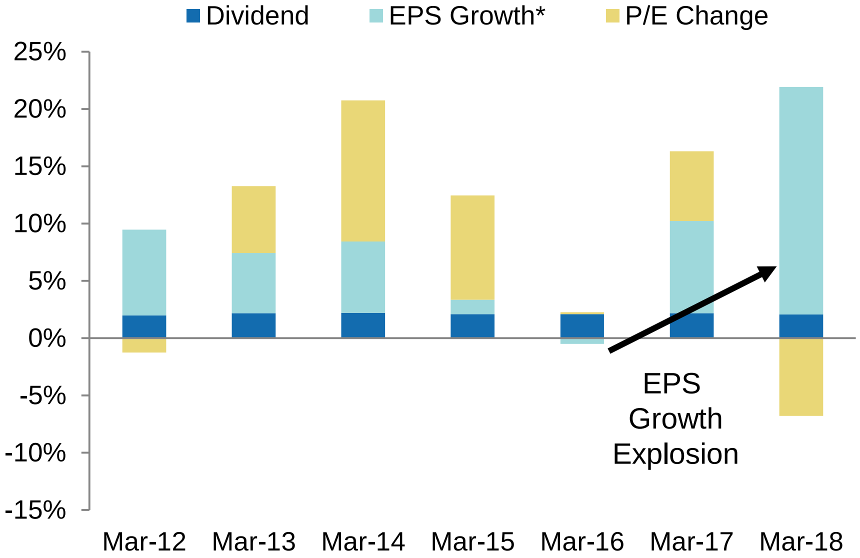


Source: FactSet as of 3/31/18 using Northfield defined quantitative factors for the Northfield broad U.S. market database.

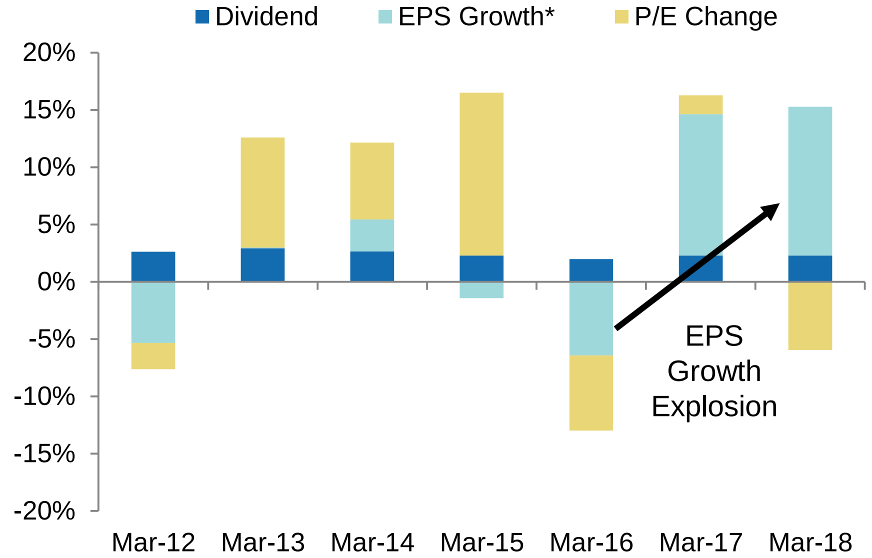
The Earnings Growth Explosion Is Driving Performance

Total Return = Dividend Yield + EPS Growth +/- P/E Change

S&P 500



MSCI All Country World Index ex-USA



12-Month Total Return:	**9%**	**14%**	**22%**	**13%**	**2%**	**17%**	**14%**

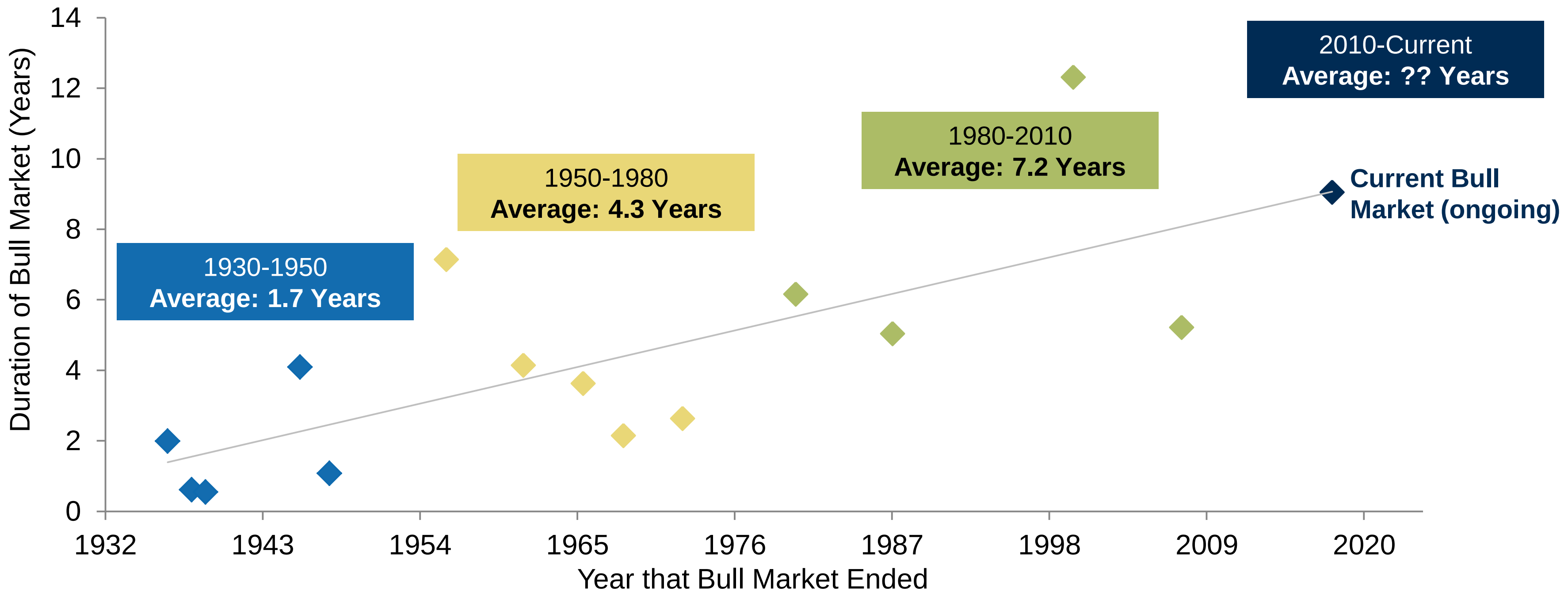
12-Month Total Return:	**-4%**	**13%**	**13%**	**16%**	**-10%**	**18%**	**9%**

Source: FactSet as of 3/31/18. *Based on consensus estimates of next 12-month EPS. Actual earnings per share might be materially different than shown. MSCI ACWI ex-US performance based on local currency.

Performance

Bull Market Is Aging Well

- Bull markets have been getting longer over time
  - Factors prolonging economic expansions include: increased fiscal and monetary intervention, structural changes in the economy, and technological advances, such as improved inventory management
  - The current bull market is three-and-a-quarter years younger than the '90s bull market



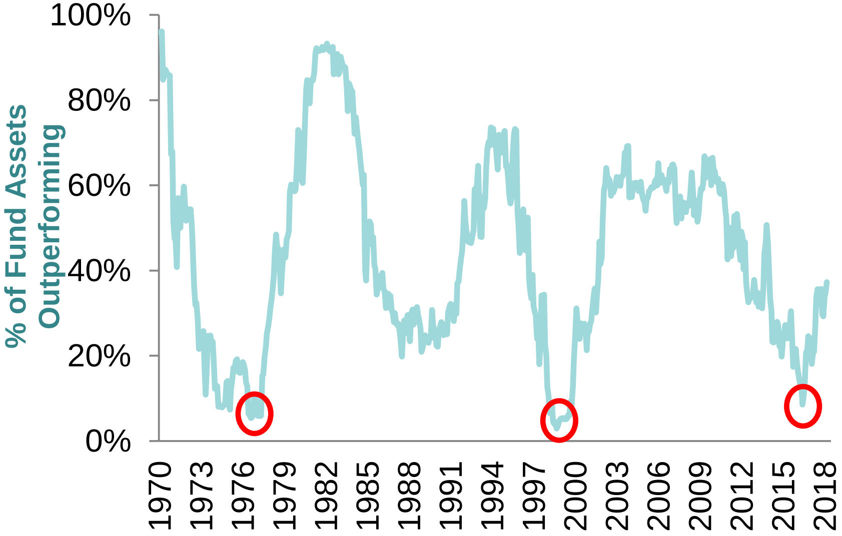
Source: FactSet and Goldman Sachs as of 3/31/18. Bull markets over six months in duration since 1930. Line is based on linear regression of displayed data points.

Performance

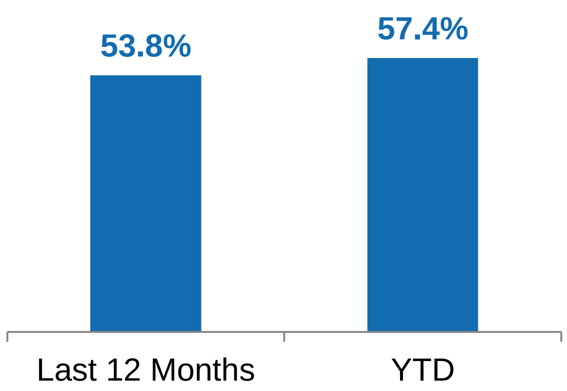
Has Active Relative Performance Troughed?

- Powerful cyclical factors impact U.S. active relative performance:
  - Interest rates/bond-like equities
  - Non-U.S. stock performance
  - Small cap performance
  - Overall market performance
- As some of those factors reverse, active management has been doing better
  - Interest rates no longer declining/bond-like equities not outperforming
  - Non-U.S. stocks have fared better
  - Small caps beginning to recover
  - Market performance more subdued

Active Relative Performance Is Cyclical



% of U.S. Large Cap Active Managers Outperforming

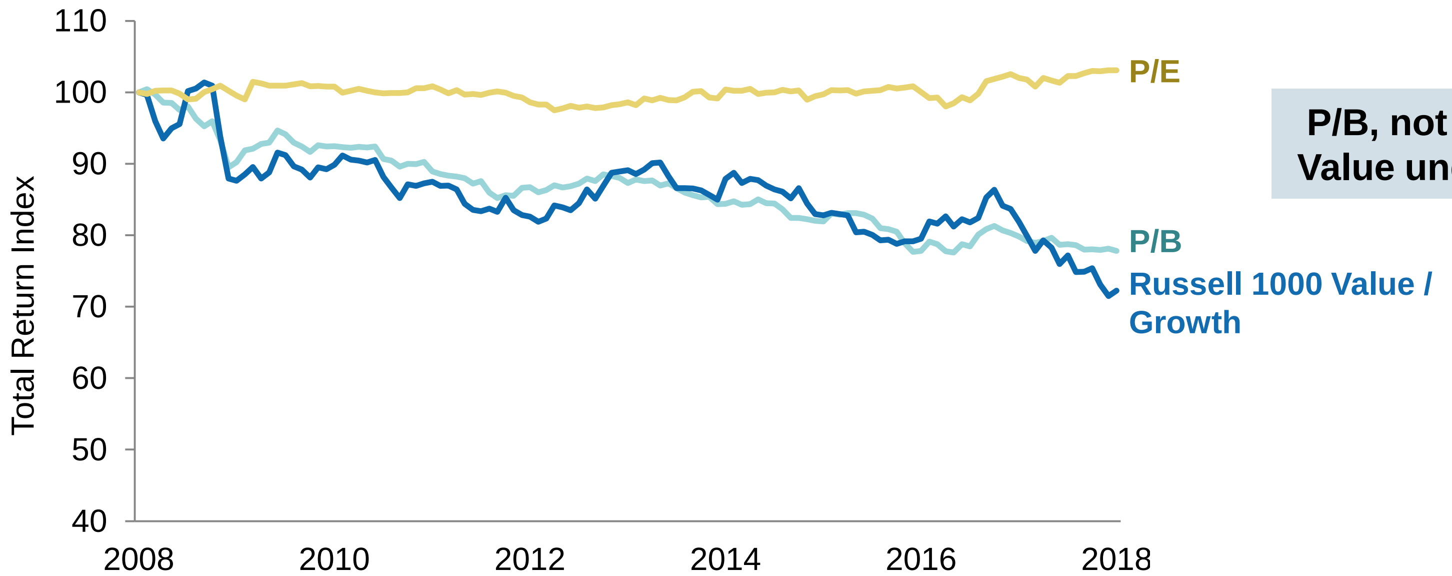


Source: Left chart: Nomura/Instinet, Joseph Mezrich and FactSet through 3/31/18. Fund performance is trailing five-year data of U.S. active equity mutual funds in existence for 5 years or more and part of the growth, growth & income, and income categories based on CRSP codes. Right chart: Bank of America Merrill Lynch U.S. Equity and U.S. Quant Strategy using Lipper data relative to Russell benchmarks through 3/31/18.

Performance

Structural Issues Driving Growth vs. Value

- Growth stocks have dramatically outperformed (+38%) Value stocks over the past decade
- The culprit for value investors has been the very weak performance of buying low P/B stocks, while P/E strategies have fared much better
- Book value, used heavily in index classification of Growth vs. Value, may no longer be as relevant given changing business models, e.g., R&D is not capitalized in book value



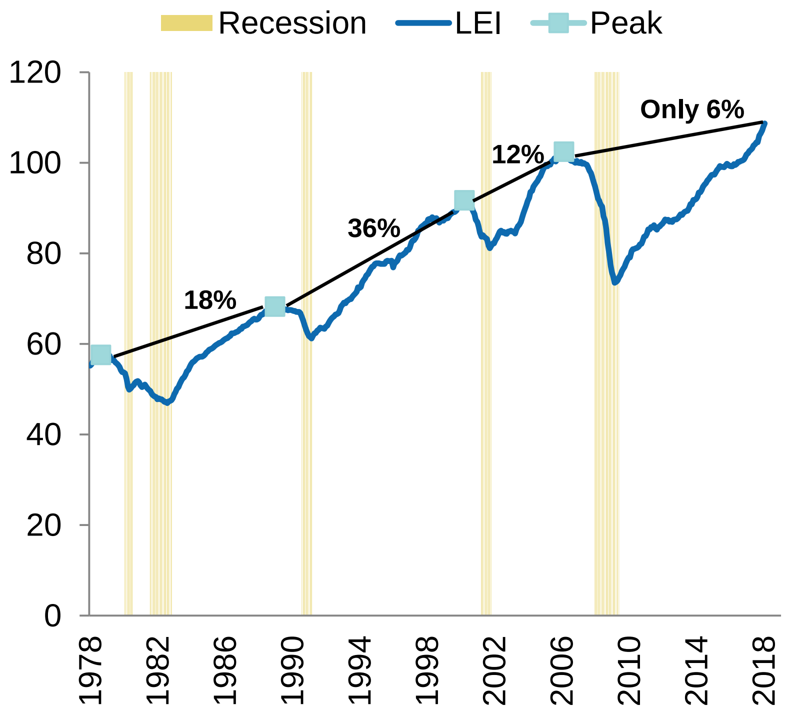
P/B, not P/E, has driven Value underperformance

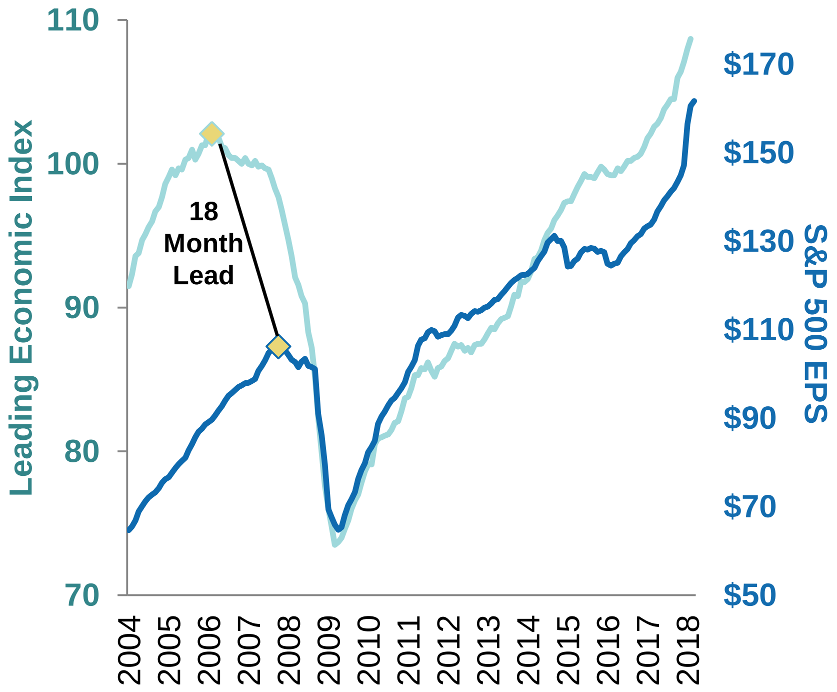
Source: FactSet as of 3/31/18. Price-to-earnings and price-to-book returns are based on the E/P and B/P Northfield factors for the Northfield broad U.S. market database.

Leading Indicators Suggest Continued Expansion

- Typically the Leading Economic Index (LEI) expands by a double-digit percentage peak-to-peak
- Using the average of the past three periods implies a peak in late 2019

- The LEI historically leads S&P 500 EPS by 6-18 months
- The record LEI reading in 1Q18 suggests EPS have room to run

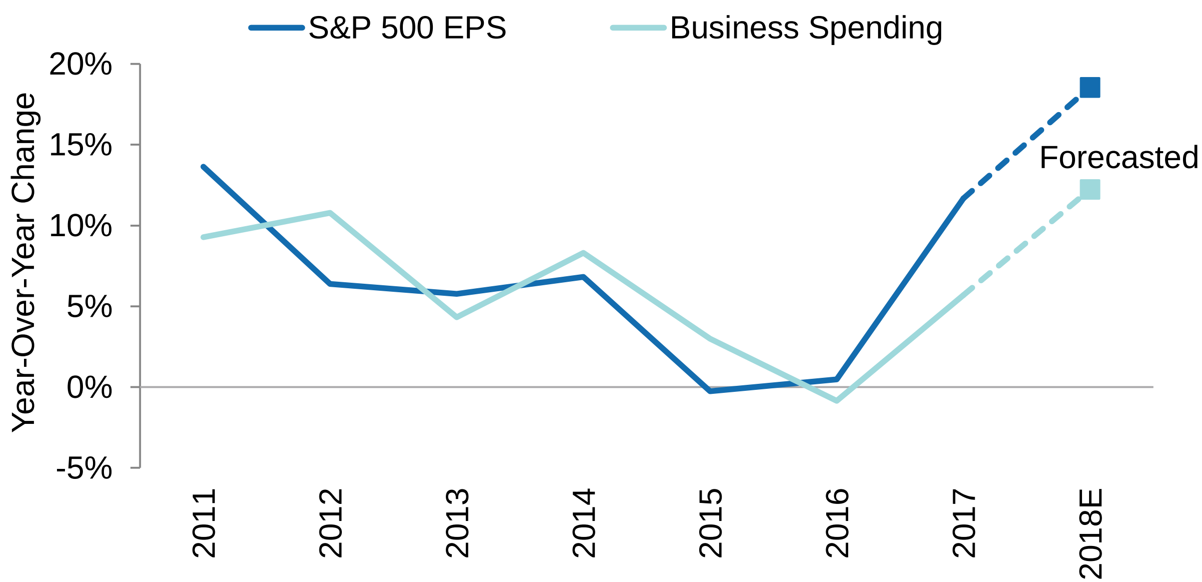




Source: FactSet, Conference Board, Evercore ISI. EPS estimates based on next 12-months consensus.

Business Spending to Accelerate Further

- Drivers of faster corporate expenditures include:
  - Strong profit growth
  - Tax reform—lower statutory rates, foreign profit repatriation, accelerated depreciation
  - Higher business confidence—driven in part by lower regulation and certainty on taxes
  - Accommodative financial conditions—banks' willingness to lend and low credit spreads

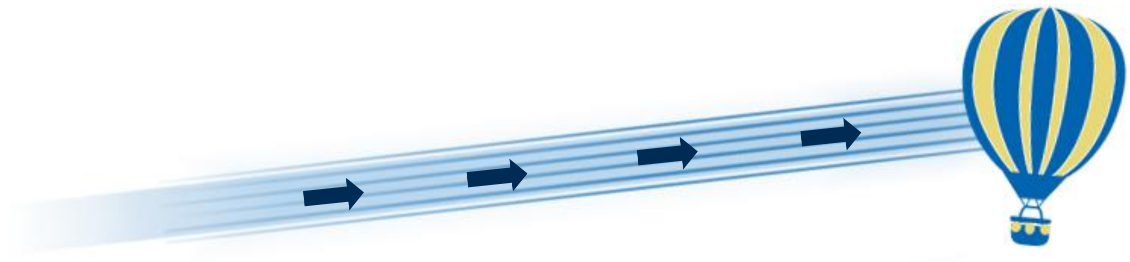


An acceleration in earnings growth should help drive a double-digit increase in business spending

Source: FactSet. Business spending is U.S. private fixed nonresidential investment with an estimate for 2018 based on a regression with S&P 500 EPS. S&P 500 EPS 2018 estimate based on consensus.

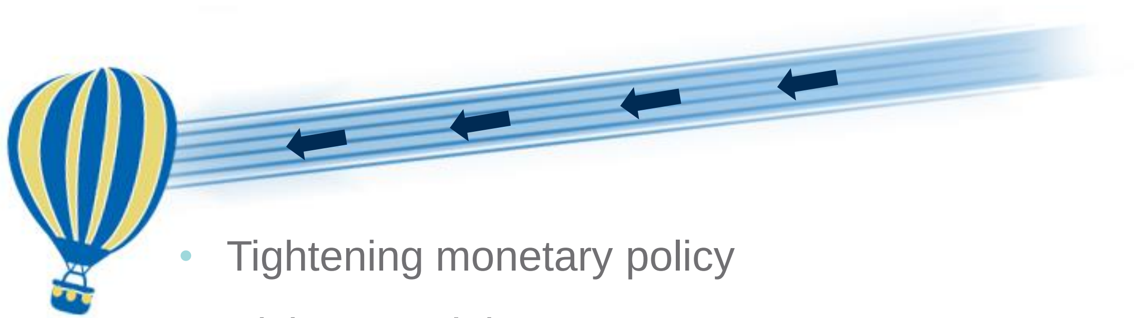
Fundamentals

Economic Outlook



Tailwinds

- Robust corporate profits
- Strong business and consumer confidence
- Strengthening corporate spending
- Solid U.S. consumer balance sheet



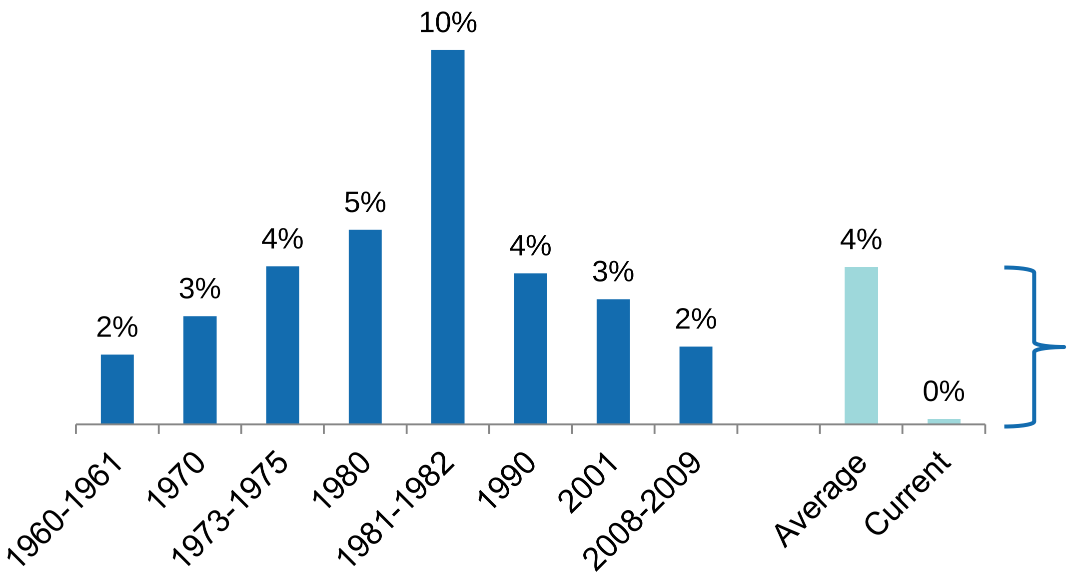
Headwinds

- Tightening monetary policy
- Rising U.S. labor costs
- Potential trade war
- China growth slowdown
- Geopolitical risk

Monetary Policy Is Not Restrictive

- Over the past half century, every U.S. recession has been preceded by a significantly positive real Federal Funds rate of 2% or higher
- In contrast, today we have a real Fed Funds rate of about 0%

Real Federal Funds Rate Prior to U.S. Recessions

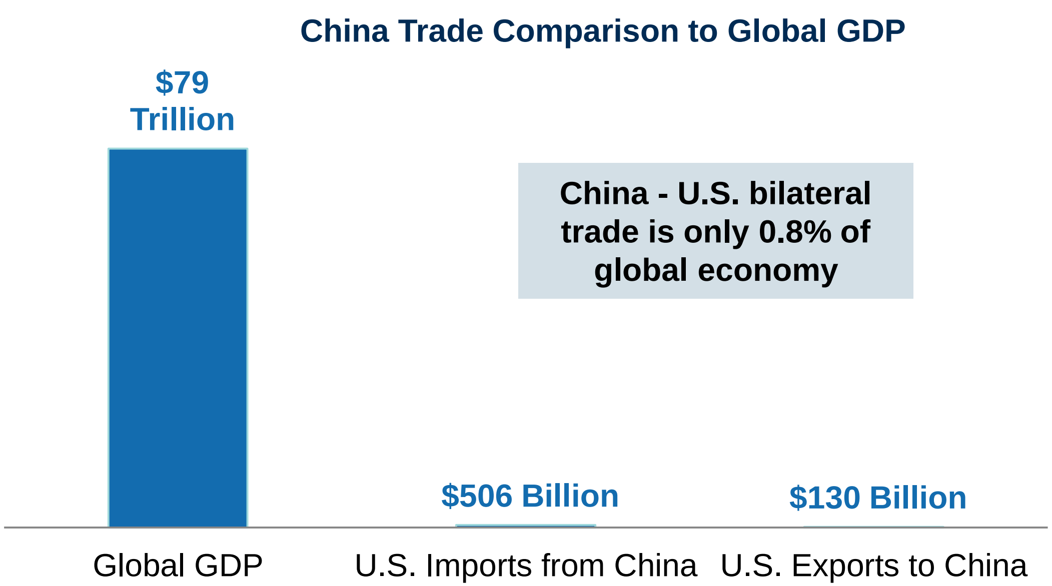


Today real short-term interest rates are far lower than what induced previous recessions

Source: FactSet as of March 2018. Inflation represented by PCE Price Index ex-food and energy (year over year). Nominal Federal Funds rate is average of 3 months prior to recession. Horizontal axis labels denote recession periods.

Tariffs Likely to Create Opportunity

- Proposed tariffs are manageable
  - While market sentiment is likely to be impacted, history suggests the long-term outcome will be better than the current bluster implies, due to negotiation and flexible supply chains that can often adjust with minimal impact
- Tariffs will create winners and losers that necessitates active management
  - U.S. Chicken Tax of 1963, which taxed imported light trucks, hurt international auto manufactures and drove American companies' dominant share in pickup trucks

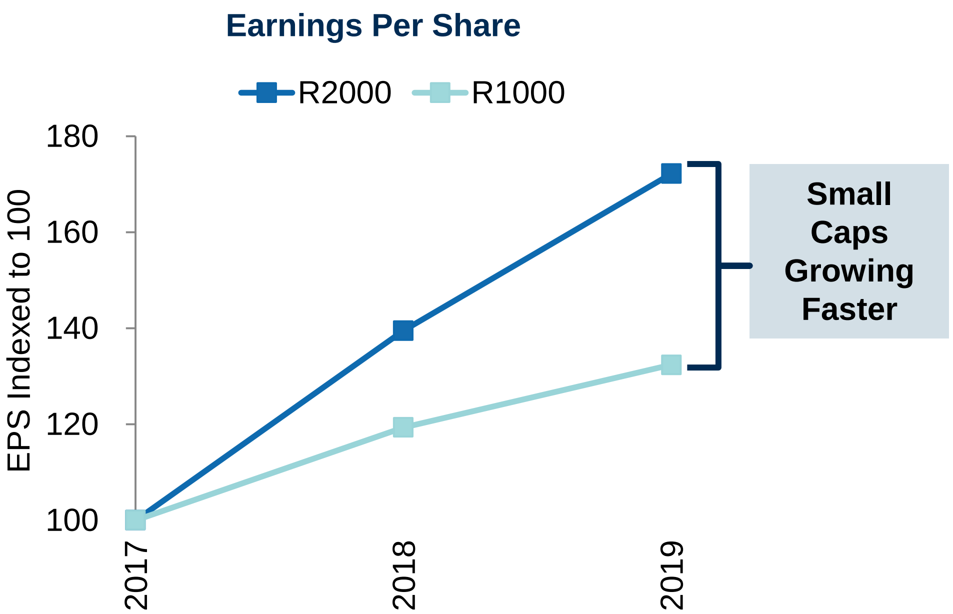


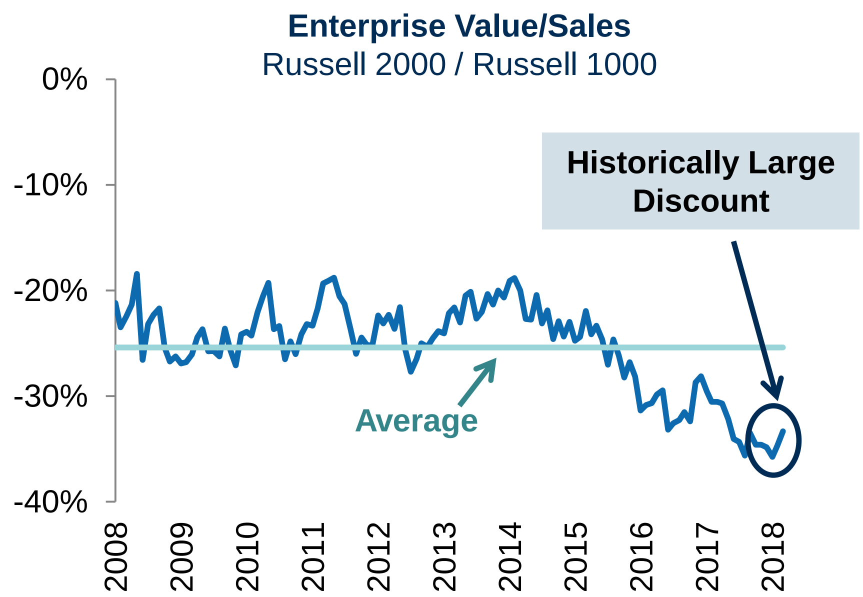
Source: IMF World Economic Outlook, U.S. Census Bureau, FactSet. Data is for 2017.

Fundamentals

Smaller Capitalization Stocks Poised to Outperform

- **Stronger fundamentals**: Estimated small cap EPS growth for ‘18 & ‘19 is double that of large cap
- **More levered domestic economy**: Small caps are more U.S.-oriented, have less exposure to international trade, and have higher operating leverage
- **Rising interest rates**: Small caps have historically outperformed large caps in rising rate environments
- **Attractive valuation**: Small cap sales multiple discount implies opportunity



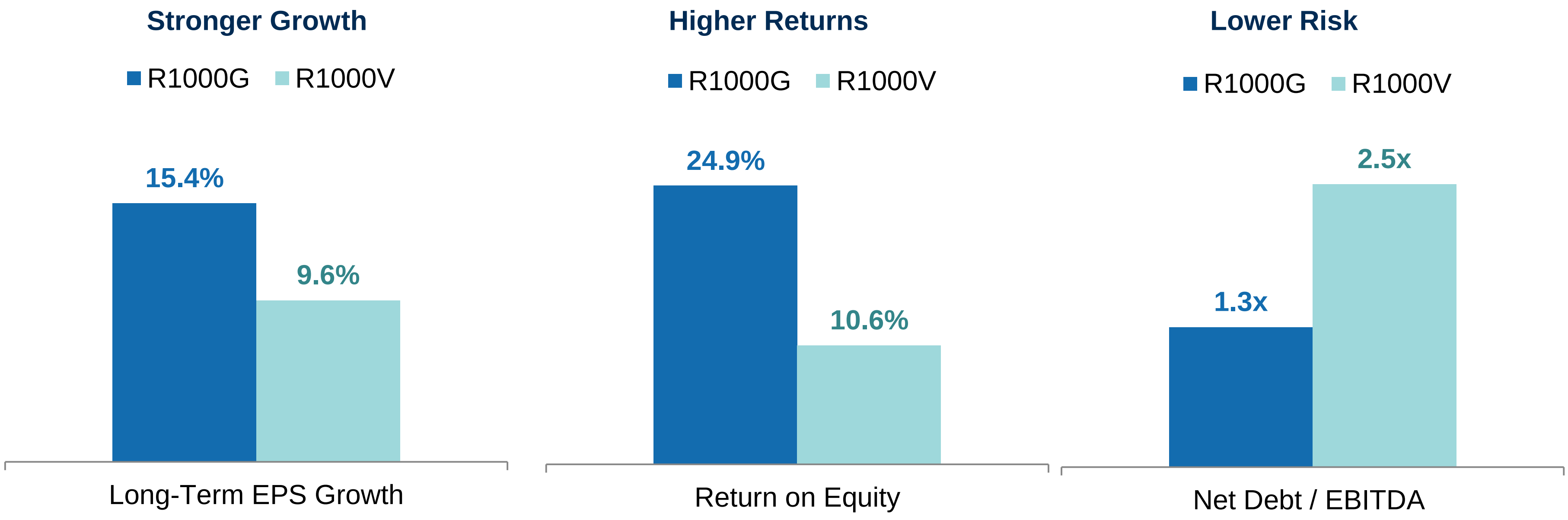


Source: FactSet as of March 2018. EPS for 2018-2019 are consensus estimates and actual earnings per share might be materially different than shown.

Fundamentals

The Growth Advantage

- Three variables drive P/E multiples: growth, returns, and risk
- As compared to the Russell 1000 Value Index, the Russell 1000 Growth Index has higher expected EPS growth, higher returns on equity, and lower risk in the form of better balance sheets

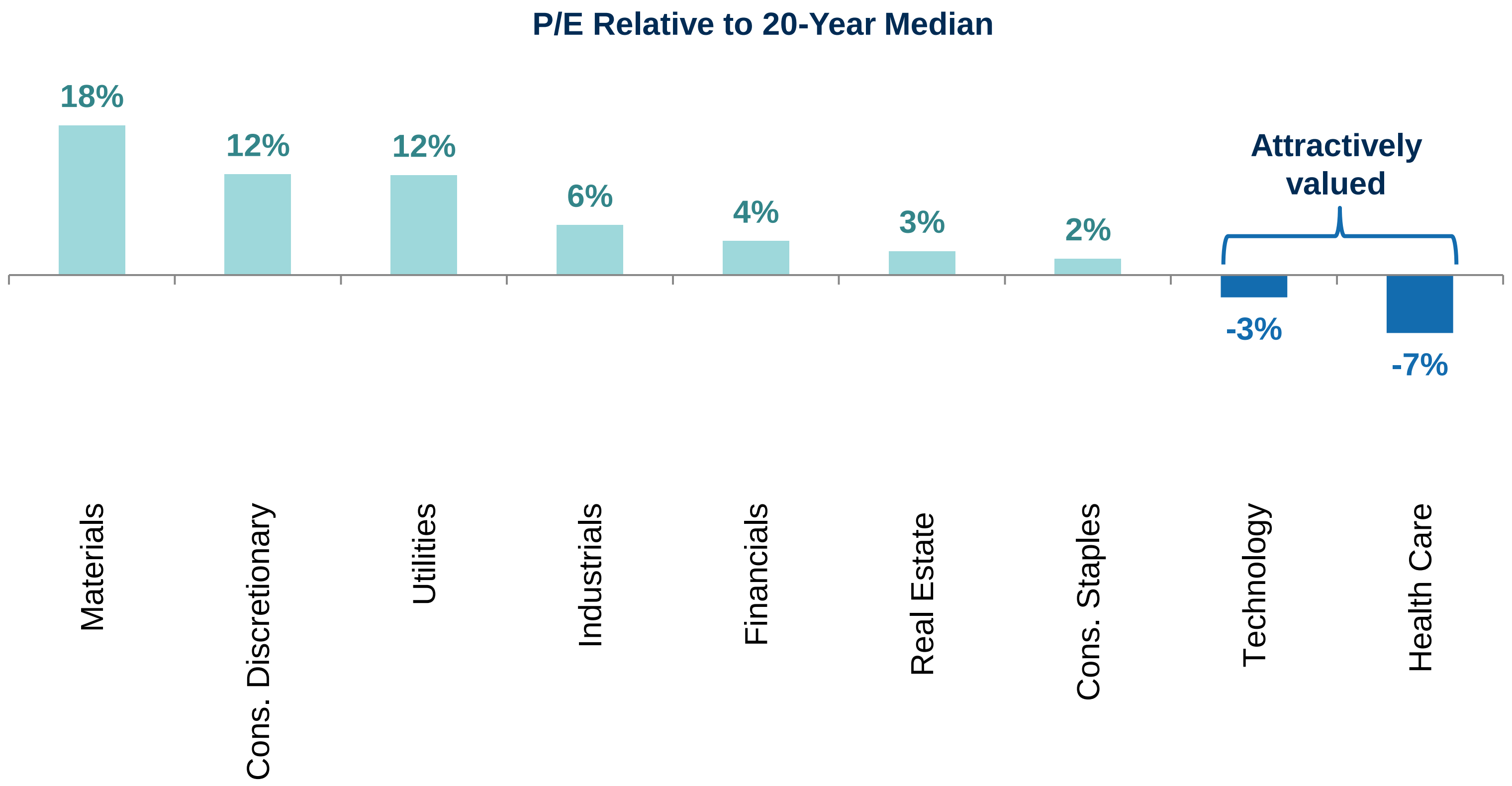


Source: FactSet as of 3/31/18. Growth represents consensus long-term analyst estimates, and actual future EPS growth rates might be materially different than the forecasts shown.

Valuation

Not All Sectors Are Expensive

- Growth-oriented sectors are attractively valued compared to history, particularly given low levels of interest rates, in contrast to many other sectors

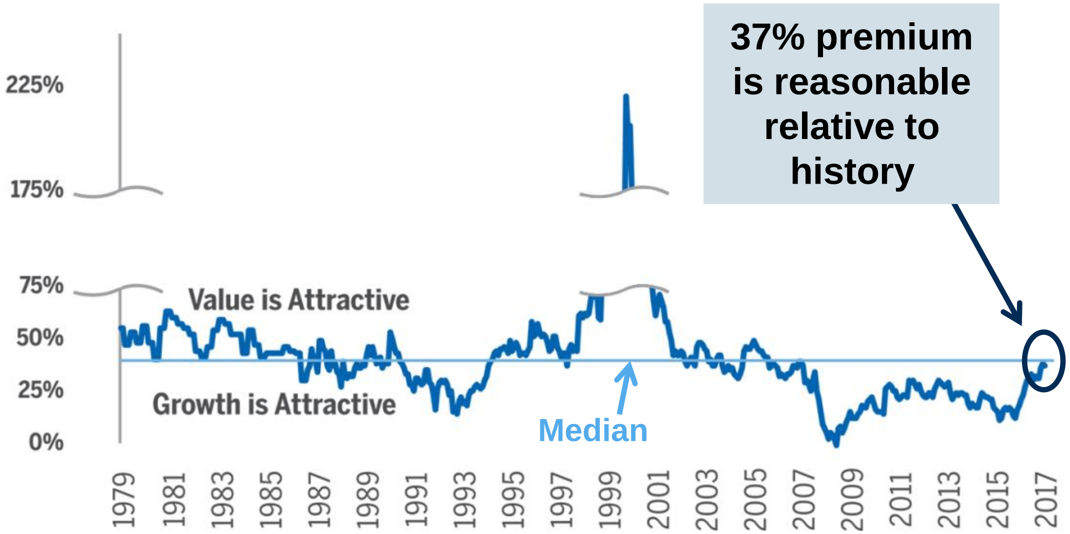


Source: FactSet, based on S&P 500 Index, 3/31/18. Note: energy and telecom are excluded; the former because of an extremely high P/E due to depressed earnings and the latter owing to a small number of constituents. Real estate is a new sector classification, so for the historical data shown above, the industry group category that has nearly17 years of data was utilized.

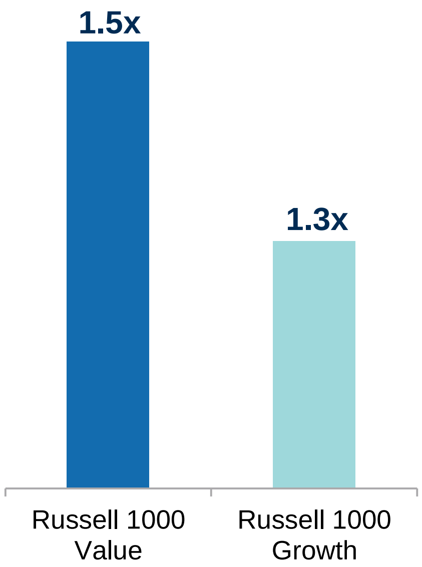
Growth Valuations Are Reasonable

- Despite their recent outperformance, Growth stocks remain reasonably valued compared to Value stocks, relative to history and their respective growth rates

Russell 1000 Growth Relative to Russell 1000 Value P/E



Russell 1000 Growth vs. Russell 1000 Value PEG Ratio
(P/E Divided by Long-Term Growth Rate)



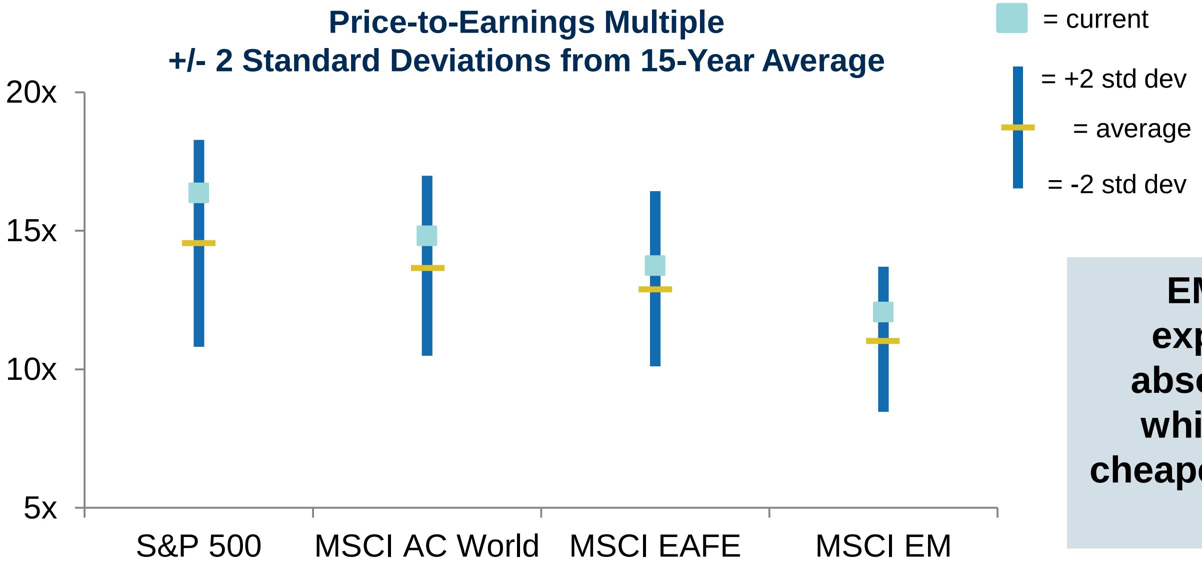
Source: FactSet, Bank of America as of 3/31/18.

Valuation

Global Multiples High but Not Relative to Interest Rates

- Price-to-earnings multiples around the world are moderately high relative to history at nearly one standard deviation above their average
  - Drivers of higher multiples relative to history include lower than average bond yields and a measurement period depressed by the aftermath of the Global Financial Crisis

Price-to-Earnings Multiple
+/- 2 Standard Deviations from 15-Year Average



EM is least expensive in absolute terms while EAFE is cheapest relative to history

Z-Score (Standard Deviations Above/Below Mean)			
1.0	0.7	0.3	0.7

Source: FactSet. Monthly estimates over past 15 years, ending 3/31/18.

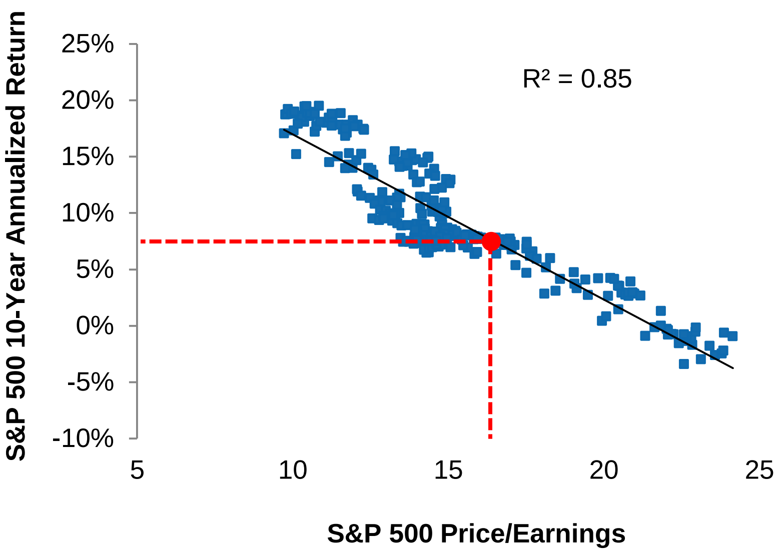
Valuation

The Single Greatest Predictor of Future Stock Market Returns

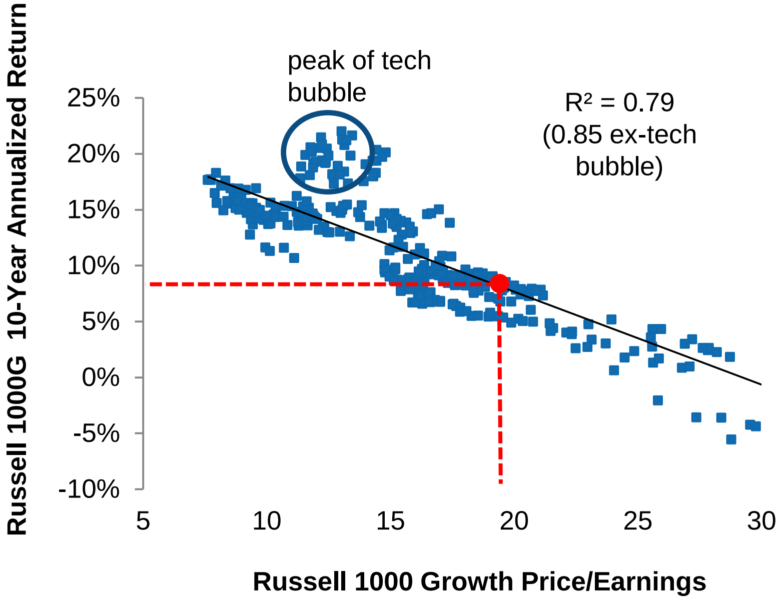
- There is a strong relationship between starting valuations and ensuing 10-year returns
- Current valuations suggest equities, particularly growth stocks, should materially outperform bonds over the coming decade

S&P 500 P/E vs. 10-Year Returns

■ = month
● = current



Russell 1000 Growth P/E vs. 10-Year Returns



Source: FactSet. Monthly data through March 2018 and beginning in January 1986 (S&P 500) and December 1978 (Russell 1000 Growth). The tech bubble, represented by the 10-year returns beginning in April 1987-March 1990 and ending in April 1997- March 2000, skewed the regression by resulting in higher returns for given valuations than the historical relationship would imply.

Disclosure

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The S&P 500 Index is an unmanaged index generally representative of the U.S. stock market without regard to company size. The S&P Composite 1500 is an unmanaged index that covers approximately 90% of the U.S. market capitalization. The Russell 1000® Growth Index is an unmanaged index designed to measure the performance of the largest 1000 companies in the Russell 3000 Index with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 Value Index measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Growth Index is an unmanaged index generally representative of common stocks designed to track performance of small-capitalization companies with greater than average growth orientation. The Russell 2000 Value Index is an unmanaged index generally representative of the small-cap value segment of the U.S. equity universe and measures the performance of Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values. The Russell 3000® Growth Index is an unmanaged index designed to measure the performance of those Russell 3000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Russell 3000 Value Index is an unmanaged index generally representative of stocks from the Russell 3000 Index with lower price-to-book ratios and lower expected growth rates. The MSCI ACWI Index (gross) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 45 country indices comprising 24 developed and 21 emerging market country indices. The MSCI ACWI ex USA Index (gross) captures large and mid cap representation across 23 of 24 Developed Markets (DM) countries excluding the US) and 23 Emerging Markets (EM) countries. The index covers approximately 85% of the global equity opportunity set outside the US. The indices presented are provided for illustrative purposes, reflect the reinvestment of dividends and do not assess fees and expenses that would have the effect of reducing returns. Investors cannot invest directly in any index. The index performance does not represent the returns of any portfolio advised by Fred Alger Management, Inc. and actual client results might differ materially than the indices shown. Note that past performance is no guarantee of future results. Comparison to a different index might have materially different results than those shown.

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Definitions

Earnings per share (EPS) is the monetary value of earnings per outstanding share of common stock for a company.

Price-Earnings ratio (P/E) is the ratio for valuing a company that measures its current share price relative to its per-share earnings.

Price-Book ratio (P/B) is a ratio used to compare a stock's market value to its book value. It is calculated by dividing the price of the stock by the book value per share.

Book value of an asset is the value at which the asset is carried on a balance sheet and calculated by taking the cost of an asset minus the accumulated depreciation.

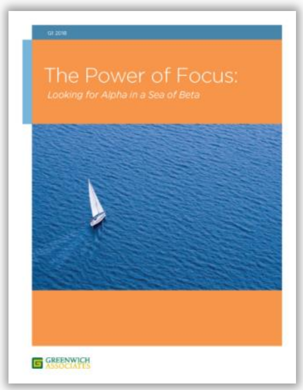
Real Federal Funds rate refers to the current U.S. Federal Funds rate less inflation.

Enterprise Value/Sales is a financial ratio that compares the total value (as measured by enterprise value) of the company to its sales.

The Power of Focus: Looking for Alpha in a Sea of Beta

Greenwich Associates recently completed a study that examined investors' views on focused strategies. According to survey results:

- Active managers can build higher conviction strategies by concentrating their best ideas into focused portfolios
- Investors believe focused portfolios improve managers' ability to generate greater levels of alpha
- Risk-reduction benefits of diversification can be achieved with a portfolio of 50 or fewer stocks
- Focus strategies can complement passive portfolio allocations while improving total return outcomes



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