Your guide to understanding and investing in the market

- Economic and market overview
- Disruption
- Divergence
- Demographics and debt
- Solutions to consider
Economic and market overview
### Key takeaways

Stocks, high yield bonds and emerging market debt continued to deliver strong performances in the past year, as monetary policy conditions remained very accommodative. Most areas of fixed income produced more modest returns, with some areas producing a negative return during the year. Alternatives performance was mixed, with commodities creating a drag on performance, hurt by several different factors including oil prices remaining in a trading range for the past year.

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### Asset class returns

<table>
<thead>
<tr>
<th>%</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>One-year performance, as of Sept. 30, 2017</th>
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<tbody>
<tr>
<td>Equities</td>
<td></td>
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<td>US – S&amp;P 500 Index</td>
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<td>International – MSCI EAFE Index¹</td>
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<td>Growth – Russell 1000 Growth Index</td>
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<tr>
<td>Fixed income</td>
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<td>Value – Russell 1000 Value Index</td>
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<td>Large cap – Russell 1000 Index</td>
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<td>Mid cap – Russell Midcap Index</td>
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<td>Small cap – Russell 2000 Index</td>
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<td>Developed – MSCI World Index¹</td>
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<td>Emerging – MSCI Emerging Markets Index¹</td>
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<td>TIPS – Bloomberg Barclays US TIPS Index</td>
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<td>Government – Bloomberg Barclays US Government Index</td>
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<td>Intermediate – Bloomberg Barclays US Aggregate Index</td>
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<td>High yield – Bloomberg Barclays US Corporate High Yield Index</td>
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<td></td>
<td></td>
<td>International – Bloomberg Barclays Global Aggregate ex-US Index</td>
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<td>EM debt – JPMorgan GBI-Emerging Markets Diversified Composite Index</td>
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<td>High yield municipals – Bloomberg Barclays Municipal High Yield Bond Index</td>
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<td></td>
<td>Int-term municipals – The BofA Merrill Lynch 3-7 Yr Municipal Index</td>
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<td></td>
<td>Non-US real estate – FTSE EPRA/NAREIT Developed ex-US Index¹</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>US real estate – FTSE NAREIT All Equity REITs Index</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Commodities – Bloomberg Commodity Index</td>
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<td></td>
<td></td>
<td>Senior secured loans – S&amp;P/LSTA Leveraged Loan Index</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Equities</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EM = Emerging markets; Int-term = Intermediate-term</td>
</tr>
</tbody>
</table>

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1. Index is computed using the net return, which withholds applicable taxes for nonresident investors.
2. Sources: Lipper, Inc. and StyleADVISOR, for the period October 2016 through September 2017. Past performance is not a guarantee of future results. An investment cannot be made directly in an index. The index performance shown is not meant to be a proxy for any Invesco product. The Russell indexes are trademarks/service marks of the Frank Russell Co. Russell® is a trademark of the Frank Russell Co.
### Industry fund flows

<table>
<thead>
<tr>
<th>$ billions</th>
<th>-20</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-9,217</td>
<td></td>
<td>17,092</td>
<td></td>
<td>106,560</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 2017</td>
<td>-5,833</td>
<td></td>
<td>11,336</td>
<td></td>
<td>77,939</td>
<td>99,569</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 2017</td>
<td>-5,267</td>
<td></td>
<td>21,811</td>
<td></td>
<td>97,458</td>
<td>99,301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 2016</td>
<td>-5,870</td>
<td>-8,198</td>
<td>-18,530</td>
<td>59,607</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key takeaways

Despite strong performance by stocks in the past year, fixed income was a more popular destination for flows during this period - particularly in the third quarter. Swings in flows to alternative funds suggest fickleness in investor attitudes toward alternatives. Finally, reflecting the reality that diversification has not improved performance in the past few years, there were outflows from allocation funds during the past year.
### Current state of the US economy

<table>
<thead>
<tr>
<th>Factors</th>
<th>Current state</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>↑</td>
<td>Economic growth rose 3.0% in the third quarter, following 3.1% growth in the second quarter 2017 (annualized).</td>
</tr>
<tr>
<td>Unemployment</td>
<td>↑</td>
<td>Unemployment remains low. However, we will want to follow nonfarm payrolls closely, as they stumbled in September.</td>
</tr>
<tr>
<td>Inflation</td>
<td>⇝</td>
<td>Inflation remains relatively low. However, the September jobs report suggests that wage growth is increasing, which could mean inflation will soon begin to rise.</td>
</tr>
<tr>
<td>Disposable income</td>
<td>↑</td>
<td>Disposable income has risen for the past several months as the labor market continues to improve. Disposable income could continue to rise if income taxes fall.</td>
</tr>
<tr>
<td>Housing</td>
<td>⇝</td>
<td>With mortgage rates poised to rise and first-time home buyer traffic low, we will want to follow the housing sector closely for signs of weakness.</td>
</tr>
<tr>
<td>Earnings</td>
<td>↑</td>
<td>Earnings continue to improve with the potential for greater improvement if the proposed tax reform bill is passed.</td>
</tr>
</tbody>
</table>

↑ Positive  ⇝ Neutral  ↓ Negative

Leading indicators of the US economy

<table>
<thead>
<tr>
<th>Leading indicators</th>
<th>Outlook</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock market</td>
<td>↑</td>
<td>Stocks have continued to hit record-high levels.</td>
</tr>
<tr>
<td>Manufacturing activity</td>
<td>↑</td>
<td>The ISM Manufacturing Index is at historically high levels and has continued to rise.</td>
</tr>
<tr>
<td>Services activity</td>
<td>↑</td>
<td>The ISM Non-Manufacturing Index is at historically high levels and has continued to rise.</td>
</tr>
<tr>
<td>Yield curve</td>
<td>↔</td>
<td>Although it has started flattening, the yield curve remains upward sloping, suggesting a supportive environment for economic growth.</td>
</tr>
<tr>
<td>Housing starts</td>
<td>↔</td>
<td>Housing dynamics vary by region but, in general, starts have recently shown signs of weakness.</td>
</tr>
<tr>
<td>Consumer expectations</td>
<td>↑</td>
<td>Consumer confidence remains relatively high at 119.8 for September. In particular, the Expectations Index rose slightly for September.</td>
</tr>
</tbody>
</table>

↑ Positive  ↔ Neutral  ↓ Negative

Disruption

Here we explore:
- Monetary versus fiscal policy
- Flight to cash
- Geopolitics
The response to the GFC was easy money – ultra low rates

Key takeaways
In the face of the Global Financial Crisis (GFC), many developed countries were unable or unwilling to implement major fiscal stimulus. Instead, major developed countries relied largely on monetary policy to combat the crisis. This resulted in extraordinarily low key interest rates.

Source: Federal Reserve Bank of St. Louis, Economic Research Division, as of Nov. 1, 2015.
The response to the GFC was easy money – central bank balance sheet expansion.

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bank of Japan</td>
<td>14.4</td>
<td>88.3</td>
</tr>
<tr>
<td>US Federal Reserve</td>
<td>5.3</td>
<td>25.0</td>
</tr>
<tr>
<td>European Central Bank</td>
<td>16.1</td>
<td>33.6</td>
</tr>
</tbody>
</table>

Key takeaways
For some countries, extremely low key rates were not enough to combat the crisis. As a result, some central banks also embarked on large-scale asset purchases, an experimental monetary policy tool that dramatically increased the size of their balance sheets and helped lower longer-term rates.

Easy money has led to unintended consequences

Focus on the news

“Rates cut to a historic low on recession fears”

“As low rates depress savers, governments reap benefits”

“Interest rates stay low for years”
- Daily Express, Jan. 20, 2016

“Postwar financial repression is back”
- Financial Times, April 1, 2012

Key takeaways
Monetary policy without fiscal policy can have unintended consequences. Rates hit extremely low levels – and have stayed low for years. Savers have been punished while risk takers have been rewarded.
With rates extremely low, stocks rose while stock ownership fell after the GFC.

S&P 500 Index rose more than 100% from March 9, 2009, through 2014.

Household stock ownership fell more than 4% between 2007 and 2013.

Key takeaways
Investors moved money out of stocks just as they were rising, which means they missed out on recovery and the potential for greater wealth accumulation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Household stock ownership %</th>
<th>Mean value of stock holdings $</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>53.2</td>
<td>254,000</td>
</tr>
<tr>
<td>2010</td>
<td>49.9</td>
<td>228,300</td>
</tr>
<tr>
<td>2013</td>
<td>48.8</td>
<td>269,900</td>
</tr>
</tbody>
</table>

Home prices have risen, but some missed out

Home prices have risen over recent years while...

...home ownership has fallen over recent years from 69.2% in 2004 to 63.7% in 2017

Key takeaways
Some Americans who were no longer homeowners missed out on the home price recovery and appreciation that occurred in the last few years.

Source: US Census Bureau, as of Sept. 30, 2017
Behavioral biases exacerbated the negative impacts of the GFC

Key takeaways
Unfortunately, the very understandable human response to the Global Financial Crisis (GFC) only exacerbated the negative impact of the crisis, as the policy response rewarded financial decisions that most Americans eschewed.

<table>
<thead>
<tr>
<th>Behavioral response to the GFC</th>
<th>Monetary policy response to the GFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock ownership fell</td>
<td>Stocks rose</td>
</tr>
<tr>
<td>Home ownership fell</td>
<td>Home prices rose</td>
</tr>
<tr>
<td>Allocations to cash rose</td>
<td>Rates fell</td>
</tr>
<tr>
<td>People became more risk-averse</td>
<td>Risk takers were rewarded</td>
</tr>
</tbody>
</table>

So wealth inequality grew
## Disruption is all around us

<table>
<thead>
<tr>
<th>Monetary policy</th>
<th>Changing world order</th>
<th>Innovation-driven disruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Including unwinding of experimental monetary policy</td>
<td>- De-globalization/shifting alliances</td>
<td>- Artificial intelligence</td>
</tr>
<tr>
<td></td>
<td>- Destabilized institutions</td>
<td>- Retail revolution</td>
</tr>
</tbody>
</table>

### Key takeaways

Investors need to be prepared for greater change driven by three key forces:
- Monetary policy
- Geopolitics
- Innovation

Source: Invesco, as of Sept. 30, 2017
Monetary policy in flux

**US**
- Federal funds rate rising
- Balance sheet normalization

**Bank of Canada, Bank of England**
- Beginning to raise key rates

**Bank of Japan, European Central Bank**
- Low key rates
- Still expanding balance sheets

**Key takeaways**

Monetary policy has the potential to create some disruption for several reasons:
- Uncertainty about Fed leadership going forward.
- The Fed has never had to unwind a massive balance sheet before. While it is likely to be slow and careful, there is still the possibility markets will have a short-term outsized reaction.
- Other countries’ central banks may become less accommodative after years of being extremely accommodative.
A changing world order

Vulnerability
- European Union
- The United Nations
- The North Atlantic Treaty Organization (NATO)
- North American Free Trade Agreement (NAFTA) and other trade deals

Instability
- Brexit
- North Korea
- Middle East

Key threats
- De-globalization
- Populism

Key takeaways
There is instability and uncertainty in many parts of the world, and we remain at risk for great geopolitical disruption going forward.

Source: Invesco, as of Sept. 30, 2017. There is no guarantee any referenced forecasts/outlooks will come to pass.
Volatility remains low but poised to increase

Key takeaways
- Volatility appears poised to increase simply on the basis of a reversion-to-the-mean argument.
- Periods of higher volatility (above 30) in the past have been associated with disruption and equity market weakness.

Source: Federal Reserve Economic Data, Chicago Board Options Exchange (CBOE) Volatility Index, as of Sept. 30, 2017. Volatility is measured by the CBOE Volatility Index (VIX). An investment cannot be made directly in an index.
Potential for downside volatility

**Key takeaways**
Investors who are concerned about a stock market downturn can consider exposure to actively managed strategies.

Outperformance of S&P 500 Index vs. Morningstar Large Cap Blend Active Funds

<table>
<thead>
<tr>
<th></th>
<th>Returns %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Bubble Burst</td>
<td>8.50</td>
</tr>
<tr>
<td>Global Financial Crisis</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Source: Morningstar, as of Sept. 30, 2017. Past performance is not a guarantee of future results. An investment cannot be made directly in an index.
Volatility is likely to increase; investors may need to participate but manage risk

**Conclusion**
- While the Fed is likely to be slow and careful, markets could have a short-term outsized reaction to balance sheet normalization.
- Geopolitical risk could also cause short-term volatility.
- There is also the potential for higher volatility, over the longer term, which can be a threat to portfolios, so managing risk is critical.

<table>
<thead>
<tr>
<th>Potential solutions</th>
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</thead>
<tbody>
<tr>
<td>- Actively managed strategies</td>
</tr>
<tr>
<td>- The low volatility factor</td>
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<tr>
<td>- Exposure to alternatives</td>
</tr>
</tbody>
</table>
Divergence

Here we explore:
- Sentiment versus reality
- Valuations
- Sources of growth
Business sentiment has outpaced activity since the US election

Key takeaways
- There is positive sentiment on the part of business owners, with the ISM Manufacturing Index indicating that managers and business owners are positive on the US economy.
- However, this has not yet resulted in a similarly large improvement in actual industrial production.

Source: FactSet Research Systems, as of Sept. 30, 2017. An investment cannot be made directly in an index.
Consumer sentiment has also improved, but spending has not

Key takeaways
- In addition to business owners, consumers also have very positive feelings about the US economy.
- However, this has not yet translated into a big boost in consumer spending.

Source: FactSet Research Systems, as of Sept. 30, 2017. An investment cannot be made directly in an index.
## Trump administration agenda: Upside and downside risks

<table>
<thead>
<tr>
<th>Upside risks</th>
<th>Downside risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business deregulation</td>
<td>Tariffs</td>
</tr>
<tr>
<td>Household tax reform</td>
<td>Immigration policy</td>
</tr>
<tr>
<td>Corporate tax reform</td>
<td>Budget cuts</td>
</tr>
<tr>
<td>Repatriation tax reform</td>
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<tr>
<td>Infrastructure spending</td>
<td></td>
</tr>
</tbody>
</table>

### Key takeaways
- There are a variety of components of the administration's agenda that are pro-growth and offer upside potential for the US economy.
- However, some items on the agenda have the potential to create downside risk for the US economy.

Source: Invesco, as of Sept. 30, 2017
Valuations have risen, largely driven by ‘animal spirits’

Key takeaways
- This suggests that much of the stock market rally following the November US presidential election has been driven by expectations for the future – specifically Trump administration policies coming to fruition.
- This in turn means the stock market could be vulnerable.

Source: FactSet Research Systems, as of Sept. 30, 2017. An investment cannot be made directly in an index.
Valuations have varied across countries

**Key takeaways**
- Some regions outside the US currently have more attractive valuations than the US.
- Historically, lower valuation stocks have fallen less than the overall stock market during downward periods.
- Investors might consider ensuring they are well diversified internationally, with exposure to areas of the globe with lower valuations.

**Sources:** MSCI and Standard & Poor's, as of Sept. 30, 2017. Past performance is not a guarantee of future results. An investment cannot be made directly in an index.
Divergence and global growth

<table>
<thead>
<tr>
<th>Growth %</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td></td>
<td></td>
<td>2.3</td>
<td></td>
<td>2.1</td>
<td></td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td></td>
<td>1.9</td>
<td></td>
<td>2.5</td>
<td></td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.6</td>
<td>6.7</td>
<td>6.8</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.7</td>
<td>6.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Eurozone</td>
<td>1.7</td>
<td></td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
<td>6.7</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td>1.7</td>
<td></td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1.2</td>
<td>1.3</td>
<td>1.5</td>
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</tbody>
</table>

Key takeaways
- While global growth is rising, some countries are exceeding expectations and others are not.
- Gross domestic product (GDP) growth expectations have been revised downward for some countries and upward for others.
- Upside risks for some countries have increased while downside risks have increased for the US, reminding investors of the need for diversification.

Source: IMF, April 2017, July 2017 and September 2017. There is no guarantee any referenced forecasts/outlooks will come to pass.
Expectations have exceeded fundamentals in the US stock market

Conclusion
- The US stock market could be vulnerable if policy expectations don't become reality.
- With expectations trumping fundamentals in US stocks, valuations are critical.
- In this environment, investors may benefit from greater diversification, including asset allocation solutions and an increase in international exposure.

Potential solutions
- The low valuation factor
- International investments
- Diversified multi-asset solutions

Source: Invesco, as of Sept. 30, 2017. Asset allocation/diversification does not guarantee a profit or eliminate the risk of loss.
Demographics and debt

Here we explore:
- Low population growth
- High debt
- Lower for longer interest rates
Older population is much larger for developed markets

### Key takeaways
- Developed markets typically have a larger proportion of older people and lower population growth.
- This has economic implications as older populations typically experience lower economic growth and greater usage of government services.
- In addition, a large population of older citizens means they have the potential to sway elections, often leading to higher debt levels and less focus on providing for future generations.

Source: Central Intelligence Agency (CIA) World Factbook, as of March 31, 2017. A developed market is a country with a high standard of living, a well-run stock market, and (mostly) free trade.
Younger population much larger for emerging markets

Key takeaways
- Emerging markets typically have a large proportion of younger people and higher population growth.
- This has economic implications as younger populations typically have higher economic growth.
- However, there is a much greater potential for political instability with large populations of youth.

Source: Central Intelligence Agency (CIA) World Factbook, as of March 31, 2017. Emerging markets are countries with relatively young stock and bond markets. Emerging markets investments have the potential for losses and gains larger than those of developed market investments.
There is a correlation between population growth and government debt

Key takeaways
- There is a strong correlation between population growth and government debt. Those countries with low or negative population growth typically have high government debt levels whereas those countries with higher population growth typically have lower government debt levels.
- This is a reminder of the growing problem of high government debt levels, which many developed countries face.

Source: Central Intelligence Agency (CIA) World Factbook, as of March 31, 2017
Debt sustainability could become a bigger issue

Key takeaways
- US government debt held by the public is projected to grow to $25 trillion in the next decade.
- With the interest on servicing the debt projected to be a growing percentage of federal spending, the Federal Open Market Committee is incentivized to keep rates lower.
- Debt is also rising in other developed countries, which suggests interest rates could remain relatively low in other countries as well, in order for them to service their debt without dramatically impacting their budgets.

Source: Congressional Budget Office, as of Sept. 30, 2017. There is no guarantee any referenced forecasts/outlooks will come to pass.
Overall debt burdens have grown

Key takeaways
- With private debt burdens growing as well, it will likely become more difficult to service debt obligations if and when rates rise.
- This suggests the monetary environment will need to remain accommodative for longer.

Source: Bank for International Settlements, as of Sept. 30, 2016 (latest available data).
Low rates likely to persist, so the hunt for income continues

Key takeaways
- Traditional sources of income have been unable to deliver adequate yields in this environment.
- But with populations aging, the need for income is greater than ever.
- Dividends may help. The current yield on the S&P 500 Index is 2.2%, which is higher than many major sovereign debt yields.
- Currently, more than 30% of stocks in the S&P 500 Index offer a dividend yield higher than the 10-year Treasury yield.

The need for retirement savings continues

Key takeaways
The mean value of retirement savings has improved in the last three years, helped by a rising stock market. However:
- Less than 70% of families participate in retirement plans.
- Including all households, the median retirement account balance is $2,500.
- For households nearing retirement with a 401(k) plan, the average account balance is only $111,000.

The need for college savings continues

<table>
<thead>
<tr>
<th>Child age</th>
<th>0</th>
<th>$5,000</th>
<th>$10,000</th>
<th>$15,000</th>
<th>$20,000</th>
<th>$25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child age 0-6</td>
<td></td>
<td>$8,596</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age 7-12</td>
<td></td>
<td></td>
<td>$13,216</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Child age 13-17</td>
<td></td>
<td></td>
<td></td>
<td>$22,998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age 18+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$13,611</td>
<td></td>
</tr>
</tbody>
</table>

Key takeaways
- Investors may need to increase their savings rate and their exposure to assets with growth potential in order to meet all investment goals, including college savings.
- Only 13% of families utilize 529 plans. Without college savings, young people can suffer with high student loan debt that could last a lifetime.

### Young families and student loan debt

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families with student loan debt</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Mean value of student loan debt</td>
<td>$30,700</td>
<td>$33,300</td>
</tr>
</tbody>
</table>

Source: Sallie Mae, “How America Saves for College” 2016
Low rates, and the hunt for income and capital continue

Conclusion

- Yields are hard to find, but a high-quality fixed income portfolio diversified across credit, securitized and government sectors may help.
- Dividends can also be an important source of income.
- Investors who fled stocks may need to consider saving more and taking advantage of savings vehicles available to them.

Potential solutions

- Diversified fixed income
- Dividend strategies
- Maximize savings to meet all investment goals

Source: Invesco, as of Sept. 30, 2017. Asset allocation/diversification does not guarantee a profit or eliminate the risk of loss.
Solutions to consider
## Key points and potential solutions

<table>
<thead>
<tr>
<th>Key points</th>
<th>Solutions to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disruption</strong></td>
<td>Volatility is likely to increase. Investors may need to participate but mitigate risk.</td>
</tr>
<tr>
<td></td>
<td>- Actively managed strategies</td>
</tr>
<tr>
<td></td>
<td>- The low volatility factor</td>
</tr>
<tr>
<td></td>
<td>- Exposure to alternatives</td>
</tr>
<tr>
<td><strong>Divergence</strong></td>
<td>Expectations have exceeded fundamentals in the US stock market.</td>
</tr>
<tr>
<td></td>
<td>- The low valuation factor</td>
</tr>
<tr>
<td></td>
<td>- International investments</td>
</tr>
<tr>
<td></td>
<td>- Diversified multi-asset solutions</td>
</tr>
<tr>
<td><strong>Demographics and debt</strong></td>
<td>Relatively low rates globally will likely persist. The hunt for adequate income and capital continues.</td>
</tr>
<tr>
<td></td>
<td>- Diversified fixed income</td>
</tr>
<tr>
<td></td>
<td>- Dividend strategies</td>
</tr>
<tr>
<td></td>
<td>- Maximize savings in order to meet all investment goals</td>
</tr>
</tbody>
</table>
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About risk

Prices of equity securities change in response to many factors, including the historical and prospective earnings of the issuer, the value of its assets, general economic conditions, interest rates, investor perceptions and market liquidity. Common stocks do not assure dividend payments. Dividends are paid only when declared by an issuer’s board of directors and the amount of any dividend may vary over time.

The risks of investing in securities of foreign issuers located in developing or emerging countries may be more negatively affected by fluctuations in foreign currencies, political and economic instability, and foreign taxation issues than in more developed countries. Foreign investments may be affected by changes in a foreign country’s exchange rates, political and social instability, changes in economic or taxation policies, difficulties when enforcing obligations, decreased liquidity, and increased volatility. Foreign companies may be subject to less regulation resulting in less publicly available information about the companies.

Fixed income products are subject to risk, including credit risk of the issuer and the effects of changing interest rates. Market prices of fixed income securities with intermediate lives generally fluctuate more in response to changes in interest rates than do market prices of municipal securities with shorter lives, but generally fluctuate less than market prices of municipal securities with longer lives.

Although bonds generally present less short-term risk and volatility than stocks, the bond market is volatile and investing in bond funds involves interest rate risk; as interest rates rise, bond prices usually fall, and vice versa. Bond funds also entail issuer and counterparty credit risk, and the risk of default. Additionally, bond funds generally involve greater inflation risk than stocks. Although less volatile than stocks, bonds are subject to credit and default risks as well as interest rate risk; as interest rates rise, bond values fall and vice versa. Stocks fluctuate in response to activities specific to the company, as well as general market and economic conditions.

High yield (junk) bonds involve a higher risk of default and price movement due to changes in the issuer’s credit quality, while foreign bonds, including those of emerging markets, may fluctuate more due to increased political concerns, taxation issues, and movements in foreign exchange rates.

Most senior secured loans are made to corporations with below investment-grade credit ratings and are subject to significant credit, valuation and liquidity risk. The value of the collateral securing a loan may not be sufficient to cover the amount owed, may be found invalid or may be used to pay other outstanding obligations of the borrower under applicable law. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid.

Municipal securities are subject to the risk that litigation, legislation, or other political events, local business or economic conditions or the bankruptcy of the issuer could have a significant effect on an issuer’s ability to make payments of principal and/or interest. Commodities may subject an investor to greater volatility than traditional securities such as stocks and bonds.

Investments in real estate related instruments may be affected by economic, legal, or environmental factors that affect property values, rents or occupancies of real estate. Real estate companies, including REITs or similar structures, tend to be small and mid-cap companies and their shares may be more volatile and less liquid.

Alternatives are investments that do not fall into the three classic asset types such as commodities, currencies, real estate and any securities that aren't traded on the open market. Alternatives also include investments that incorporate non-traditional features such as long/short investing. Alternative products typically hold more non-traditional investments and employ more complex trading strategies, including hedging and...
leveraging through derivatives, short selling and opportunistic strategies that change with market conditions. Investors considering alternatives should be aware of their unique characteristics and additional risks from the strategies they use. Like all investments, performance will fluctuate. You can lose money. Alternative investments can be less liquid and more volatile than stocks and bonds, and often lack longer term track records.

Derivatives may be more volatile and less liquid than traditional investments and are subject to market, interest rate, credit, leverage, counterparty and management risks. An investment in a derivative could lose more than the cash amount invested.

Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa.

Counterparty risk is the risk that the other party to the contract will not fulfill its contractual obligations, which may cause losses or additional costs.

Leverage created from borrowing or certain types of transactions or instruments may impair liquidity, cause positions to be liquidated at an unfavorable time, lose more than the amount invested, or increase volatility.

Short sales may cause an investor to repurchase a security at a higher price, causing a loss. As there is no limit on how much the price of the security can increase, exposure to potential loss is unlimited.

While US Treasuries are backed by the full faith and credit of the US Government, they are subject to interest rate and inflation risk.

**Index definitions**

**Expectations Index** is a sub-index that measures overall consumer sentiments toward the short-term (6-month) future economic situation and is used to derive (approx. 60%) the Consumer Confidence Index, a widely used economic indicator. The sub-index is compiled from data gathered from a survey of 5,000 households on questions regarding expected business and employment conditions as well as expected income in the near-term.

**Purchasing Managers Index (PMI)** is an indicator of the economic health of the manufacturing sector. The PMI index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment.

**Consumer Price Index (CPI)** is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them; the goods are weighted according to their importance. Changes in CPI are used to assess price changes associated with the cost of living.

**ISM Manufacturing Index** is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management (ISM). The ISM Manufacturing Index monitors employment, production, inventories, new orders and supplier deliveries. A composite diffusion index monitors conditions in national manufacturing and is based on the data from these surveys.

**ISM Non-Manufacturing Index** is an index based on surveys of more than 400 non-manufacturing firms’ purchasing and supply executives, within 60 sectors across the nation, by the Institute of Supply Management (ISM). The ISM Non-Manufacturing Index tracks economic data, like the ISM Non-Manufacturing Business Activity Index. A composite diffusion index is created based on the data from these surveys, that monitors economic conditions of the nation.

**BarclayHedge Currency Traders Index** is an equal weighted composite of managed programs that trade currency futures and/ or cash forwards in the inter-bank market.

**BarclayHedge Equity Market Neutral Index** includes funds that attempt to exploit equity market inefficiencies and usually involves being simultaneously long and short matched equity portfolios of the same size within a country. Market neutral portfolios are designed to be either beta or currency neutral, or both. Well-designed portfolios typically control for industry, sector, market capitalization, and other exposures. Leverage is often applied to enhance returns. Only funds that provide net returns are included in the index calculation.

**BarclayHedge Fixed Income Arbitrage Index** includes funds that aim to profit from price anomalies between related interest rate securities. Most managers trade globally with a goal of generating steady returns with low volatility. This category includes interest rate swap arbitrage, US and non-US government bond arbitrage and forward yield curve arbitrage. Only funds that provide net returns are included in the index calculation.

**BarclayHedge Global Macro Index** includes funds that carry long and short positions in any of the world's major capital or derivative markets. These positions reflect their views on overall market direction as influenced by major economic trends and or events. The portfolios of these funds can include stocks, bonds, currencies, and commodities in the form of cash or derivatives instruments. Most funds invest globally in both developed and emerging markets. Only funds that provide net returns are included in the index calculation.
BarclayHedge Long/Short Index includes funds employ a directional strategy involving equity-oriented investing on both the long and short sides of the market. The objective is not to be market neutral. Managers have the ability to shift from value to growth, from small to medium to large capitalization stocks, and from a net long position to a net short position. Managers may use futures and options to hedge. The focus may be regional or sector specific. Only funds that provide net returns are included in the index calculation.

BarclayHedge Multi Strategy Index includes funds that are characterized by their ability to dynamically allocate capital among strategies falling within several traditional hedge fund discipline. The use of many strategies, and the ability to reallocate capital between them in response to market opportunities, means that such funds are not easily assigned to any traditional category. Only funds that provide net returns are included in the index calculation.

Bloomberg Barclays Corporate Bond Index is an unmanaged index considered representative of publicly issued US corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements. To qualify, bonds must be SEC-registered.

Bloomberg Barclays Global Aggregate ex-US Index is an unmanaged index considered representative of bonds of foreign countries.

Bloomberg Barclays Global Aggregate Credit USD Hedged Index is an unmanaged portfolio of globally issued debt securities.

Bloomberg Barclays High Yield Index is an unmanaged index that covers the US dollar-denominated, noninvestment grade, fixed-rate, taxable corporate bond market.

Bloomberg Barclays High Yield Municipal Index is generally representative of bonds that are noninvestment grade, unrated or rated below Baa1.

Bloomberg Barclays Global High Yield USD Hedged Index provides a broad-based measure of the global high-yield fixed income markets.

Bloomberg Barclays Emerging Market USD Aggregate Index includes USD-denominated debt from emerging markets around the world.

Bloomberg Barclays Municipal A Bond Index is an unmanaged index considered representative of the tax-exempt bond market where the securities included are A-rated.

Bloomberg Barclays Municipal Bond AA Index is an unmanaged index considered representative of the tax-exempt bond market where the securities included are AA-rated.

Bloomberg Barclays Municipal Bond BBB Index is an unmanaged index considered representative of the tax-exempt bond market where the securities included are BBB-rated.

Bloomberg Barclays Municipal Bond Index is an unmanaged index considered representative of the tax-exempt bond market.

Bloomberg Barclays Municipal High Yield Bond Index measures the noninvestment-grade and nonrated US dollar-denominated, fixed-rate, tax exempt bond market within the 50 United States and four other qualifying regions (Washington D.C., Puerto Rico, Guam and the Virgin Islands).

Bloomberg Barclays Municipal High Yield Puerto Rico Index is a subset of the Barclays US Municipal High Yield Index and contains all the Puerto Rico bonds under the index.

Bloomberg Barclays Municipal Intermediate 5-10 Year Bond Index is an unmanaged index of long-term, fixed-rate, investment grade, tax-exempt bonds representative of the municipal bond market.

Bloomberg Barclays US Aggregate Index is an unmanaged index considered representative of the US investment-grade, fixed-rate bond market.

Bloomberg Barclays US Corporate Index is a broad-based benchmark that measures the investment grade, fixed-rate, taxable, corporate bond market.

Bloomberg Barclays US Corporate Bond A Index consists of publicly issued US corporate and specified foreign debentures where the securities included are A-rated.

Bloomberg Barclays US Corporate Bond AA Index consists of publicly issued US corporate and specified foreign debentures where the securities included are AA-rated.

Bloomberg Barclays US Corporate Bond BBB Index consists of publicly issued US corporate and specified foreign debentures where the securities included are BBB-rated.

Bloomberg Barclays US Corporate High Yield Index is an unmanaged index that covers the US dollar-denominated, non investment grade, fixed-rate, taxable corporate bond market.

Bloomberg Barclays US Corporate Investment Grade Index is an unmanaged index consisting of publicly issued US corporate and specified foreign debentures and secured notes that are rated investment grade (Baa3/BBB- or higher) by at least two ratings agencies, have at least one year to final maturity and have at least $250 million par amount outstanding.

Bloomberg Barclays US Government Index is a market-value-weighted index of US government and government agency securities (other than mortgage securities) with maturities of one year or more.


Bloomberg Barclays US MBS Index measures the performance of investment grade fixed-rate mortgage-backed pass-through securities of Ginnie Mae, Fannie Mae and Freddie Mac.
Bloomberg Barclays US Municipal Bond Index represents a rules-based, market-value-weighted index engineered to track the broad US municipal bond market.

**Bloomberg Barclays US TIPS Index** is an unmanaged index that measures the performance of the US Treasury Inflation-Protected Securities (TIPS) market.

**Bloomberg Commodity Index** is a broadly diversified index that allows investors to track commodity futures through a single, simple measure.

**Chicago Board Options Exchange (CBOE) Volatility Index** shows the market’s expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 Index options. This volatility is meant to be forward looking and is a widely used measure of market risk, often referred to as the “investor fear gauge”.

**Credit Suisse Leveraged Loan Index** represents tradable, senior-secured, US-dollar-denominated, noninvestment grade loans.

**FTSE EPRA/NAREIT Developed ex-US Index** is designed to track the performance of listed real estate companies and REITs.

**FTSE NAREIT All Equity REITs Index** is an unmanaged index considered representative of US REITs.

**JPMorgan GBI-Emerging Markets Diversified Composite Index** is a comprehensive global local emerging markets index, and consists of liquid, fixed-rate, domestic currency government bonds.

**JPMorgan US High Yield Index** is designed to mirror the investable universe of the US high-yield corporate debt market, including issues of US- and Canadian-domiciled issuers.

**Morningstar Category: Nontraditional Bond** contains funds that pursue strategies divergent in one or more ways from conventional practice in the broader bond-fund universe. Many funds in this group describe themselves as “absolute return” portfolios, which seek to avoid losses and produce returns uncorrelated with the overall bond market; they employ a variety of methods to achieve those aims. Another large subset are self-described “unconstrained” portfolios that have more flexibility to invest tactically across a wide swath of individual sectors, including high yield and foreign debt, and typically with very large allocations. The category is also home to a subset of portfolios that attempt to minimize volatility by maintaining portfolios, but explicitly court significant credit and foreign bond market risk in order to generate high returns. Funds within this category often will use credit default swaps and other fixed income derivatives to a significant level within their portfolios.

**MSCI EAFE Index** is an unmanaged index considered representative of stocks of Europe, Australasia and the Far East.

**MSCI Emerging Markets Index** is an unmanaged index considered representative of stocks of developing countries.

**MSCI Europe Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe.

**MSCI USA Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure large and mid-cap US equity market performance.

**MSCI World Index** is an unmanaged index considered representative of stocks of developed countries.

**Russell 1000 Index** is an unmanaged index considered representative of large-cap stocks.

**Russell 1000 Growth Index** is an unmanaged index considered representative of large-cap growth stocks.

**Russell 1000 Value Index** is an unmanaged index considered representative of large-cap value stocks.

**Russell 2000 Index** is an unmanaged index considered representative of small-cap stocks.

**Russell Midcap Index** is an unmanaged index considered representative of mid-cap stocks.

**S&P 500 Index** is an unmanaged index considered representative of the US stock market.

**S&P 500 Financials Index** comprises those companies included in the S&P 500 that are classified as members of the GICS® financials sector.

**S&P 500 Information Technology Index** comprises those companies included in the S&P 500 that are classified as members of the GICS® information technology sector.

**S&P 500 Pure Value Index** measures value in separate dimensions across six risk factors. Value factors include book-value-to-price ratio, earnings-to-price ratio, and sales-to-price ratio. The Pure Style Index only includes those stocks from the parent index that exhibit strong value characteristics, and weights them by style score.

The S&P/Case-Shiller US National Home Price Index is a composite of single-family home price indices for the nine US Census divisions. As the broadest national measurement of home prices, the index captures approximately 75% US residential housing stock by value.

**S&P/LSTA Leveraged Loan Index** is a weekly total return index that tracks the current outstanding balance and spread over Libor for fully funded term loans.

The BofA Merrill Lynch 3-7 Year Municipal Index tracks the performance of US dollar-denominated, investment grade, tax-exempt debt that is publicly issued by US states and has a remaining term to final maturity between three and seven years.
The BofA Merrill Lynch 3-Month US Treasury Bill Index represents an unmanaged market index of US Treasury securities maturing in 90 days that assumes reinvestment of all income. The Russell Indices are trademarks/service marks of the Frank Russell Co. Russell® is a trademark of the Frank Russell Co. Unmanaged index returns do not reflect fees, expenses, or sales charges. An investment cannot be made directly in an index.

Other definitions

10-year Treasury, US government obligations may be (i) supported by the full faith and credit of the US Treasury, (ii) supported by the right of the issuer to borrow from the US Treasury, (iii) supported by the discretionary authority of the US government to purchase the agency's obligations, or (iv) supported only by the credit of the instrumentality. There is a risk that the US government may choose not to provide financial support to US government-sponsored agencies or instrumentalities if it is not legally obligated to do so. In that case, if the issuer were to default, a portfolio holding securities of such issuer might not be able to recover its investment from the US government.

Core plus is a fixed-income investment management style that permits managers to add instruments with greater risk and greater potential return such as high-yield, global and emerging market debt, for example, to core portfolios of investment-grade bonds.

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. 12-month forward EPS is based on projections for 12 months into the future.

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

Price-book ratio (P/B) is a financial ratio used to compare a company's current market price to its book value.

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

Trailing price/earnings (P/E) ratio is the sum of a company's price-to-earnings, calculated by taking the current stock price and dividing it by the trailing earnings per share for the past 12 months. This measure differs from forward P/E, which uses earnings estimates for the next four quarters.

Forward price/earnings (P/E) ratio is one measure of the price-earnings ratio that uses forecasted earnings (usually for the next 12 months or the next full fiscal year), rather than current earnings, for the calculation.

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This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

Note: Not all products, materials or services available at all firms. Advisors should contact their home offices.

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