ABBOT DOWNING STRATEGY REPORT

Summer Lull: Pause That Refreshes, or Calm Before The Storm?
ABBOT DOWNING STRATEGY REPORT – Summer Lull: Pause That Refreshes, or Calm Before The Storm?

In this issue:

<table>
<thead>
<tr>
<th>In this issue:</th>
<th>Contributors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Commentary:</td>
<td><strong>Abbot Downing Strategy Team</strong></td>
</tr>
<tr>
<td>Summer Lull: Pause That Refreshes,</td>
<td>Douglas W. Evans, CFA</td>
</tr>
<tr>
<td>or Calm Before The Storm?</td>
<td>Senior Managing Director, Asset Management</td>
</tr>
<tr>
<td>Control What You Can</td>
<td>Philip W. White, CFA</td>
</tr>
<tr>
<td>Capital Market Assumptions</td>
<td>Senior Managing Director, Asset Management</td>
</tr>
<tr>
<td>Key Market Events</td>
<td>Carol M. Schleif, CFA</td>
</tr>
<tr>
<td>Notable Observations</td>
<td>Deputy Chief Investment Officer, Asset Management</td>
</tr>
<tr>
<td>Dynamic Allocation Summary</td>
<td>Todd F. Rabold, CFA, CAIA</td>
</tr>
<tr>
<td></td>
<td>Regional Chief Investment Officer, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Jeffrey R. Erickson, CFA</td>
</tr>
<tr>
<td></td>
<td>Managing Director, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Robert B. Farrington, CFA, CAIA</td>
</tr>
<tr>
<td></td>
<td>Senior Portfolio Manager, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Daniel P. Burke, CFA</td>
</tr>
<tr>
<td></td>
<td>Senior Portfolio Manager, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Doug R. Beath</td>
</tr>
<tr>
<td></td>
<td>Portfolio Manager, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Thomas J. Raymond Jr., CFA</td>
</tr>
<tr>
<td></td>
<td>Portfolio Manager, Asset Management</td>
</tr>
<tr>
<td></td>
<td>Roger W. Adams, CFA</td>
</tr>
<tr>
<td></td>
<td>Business Support Consultant, Asset Management</td>
</tr>
</tbody>
</table>

Investment Products: ► NOT FDIC Insured ► NO Bank Guarantee ► MAY Lose Value

2 Abbot Downing Strategy Report – Summer Lull: Pause That Refreshes, or Calm Before The Storm?
Investment industry lore has long hailed the advent of the “summer lull”...a delightful few weeks during the dog days of summer when many financial industry participants are on vacation; congress is in recess; trade volume is low and potentially explosive headlines non-existent. For those in the office tending to business, it has often represented a blissful period of getting caught up on miscellaneous projects amidst an unusually more reasonable pace.

This quiet period has also typically afforded a time to pause and reflect on the events of the year to date, and think through various scenarios of what may lie ahead for the post-Labor Day through year end rush. Models can be re-run and scenarios outlined and weighted, with attendant portfolio repositioning shifts prepped for implementation should fundamentals play out or the weight of the evidence shift in a particular direction. It’s the proverbial pause button between the “stimulus-response” cycles that typically frenetic markets promote during much of the rest of the year.

As we entered August 2018, many of the factors were in place for the typical summer lull: light trading volume; low market volatility as evidenced by repressed VIX levels; and The House gone from The Hill until after Labor Day. One set of key factors has obviously NOT complied with the call for calm however – as headlines and social media feeds aimed at companies, industries, trade partners, and global bad actors, as well as headlines related to trade tiffs, primary elections, immigration issues, natural disasters, tech industry happenings and legal matters at the highest levels of the land have been roiling investor psyches.

We’ll use this pause as an opportune time to sort through the flow parsing for the nuggets amidst the noise. What follows is our attempt to frame up the factors likely to have the largest impact on what the balance of the year and into 2019 may hold.

What is Going Right

Earnings – According to Reuters, aggregate S&P 500 profits in the second quarter were up over 23% from 2017’s second quarter, on revenues that advanced 9.9%. As alluded to in last month’s Strategy Report, more important than the earnings themselves would be the tenor of analyst calls and what managements had to say about inflation, the impact of tariffs, finding workers, and go forward plans. Numerous companies indeed saw prices rise or fall dramatically – often by double digits (ala Facebook, Apple, Twitter, etc.) based not on absolute growth rates, but on misses relative to expectation or specific statements with regard to bottlenecks or opportunities. We expect the earnings cycle should remain strong for at least a few more quarters, based on lower taxes, increased capital expenditures, still solid global activity and accelerating consumer spending.

Economic Fundamentals – The US economy continues to power along on all cylinders with record low unemployment; an increased workforce participation rate; high optimism among businesses, consumers and investors; improving capital spending; solid housing market demand; and lofty corporate margins (see charts 1, 2, 3, 4). These factors combined to produce a GDP of over 4% in the 2nd quarter. While some of this activity may have been pulled from the 3rd and 4th quarters as businesses tried to accelerate onshoring in advance of threatened tariffs, we nonetheless expect that reduced taxes, enhanced cap-ex write off rules (which expire in five years), and pent up demand will keep the pace healthy for at least a few quarters more. Our Wells Fargo Economists do not see the risk of recession or imminent slowdown until late next year or beyond at the earliest.

Pricing Power – Investors and analysts alike listened closely to each quarterly call seeking guidance on inflationary impacts, especially as they related to a tight labor market, increased raw materials and input costs, and other potential knock on impacts of tariffs.
While most companies did discuss these topics, many in a broad swath of industries from industrial goods to autos, airlines to services and delivery companies – also noted that they were passing along at least some of the increased costs to consumers. The resultant pricing power is a phenomenon that has not been witnessed for nearly a decade, and one that a generation of managers has arguably little experience with. Given the underlying strength of the economy and the watchfulness of competitors, we expect they will stick and more and more companies will attempt to pass at least some of the margin pressure along. In light of the lower overall corporate tax rate and stronger topline growth, many companies should theoretically be able to absorb at least a portion of the increased input costs, meaning they will only pass a portion along, thus keeping overall inflationary impacts reasonable.

Productivity Enhancements – While Capital Expenditures (CapEx) are not off the charts, they do show signs of picking up, especially in labor intensive businesses. To the extent that employers can’t find enough humans to do the job and deploy labor saving devices, long run productivity should be enhanced.

Business Model Destruction and Reconstruction Continues – The rewrite of many business models from media to tech, retail, distribution, transportation etc. continues. The chasm between haves and have nots grows quickly with consumers and investors alike flocking toward models that work and leaving a path of strained old world models behind. Even the growth industries are changing, with technology and sustainability trends reaching into medical, consumer, services, urban planning, transportation, basic utility, artificial intelligence (AI) and Internet of Things (IoT) based industrial retrofitting and outfitting, and a wide range of personal and business services (to name but a few!). For the nimble, these trends create jobs and investable opportunities in a variety of spheres.

What is Potentially Worrisome

The question we arguably hear the most often these days is “how much further can this (markets, economic growth) go?” Followed closely by “what end of cycle signs are emerging?” While a number of the indicators we watch moved for a time into overbought / extended territory, the weight of the evidence still leads us to suspect that things can continue on for some time yet, given the solidity of the underlying fundamentals as outlined above. Nonetheless, a number of factors typically seen late in the cycle are starting to erupt.

Equity Market Valuations – Stocks are not cheap but won’t necessarily have the opportunity to get dirt-cheap given supply demand imbalances. As we’ve highlighted in prior publications, the net open market share count is down by over 1/3 versus the late 1990s – and that was before the record setting number of buybacks announced since the new Tax Act was signed into law. Merger and acquisition (M&A) activity, too, is reducing public share count, aided by reduced corporate tax rates, changing business models, and the temporary benefit for immediate expensing of CapEx and CapEx intensive purchases.

Debt Market Shenanigans – a number of articles and industry insiders are decrying the looser or non-existing covenants in debt financing as well as the proliferation of alternative lending schemes and disintermediation away from traditional (and more strictly regulated) lenders. Overall corporate and consumer debt is not as high as perceived, however (see “notable observations” page 15), seemingly mitigating this factor somewhat.

Drying liquidity – Given increased regulation and industry consolidation post the financial crisis, a number of traditional sources of liquidity, especially during low volume or stressful times, seem to be disappearing. This factor is less observable when markets are moving upward, but a number of industry insiders have been hinting that this factor is lurking just under the surface, and could reemerge should volatility return in a big way and particular markets seize.

Sources:

1 FactSet
2 Wells Fargo Securities: The Lingering Effect on Real PCE from the Great Recession, April 16, 2018
Increased Debt Market Supply - The recently passed U.S. Budget coupled with the tax cut is expected to swell the US Deficit to over $1 trillion in 2019 and beyond. Then too, the US Federal Reserve’s balance sheet normalization efforts will also take a potential buyer out of the fixed income markets, reducing demand and forcing yields higher. The Treasury tends to fund at the short end of the curve, increasing the likelihood that it could invert if investor inflation expectations about the future do not increase.

Trade war - Escalating rhetoric (China vs US) and isolating former partners (Canada and Mexico) is not winning the U.S. many friends on the global stage, though a number of diplomats seem to be working hard behind the scenes to bring all parties to the table and toward a peaceful resolution. The spat with China in particular is worrisome, as the Chinese have thousands of years of experience in playing a “long game.” While they may not be able to match tariffs dollar for dollar, we have already seen they have many other ways to interfere with US business interests: denying corporate acquisitions within their borders; increasing inspections; shaping the media message to their nearly 1.4 billion population; and urging their citizens to start selling their U.S. and other dollar denominated assets like real estate. Additionally, as the U.S. pulls out of participation in multi-national trade deals like the Trans Pacific Partnership, China has been only too happy to step into a leadership position. China’s Belt and Road plan and focus on achieving global economic dominance in key growth industries by 2025 also bears close monitoring.

Return of Complacency - As has been well documented, 2017 was record-breaking for the low volatility of markets and the attendant lackadaisical attitude sported by many investors. The disruption in early February, however, which saw markets pull back over 10% from their late January highs seemed to indicate a return to more normalized levels of volatility and cautiousness. As markets have retraced to new highs and fundamentals have remained strong, low volatility and high complacency has seemed to reassert itself. Exacerbating this trend is that most of the optimism and outperformance has been happening in the most growth oriented investments - meaning the most crowded trades are those with theoretically the least room for disappointment.

Bottom Line
On balance, we suspect the economy - barring major trade or policy related blunders - continues to power on for a number of quarters yet and could surprise participants with the durability of current trends. That said, it makes sense to carefully consider allocation relative to long term goals, and rebalancing asset classes that may have become over or under represented given recent market activity. A focus on quality and liquidity - especially in fixed income holdings - is also a worthwhile activity.

Sources:
3 The Congressional Budget Office: The Budget and Economic Outlook: 2018 to 2028
4 The World Bank
Recent Earnings Recession Over; Profit Margins Remain Strong

Consumer Balance Sheet Suggests Consumption Continues

Household Debt Service Ratio Near All-Time Lows

Household Net Worth At All-Time Highs


Sources: Bloomberg, Federal Reserve Board, FactSet, Wells Fargo Investment Institute. 3/31/2018
Control What You Can

“Climate is what we expect, weather is what we get.”
Andrew John Herberston

Herbertson was a well-respected, British geography professor at Oxford University; and that is about as exciting as his biography gets. But he is credited with the quote above popularized later by Mark Twain, science fiction writer Robert Heinlein, and even the National Weather Service, where it appears on the top of their monthly newsletter. It expresses a useful concept that while you can expect a general range of outcomes in the future, only one of those outcomes actually occurs. For example, in the financial markets a ‘bull market’ might be the climate, but a return on the S&P 500 of 10.6% is the weather. At Abbot Downing, we understand that we control the type of climate we are preparing client portfolios for, but the markets control the weather that client portfolios actually experience.

An Underappreciated Risk

If you spend time consuming any form of financial media, you have likely been misled to believe that the concept of risk begins and ends with the up and down movements of the financial markets. It is the most popular form of describing risk because it sells. The media can fill unlimited airtime musing about what moved the markets yesterday and what’s going to move the markets tomorrow. While it is important to read these movements to see what type of climate we may be headed for, we also focus on an additional risk; a separate risk that can be substantially more impactful than market volatility - the risk of not reaching your financial goals. We refer to this as ‘shortfall risk’. One of the most effective ways to address shortfall risk is to ensure that client portfolios can compound at as full a risk-adjusted rate of return as possible. This means picking up every basis point we can along the way.

There are a handful of tools we use to help mitigate shortfall risk. First, we establish a long-term strategic asset allocation that we feel provides the best opportunity for a portfolio to achieve its goals over a 20+ year time horizon. We discuss this process in October 2017 and June 2018. The challenge is that we can’t control the markets, so we focus intently on the things we can control. Two things we work hard to control are taxes and fees.

Manager selection is an important tool in helping to limit the impact of taxes and fees on client portfolios. For example, tax loss harvesting strategies represent a very effective way to add value. Through a quantitatively-driven process these managers sell stocks that have gone down throughout the year and replace them with stocks with a similar profile (e.g. sell Coca Cola stock, buy Pepsi) maintaining close tracking error to an index. The result is performance in line with the benchmark, coupled with the accumulation of a ‘tax loss asset’ that can be used to offset gains elsewhere in the portfolio.

The use of low-cost passive strategies is also an important tool. In more efficient areas of the markets - think large cap equities and investment grade bonds - it can be difficult to gain an informational advantage and substantially outperform the benchmark over long periods of time. As a result, we tend to favor index funds for the core exposure within these areas. By only allocating a small portion of the ‘fee budget’ on these core exposures we can add active management as ‘satellite’ positions around the core to add alpha over time.
Control What You Can (Continued)

In our experience, the two most common types of managers that have the ability to add alpha are managers in the alternatives space, and managers that run concentrated, low-turnover strategies. The data shows that alternative strategies (hedge funds, private equity, venture capital, timber, etc.) have a wide dispersion of outcomes. Select a top quartile fund and performance justifies the higher fees. End up in a bottom quartile fund and you likely have done materially worse than a cheap public-market equivalent. This is why we have dedicated the majority of our internal due diligence resources to the strategy and manager selection process within alternative asset classes. Because alternatives use up a large portion of the fee budget, we want to do our best to ensure that returns meet or exceed expectations. Our large asset size also lets us negotiate favorable fee arrangements on behalf of our clients.

In more traditional asset classes, managers can add value by being particularly tax-sensitive. We favor managers that take a long-term view and hold positions for several years. If a manager has high turnover (trades in and out of positions frequently throughout the year) the gains realized will be taxed at a higher rate (37% for a client in the highest tax bracket). This is compared to a long-term capital gains rate of 23.8%, for a similar client, for a manager with low-turnover. The table included shows the annual total return for the S&P 500 from 2013 through 2017. The annualized return on the portfolio before taxes is 15.8%. The annualized return using the long-term rate is 12.1%, and the return using the short-term rate is 10.1%. This is a simplified model, but the implications are fairly clear – executing a strategy that generates short-term capital gains can be very costly. It increases shortfall risk over time.

<table>
<thead>
<tr>
<th>S&amp;P 500</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>32.4%</td>
</tr>
<tr>
<td>2014</td>
<td>13.7%</td>
</tr>
<tr>
<td>2015</td>
<td>1.4%</td>
</tr>
<tr>
<td>2016</td>
<td>12.0%</td>
</tr>
<tr>
<td>2017</td>
<td>21.8%</td>
</tr>
<tr>
<td>Annualized Before Tax</td>
<td>15.8%</td>
</tr>
<tr>
<td>Low Turnover</td>
<td>12.1%</td>
</tr>
<tr>
<td>High Turnover</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Conclusion

Most of our prior monthly discussions have made reference to taxes and fees. They are persistent and unavoidable; but – unlike market performance – they are also fairly predictable and manageable. Helping to limit their impact on portfolios helps us mitigate the potential for shortfall risk. Our clients typically benefit from having a long time horizon – this works in their favor if their assets are protected and resources are not wasted, allowing the maximum amount of assets to grow over time. Warren Buffett understands. When asked how he’s managed to create his wealth he said, “My wealth has come from a combination of living in America, some lucky genes, and compound interest.”
## Capital Market Assumptions

### 2018 Asset-Class Return and Volatility Assumptions (10- to 15-Year Horizon)

<table>
<thead>
<tr>
<th>Capital Market Assumptions</th>
<th>Hypothetical Arithmetic Return</th>
<th>Hypothetical Geometric Return</th>
<th>Hypothetical Standard Deviation</th>
<th>Yield or Dividend Yield</th>
<th>Downside Risk</th>
<th>Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Alternatives</td>
<td>2.5%</td>
<td>2.5%</td>
<td>1.0%</td>
<td>2.5%</td>
<td>0.9%</td>
<td>0.00</td>
</tr>
<tr>
<td>U.S. Short Term Taxable Fixed Income</td>
<td>2.7%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>2.7%</td>
<td>-0.1%</td>
<td>0.12</td>
</tr>
<tr>
<td>U.S. Intermediate Taxable Fixed Income</td>
<td>3.2%</td>
<td>3.1%</td>
<td>4.5%</td>
<td>3.1%</td>
<td>-4.0%</td>
<td>0.16</td>
</tr>
<tr>
<td>U.S. Long Term Taxable Fixed Income</td>
<td>3.8%</td>
<td>3.2%</td>
<td>10.5%</td>
<td>3.2%</td>
<td>-12.5%</td>
<td>0.12</td>
</tr>
<tr>
<td>High Yield Taxable Fixed Income</td>
<td>6.8%</td>
<td>6.1%</td>
<td>12.0%</td>
<td>6.1%</td>
<td>-11.7%</td>
<td>0.36</td>
</tr>
<tr>
<td>Short Term Tax Exempt Fixed Income</td>
<td>2.2%</td>
<td>2.2%</td>
<td>1.8%</td>
<td>2.2%</td>
<td>-0.7%</td>
<td>0.10</td>
</tr>
<tr>
<td>Intermediate Tax Exempt Fixed Income</td>
<td>2.6%</td>
<td>2.5%</td>
<td>4.5%</td>
<td>2.5%</td>
<td>-4.7%</td>
<td>0.13</td>
</tr>
<tr>
<td>Long Term Tax Exempt Fixed Income</td>
<td>3.0%</td>
<td>2.6%</td>
<td>9.0%</td>
<td>2.6%</td>
<td>-11.1%</td>
<td>0.12</td>
</tr>
<tr>
<td>High Yield Tax Exempt Fixed Income</td>
<td>5.4%</td>
<td>4.8%</td>
<td>12.0%</td>
<td>4.8%</td>
<td>-13.1%</td>
<td>0.30</td>
</tr>
<tr>
<td>Developed Market Ex-U.S. Fixed Income</td>
<td>3.2%</td>
<td>2.9%</td>
<td>8.3%</td>
<td>2.9%</td>
<td>-9.7%</td>
<td>0.09</td>
</tr>
<tr>
<td>Emerging Market Fixed Income</td>
<td>6.8%</td>
<td>6.1%</td>
<td>12.0%</td>
<td>6.1%</td>
<td>-11.7%</td>
<td>0.36</td>
</tr>
<tr>
<td>Inflation-Linked Fixed Income</td>
<td>3.3%</td>
<td>3.1%</td>
<td>6.0%</td>
<td>3.1%</td>
<td>-6.3%</td>
<td>0.12</td>
</tr>
<tr>
<td>Preferred Stock</td>
<td>5.1%</td>
<td>4.4%</td>
<td>12%</td>
<td>4.4%</td>
<td>-13.4%</td>
<td>0.21</td>
</tr>
<tr>
<td>U.S. Large Cap Equities</td>
<td>8.9%</td>
<td>7.8%</td>
<td>16.0%</td>
<td>2.1%</td>
<td>-15.2%</td>
<td>0.40</td>
</tr>
<tr>
<td>U.S. Mid Cap Equities</td>
<td>9.8%</td>
<td>8.4%</td>
<td>17.8%</td>
<td>1.8%</td>
<td>-16.8%</td>
<td>0.41</td>
</tr>
<tr>
<td>U.S. Small Cap Equities</td>
<td>10.3%</td>
<td>8.5%</td>
<td>20.0%</td>
<td>1.3%</td>
<td>-19.2%</td>
<td>0.39</td>
</tr>
<tr>
<td>Developed Market Ex-U.S. Equities</td>
<td>8.9%</td>
<td>7.5%</td>
<td>17.5%</td>
<td>3.0%</td>
<td>-17.4%</td>
<td>0.36</td>
</tr>
<tr>
<td>Developed Market Ex-U.S. Small Cap Equities</td>
<td>9.8%</td>
<td>8.0%</td>
<td>20.0%</td>
<td>2.0%</td>
<td>-19.8%</td>
<td>0.36</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>11.5%</td>
<td>9.2%</td>
<td>23.0%</td>
<td>2.3%</td>
<td>-22.0%</td>
<td>0.39</td>
</tr>
<tr>
<td>Frontier Market Equities</td>
<td>11.1%</td>
<td>8.2%</td>
<td>26.0%</td>
<td>3.5%</td>
<td>-26.0%</td>
<td>0.33</td>
</tr>
<tr>
<td>Public Real Estate</td>
<td>8.7%</td>
<td>7.2%</td>
<td>18.0%</td>
<td>4.1%</td>
<td>-18.2%</td>
<td>0.34</td>
</tr>
<tr>
<td>Private Real Estate*</td>
<td>8.7%</td>
<td>7.7%</td>
<td>15.0%</td>
<td>6.0%</td>
<td>-14.1%</td>
<td>0.41</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>8.7%</td>
<td>7.5%</td>
<td>16.0%</td>
<td>4.0%</td>
<td>-15.5%</td>
<td>0.38</td>
</tr>
<tr>
<td>Master Limited Partnerships</td>
<td>8.9%</td>
<td>7.6%</td>
<td>17.0%</td>
<td>6.0%</td>
<td>-16.7%</td>
<td>0.38</td>
</tr>
<tr>
<td>Timberland</td>
<td>7.5%</td>
<td>6.8%</td>
<td>12.3%</td>
<td>5.0%</td>
<td>-11.4%</td>
<td>0.41</td>
</tr>
<tr>
<td>Commodities</td>
<td>5.5%</td>
<td>4.4%</td>
<td>15.0%</td>
<td>0.0%</td>
<td>-17.3%</td>
<td>0.20</td>
</tr>
<tr>
<td>Hedge Funds—Relative Value*</td>
<td>5.3%</td>
<td>5.1%</td>
<td>5.8%</td>
<td>0.0%</td>
<td>-3.9%</td>
<td>0.48</td>
</tr>
<tr>
<td>Hedge Funds—Macro*</td>
<td>5.1%</td>
<td>4.9%</td>
<td>6.3%</td>
<td>0.0%</td>
<td>-4.9%</td>
<td>0.41</td>
</tr>
<tr>
<td>Hedge Funds—Event Driven*</td>
<td>5.5%</td>
<td>5.3%</td>
<td>7.0%</td>
<td>0.0%</td>
<td>-5.6%</td>
<td>0.43</td>
</tr>
<tr>
<td>Hedge Funds—Equity Hedge*</td>
<td>6.1%</td>
<td>5.7%</td>
<td>8.8%</td>
<td>0.0%</td>
<td>-7.7%</td>
<td>0.41</td>
</tr>
<tr>
<td>Private Equity*</td>
<td>13.0%</td>
<td>10.9%</td>
<td>22.0%</td>
<td>0.0%</td>
<td>-19.3%</td>
<td>0.48</td>
</tr>
<tr>
<td>Private Debt*</td>
<td>9.3%</td>
<td>8.1%</td>
<td>16.0%</td>
<td>6.8%</td>
<td>-14.9%</td>
<td>0.42</td>
</tr>
</tbody>
</table>

**Sources:** Wells Fargo Investment Institute.

Capital market and asset class assumptions are estimates of how asset classes may respond during various market environments. For example, Downside risk is based on our assumptions about average returns and the variability of returns. It represents the minimum return that would be statistically likely in 95% of annual returns. In other words, in 19 out of 20 years, performance would likely be better than this figure and in the twentieth year it would likely be worse. There is no guarantee that any particular 20-year period would follow this pattern. Hypothetical returns represent our estimate of likely average returns over the next several market cycles. They do not represent the returns that an investor should expect in any particular year. Geometric return is the compounded annual growth rate of an investment (asset class or portfolio) over a specified period of time longer than one year. Standard deviation is a measure of volatility; it reflects the degree of variability surrounding the outcome of an investment decision; the higher the standard deviation, the greater the risk. Yield on a bond assumes constant maturity. Dividend yield on an equity or real-asset investment represents the projected dividend as a percentage of the purchase price. Sharpe ratio measures the additional return that an investor could expect to receive for accepting additional risk. The assumptions are not designed to predict actual performance, and there are no assurances that any estimates used will be achieved. The information given has been provided as a guide to help with investment planning and does not represent the maximum loss a portfolio could experience.

*Alternative investments are not suitable for all investors. They are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program.

---

9 Abbot Downing Strategy Report – Summer Lull: Pause That Refreshes, or Calm Before The Storm?
Key Market Events

Listed below are key upcoming events and/or accelerating trends we’re watching especially closely, as well as a few comments related to how they may impact short-term markets.

### The Return of Volatility

Global equities remain volatile, as the February bottom on the S&P 500 was tested on April 2nd, and has since rebounded over 10 percent. Perhaps too early to decipher, but recent market action appears to be a sign that investors are beginning to focus less on issues that produced anxiety during the first quarter (trade conflict with China, fears of excessive regulation within the internet and social media sector, geopolitics) and are turning toward expectations of more positive earnings’ reports from Q2— and stronger forward estimates in the second half of the year, versus potential headwinds of rising interest rates and an uptick in inflation due to a tight labor market.

Inflation, deficits, regulation, fiscal spending and tariffs could all add to market volatility at least through the mid-term elections in November and likely beyond. Economic data must be thoroughly monitored for signs of overheating and the potential for bottlenecks.

### Global Trade

While negotiations will likely win out over all-out trade war, the risks of damaging trade conflict between the U.S. and China have risen. The U.S. hit $34 billion of Chinese goods with import tariffs on July 6th, a measure matched by Beijing. A second round of $16 billion will likely go into effect in August. Shortly thereafter, United States representatives (USTR) released a list of $200 billion in imports from China on which a 10% tariff will be assessed — possibly increasing to 25%. China again retaliated by releasing a list of $60 billion in U.S. goods that Beijing intends to hit with tariffs. Key demands from the U.S. dictate that China open its markets, increase its imports, stop protecting its favored industries and change rules to prevent the theft of U.S. Technology. Although escalating punitive policy responses would produce unfavorable economic circumstances for both countries, investors (for now) believe that China has more to lose than the U.S. based on the sharp downturn in the Yuan and emergence of a bear market for the Shanghai Stock Exchange.

U.S. and Europe outlined a deal to lower tariffs and other trade barriers, which diffused (for the moment) a trade battle that began with Mr. Trump’s tariffs on steel and aluminum exports, and threatened to escalate to automobiles. This all comes in advance of the mid-term elections. If markets weaken considerably on trade concerns, you can be sure Democrats are going to be ready to highlight.

Global trade negotiations have evolved into a political chess match that is highly unpredictable and we feel they thus carry a greater than average risk of “surprising” investors and markets.
Domestic Geopolitical Concerns

The new U.S. tax bill and reduced regulatory constraints appear to be having a salutary effect on corporate psyches. From our perspective, spending and hiring plans are firm and corporate optimism is running high. So high in fact, that some bottlenecks appear to be emerging in selected industries. We still believe that on balance, we can expect potentially more economic stimulus and equity-market support than forecasted even a few months ago.

With permanently lower corporate tax rates, immediate write off of capital expenditures for the next five years, and a host of devilish details, the law in full bloom is liable to yield a number of modifications in business behavior, many with a growth bias.

We feel that investor consternation is rising over the potentially inflationary/growth aspects of the law: Can we get enough growth without overheating an already arguably fully employed populace? Case in point. More Americans are choosing to quit their jobs than since the internet boom 17 years ago – and getting rewarded with higher pay at new positions.

In our opinion, partisan battles over the budget, immigration, an infrastructure plan, and trade will dominate headlines in coming months making heightened volatility a likelihood—even as the economy continues to perform solidly amidst the noise.

Central Bank Meetings – The Fed and The ECB

As expected, the U.S. Federal Reserve voted to maintain the target range for the federal funds rate at 1.75 to 2.00 percent at the August meeting, after raising rates by 25 basis points at the June meeting.

A key question remaining in our mind: Will they move preemptively to tame inflation, or let it run on a bit? U.S. headline and core inflation, as well as employment cost indices, will be under extra scrutiny in months ahead. Expectations for rate increases as indicated by futures markets suggest one, possibly two, additional hikes in 2018. QE tapering will also be a focus, as the Fed reduces the bond purchasing program initiated in the wake of the financial crisis and the U.S. Treasury increases its issuance of T-bills, notes, and bonds to pay for an expanding deficit, investors will be watching closely to see if yields are forced upward given the extra supply.

Employment cost index releases should continue to spawn market volatility; recent monthly unemployment reports have reached the lowest levels since year 2000. This is likely to be a much watched statistic for the remainder of the year along with its inferred implication for Fed monetary policy decision. The June and July reports were encouraging in that they displayed a meaningful increase in the labor force – employing more than all of the new entrants. Notwithstanding, average hourly earnings have remained stable in 2018.

The European Central Bank (ECB) reiterated it will continue buying 30 billion euros of assets a month until the end of September, reduce the pace to 15 billion euros from October, and stop purchases at the end of the year. It also pledged to keep interest rates unchanged “at least through the summer of 2019.”
Key Market Events (Continued)

Central Bank Meetings - The Fed and The ECB

We feel that markets will continue to micro-analyze early commentary from Chairman Powell as well as any and all speeches individual governors give in the next few months for hints related to pacing and number of increases in 2018. Progress and commentary around the pace of balance sheet unwind will also bear watching for its impact on market levels of liquidity and pricing.

Markets will also continue to scrutinize ECB President Mario Draghi’s comments; at the latest ECB press conference in late July, Mr. Draghi was upbeat regarding the euro area economy, and stated that underlying inflation is expected to pick up.

The Bank of Japan (BOJ) maintained the “yield curve control” policy, in which it will target the overnight rate at negative 0.1%, and the 10-year Japanese Government Bond yield at 0.0% - but also announced greater flexibility in the zero yield target, from a 0.1% yield cap to a range of +/- 0.2%.
Commodity Prices

Based on historical data, commodities are knee-deep in a bear super cycle (a cycle that lasts 15-20 years where price moves typically occur in the first five years) that commenced in 2011 with, we suspect, the bulk of the damage having already occurred. Six years into the cycle, individual commodities in aggregate are likely to be range bound—providing potential opportunities for investors. For example, despite oil prices hovering near $70 due mostly to geopolitical issues (OPEC, Iran, Venezuela), WTI crude is still expected to fall back into the $50-$65 range by the end of 2018 according to the Wells Fargo Investment Institute—mostly based on record U.S. production.

Commodities price volatility, especially to the upside, could further stoke investor nerves regarding inflationary pressures.

Progress on President Trump’s Economic Initiatives

In addition to the recently passed tax initiatives, market expectations are also high for further progress on rolling back regulations and possibly an infrastructure plan. President Trump’s political problems associated with potential interference in the U.S. elections and legal issues with his former associates threaten to undermine the aforementioned initiatives deemed to be pro-growth by the markets.

From our perspective, the details will prove important to watch as even recent presidential orders contain sweepingly different outcomes for different segments of the economy (witness environmental, energy, and military initiatives).

Techlash

In view of high profile hacks/data misuse announcements by companies from Facebook to Under Armour, to Aptiva and Experian, Congressional scrutiny of the technology sector is likely to increase.

The European Union is far ahead of the U.S. on this front and has already lodged fines on affected companies from Facebook to Apple.

U.S. Economic Data Heading into 2018

After expanding 2.0% in Q1, the U.S. economy accelerated to 4.1% on an annualized basis in Q2. We believe the latest data inputs support continued growth through 2018: leading economic indicators (LEI), quality corporate bond spreads, and manufacturing surveys are all forecasting solid expansion.

Although output has clearly accelerated throughout 2017, we believe monitoring incoming data late in a business cycle for signs of acceleration and deceleration is prudent.

Source:

5 Factset
Notable Observations

Even as the US Federal Reserve works to rewind the increase in its own balance sheet, there has been much hand ringing in the popular press re “increasing debt levels in various other sectors of the US economy (e.g. consumer, business and municipalities). As the chart below shows, however, debt in most areas remains well below prior peaks with consumer and business balance sheets in particular in much better shape than they have been in many years.

Total Liabilities Net of Cash as a % of Net Worth of Nonfarm Nonfinancial Corporate Businesses

Quarterly 3/31/1952 - 3/31/2018

Notable Observations (Continued)

Components of Domestic Nonfinancial Debt Growth (SAAR)
Quarterly 3/31/1952 - 3/31/2018

Global Outlook Overview

U.S. Large Cap Equities

Outlook: Mixed Positive

Macro and fundamental inputs continue to favor U.S. large-cap equities although the market environment (technicals and sentiment) has deteriorated. The new tax bill shows potentially more economic stimulus and equity-market support than forecasted at the beginning of the year. We are also aware of elevated valuations, and in instances where clients are in need of capital we would consider taking profits in this asset class, if the client is above target weights. At the same time, if U.S. large-cap stocks were to experience additional volatility, we would consider this a potential opportunity to invest at more attractive prices.

U.S. Small Cap Equities

Outlook: Neutral

We have a Neutral weighting on domestic small cap equities. Valuations are deemed expensive relative to larger companies, but the new tax plan should benefit small-cap stocks by comparatively more than the large-cap indices; smaller domestic companies tend to pay higher tax rates than large, multinational companies, and generally have lower profit margins. Active management is favored to generate alpha in this space.

Developed Market Equities

Outlook: Mixed Positive

Economic momentum from developed countries outside the U.S. stalled in the first half of 2018, but is expected to improve as the year progresses. Accelerating profits, and reasonable valuations favor developed market equities in our opinion. In cases where clients have immediate funds to invest, developed equities would be one of our top considerations.

Emerging Market Equities

Outlook: Neutral

The strengthening U.S. dollar and escalating trade tensions have pressured emerging market equities – and made valuations more attractive. Stronger balance sheets of developing countries (lower external debt) and expectations of a more stable greenback have made us more optimistic on this asset class going forward.
Dynamic Allocation Summary (Continued)

U.S. Investment Grade Fixed Income

**Outlook:** Neutral

We feel that yields of investment grade bonds (treasuries, municipals, and corporates) have moved into fair value range, and are supported by expectations that the Fed will continue to raise rates at a gradual pace; markets currently appear to anticipate one to two additional hikes in 2018.

Non-Investment Grade Fixed Income

**Outlook:** Neutral

We remain constructive on preferred stock securities based on healthy yield premiums versus investment-grade bonds. We feel that valuations have become expensive in the high-yield asset class.

International Fixed Income

**Outlook:** Negative

We believe near zero yields on many developed country sovereign debt issues warrant caution for this sector. Emerging market bond spreads are now at their long-term historical averages.

Real Estate Investment Trusts (REITs)

**Outlook:** Neutral

We have downgraded REITs to neutral, as they have become more sensitive to interest rate moves. REIT fundamentals remain solid and exhibit attractive valuations. REITs currently sell at a 2.1% discount to underlying real estate holdings.

Master Limited Partnerships (MLPs)

**Outlook:** Mixed Positive

Although MLPs have come under pressure recently as investors appear to adjust to lower distribution growth rates and tax-loss selling, we believe the outlook for MLPs from a fundamental perspective is improving. Current MLP yields of near 9% are also attractive on both an absolute and relative basis. Finally, active management is favored in this space due to the recent FREC ruling and risk of C-corp conversion.
Disclosures

Risk Considerations

Past performance does not indicate future results. The value or income associated with a security or an investment may fluctuate. There is always the potential for loss as well as gain. Investments discussed in this report may be unsuitable for some investors depending on their specific investment objectives and financial position.

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities.

There is no guarantee that dividend-paying stocks will return more than the overall stock market. Dividends are not guaranteed and are subject to change or elimination. There are no guarantees that growth or value stocks will increase in value or that their intrinsic values will eventually be recognized by the overall market. The return and principal value of stocks fluctuate with changes in market conditions. The growth and value type of investing tends to shift in and out of favor.

Asset allocation and diversification do not assure or guarantee better performance and cannot eliminate the risk of investment losses. Your individual allocation may be different than the strategic long-term allocation above due to your unique individual circumstances but is targeted to be in the allocation ranges detailed. The asset allocation reflected above may fluctuate based on asset values, portfolio decisions, and account needs.

Investing in commodities is not suitable for all investors. Exposure to the commodities markets may subject an investment to greater share price volatility than an investment in traditional equity or debt securities. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. Products that invest in commodities may employ more complex strategies which may expose investors to additional risks.

Convertible securities are subject to the same interest rate, price and credit risks as regular debt securities. Prices tend to be inversely affected by changes in interest rates. In addition, a convertible security is also subject to the risks associated with common stocks. The return and principal value of stocks fluctuate with changes in market conditions.

Alternative investments, such as hedge funds, carry specific investor qualifications which can include high income and net-worth requirements as well as relatively high investment minimums. They are complex investment vehicles which generally have high costs and substantial risks. The high expenses often associated with these investments must be offset by trading profits and other income. They tend to be more volatile than other types of investments and present an increased risk of investment loss. There may also be a lack of transparency as to the underlying assets. Alternative investments are subject to fewer regulatory requirements than mutual funds and other registered investment company products and thus may offer investors fewer legal protections than they would have with more traditional investments. Additionally, there may be no secondary market for alternative investment interests and transferability may be limited or even prohibited. Other risks may apply as well, depending on the specific investment product. Please carefully review the prospectus, private placement memorandum or other offering documents for complete information regarding terms, including all applicable fees, as well as risks and other factors you should consider before investing.

Investments in fixed-income securities are subject to interest rate and credit risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond’s price. Credit risk is the risk that an issuer will default on payments of interest and principal. High yield fixed income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment grade fixed income securities. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes. They are subject to credit risk and potentially the Alternative Minimum Tax (AMT). Quality varies widely depending on the specific issuer. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Mortgage-related and asset-backed securities are subject to prepayment risks. Changes in prepayments may significantly affect yield, average life and expected maturity.

Currency hedging is a technique used to seek to reduce the risk arising from the change in price of one currency against another. The use of hedging to manage currency exchange rate movements may not be successful and could produce disproportionate gains or losses in a portfolio and may increase volatility and costs.

Investing in foreign securities presents certain risks that may not be present in domestic securities. For example, investments in foreign, emerging and frontier markets present special risks, including currency fluctuation, the potential for diplomatic and potential instability, regulatory and liquidity risks, foreign taxation and differences in auditing and other financial standards.
Master Limited Partnerships (MLPs) involves certain risks which differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc., regulatory risk, and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes which would reduce the amount of cash flows distributed by the MLP. Other risks include the volatility associated with the use of leverage; volatility of the commodities markets; market risks; supply and demand; natural and man-made catastrophes; competition; liquidity; market price discount from Net Asset Value and other material risks.

There are special risks associated with investing in preferred securities. Preferred securities are subject to interest rate and credit risks and are generally subordinated to bonds or other debt instruments in an issuer’s capital structure, subjecting them to a greater risk of non-payment than more senior securities. In addition, the issue may be callable which may negatively impact the return of the security. Preferred dividends are not guaranteed and are subject to deferral or elimination.

Private debt has speculative characteristics that include potential default, limited liquidity and the infrequent availability of independent credit ratings for private companies.

There are risks associated with investments in private companies. Such companies are not subject to SEC reporting requirements and are not required to maintain effective internal controls over financial reporting. These companies may have limited financial resources; shorter operating histories; more asset concentration risk; narrower product lines and smaller market shares that larger companies. In addition, securities issued by private companies are typically illiquid and there may be no readily available trading market for such securities.

Investing in real estate involves special risks, including the possible illiquidity of the underlying property, credit risk, interest rate fluctuations and the impact of varied economic conditions.

The prices of small cap and mid cap company stocks are generally more volatile than large cap company stocks. They often involve higher risks because smaller companies may lack the management expertise, financial resources, product diversification and competitive strengths to endure adverse economic conditions.

Technology and internet-related stocks, especially of smaller, less-seasoned companies, tend to be more volatile than the overall market.

Treasury Inflation-Protected Securities (TIPS) are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond to fluctuate more than other fixed income securities. TIPS have special tax consequences, generating phantom income on the “inflation compensation” component of the principal. A holder of TIPS may be required to report this income annually although no income related to “inflation compensation” is received until maturity.

There is no assurance that any of the target prices or other forward-looking statements mentioned will be attained.

Index and Other Definitions

An index is unmanaged and not available for direct investment.

Inflation is the change in the Consumer Price Index (CPI). The CPI measures the price of a fixed basket of goods and services purchased by an average consumer.

Core inflation is the change in the core Consumer Price Index (CPI). The core CPI measures the price of a fixed basket of goods and services—excluding the volatile food and energy components—purchased by an average consumer.

Alpha is a coefficient measuring the risk-adjusted performance, considering the risk due to the specific security, rather than the overall market. A large alpha indicates that the stock or mutual fund has performed better than would be predicted given its beta (volatility).

Beta measures a security’s or group of securities’ (portfolio’s) volatility relative to a benchmark. A result greater than 1.0 implies that the security or portfolio is more volatile than the benchmark; a result less than 1.0 suggests that the security or portfolio is less volatile than the benchmark. Betas may change over time.

Conference Board’s Leading Economic Index (LEI) is a composite economic index designed to signal peaks and troughs in the business cycle. The leading economic index is essentially a composite average of several individual leading indicators. They are constructed to summarize and reveal common turning point patterns in economic data in a clearer and more convincing manner than any individual component—primarily because they smooth out some of the volatility of individual components.

Consumer Confidence Index® (CCI) is a barometer of the health of the U.S. economy from the perspective of the consumer. The index is based on consumers’ perceptions of current business and employment conditions, as well as their expectations for six months hence regarding business conditions, employment, and income.

Markit Manufacturing Purchasing Managers Index (PMI) tracks manufacturing and service sector activity in the Eurozone. An index value over 50 indicates expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

PMI Surveys, such as the Eurozone Manufacturing PMI, track sentiment among purchasing managers at manufacturing, construction and/or services firms. An overall sentiment index is generally calculated from the results of queries on production, orders, inventories, employment, prices, etc.

The Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output.

The Market Volatility Index (VIX) is an index designed to track market volatility as an independent entity. The index is calculated based on option activity and is used as an indicator of investor sentiment, with high values implying pessimism and low values implying optimism.
The Institute of Supply Management (ISM) Manufacturing Index is a composite index based on the diffusion indexes of five of the indexes with equal weights: New Orders (seasonally adjusted), Production (seasonally adjusted), Employment (seasonally adjusted), Supplier Deliveries (seasonally adjusted), and Inventories. An Index values over 50 indicate expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

The U.S. Dollar Index (USDX, DXY) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners’ currencies.

Real economic growth is the change in the gross domestic product (GDP) adjusted for inflation—that is, the volume of services and goods produced in the United States.

West Texas Intermediate Crude Oil is a light, sweet (i.e., low sulfur) crude oil which is the main type of U.S. crude oil traded in U.S. futures markets.

Brent Crude Oil is a light, sweet crude oil extracted from the North Sea. It serves as a major benchmark price for purchases of oil worldwide.

Bond credit rating. A grade given to bonds that indicates their credit quality. Private independent rating services such as Standard & Poor’s, Moody’s and Fitch provide these evaluations of a bond issuer’s financial strength, or its the ability to pay a bond’s principal and interest in a timely fashion. The general meaning of these credit rating opinions are as follows:

AAA—Extremely strong capacity to meet financial commitments. Highest Rating.
AA—Very strong capacity to meet financial commitments.
A—Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances.
BBB—Adequate capacity to meet financial commitments, but more subject to adverse economic conditions.

Global Fixed Income Representative Indices

Global Multiverse Fixed Income: Bloomberg Barclays Multiverse Index provides a broad-based measure of the global fixed-income bond market. The index represents the union of the Global Aggregate Index and the Global High-Yield Index and captures investment grade and high yield securities in all eligible currencies. Standalone indices such as the Euro Floating-Rate ABS Index and the Chinese Aggregate Index are excluded. The Multiverse Index family includes a wide range of standard and customized sub-indices by sector, quality, maturity, and country. JP Morgan Global Ex United States Bond Index is a total return, market capitalization weighted index, rebalanced monthly consisting of the following countries: Australia, Germany, Spain, Belgium, Italy, Sweden, Canada, Japan, United Kingdom, Denmark, Netherlands, and France.


U.S. Treasury Bills Fixed Income: Bloomberg Barclays U.S. Treasury Bills includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than three months and more than one month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non-convertible.

Short, Intermediate and Long Term Fixed Income: Bloomberg Barclays U.S. Aggregate Bond Index is made up of the Bloomberg Barclays U.S. Government/Corporate Bond Index, Mortgage-Backed Securities Index, and Asset-Backed Securities Index, including securities that are of investment grade quality or better, have at least one year to maturity, and have an outstanding par value of at least $100 million.

U.S. Treasury Fixed Income: Bloomberg Barclays U.S. Treasury Index includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.

U.S. Corporate Fixed Income: Bloomberg Barclays U.S. Corporate Bond Index includes publicly issued U.S. corporate and Yankee debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

U.S. Municipal Fixed Income: Bloomberg Barclays U.S. Municipal Bond Index represents municipal bonds with a minimum credit rating of at least Baa, an outstanding par value of at least $3 million, and a remaining maturity of at least one year. The Index excludes taxable municipal bonds, bonds with floating rates, derivatives, and certificates of participation.

U.S. TIPS Fixed Income: Bloomberg Barclays Treasury Inflation Protected Securities (TIPS) Index includes all publicly issued, investment-grade U.S. TIPS with an outstanding face value of more than $250 million and that have at least one year to maturity.

U.S. High Yield Fixed Income: Bloomberg Barclays U.S. High Yield Bond Index is an unmanaged index that tracks the performance of below investment grade U.S.-dollar-denominated corporate bonds publicly issued in the U.S. domestic market.

Developed ex. U.S. Fixed Income: JPMorgan GBI Global ex-U.S. (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.
**Disclosures (Continued)**

**Emerging Market Spread:** Bloomberg Barclays EM USD Aggregate Index is a flagship hard currency Emerging Markets debt benchmark that includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers. The index is broad-based in its coverage by sector and by country, and reflects the evolution of EM benchmarking from traditional sovereign bond indices to Aggregate-style benchmarks that are more representative of the EM investment choice set. Country eligibility and classification as an Emerging Market is rules-based and reviewed on an annual basis using World Bank income group and International Monetary Fund (IMF) country classifications. This index was previously called the Bloomberg Barclays U.S. EM Index and history is available back to 1993.

**Emerging Market Bond (U.S. Dollar):** JP Morgan Emerging Markets Bond Index (EMBI Global) currently covers 27 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

**Preferred Stock:** S&P Preferred Stock is an unmanaged index consisting of U.S.-listed preferred stocks.

**U.S. Dollar Index (USDX)** measures the value of the U.S. dollar relative to majority of its most significant trading partners. This index is similar to other trade-weighted indexes, which also use the exchange rates from the same major currencies.

**Global Equity Representative Indices**

**Global Market Equity:** MSCI AC World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The Index consists of 46 country indices comprising 23 developed and 23 emerging market country indices. The developed market country indices included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, United Kingdom, and the United States. The emerging market country indices included are: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

**Dow Jones Industrial Average** is a price-weighted index of 30 “blue-chip” industrial U.S. stocks.

**NASDAQ Composite Index** measures the market value of all domestic and foreign common stocks, representing a wide array of more than 5,000 companies, listed on the NASDAQ Stock Market.

**Large Cap Equity:** S&P 500 Index is a capitalization-weighted index calculated on a total return basis with dividends reinvested. The index includes 500 widely held U.S. market industrial, utility, transportation, and financial companies.

**Large Cap Equity (Growth):** Russell 1000® Growth Index measures the performance of those Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values.

**Large Cap Equity (Value):** Russell 1000® Value Index measures the performance of those Russell 1000® companies with lower price-to-book ratios and lower forecasted growth values.

**Mid Cap Equity:** Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index.

**Small Cap Equity:** Russell 2000® Index measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000® Index.

**Developed Market ex. U.S. Equity:** MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. The Index consists of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.

**Emerging Markets:** MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

**Frontier Market Equity:** MSCI Frontier Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of frontier markets. The MSCI Frontier Markets Index consists of the following 24 frontier market country indexes: Argentina, Bahrain, Bangladesh, Bulgaria, Croatia, Estonia, Jordan, Kenya, Kuwait, Lebanon, Lithuania, Morocco, Kazakhstan, Mauritius, Nigeria, Oman, Pakistan, Romania, Serbia, Slovenia, Sri Lanka, Tunisia, Ukraine, and Vietnam. The MSCI Saudi Arabia Index is currently not included in the MSCI Frontier Markets Index but is part of the MSCI Gulf Cooperation Council (GCC) Countries Index. The MSCI Bosnia Herzegovina Index, the MSCI Botswana Index, the MSCI Ghana Index, the MSCI Jamaica Index, the MSCI Palestine IMI, the MSCI Trinidad & Tobago Index, and the MSCI Zimbabwe Index are currently stand-alone country indexes and are not included in the MSCI Frontier Markets Index. The addition of these country indexes to the MSCI Frontier Markets Index is under consideration.
Global Real Assets Representative Indices

Global REITs: FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real-estate companies and REITs in developed countries worldwide.

Domestic REITs: FTSE NAREIT U.S. All Equity REITs Index is designed to track the performance of REITs representing equity interests in (as opposed to mortgages on) properties. It represents all tax-qualified REITs with more than 50% of total assets in qualifying real estate assets, other than mortgages secured by real property that also meet minimum size and liquidity criteria.

International REITs: FTSE EPRA/NAREIT Developed ex-U.S. Index is designed to track the performance of listed real estate companies in developed countries worldwide other than the United States.

MLPs: Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated real-time on a price-return basis and on a total-return basis.

Commodities (S&P GSCI): S&P Goldman Sachs Commodity Index is a trade-weighted index of commodity sector returns representing unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The index includes futures contracts on 24 physical commodities, of which Energy represents nearly 70%.

Commodities (BCOM): Bloomberg Commodity Index represents futures contracts on 19 physical commodities. No related group of commodities (e.g., energy, precious metals, livestock and grains) may constitute more than 33% of the index as of the annual reweighing of the components. No single commodity may constitute less than 2% of the index.

Commodities (RICI): The Rogers International Commodity Index is a U.S. dollar based index representing the value of a basket of commodities consumed in the global economy. Representing futures contracts on 37 physical commodities, it is designed to track prices of raw materials not just in the U.S. but around the world.

Global Alternative Investments Representative Indices

Global Hedge Funds: HFRI Fund Weighted Composite Index. A global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net-of-all-fees performance in U.S. Dollars and have a minimum of $50 million under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

Relative Value Arbitrage: HFRI Relative Value (Total) Index. Strategy is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative, or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

Arbitrage: HFRI RV: Fixed Income Sovereign Index. Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a sovereign fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple sovereign bonds or between a corporate and risk-free government bond. Fixed Income Sovereign typically employ multiple investment processes including both quantitative and fundamental discretionary approaches and relative to other Relative Value Arbitrage sub-strategies, these have the most significant top-down macro influences, relative to the more idiosyncratic fundamental approaches employed.

Long/Short Credit: HFRI RV: Fixed Income—Corporate Index. Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed-income instrument. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk-free government bond. They typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.
Disclosures (Continued)

**Structured Credit/Asset Backed: HFRI RV: Fixed Income—Asset Backed Index.** Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed-income instrument backed by physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments, which frequently include loans, pools and portfolios of loans, receivables, real estate, machinery, or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed-income instruments, broadly speaking. In many cases, investment managers hedge, limit, or offset interest-rate exposure in the interest of isolating the risk of the position to strictly the disparity between the yield of the instrument and that of the lower-risk instruments.

**Macro: HFRI Macro (Total) Index.** Encompass a broad range of strategies predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard-currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches and long- and short-term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments rather than on realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

**Systematic Macro: HFRI Macro: Systematic Diversified Index.** Diversified employing mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies are designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative processes which focus on statistically robust or technical patterns in the return series of the asset, and they typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean-reverting strategies. Although some strategies seek to employ counter-trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Typically have no greater than 35% of portfolio in either dedicated currency or commodity exposures over a given market cycle.

**Discretionary Macro: HFRI Macro: Discretionary Thematic Index.** Strategies primarily rely on the evaluation of market data, relationships and influences, as interpreted by individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top-down analysis of macroeconomic variables. Investment Managers may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency and commodity markets; they frequently employ spread trades to isolate a differential between instrument identified by the Investment Manager as being inconsistent with expected value. Portfolio positions typically are predicated on the evolution of investment themes the Manager expects to develop over a relevant time frame, which in many cases contain contrarian or volatility-focused components.

**Event Driven: HFRI Event Driven (Total) Index.** Maintains positions in companies currently or prospectively involved in corporate transactions of a wide variety including mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated and frequently involve additional derivative securities. Exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company-specific developments. Investment theses are typically predicated on fundamental (as opposed to quantitative) characteristics, with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

**Activist: HFRI ED: Activist Index.** Strategies may obtain or attempt to obtain representation on the company’s board of directors in an effort to impact the firm’s policies or strategic direction and in some cases, may advocate activities such as division or asset sales, partial or complete corporate divestiture, dividends or share buybacks, and changes in management. Strategies employ an investment process primarily focused on opportunities in equity and equity-related instruments of companies that are currently or prospectively engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off, or another catalyst-oriented situation. These involve both announced transactions and situations in which no formal announcement is expected to occur. Activist strategies would expect to have greater than 50% of the portfolio in activist positions, as described.
Disclosures (Continued)

Distressed Credit: HFRI ED: Distressed/Restructuring Index. Strategies focus on corporate fixed-income instruments, primarily corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceedings or financial-market perception of near-term proceedings. Managers are typically actively involved with the management of these companies; they are frequently involved on creditors’ committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments that are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.

Merger Arbitrage: HFRI ED: Merger Arbitrage Index. Strategies primarily focus on opportunities in equity and equity-related instruments of companies that are currently engaged in a corporate transaction. Merger Arbitrage involves primarily announced transactions, typically with limited or no exposure to situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross-border, collared, and international transactions that incorporate multiple geographic regulatory institutions, typically with minimal exposure to corporate credits. Strategies typically have over 75% of positions in announced transactions over a given market cycle.

Equity Hedge: HFRI Equity Hedge (Total) Index. Equity Hedge Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.

Directional Equity: HFRX EH: Multi-Strategy Index. Managers maintain positions both long and short in primarily equity and equity-derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage, holding period, concentrations of market capitalizations, and valuation ranges of typical portfolios. Managers typically do not maintain more than 50% exposure to any one Equity Hedge sub-strategy.

Equity Market Neutral: HFRI EH: Equity Market Neutral Index. Strategies employ sophisticated quantitative techniques to analyze price data to ascertain information about future price movement and relationships between securities. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies predicated on the systematic analysis of common relationships between securities. In many cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high-frequency techniques may be employed; trading strategies may also be based on technical analysis or designed opportunistically to exploit new information that the investment manager believes has not been fully, completely, or accurately discounted into current security prices. Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Cambridge Associates LLC U.S. Private Equity Index® is an end-to-end calculation based on data compiled from 1,152 U.S. private equity funds (buyout, growth equity, private equity energy and mezzanine funds), including fully liquidated partnerships, formed between 1986 and 2014. Pooled end-to-end return, net of fees, expenses, and carried interest. The latest published returns data are as of September 30, 2014.

Note: While the HFRI Indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI Indices are based on information hedge fund managers decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Returns of the underlying hedge funds are net of fees and are denominated in USD.
Disclaimers

Abbot Downing, a Wells Fargo business, provides products and services through Wells Fargo Bank, N.A. and its various affiliates and subsidiaries. Wells Fargo Bank, N.A. is a bank affiliate of Wells Fargo & Company.

Global Investment Strategy (GIS) is a division of Wells Fargo Investment Institute, Inc. (WFII). The Institute is a registered investment adviser and wholly-owned subsidiary of Wells Fargo & Company and provides investment advice to Wells Fargo Bank, N.A., Wells Fargo Advisors and other Wells Fargo affiliates. Wells Fargo Bank, N.A. is a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by Abbot Downing and the Global Investment Strategy division of WFII.

Opinions represent WFII and Abbot Downing opinions as of the date of this report and are for general informational purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector, or the markets generally. GIS and Abbot Downing do not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

This report is not an offer to buy or sell or solicitation of an offer to buy or sell any securities mentioned. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs, and investment time horizon. Your actual portfolio allocation may differ from the strategic and dynamic allocations reflected in this report.

Wells Fargo Advisors is registered with the U.S. Securities Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions, or communications made with Wells Fargo Advisors.

Wells Fargo Wealth and Investment Management (WIM) is a division within Wells Fargo & Company. WIM provides financial products and services through various banking and brokerage affiliates of Wells Fargo & Company.

Brokerage products and services are offered through Wells Fargo Advisors. Wells Fargo Advisors is the trade name used by two separate registered broker-dealers: Wells Fargo Advisors, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, non-bank affiliates of Wells Fargo & Company.

Additional information is available upon request.

Abbot Downing does not provide legal advice. Please consult your legal and tax advisors to determine how this information may apply to your own situation. Whether any planned tax result is realized by you depend on the specific facts of your own situation at the time your taxes are prepared.

© 2018 Wells Fargo Bank, N.A. All rights reserved.