Enjoy the Ride

One of my favorite movie scenes comes from Parenthood, a 1989 comedy starring Steve Martin. In the scene, Martin’s grandmother tries to explain to him that life can be either a merry-go-round or a rollercoaster. While the merry-go-round can be more relaxing and stable, the rollercoaster is much more exhilarating—even scary at times. In other words, the rollercoaster seems to be a riskier ride but, in the end, it’s more fun and much more rewarding.

Depending on your perspective, you could describe today’s investment environment as either a merry-go-round or a rollercoaster. First, the low volatility and steady grind higher makes us feel like we’re on the former—a boring ride with nothing much to do. However, you could just as easily argue we’ve never experienced such volatility in the “news” cycle thanks to social media, cable television and the internet. This creates extreme bursts in sentiment, both up and down. So which is it?

I think we have a little of both, which is why global equity markets have continued to simply work their way higher this year with no more than a 2% to 3% correction. The “news” keeps it exciting and even unnerving at times, but the market continues to move upward with little volatility because the fundamentals support it. First, economic data remain solid, with the second quarter recording the fastest global GDP growth in more than five years. Importantly, global economic growth is synchronous; with every region contributing, no region is in danger of overheating. Second, corporate earnings are exceptionally strong and broadly distributed. Finally, because no region is overheating, central banks do not have to overreact, which keeps financial conditions accommodative. This has been our recipe all year for the bull market we are now enjoying—and it’s not over yet.

This past month, it’s hard not to notice that the folks in Washington seem to be working together a little better. First, we had the surprise snap agreement between President Trump and Democratic congressional leaders to extend the debt ceiling well before the deadline and avoid the 11th hour hand wringing. Now, we have an initial tax plan from the Republicans that our folks in Washington believe has an 80% chance of getting signed into law in some form. Equity prices are making all-time highs, with our procyclical tilts leading the way—banks, small/mid caps, energy and technology stocks.

Enjoy the ride.
What If the Tax Code Goes On a SALT-Free Diet?

Micheal D. Zezas, CFA  
Strategist  
Morgan Stanley & Co.

Mark T. Schmidt, CFA  
Strategist  
Morgan Stanley & Co.

Alexander W. Ventriglia  
Strategist  
Morgan Stanley & Co.

Will Congress kill a $101 billion tax break for Californians?" asked the Los Angeles Times earlier this year. “New Yorkers May Lose $67 Billion” proclaimed a report by the New York state controller, as summarized by Bloomberg News. Headlines such as these reflect investor concerns that the loss of the state and local tax (SALT) deduction would result in relatively higher taxes in some US locations. The increasingly common question we get is whether this will result in clear winners and losers in the municipal bond market. Specifically, what is the risk of “tax flight”—tax bases eroding and increasing credit risk in high-tax locations such as California and New York, while low-tax jurisdictions reap the benefit of a boost to economic growth?

The concern is valid. Yet, there's simply not sufficient evidence to justify changing the approach to credit picking and geographical distribution in one's municipal bond portfolio based on this particular issue. However, if you live in a high-tax state and make use of the SALT deduction, you may want to pay attention.

Politics and Taxes. Let's start with a little background. Republicans in Congress and the White House are proposing to repeal the state and local deduction as a way to pay for lower headline tax rates. Although conservatives going back to the Reagan years have advocated a repeal of the SALT deduction, it nevertheless surprises many casual observers of politics. After all, aren't Republicans the party of tax cuts? To answer why the SALT deduction is in the GOP reform crosshairs, it's important to explain what SALT is, who claims it, and why Republicans still aim for a “revenue-neutral” tax reform that mixes tax cuts with tax hikes, instead of just a tax cut.

What exactly is the SALT deduction? The federal tax code allows taxpayers who itemize their deductions on their returns to deduct their state and local property, income or sales taxes from their federal adjusted gross income (AGI). The deduction dates to the founding of the modern income tax in 1913. It is the fifth-largest tax expenditure in the federal income tax code, projected by the Joint Committee on Taxation to cost the US Treasury some $550 billion over five years (see table).

GEOGRAPHIC CONCENTRATION. Importantly, taxpayers who claim the SALT deduction are geographically concentrated. According to the Tax Policy Center, just two states account for 30% of the SALT deduction by value: California, with 19%, and New York, with 14%. Coincidentally, these two states also boast the highest marginal state and local combined individual income tax rates. Their high taxes also provide ample debt service, which allows for large amounts of debt: California and New York together

<table>
<thead>
<tr>
<th>Among Federal Tax Expenditures, the SALT Deduction Ranks as a Significant Line Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenditure Item</strong></td>
</tr>
<tr>
<td>Net exclusion of pension contributions and earnings</td>
</tr>
<tr>
<td>Exclusion of employer contributions for health care, health insurance premiums, and long-term-care insurance premiums</td>
</tr>
<tr>
<td>Reduced rates of tax on dividends and long-term capital gains Less: Surtax on investment income</td>
</tr>
<tr>
<td>Deferral of active income of controlled foreign corporations</td>
</tr>
<tr>
<td>Earned income credit</td>
</tr>
<tr>
<td>Deduction of nonbusiness state and local government income taxes, sales taxes, and personal property taxes</td>
</tr>
<tr>
<td>Deduction for mortgage interest on owner-occupied residences</td>
</tr>
<tr>
<td>Subsidies for insurance purchased at health benefit exchanges</td>
</tr>
<tr>
<td>Credit for children under age 17</td>
</tr>
<tr>
<td>Expensing under section 179 of depreciable business property</td>
</tr>
<tr>
<td>Charitable contributions deduction, ex education and health</td>
</tr>
<tr>
<td>Exclusion of untaxed Social Security and railroad retirement benefits</td>
</tr>
<tr>
<td>Exclusion of interest on public purpose state and local government bonds</td>
</tr>
<tr>
<td>Deduction for property taxes on real property</td>
</tr>
<tr>
<td>Exclusion of capital gains at death</td>
</tr>
<tr>
<td>Exclusion of benefits provided under cafeteria plans</td>
</tr>
<tr>
<td>Exclusion of capital gains on sales of principal residences</td>
</tr>
<tr>
<td>Exclusion of amounts received under life insurance contracts</td>
</tr>
<tr>
<td>Deduction for income attributable to domestic production activities</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Research, Joint Committee on Taxation
make up over 30% of the S&P Municipal Bond Index. Add in two other high-tax states, Connecticut and New Jersey, and you’re at 37% of the index.

Why would Republicans target the SALT deduction? There are two main reasons, in our view. The first is simple: It’s how you make the math of revenue-neutral tax reform work, provided you work within a reconciliation framework. Said differently, tax reform aims to simplify the code, broaden the base and lower top-line rates. Reducing the number of taxpayers who itemize accomplishes the first two goals, and raises money to pay for the third. Reducing itemized deductions also tends to raise money from higher-income people, who have a higher capacity to pay tax (see table).

**LARGE DEDUCTION.** Among itemized deductions, the SALT deduction is one of the largest. Inclusive of property taxes, it can account for well over half of all itemized deductions claimed—far larger than the home mortgage interest deduction, for example. Because the SALT deduction is so large, it appears to be a driving factor in taxpayers’ decision whether to itemize their return.

**SALT TARGETED.** Indeed, although investors dwell on the municipal bond interest exemption, the deduction for state and local government taxes paid—another indirect support for muni credit—costs the federal government almost three times as much as the muni bond exemption. With the border tax off the table and little appetite for bipartisanship of any kind, Republicans have targeted the SALT deduction as a potential way to pay for marginal rate cuts. Accordingly, we must take seriously the risk of a repeal of the SALT deduction and therefore closely examine the theory of “tax flight” impacting high-tax states, whose issuance accounts for a substantial portion of the municipal bond market. In our view, a SALT repeal could result in higher taxes for a meaningful subset of taxpayers in high-tax areas. However, when considering the fuller set of potential variables for why individuals choose where they live, we don’t see sufficient evidence to suggest potential tax hikes would trigger tax flight out-migration. We concede they could support existing regional migration patterns from the northeast and midwest to the south and west. Given that these migration patterns already exist, we do not think this should result in a change of one’s existing credit evaluation of issuers in those areas.

**A MESSY MATTER.** The politics of a SALT repeal are messy. Itemized deductions have been so hard to get rid of because they are key to upper-middle-income taxpayers—the top 20% to 30% of households. Unlike millionaires or multimillionaires, these affluent households are a meaningful voting bloc in numbers. Moreover, they’ve become a swing bloc in recent years, switching between Republican and Democratic candidates.

As the Tax Policy Center recently noted, many of these affluent voters are represented in Congress by Republicans, even if they live in states that vote Democratic in presidential elections. For example: New York, New Jersey, and California together have 28 Republican representatives. Only 23 Republican “no” votes on a tax-reform package would be sufficient to block its passage, assuming no Democrats voted for the measure. Politics notwithstanding, the data make plain that high-tax areas could see their federal taxes go up as a result of a repeal of itemized deductions, the SALT deduction included.

The question for muni investors, however, remains: Will tax liabilities increase enough to spur outmigration and population decline? We think the answer is: not likely.

### Higher-Income Taxpayers Make Greater Use of the Deduction for State and Local Taxes

<table>
<thead>
<tr>
<th>Federal Taxable Income*</th>
<th>All Returns</th>
<th>$100,000-$200,000</th>
<th>$200,000-$500,000</th>
<th>$500,000-$1 Million</th>
<th>$1 Million Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>State and local income taxes</td>
<td>26%</td>
<td>23%</td>
<td>33%</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>State and local general sales taxes</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Real estate taxes</td>
<td>15</td>
<td>17</td>
<td>17</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Home mortgage interest paid</td>
<td>23</td>
<td>29</td>
<td>24</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Charitable contributions</td>
<td>18</td>
<td>14</td>
<td>16</td>
<td>21</td>
<td>39</td>
</tr>
</tbody>
</table>

*Adjusted gross income - standard deduction/itemized deductions - exemptions

**Source:** Morgan Stanley Research, IRS
What’s Eating Away at US Inflation?

ELLEN ZENTNER
Chief US Economist
Morgan Stanley & Co.

MICHEL DILMANIAN
US Economist
Morgan Stanley & Co.

ROBERT ROSENER
US Economist
Morgan Stanley & Co.

GUNEET DHINGRA, CFA
Interest Rate Strategist
Morgan Stanley & Co.

Weakness is not idiosyncratic, and it’s time to recognize the multitude of unavoidable, longer-term influences affecting inflation. Bowing to these factors, we have lowered our estimated monthly growth in inflation—and interest rate hikes next year.

We have made wholesale changes to our forecast for the core Personal Consumption Expenditure Price Index (PCE), and now see annual growth ending 2017 at 1.4% and 2018 at 1.7% (see chart). Compared with our midyear outlook, this new path for core PCE inflation is roughly 0.2 percentage points lower throughout the forecast horizon. As a result, following a rate hike in December we now see the Federal Reserve raising rates three times in 2018, versus four previously.

Why not lower our rate hike expectation even further? The Federal Open Market Committee (FOMC) is faced with an increasingly difficult trade-off—how to balance persistently low inflation, which might inform a do-nothing stance, versus easy financial conditions, which might inform continued rate increases to maintain financial stability. Fed Chair Janet Yellen stands firmly on the preemptive side, as do a number of her colleagues. Convincing markets that further rate hikes are appropriate remains the greatest challenge as unavoidable forces eat away at inflation. These forces are offsetting progress toward the Fed’s 2% annual goal, even with a tight labor market. We expect the Fed to fall short of its goal this year and next.

FILTERING OUT NOISE. Herein, we have identified and discuss important key drivers that have depressed inflation and are likely to continue doing so in the intermediate term. (see table, page 5). We examine how these drivers affect the trend line in inflation, getting away from the noise of transitory effects, such as the one-off quality adjustment in telecom services in March and, more recently, the economic impact of the major hurricanes.

Regarding hurricane effects, temporary price pressures tend to arise as demand for replacement autos soars, as well as repair and replacement of homes. Energy prices—particularly around Hurricane Harvey because it has affected a major US refinery hub—also rise and then fall as refineries come back online. Following Hurricane Sandy in 2012, regional price increases for goods, services and labor were felt, but little impact was discernible at the aggregate level.

A recognition of these drivers allows us to conclude that recent declines in inflation are not solely idiosyncratic, but also reflect broader trends that are likely to persist. For example, the sharp declines in hotel prices in the July Consumer Price Index (CPI) and PCE have come on the back of an already declining trend, something our lodging analysts believe reflects the penetration of online vacation rentals.

The impact of technology. We see technology as a longer-term disinflationary force. The rise of online retail for a host of goods and services, including but not limited to apparel, drugs, hotels and, most recently, food, has kicked off price wars and lowered sellers’ pricing power. Services like Uber, Amazon and Airbnb have allowed consumers to purchase goods and services at a lower cost but similar quality.

Oversupply. In the US, oversupply is evident in various markets, most notably in used cars where our motor vehicle analysts anticipate unprecedented declines in used-car values. Our commercial real estate analysts expect decelerating growth in apartment rents to continue in the near term. Price wars among airlines and

We Expect Year-Over-Year Inflation to Decline Before It Picks Up

Source: Bureau of Labor Statistics, Morgan Stanley Research as of Sept. 6, 2017
elsewhere in the services industry can also be linked to oversupply.

**Overcapacity.** In the fourth quarter of last year, prices for China’s consumer goods pulled out of deflation and continue to rise. As yet, this has resulted in little-to-no pass-through to higher prices in the US, even though China influences roughly 40% of the US core consumer goods basket. We expect the degree of pass-through to remain limited, but do acknowledge risk to this assessment on the more recent bullishness of our China economists.

**US dollar bull market.** Past appreciation in the nominal broad trade-weighted dollar continues to put downward pressure on core inflation. This year’s reversal in the dollar still leaves the index roughly 16% higher since mid 2014. Though we expect some offset, a deeper and longer dollar depreciation is needed for core inflation to respond more meaningfully to the recent decline.

**Lower inflation expectations.** Measures of inflation expectations have fallen in recent years—which we estimate may be weighing on year-over-year growth in core consumer inflation to the tune of about 0.1 percentage points per year. Inflation expectations in Chair Janet Yellen’s model for core PCE prices are key, much more so than measures of slack.

**The Phillips curve.** The Phillips curve, which posits that inflation and unemployment have a stable and inverse relationship, does indeed exert itself in certain key segments of inflation; namely, shelter and core services, ex health care. However, these forces alone are not sufficient to overcome downward pressure from other factors.

**FORECAST RISKS.** Where could we be wrong? While our analysis points toward a weak outlook for inflation, we see two factors that could cause us to reconsider our forecast:

- **An upside surprise on tax reform.** Our base case is that delayed and diluted tax reform will be delivered by this administration in the first half of next year. We believe that tax reform could be a key channel for translating current labor market strength into inflation. While we do incorporate some upside from tax reform in our inflation forecasts, any material surprise on this front could boost inflation and inflation expectations.

- **A sustained and material depreciation of the trade-weighted dollar.** While we do acknowledge the recent weakness in the dollar, we do not see a big impact on core goods prices based on the depreciation thus far. A sustained and more material depreciation of the dollar beyond our current forecasts could cause us to rethink our core goods inflation path, which in turn would put upward pressure on forecasts for overall core inflation.
Why We Differ On Japan

ANDREW SHEETS  
Cross-Asset Strategist  
Morgan Stanley & Co. International

TAKESHI YAMAGUCHI  
Economist  
Morgan Stanley MUFG Securities Co., Ltd.

JONATHAN GARNER  
Chief Asia and Emerging Markets Equity Strategist  
Morgan Stanley Asia Ltd.

PANKAJ MATANEY  
Equity Strategist  
Morgan Stanley Asia Ltd.

Japan is where Morgan Stanley & Co.’s economic and strategy forecasts most differ from market consensus—and it is the region where global investor focus and interest appear the lowest. That’s an attractive combination. Below we lay out why we think that Japanese growth will be stronger than consensus expectations, why inflation can rise more than has been priced in, and what this means for markets: We expect the yen to weaken against the euro in this quarter, 38% earnings-per-share (EPS) growth in 2017 and a 7% return for Japanese equities through the second quarter of 2018.

The Economy

Many investors remain highly skeptical of our constructive view on Japan’s growth and inflation outlook. Let’s start with the current state of the economy. Japan’s real GDP currently maintains positive quarter-over-quarter growth for a sixth straight quarter for the first time in 11 years. We think that factors supporting this cyclical recovery include a recent synchronized recovery in the global economy, a change in the government’s fiscal policy stance after excessive fiscal austerity and a highly accommodative Bank of Japan (BOJ), with unconventional monetary easing under the current inflation-targeting regime.

The breakdown of recent GDP growth shows that it has not been reliant on exports alone but well-balanced based on domestic and external demand. Private capital spending has been robust, recovering in a way that far exceeds the historical trend. With capacity-utilization rates rising and the business outlook for the economy perking up, companies are spending on labor-saving technology.

**IMPROVED CONSUMER SPENDING.**

Personal consumption is finally picking up after the adverse shock caused by the 2014 consumption-tax hike, backed by solid growth in wages. We often hear the objection that the older generation does not see any benefit from growth in compensation for employees, but the fact that roughly 60% of Japan’s overall financial assets are held by the over-60s is sometimes overlooked. According to the BOJ’s flow of funds data, households’ financial assets are continuing to build steadily, and have reached ¥1,800 trillion.

Meanwhile, public investment has been supportive for the economy in 2017 on the back of a change in the government’s fiscal policy. Public investment increased temporarily when Abenomics—the reform-oriented policies of Prime Minister Shinzo Abe—got underway in 2013. However, with the effects of fiscal austerity and the boost from disaster-related reconstruction demand fading, public investment decreased 2014 through 2016, acting as a drag on the economy. More recently, with the past year’s supplementary budget, public investment has been providing a boost to the economy.

All told, MS & Co. looks for 1.7% GDP growth for 2017, well above the 1.4% consensus forecast. For 2018, our 1.1% forecast is aligned with the consensus forecast. For inflation, we expect a 0.6% year-over-year rise in consumer prices this year rising to 1.2% in 2018, while the consensus is below 1%.

The Stock Market

Investors remain significantly underweight Japanese equities, which differs from our recommendation, which was raised back to overweight in November 2016. Foreigners have been net sellers of Japanese equities for the year to date in an aggregate amount of $1.5 billion, compared with emerging markets’ net inflows of $53.9 billion. Our clients continue to be bearish. They say: Abenomics has failed to deliver a sustainable macroeconomic improvement in Japan; Japan equities remain just a play on the yen/dollar moves; wage reflation is not happening; companies remain insufficiently focused on return on equity (ROE); improvements in corporate governance have been limited; and when Prime Minister Shinzo Abe and BOJ Governor Haruhiko Kuroda leave their current roles, what little reform impetus that is present in Japan will likely be lost.

Our report touches elsewhere on many of these concerns, but in two areas of direct relevance we can demonstrate why we differ. First, there has been an improvement in ROE this cycle, a trailing 8.7% since Abe came to power. Full convergence to the developed market average has not taken place, but Japan’s absolute and relative standings have improved—particularly in comparison with Europe. Second, on shareholder reward policy, the dividend payout ratio has increased to a current 32%, with earnings per share at an all-time high. This compares with 25% at the start of Abenomics in 2013/2014. We think that, in sum, share buybacks and dividends will reach a new high in yen terms this year.
LOCAL BUYING OF STOCKS. While Japan has remained out of favor with global investors, local buying has centered on corporate buybacks, the BOJ’s purchases of exchange-traded funds and modest purchases by the Government Pension Investment Fund and its affiliates. For every buyer there is a seller, but valuations have drifted lower in both absolute and relative terms versus the MSCI All Country World Index. The TOPIX now trades on a 12-month forward price/earnings ratio (P/E) of just 13.7 on the consensus earnings forecast, down from 15.0 at the peak of global reflation optimism in late 2016 and 15.5 in mid 2015 when investor enthusiasm about Abenomics was at its height. As a result, Japan trades at a 15% discount to developed market equities on 12-month consensus forward P/E, which is at the lower end of the 15-year range.

So we think valuations are now too cheap—but what might drive them up?

First is the direction of the yen exchange rate against both the US dollar and the euro. Second is the continued strong earnings growth, which is only partly dependent on the future path of the currency. In terms of how this unfolds, we would expect a change in foreign investor interest to be the critical factor. Their buying and selling of Japanese equities have a strong relationship with the forward P/E and a correlation in the last five years of 60%.

Japanese Data Have Been Strong; Tankan Highest Since 2007

Labor Market Tighter Than Appreciated, Should Push Core Inflation Higher

Japanese Equities Are Inexpensive and Underowned, With Strong EPS Growth

We Normally See Stronger Equities and a Weaker Yen in the Fourth Quarter

Source: Bloomberg, Morgan Stanley Research as of Sept. 12, 2017

Source: MCI, MHLW, Morgan Stanley Research as of Sept. 12, 2017


Source: Bloomberg, Morgan Stanley Research as of Sept. 12, 2017

Please refer to important information, disclosures and qualifications at the end of this material.
STRONG EARNINGS GROWTH. The main reason why we have been and remain bullish on Japan equities is that we expect earnings growth of 38% year over year in calendar 2017. This puts us 6% above consensus EPS estimates. All four factors in our top-down earnings regression model are likely to be supportive, whereas all four were negative at the end of 2015. The model’s factors are: global manufacturing purchasing managers indexes (PMI), the Japan Economy Watcher Expectations Index, and the yen/US dollar and yen/euro exchange rates (see charts, page 7).

Both global manufacturing PMI and the Japan Economy Watcher Expectations Index are heavily influenced by global business cycles and domestic economic activity, where our economists remain constructive. The recent Japan real GDP report of a 2.5% seasonally adjusted annual rate is consistent with our economists forecast. Currencies have been an important EPS driver in Japan, given the weight of global earnings exporters in the index. The yen/US dollar and, to a lesser extent, the yen/euro rate are other key components in our model. Our currency strategy team expects a modest depreciation of the yen versus the US dollar, which peaks with the yen at 116 to the dollar versus the current spot level of 111 by the first quarter of 2018. The forecast depreciation of the yen versus the euro is more significant: 145 by the first quarter of 2018 versus the current 130.

However, as we transition into the second half of 2018, our earnings regression model points toward EPS growth slipping below consensus. This is mainly because our currency teams expect the yen to strengthen again against both the dollar and the euro as the BOJ’s potential exit from accommodation comes into focus. This means that the sweet spot for the market is probably concentrated in the next couple of quarters.

Within Japanese equities, we like these four themes:

- **Information technology (IT), financials and real estate are our preferred sectors.** On IT, we remain overweight on the back of our generally bullish global view. Moreover, our foreign exchange sensitivity analysis suggests that Japan's IT sector earnings have the most upside in an environment of a weaker yen versus the euro, and our currency team sees a sharp depreciation of yen versus euro in the next 10 months. We believe that financials and real estate will outperform strongly once inflation picks up in Japan. Our economist expects core inflation in Japan to reach around a 1% annual rate by the first quarter of 2018.

- **Corporate restructuring.** Since January 2014, there have been a number of initiatives to reform corporate governance, such as the stewardship code and the first-ever concrete corporate governance code. More recently, we have had the tax reform and stewardship code 2.0. Key corporate governance measures have included increases in the share of independent directors on the board, scheduling and voting at annual general meetings, having professionals on the board, companies with performance-linked pay, number of female directors and English disclosures. The results of these reforms are already showing in shareholder reward policy. Going forward, we expect more material changes in corporate restructuring.

- **Domestic wage reflation beneficiaries.** Most investors are skeptical about the wage reflation theme as a tighter labor market has thus far appeared to fail to generate wage reflation in Japan. We think that the lack of wage reflation thus far has been related to hidden slack in the market, which is now close to being eliminated. This hidden slack was due to a prior surge in nonregular employment and elastic labor supply, mainly relating to female workers.

Sectors with the most positive impact from wage reflation are financials and real estate. This is based on the survey that our research team undertook earlier this year. On the negative side, transportation is the most notable sector, given its high labor share cost as a percentage of revenues.

- **Japan best business model.** Our best business model is our core bottom-up stockpicking strategy globally. This approach involves methodical selection of the highest-quality companies, using the key metric of return on net operating assets, as well as balance sheet indicators. Our model also insists on a reasonable price, using fundamental valuation metrics, such as price/book value, in each industry. In doing so, we leverage the expertise of Morgan Stanley's strategists and analysts.

Also contributing were Phanikiran L. Naraparaju, Serena W. Tang, Wanting Low, Sheena Shah and Hans W. Redeker of Morgan Stanley & Co. International; Elizabeth Volynsky of Morgan Stanley & Co.; and Koichi Sugisaki of Morgan Stanley MUFG Securities Co.
The stock market is near or at all-time peaks, so it’s natural for investors to seek pockets of relative value. In our view, look at the industrial sector. With a 10-year return of 106%, it’s long lagged other cyclical sectors, behind consumer discretionary, up 189%, and technology, up 161%. At 17.6 times fiscal 2018 earnings, industrials trade at a slight premium to technology and discount to consumer discretionary, while remaining in-line with the broader market.

CONSTRUCTIVE SETUP. Supporting this constructive setup is commentary from management teams at a recent Morgan Stanley & Co. conference. They cited a strengthening merger-and-acquisitions (M&A) pipeline, a weaker US dollar and a strong industrial demand backdrop globally, particularly in China. Subsectors that seem to be inflecting positively include aerospace, which benefits from robust global airline traffic, and trucking and logistics, which could see improved pricing due to a near-term reduction in capacity.

Recent data and events are supportive of these tailwinds. The 9% year-to-date decline in the US dollar has lent support to US manufacturers and bolsters multinationals. The recent hurricanes are likely to trigger a large rebuilding effort during the next 12 months, which should drive demand for industrial materials, logistics and machinary. On the political horizon, there’s potential for a tax cut that could help domestically focused industrial companies and the possibility of an infrastructure bill, which could bolster investment in areas such as electrical and highway infrastructures. Additionally, any clarity regarding these proposals could spur M&A activity in the sector.

EXTENDED ACCELERATION. MS & Co. policy strategist Michael Zezas notes that a tax bill could be delayed until the first half of next year. If so, it could serve to extend recent industrial acceleration by providing a lift just as the impact from hurricane-related construction and the weak dollar start to fade. Finally, Mike Wilson, MS & Co.’s chief US equity strategist, is overweight industrials as he calls for a late-cycle, procyclical rally. While industrials have given up much of their postelection gains, he notes that continued earnings acceleration—supported by an improving capital spending environment—provides a constructive background.

History also tells it may be a good time for industrials. In late 2014, oil prices dropped some 60%, and the industrials followed as production contracted sharply. The last time we saw a similar crash in oil that led to an industrial slowdown, but not a broader economic recession, was in 1985-1986, when crude fell 64%. Growth in industrial production bottomed in July 1985, at which point it accelerated into November 1987. If we align the troughs of industrial production in July 1985 and December 2015, it suggests accelerating industrial activity for at least the next six months (see chart).

HISTORICAL PRECEDENT. Interestingly, when we review the industrial components in the Dow Jones Industrial Average from 1986, we find they averaged an approximate 20% return from a similar point post-trough in this expansion. Given the tailwinds and catalysts, we think industrials may be on the verge of a similar revaluation today as production accelerates off of depressed levels. A word of caution: This historical analogy directly preceded the 1987 stock market crash. That said, given the current global synchronous economic recovery is supported by robust earnings growth, we don’t see the same market conditions today. We think this presents an opportunity to take advantage of a late-cycle environment which has historically rewarded procyclical sectors. With this backdrop, we think there are still significant gains to be had in industrials.

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History Suggests a Pickup in Industrial Production

<table>
<thead>
<tr>
<th>Months Since Start of Cycle</th>
<th>Industrial Production Growth, Year Over Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-6</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Morgan Stanley Wealth Management as of Sept. 25, 2017
Rising VIX Shorts: Reaching for the Last Inches?

In recent weeks, short positions in VIX futures contracts have reached record levels (see chart). This trade profits when realized volatility falls below the implied volatility embedded in VIX futures. Typically, the VIX futures curve is upward-sloping, i.e., in a placid month, the price on a contract “rolls down” from a higher implied level to the lower realized level. Given the low-volatility environment and healthy financial conditions, both institutional and individual investors have piled in, mostly via short-volatility exchange-traded funds (ETFs). For those who are short volatility, a sharp jump may trigger steep losses. Roughly speaking, a doubling of volatility could mean total losses for these ETFs. These extended positions should be watched closely, as complications could arise even from a mild pullback in equity prices—and a consequent move higher in volatility.—Steve Edwards

Why Security Selection Is Increasingly Important With Bonds

Investment grade issuance has continued at a record pace this year, as companies have rushed to the bond market in anticipation of higher interest rates (see chart). This supply has extended the duration (interest rate risk) of the Bloomberg Barclays US Corporate Bond Index to new highs at a time of rising uncertainty regarding the impact of Federal Reserve policy on the direction and ultimate level of interest rates. What’s more, the increasing proportion of issuance in lower investment grade has raised the BBB allocation in the index by 150 basis points year over year. After modest widening in August on strong supply, credit spreads (the additional yield earned over equal-maturity US Treasuries) have mostly retraced to prior tights as investor appetite remains strong. This confluence of tight spreads, extended duration and reduced quality means investors should practice more rigorous security and sector selection, rather than allocate broadly to the asset class.—Darren Bielawski

Even With Higher Oil Prices, Energy Stocks Remain Relatively Cheap

Supporting our view that the January 2016 low in oil prices was indeed an important longer-term low is the observation that energy stocks traded at their all-time-low price/book (P/B) ratio relative to the S&P 500’s P/B ratio at that time (see chart). Those stocks aren’t quite as cheap today, but they shouldn’t be, given the 100% rise in oil prices and much lower level of financial distress in the sector. The stock market now values the energy sector P/B’s at 0.6 times that of the S&P 500’s P/B. In contrast, based on more than 50 years of market history, the average relative P/B ratio for the energy sector is slightly below 0.9. In short, energy stocks have rarely offered such value relative to the broader market on a P/B basis.—Mike Wilson
Introducing Our Tactical Fixed Income Framework

AILI CHEN
Cross-Asset Strategist
Morgan Stanley Wealth Management

ZACHARY APOIAN
Head of Market Strategy and Portfolio Analytics
Morgan Stanley Wealth Management

Risk assets have rallied thus far in 2017, as stock markets have continued to post all-time highs. However, risks in the fixed income markets have mounted in the face of strong global growth, low interest rates, tight credit spreads and expectations that the Federal Reserve will tighten. Therefore, we are introducing a framework to help evaluate, on an ongoing basis, the fixed income risks and opportunities available for a 12-month horizon. We believe this framework can add value for tactical investors by deconstructing sources of risk, evaluating return prospects and identifying the fixed income asset classes with the most attractive risk-reward characteristics.

What are the main drivers of fixed income returns over tactical horizons? Our framework examines the five main drivers of fixed income returns: the current yield level, or the starting yield; potential price return from rolling down a traditionally upward-sloping yield curve, or the roll return; losses in value from defaults, or credit loss; and the price impact from movements in interest rates and credit spreads, or rate impact and spread impact. Yield, roll return and credit loss together form our forward return estimates. For 12-month horizons, changes in interest rates and credit spreads can materially affect returns; longer-duration bonds are more prone to losses from rising rates, while bonds that are more credit sensitive post larger declines from widening credit spreads. Therefore, we evaluate the potential rate and spread impact on each bond asset class given its rate and spread sensitivities.

Assessing the Risks in Various Fixed Income Sectors

Forward 12-Month Return Variation Attribution

Source: Morgan Stanley Wealth Management, Bloomberg, Datastream as of Aug. 31, 2017

Risk and return drivers impact bond asset classes differently. Our framework develops views on the relative attractiveness of US and global fixed income asset classes, including investment grade government and corporate bonds, securitized instruments, high yield bonds, US Treasuries and municipal bonds. We deconstruct and quantify the sources of risks for each asset class based on the drivers identified above (see chart).

The impact of these drivers varies based on the distinctive characteristics of each asset class. For example, the variation in forward 12-month returns in 10-year US Treasury bonds can be explained primarily by interest rate risk, whereas the return variation of lower-quality instruments such as high yield bonds is generally driven to a greater extent by credit risk. Certain asset classes have a notable portion of return variation driven by additional sources of uncertainty that are currently not captured in our framework. These include the effect of currency movements on international bonds and, in the case of municipal bonds, the effect of changes in the ratio of the muni yield to the comparable US Treasury yield.

Positioning for this low-rate environment. Consistent with the Global Investment Committee’s view, our framework indicates that the front-end of the yield curve currently offers higher expected returns per unit of interest rate risk, as measured by duration. Furthermore, with credit spreads near cycle-tights, we recommend allocating selectively in credit and limiting exposure to lower-quality bonds, which are more sensitive to credit spread movements. Currently, within the cohort of short-duration, low-credit-risk bonds, US short-term investment grade and US securitized instruments offer the highest expected returns based on our framework. For more details on this tactical fixed income framework, please see the September issue of Topics in Portfolio Construction.
Utilizing Private Markets Late in the Cycle

With the private markets exhibiting higher valuations, increased competition and elevated dry powder, investors may be dampening their outlook. However, with the Global Investment Committee forecasting seven-year annualized returns of 4.9% for US equities and 3.0% for US fixed income, investors may need private investments to enhance their portfolios. Alongside disciplined manager selection and an ability to manage risk through the next downturn, private equity, private credit and private real estate may help investors achieve better absolute and risk-adjusted returns.

To examine how private equity performed late in the previous cycle, we reviewed funds launched in the 2004-to-2007 period, during which managers faced a rising valuation environment. Despite this pressure, US buyout funds still delivered returns that were 75 to 526 basis points higher versus the S&P 500 in each of these vintage years according to ThomsonOne. Notably, US buyout had a more than 8% median internal rate of return—the top quartile had 14%—during the 2005 vintage year, which was the worst since 2000 (see chart). Moreover, in the 10 years ending March 31, 2017, US buyout delivered a 10.2% return showing an appropriate long-term illiquidity premium to the S&P 500, which returned 8.2% in the same period on a public-market equivalent basis.

**DIRECT LENDING.** Within private credit, we believe direct lending has the ability to deliver its returns with lower risk, as tighter controls and oversight could allow managers to achieve strong recovery rates and lower defaults during another period of stress. According to Cliffwater Research, direct lending’s return premium was 460 basis points and 170 basis points relative to leveraged loans and high yield, respectively, for the 10-year period ending March 31, 2017. What’s more, direct lending had lower volatility. During this period, the average credit loss for direct lending was less than that of leveraged loans and in line with that of high yield. In addition, direct lending spreads continue to deliver an illiquidity premium of some 270 basis points compared with publicly traded loans, according to KKR Insights.

In private real estate, we believe that value-add, opportunistic and certain thematic areas can deliver an illiquidity premium. However, the value proposition of private core real estate lies more in its low volatility and low correlation, particularly when compared with publicly traded real estate investment trusts (REITs) and stocks. Specifically, private core real estate has exhibited lower volatility of 5.8% compared with 25.2% for US REITs and 16.4% for the S&P 500 during the past 10 years.

**DOWNCYCLE PERFORMANCE.** Finally, private investments have performed relatively well in declining markets. For example, from 2007 through 2009, US buyout had a 28% maximum drawdown compared with the S&P 500’s 46% drawdown, according to ThomsonOne. During the same period, direct lending’s 8% maximum drawdown compared favorably with 30% for leveraged loans and 27% for high yield according to Cliffwater Research, while private core real estate’s 24% maximum drawdown outpaced US REIT’s 65%.

For all private investments, we advise maintaining consistent capital deployment and diversifying across vintage years and strategies, as well as selecting seasoned investment managers to meet an investor’s goals. As the economic cycle progresses, private investments generally afford more control, which can help maximize returns and mitigate drawdowns during market pullbacks.

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Even in the Worst Vintage Year, US Buyout Funds Had a More Than 8% Median Return

![Graph showing US buyout median internal rate of return and top-quartile internal rate of return compared to purchase price multiple over various vintage years.](chart)

Source: ThomsonOne as of March 31, 2017 and S&P LCD as of June 30, 2017
“Bond King” Says Fixed Income Rally Is Fading

Jeffrey Gundlach, chief executive officer and chief investment officer of DoubleLine Capital, casts a wary eye on the bond market these days. “We don’t see the recession coming, so we’re not worried about a big collapse in corporate credit in the near term.” Still, the portfolio manager about a big collapse in corporate credit in the recession coming, so we’re not worried the bond market these days. “We don’t see DoubleLine Capital, casts a wary eye on high as they are.” Gundlach recently shared his thoughts on the sixed income environment with Vijay Chandar, a market strategist at Morgan Stanley Wealth Management. The following is an edited version of their conversation.

VIJAY CHANDAR (VC): What is your thinking about the market?

JEFFREY GUNDLACH (JG): In thinking about markets this year, I have focused on currency movements. When we entered 2017, there was a tremendous consensus that the US dollar was going to continue to rally. DoubleLine wasn’t of that opinion, even though we were in consensus that the Federal Reserve was going to raise interest rates at least a couple of times in 2017.

When the Fed is looking to raise interest rates, a lot people believe that means that the dollar will get even stronger. The thing a lot of investors don’t understand is that the near-term Fed prospects don’t really affect the value of the dollar; rather, it’s longer term, looking out to what the Fed might do over two years or so.

People believed that the Federal Reserve was going to be able raise rates not just a few times in 2017 but also in 2018. Our view was that there was no way that was going happen, and what we’re seeing when you look at the market pricing is that the prospect for 2018 interest rate increases has virtually disappeared.

Right now, there is almost no chance that the Fed will raise rates at all beyond perhaps one more hike in December, and because of that we’re seeing a tremendous flattening of the yield curve. Many people are saying that a flat yield curve is a sign of economic weakness, but we don’t agree with that, either. Putting things into historical context, yields for two- and 10-year US Treasuries are not very far away from average.

VC: Where do you expect yields to be at the end of 2017?

JG: Quite frankly, the bond rally that’s happened from March to today was something we expected, but at this point we think the rally is pretty far extended. When we look at some of the fundamentals, the 10-year Treasury yield seems too low right now; it’s very odd to have it at half the level of nominal GDP.

We also look at the ratio of copper to gold for short-term timing of the 10-year Treasury, which is uncanny in its ability to give signals on the direction of interest rates. For the past few weeks, the ratio of copper to gold has been rising pretty sharply—even though gold is at the high for the year.

So we are not terribly fond of US Treasury bonds at these yield levels relative to the commodity complex rallying relative to nominal GDP. Investors should begin some of their fundamental analysis on the simple question—are we headed to a recession or not?—and decide whether you want risk assets or you want to hunker down in safety.

VC: Do you expect a recession anytime soon?

JG: When we go through the indicators, there is very little in the US that suggests recession. We start with the leading indicators year over year, which were looking somewhat weak a little over a year ago based upon weak industrial activity. Today they’re quite strong and they seem to be in an uptrend. The ISM Survey reports show that the manufacturing sector is still quite robust in the US. Corporate credit spreads also are usually a good indicator of recession. When you compare the yields on junk bonds to Treasuries, you always see a noticeable spread widening before recessions. They’ve widened a little bit but are nowhere near suggesting of recession.

When you don’t have a recession in prospect, you probably should not be in a flight-to-quality mode—but that’s what’s happened in recent weeks. Maybe we can blame that on the hurricanes that will probably downgrade GDP growth in the near term. History shows that natural disasters take a divot out of real-time GDP because the major parts on the economy are shut down; but over the next couple of quarters, the deficit GDP typically is earned back because of rebuilding.

This is not real economic growth. When you break a window and you have to replace it, you end up exactly where you started but you’ve spent money. Natural disasters are a transfer of wealth, from savings like the government in terms of assistance, and insurance companies in terms of having to cover losses. That transfer doesn’t lead to prosperity, but it does mean that economic growth will be sustained.

VC: Our house view is that 2012 was a low for the 10-year yield, and we don’t anticipate going back to those levels around 1.3%. Would you agree with that?

JG: I do. We did a retest of those levels in July 2016, so it does look like a double
Consumer loan growth is basically at zero over-year cumulative corporate and the Fed usually stops tightening. Year-over-year cumulative corporate and consumer loan growth is basically at zero now.

VC: Would you agree that the Fed is actually much further along in this tightening cycle than a lot of people in the market realize, given the tapering of Quantitative Easing (QE)?

JG: Yes. QE was pretty powerful and it was designed to stimulate the economy. The Atlanta Fed’s Wu-Xia model points out that if the Fed hadn't done QE and bond buying—and instead had just taken the fed funds rate negative—the rate would have had to have been about negative 300 basis points to have had the same economic impact as QE.

So tightening began in 2014, when QE was stopped and when, combined with raising the fed funds rate from zero, the tightening is 400 basis points. When you look at the past several decades, 400 basis points has been the amount of tightening at which the economy starts to soften. In that sense, it isn’t all that surprising that loan growth has fallen to zero.

VC: What are a few surprises you're watching for?

JG: The corporate bond market could be a disappointment. Yields on junk bonds in Europe on an index basis are about the same as the yields on US Treasuries. It’s hard to believe that someone would actually buy junk credit in Europe at the same yield as Treasuries—and so that looks like a real setup for failure. Maybe the people who own those bonds don’t have the option to own Treasuries, or maybe they’re worried about currency movements. Certainly European investors haven’t done very well owning US debt this year, with the euro appreciating so much.

The other thing that is interesting is that in the 18 months ending August 2017, US Treasuries had a negative rate of return, while investment grade corporate bonds returned 12% and junk bonds returned 29%. This is unusual, because for Treasuries to have a negative rate of return for 18 months the price has to go down. With Treasury rates rising, corporate bonds should have negative returns, because corporate bonds have a lot of interest rate risk. The duration of the Bloomberg Barclays US Corporate Bond Index is more than seven years—higher than the Treasury bond index. If somebody said rates are going to rise over an 18-month period, you would think corporate bonds would have a similar return to Treasuries, if not a little worse. What that means is that spreads on corporate bonds have compressed in an extreme manner over that 18-month period.

When we look at fund flows, there's a narrative that there's a lot of money going into bond funds, but if you look under the surface there are only two categories that have strong flows this year: junk bond funds and corporate bond funds. Every other category is flat or has outflows. Even at these compressed spread levels, investors have themselves convinced—based on 18 months of price movements—that there is less risk in corporate bonds than there really is. My experience is that when money naively piles into an asset class, based upon an anomalous historical price movement, the typical pattern reasserts itself. While it’s still early—first we have to survive 2017—my highest conviction idea right now for 2018 is that Treasury bonds and very-high-quality corporate bonds will significantly outperform junk bonds and lower-rated corporate bonds.

VC: One of the changes our Global Investment Committee made over the summer was reducing credit exposure, particularly in high yield. In addition to being bullish on high-quality bonds, what other opportunities do you see?

JG: I think it is okay to continue to own some junk bonds, and some corporate credit. The real sentiment question you have when you own junk bonds is: Are we headed to a recession? Again, right now, we do not see a recession on the horizon—but you are absolutely right that the risk-reward is based upon the spreads, which are at a level where you have to watch carefully. You can’t just disappear thinking things are going to be okay; you have to monitor indicators like these.

We own some junk bonds, but those we like are in the bank-loan market, where you can get a decent yield without the interest rate risk. You can get a yield that is higher than the 30-year Treasury bond on a high-quality bank-loan portfolio.

Jeffrey Gundlach is not an employee of Morgan Stanley Wealth Management. Opinions expressed by him are solely his own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.
Global Investment Committee
Tactical Asset Allocation

The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with up to $25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

### Capital Preservation

- 14% Ultrashort Fixed Income
- 8% International Equities
- 8% US Equities
- 18% US Fixed Income Taxable
- 20% Short-Term Fixed Income
- 2% Inflation-Protected Securities
- 5% High Yield Fixed Income
- 6% MLPs
- 3% Absolute Return Assets
- 4% Emerging & Frontier Markets

### Income

- 24% US Equities
- 16% US Fixed Income Taxable
- 15% Short-Term Fixed Income
- 16% US Fixed Income
- 7% MLPs
- 4% Absolute Return Assets
- 5% High Yield Fixed Income
- 2% Inflation-Protected Securities
- 6% Emerging & Frontier Markets
- 1% Ultrashort Fixed Income

### Balanced Growth

- 4% Equity Hedge Assets
- 4% Equity Return Assets
- 4% US Equities
- 7% Emerging & Frontier Markets
- 7% MLPs
- 3% Short-Term Fixed Income
- 9% US Fixed Income Taxable
- 2% Inflation-Protected Securities
- 3% High Yield Fixed Income
- 15% International Equities

### Market Growth

- 31% US Equities
- 23% International Equities
- 9% Emerging & Frontier Markets
- 3% Short-Term Fixed Income
- 1% Ultrashort Fixed Income
- 7% Equity Return Assets
- 2% Inflation-Protected Securities
- 2% High Yield Fixed Income
- 6% MLPs
- 4% US Fixed Income Taxable

### Opportunistic Growth

- 4% MLPs
- 6% Equity Hedge Assets
- 28% International Equities
- 10% Emerging & Frontier Markets
- 2% US Equities
- 8% Equity Return Assets
- 44% US Equities

**Key**

- Ultrashort Fixed Income
- Fixed Income & Preferreds
- Equities
- Alternatives

Source: Morgan Stanley Wealth Management GIC as of Sept. 30, 2017
The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with over $25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

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<thead>
<tr>
<th>Capital Preservation</th>
<th>Income</th>
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<tr>
<td><img src="image1" alt="Capital Preservation Chart" /></td>
<td><img src="image2" alt="Income Chart" /></td>
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<tr>
<th>Balanced Growth</th>
<th>Market Growth</th>
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<tr>
<td><img src="image3" alt="Balanced Growth Chart" /></td>
<td><img src="image4" alt="Market Growth Chart" /></td>
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<tr>
<th>Opportunistic Growth</th>
<th>Key</th>
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<tr>
<td><img src="image5" alt="Opportunistic Growth Chart" /></td>
<td><img src="image6" alt="Key Chart" /></td>
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Source: Morgan Stanley Wealth Management GIC as of Sept. 30, 2017
# Tactical Asset Allocation Reasoning

<table>
<thead>
<tr>
<th>Global Equities</th>
<th>Relative Weight Within Equities</th>
<th>Reasoning</th>
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<tbody>
<tr>
<td>US</td>
<td>Overweight</td>
<td>While US equities have done exceptionally well since the global financial crisis, they are now in the latter stages of a cyclical bull market. This bull market was challenged during the past year by fears of political events and instability. While the Trump/Republican pro-growth agenda has been slower to develop than hoped, it has also left us in a bit of a Goldilocks environment in which growth and interest rates are neither too hot nor too cold. This is supportive of our call for higher valuations and 2,700 on the S&amp;P 500.</td>
</tr>
<tr>
<td>International Equities (Developed Markets)</td>
<td>Overweight</td>
<td>We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are likely to drive more fiscal policy action in both regions, which is needed to make the extraordinary monetary policy offered more effective. Both are still at record levels of cheapness but we prefer Japan at the moment given the over-exuberance on Europe. We recommend hedging currency risk for 50% of Japanese positions but not Europe.</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>Overweight</td>
<td>Emerging market (EM) equities have been the strongest region over the past 12 months and for the year to date. With the US dollar appearing to have made a cyclical top, global growth and earnings accelerating, and financial conditions remaining loose, we think EM equities will continue to keep up with global equity markets but are unlikely to lead as strongly in the first half of the year.</td>
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<table>
<thead>
<tr>
<th>Global Fixed Income</th>
<th>Relative Weight Within Fixed Income</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Investment Grade</td>
<td>Underweight</td>
<td>We have recommended shorter-duration* (maturities) since March 2013 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels. While interest rates have remained exceptionally low, there is more near-term upward pressure on US economic data to revert back toward 0%. That view played out in 2016 but has not yet run its course.</td>
</tr>
<tr>
<td>International Investment Grade</td>
<td>Underweight</td>
<td>Yields are even lower outside the US, leaving very little value in international fixed income, particularly as the global economy begins to recover more broadly. While interest rates are likely to stay low, the offsetting diversification benefits do not warrant much, if any, position, in our view.</td>
</tr>
<tr>
<td>Inflation-Protected Securities</td>
<td>Overweight</td>
<td>With deflationary fears having become extreme in 2015 and early 2016, these securities still offer relative value in the context of our forecasted acceleration in global growth, and expectations for oil prices and the US dollar’s year-over-year rate of change to revert back toward 0%. That view played out in 2016 but has not yet run its course.</td>
</tr>
<tr>
<td>High Yield</td>
<td>Equal weight</td>
<td>High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently downgraded high yield to equal weight from overweight on the back of this performance, record-low credit spreads and interest rates and early signs of credit deterioration in commercial real estate and auto financing.</td>
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<table>
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<tr>
<th>Alternative Investments</th>
<th>Relative Weight Within Alternative Investments</th>
<th>Reasoning</th>
</tr>
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<tbody>
<tr>
<td>REITs</td>
<td>Underweight</td>
<td>Real estate investment trusts (REITs) have underperformed global equities since mid 2016 when interest rates bottomed. We think it is still too early to reconsider our underweight zero allocation given the further rise in rates we expect and deteriorating fundamentals for the industry. Non-US REITs should be favored relative to domestic REITs.</td>
</tr>
<tr>
<td>Master Limited Partnerships/Energy Infrastructure*</td>
<td>Overweight</td>
<td>Master limited partnerships (MLPs) rebounded sharply from a devastating 2015 but, with oil’s slide, have performed poorly in 2017. As long as oil remains above $40 per barrel, they should provide a reliable and attractive yield and they look exceptionally cheap relative to high yield. A Trump presidency should also be supportive for fracking activity and pipeline construction, both of which should lead to an acceleration in dividend growth.</td>
</tr>
<tr>
<td>Hedged Strategies (Hedge Funds and Managed Futures)</td>
<td>Equal Weight</td>
<td>This asset category can provide uncorrelated exposure to traditional risk-asset markets. It tends to outperform when traditional asset categories are challenged by growth scares and/or interest rate volatility spikes. As volatility becomes more persistent in 2017, these strategies should do better than in recent years.</td>
</tr>
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*For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 18 of this report.*
ON THE MARKETS

Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following:

Risk Considerations

Alternative Investments

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be suitable for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

Hypothetical Performance

General: Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Hypothetical performance results have inherent limitations. The performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation.

Despite the limitations of hypothetical performance, these hypothetical performance results may allow clients and Financial Advisors to obtain a sense of the risk / return trade-off of different asset allocation constructs.

Investing in the market entails the risk of market volatility. The value of all types of securities may increase or decrease over varying time periods.

This analysis does not purport to recommend or implement an investment strategy. Financial forecasts, rates of return, risk, inflation, and other assumptions may be used as the basis for illustrations in this analysis. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. No analysis has the ability to accurately predict the future, eliminate risk or guarantee investment results. As investment returns, inflation, taxes, and other economic conditions vary from the assumptions used in this analysis, your actual results will vary (perhaps significantly) from those presented in this analysis.

The assumed return rates in this analysis are not reflective of any specific investment and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific investment may be more or less than the returns used in this analysis. The return assumptions are based on hypothetical rates of return of securities indices, which serve as proxies for the asset classes. Moreover, different forecasts may choose different indices as a proxy for the same asset class, thus influencing the return of the asset class.
MLPs

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund’s value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund’s after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

**Duration**

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

**International investing** entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

**Managed futures investments** are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually suitable only for the risk capital portion of an investor’s portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

**Investing in commodities** entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

**Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long-term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation (“SIPC”) provides certain protection for customers’ cash and securities in the event of a brokerage firm’s bankruptcy, other financial difficulties, or if customers’ assets are missing. SIPC insurance does not apply to precious metals or other commodities.

**Bonds** are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

**Bonds rated below investment grade** may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

**Interest on municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one’s state of residence and, if applicable, local tax-exemption applies if securities are issued within one’s city of residence.
The Asset allocation and diversification high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Value investing companies paying dividends which may involve currency risk. Prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, closed-end funds. Besides the general risk of holding securities that may decline in value, call protection does not protect against a loss in declining financial markets.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.
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REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

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