A Pause to Refresh

Thanks to technology, everyone is now connected 24/7. There is little doubt this has made us more productive than we were 20 years ago, when people ended their workday the minute they walked out of the office. However, it has also made us a little crazy and unable to focus at times. I’ve definitely noticed this in the investment world as it’s easy to be distracted by the barrage of noise and then miss the real signals. This is why I force myself to take time out of every day to simply sit and think. Others use meditation as a means to disconnect. It’s amazing how much even a short pause can refresh.

This year has been exceptionally strong for global equities. Every region and almost every sector has done well. The reason: The most synchronous global expansion since the financial crisis has led to a corporate earnings bonanza. Meanwhile, interest rates have remained low and corporate credit spreads well behaved, thanks to the ongoing Quantitative Easing programs in Europe and Japan and easy financial conditions globally. That means valuations for equities can rise and they have—by approximately 10% this year. This has all been aligned with our call, but now we think it may be time for a pause.

The problem is that sentiment has changed almost 180 degrees from August, when both institutional and individual clients were very nervous about North Korea and the Federal Reserve’s planned balance sheet reduction—Quantitative Tightening—not to mention the fact that Fed Chair Janet Yellen is unlikely to be back for a second term next year. When I talk to clients now about the potential for a pullback or pause as we head into November, I don’t hear about these concerns anymore. Instead I hear, “But Mike, earnings are great and taxes are likely going to be cut now by Congress. They seem to be making real progress. Haven’t you heard?”

Yes, I have heard, but when optimism gets this stretched it’s time for a pause. Calling for such corrections has been a fool’s game for the past 18 months, which is why we have been loath to do it. In fact, we have been criticized during the past year for not forecasting any pullbacks. Now, we are finally doing it and we are hearing the same criticisms on the other side as people suggest we could be entering a melt-up phase. To be clear, we are not looking for the end of the cycle or anything dramatic in terms of absolute price damage. We are simply looking for a pause to refresh.
Playing the Late Cycle

With markets at an all-time high, up more than 15% for the year to date and nearly 280% since the March 2009 low, it is natural to ask, “Where are we in the cycle?” There’s no easy answer because this cycle has been notably different from its predecessors. During the past nine years, central bank manipulation of risk-free rates, shifting banking regulations, a backdrop of fiscal austerity and global deflation have rendered standard gauges like the level and shape of the yield curve less useful in this cycle. Capacity-utilization metrics also have been distorted by technological obsolescence, with labor market dynamics obscured by seismic demographic shifts. What’s more, phased implementation of monetary policy created rolling regional recessions, culminating in the 2015/2016 minirecession. As a result of that slowdown, China’s economy experienced a soft landing, the US dollar soared and oil prices cratered.

All told, it’s not surprising that investors wonder whether the US economy is at the later stages of a nine-year cycle or, like international markets, in the early stages of a globally synchronous reflationary recovery. While the Global Investment Committee is sanguine about the US’s near-term participation in the global rebound, we are looking for signs that the US cycle is normalizing. Through that lens, we can diagnosis its late-cycle characteristics.

BUOYANT ECONOMY. To start with, we acknowledge that current economic activity gauges are downright buoyant; in fact, the US Purchasing Managers Index for September was at a 12-year high. While sustaining those readings and thus momentum in economic surprises is unlikely, that data alone are insufficient to identify a cycle peak, as we know survey-driven data can be subject to sentiment, potentially obscuring important pockets of weakness in commercial real estate, housing, trade or capital spending.

Instead our preferred current indicator is the labor market, where the data are reaching extremes. Specifically, even though the September jobs report was distorted by the hurricanes in Texas and Florida, we observed a number of bests: The U-3 unemployment rate fell to 4.2%, the best report since February 2001; the U-6 rate, which includes part-timers, dropped to 8.3%, the best since 2007; the 63.1% labor-force participation rate is the best of the cycle; and a jobs-to-population ratio of 60.9% is the best in nearly nine years. Even more important, average hourly earnings growth finally accelerated, with year-over-year gains moving up to 2.9% from 2.7% in August; the three-month run rate was an annualized 4.3%.

UPENDED RELATIONSHIP? Many market observers and critics of Fed policy have suggested that the traditional inverse relationship between unemployment rates and wages—known as the “Phillips curve”—is no longer valid because of technological and demographic trends. We have always been skeptical of that argument and believe we are just now at the beginning of the wage acceleration that occurs when labor markets tighten. Indeed, annualized average hourly wage growth bottomed in 2013 and, while progress has been frustratingly slow, it is a strengthening upward trend (see chart). Also, when wage growth is examined by age cohort, those 55 and younger are compounding wage gains in excess of 4% a year, more typical of prior cycle peaks. With the younger cohort destined to become a larger portion of the workforce, we think upward pressure on wages will continue. When the downward pressure on nonwage components of inflation abate, wage gains may start to bite (see chart, page 3). This potential for inflation surprise could come about if deficit-financed tax cuts, now under consideration in Congress, are enacted. Tax cuts have rarely been implemented with unemployment this low.

Wages Are Gaining Momentum

![Average Hourly Earnings, Year-Over-Year Change (left axis) Fed Funds Target Rate (right axis)](chart)

Source: Haver Analytics as of Sept. 30, 2017

Please refer to important information, disclosures and qualifications at the end of this material.
IMPORTANCE OF WAGE GAINS. The importance of accelerating wage gains to late-cycle dynamics cannot be underestimated. When wage gains start outpacing consumer prices, individuals experience real income gains, which go toward consumption, debt reduction and savings, driving further economic growth.

Perhaps more important, real income growth has been correlated with a pickup in the capital spending and productivity cycles. The reason is twofold: Real wage acceleration tends to both pressure corporate profit margins and cause a rise in interest rates through inflation expectations. Critically, this combination of rising cost of capital and rising labor costs usually prompts corporate executives to invest in new equipment, substituting machines for new employees, or to take on strategic mergers and acquisitions (M&A) that can add scale, provide synergies or lead to cost savings. In fact, recent data validate this dynamic, with durable goods orders improving and fixed asset investment up at an annual pace of 8.8% as of the third quarter. M&A volume relative to market capitalization, while running at roughly 50% of prior peaks, has also picked up meaningfully in the last quarter.

NO TOP YET. Although other critical data points like a flattening of the two-year/10-year US Treasury yield curve, investment grade and high yield spreads near cycle tights and extremely accommodative financial conditions also support the late-cycle diagnosis, none of our timing indicators suggest a stock market top. Cash balances among mutual fund managers and households remain above average, hedge fund positioning remains net short the market and options hedging appears defensively skewed. Market breadth is healthy and momentum is solid, yet stocks are not in overbought territory. Fund flows still massively favor fixed income, suggesting little euphoria around equities. In fact, margin debt in New York Stock Exchange trading accounts is no higher than it was in March, when the S&P 500 was more than 200 points lower.

While we believe that market momentum can continue, accelerating wages tell us it is getting later in the game when inflation, credit spreads, financial conditions and policy normalization will become more important. Stay invested in equities, but emphasize stocks that can benefit from a late-cycle, reflationary environment (see below).

Positioning Portfolios for Reflation
After underperforming for most of this year, cyclical stocks have picked up—behavior that is in sync with the late stages of the business cycle. Cyclically oriented sectors such as financials, energy, industrials and materials are more attractively valued and are more levered to rising inflation and growth to bolster sales and earnings. We believe this outperformance is likely to persist as the market continues to price in higher interest rates, inflation and economic growth from the lower levels seen for much of this year.

Top US subsectors that exhibit above-average correlations to yields and inflation expectations may benefit from rising inflationary pressures and improving economic growth. These top US subsectors include industrial machinery, investment banking and brokerage, and asset management and custodial banks.

From a global perspective, while the US stock market has more growth stocks, the rest of the world shows tilts toward value. Regions with the highest concentration of value stocks include Japan and developed markets such as Canada, Australia and New Zealand. The global sectors that exhibit high exposure to value are led by energy and financials.

High beta stocks—stocks with high sensitivity to broad market returns—may have higher upside in a rising market, which we believe is likely supported by reflationary trends. Regions with the highest concentration in high beta stocks are the emerging markets and the UK, where nearly half of the regions’ market cap offers high beta exposure. Globally, the materials, technology and financial sectors demonstrate the greatest exposure to the high beta factors.

For more details, please see the October issue of Topics in Portfolio Construction—Aili Chen and Zachary Apoian.
Investment Themes
For a Transformed China

China’s transformation to a consumer-powered economy from an export-driven, fixed-investment model has been playing out for many years, but it still has a long way to go. Indeed, according to Morgan Stanley & Co. Research, private consumption will almost double in size to $9.7 trillion by 2030 from $4.4 trillion in 2016 (see chart). What’s more, President Xi Jinping, who has been driving this transition, was recently chosen for another five-year term, which suggests continuity.

Given the upbeat outlook, we have several long-term themes to help investors gain exposure to the changing Chinese economy.

Consumers. Spending on travel, entertainment and leisure will likely gain momentum as China attains a high-income status of per capita income of $12,900 by 2027, up from $8,100 today, according to Morgan Stanley Research estimates. We favor high-quality media companies that own theme parks; in 2016, attendance at China’s existing parks grew by 8% and new parks saw 9 million visitors.

Additionally, we like premium-liquor manufacturers, where the Morgan Stanley & Co. AlphaWise Team expects 8% annual volume growth in China, and for the broader spirits market profit pool to expand to $12 billion by 2020.

Manufacturers of smart phones should benefit, too, given likely pent-up demand for their new products. MS & Co. analyst Katy Huberty forecasts 66% China iPhone unit growth in 2018, driven by accelerating upgrades. While Chinese internet companies are beneficiaries given some 700 million users, these companies have done exceptionally well this year and valuations are no longer compelling.

Technology/Industrials. With the government focus on value-added manufacturing and a connected industrial ecosystem, we see opportunities for semiconductor makers that provide chips for factory automation and infotainment in autos and telecommunications. On factory automation, we note that China’s industrial robot demand accounted for 31% of global demand in 2016, and the International Federation of Robotics has estimated a 21% annual growth rate for the Chinese market in 2017 through 2019.

Despite slowing global demand for autos, MS & Co. analysts see Chinese auto parts and semiconductor companies as best positioned to capture demand growth in the auto electronics market, which is expected to almost double in the next few years to become a $200 billion market by 2020. Semiconductors are also powering the 5G wireless cycle, which is expected to provide faster connections and a 20-fold improvement in efficiency over existing 4G technology. China’s 5G projects are forecasted at $450 billion through 2030.

Health Care. One of the impediments to higher consumer spending has been a lack of a consumer safety net, as well as significant air- and food-quality issues in the major cities. That is changing, however, as the government has invested in environmental improvements.

According to the US Environmental Protection Agency, China accounts for one-third of global carbon dioxide emissions, and environmental and food safety alongside health care have consequently become top priorities of China’s 13th Five-Year plan. In fact, the budget for environmental projects is double what it was in the last plan, making China a critical driver of global spending growth in these categories.

We favor select life-science tool companies that manufacture sophisticated testing equipment to improve air and food quality. Notably, we have seen the government pay up for Western products as they cannot yet more cheaply replicate the technology.

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Personal Consumption on a Steady Climb in China

Enhancing Yield With Option Income Strategies

John Duggan
Closed-End Fund Strategist
Morgan Stanley Wealth Management

As the potential for rising rates grows along with economic expansion, yield-focused investors are left with a quandary: how to achieve or maintain attractive cash flow while limiting direct interest rate and credit exposure. We suggest they consider option income strategies and, in particular, covered call closed-end funds (CEFs) as part of a balanced blend of dividend and income-oriented vehicles.

Covered call CEFs seek to generate steady and attractive distributions by owning dividend-paying stocks and "writing," aka selling, call options. Call options are instruments that give an investor the right but not the obligation to buy a stock, bond or other instrument at a specified price within a particular time period. Fund managers write options on varying percentages of the underlying holdings, or corresponding indexes, in order to pass on the income from the options along with dividends and any capital gains.

Downside Cushion. While call writing tends to restrain a fund’s upside depending on how and the extent to which it is implemented, it may cushion net asset value (NAV) total-return downside when compared with "uncovered" equity portfolios. Notably, in the case of a step-up in stock market volatility, opportunities for fund managers to target higher option income could expand, as volatility ordinarily coincides with higher premiums. The Morgan Stanley Wealth Management Global Investment Committee thinks higher volatility would likely occur if financial conditions deteriorate.

We believe recent history has confirmed a longer-term tendency for select call-writing strategies to potentially enhance broader investment portfolios from a volatility and/or total-return perspective (see chart). Since 2010, during a dozen consecutive, distinct periods of 50-basis-point increases in the 10-year US Treasury yield, the CBOE S&P 500 BuyWrite Monthly Index (BXM) outpaced the Dow Jones Select Dividend Index six times and failed to beat the Bloomberg Barclays US Aggregate Total Return Index only once. During the same 12 periods, adding the BXM to create an even three-way mix of the indexes outpaced an even mix of the latter two 11 times, as well as across all the periods, on average, on an absolute and downside-risk-adjusted basis.

Broad Choices. With 34 components and $23.1 billion aggregate market cap, the broad covered call category is one of the largest in the CEF universe, accounting for 23.6% of total equity fund capitalization. It offers an array of choices in terms of manager, percentage of portfolio overwritten and geographic and sector concentration. Furthermore, covered calls produced better returns than most other CEF categories during the past five years. The category features funds that trade at attractive market prices relative to net asset value, with several at discounts to NAV of more than 6.0%, and annualized distribution rates, based on either monthly or quarterly dividends, range from 6.1% to 10.9%. Seasoned investment management firms such as BlackRock, Eaton Vance, Nuveen and Voya lead the fund offering in this category.

Investors in covered call CEFs, as with other equity investments, need to be mindful of the risks, including the potential for stock market declines amid higher volatility, movements in fund prices away from NAV, changeable liquidity and the possibility of dividend cuts related to NAV reductions. Also, at times, issuers may set fairly aggressive distribution rates that can exceed a fund’s earnings capacity. When this happens, the unearned distributions are often considered return of capital (ROC), which puts downward pressure on the NAV. The ROC distribution is nontaxable because it is not income, but comes at the expense of the fund’s NAV. We generally prefer funds with recent annualized NAV total returns in line with or greater than their NAV distribution rates.
Conditions May Be Just Right for Convertibles

JOSE CRUZ
US Equities Analyst
Morgan Stanley Wealth Management

As equities march to new highs while the markets anticipate higher interest rates, investors may want to consider convertible securities. It’s an often-overlooked asset class that may present an opportunity to diversify some of the inherent risks in equities and traditional fixed income at this time.

EMBEDDED OPTION. Convertibles are corporate bonds or preferred stocks that allow the holder to convert into the issuer’s common equity at a set price. They possess some of the more attractive attributes of both equities and fixed income. Convertibles can be expected to participate meaningfully in rising equity markets, while behaving somewhat defensively in sell-offs. Additionally, convertibles have a yield similar to the Bloomberg Barclays US Aggregate Bond Index. In contrast, the 10-year US Treasury has duration of 8.8 years. The Global Investment Committee has recommended a shorter-duration positioning in fixed income, which convertibles provide in addition to an opportunity to capture any equity upside.

LOW RELATIVE VOLATILITY. One of convertibles’ positive attributes is low relative volatility. For the 20 years ending Sept. 30 they kept pace with domestic equities, but with lower volatility. As a result, convertibles have generated higher risk-adjusted performance. While convertibles have provided equity upside participation, they have a “bond floor,” which is equivalent to the value of a straight bond paying a fixed coupon and principal. Thus, convertibles maintain bond-like investment value if the issuer’s common stock stays flat or declines provided the company remains viable. Additionally, convertibles generate a higher yield than most dividend stocks; as of Sept. 29, the BofA Merrill Lynch All US Convertible Index had a current yield of 3.0% versus the S&P’s 500’s 1.9% dividend yield.

Convertibles’ rising-rates performance can be attributed to their shorter duration as longer-duration securities by definition have more interest rate risk. As of Sept. 29, the convertibles index had an average duration of 2.6 years, compared with 6.0 years for the Bloomberg Barclays US Aggregate Bond Index. In contrast, the 10-year US Treasury has duration of 8.8 years. The Global Investment Committee has recommended a shorter-duration positioning in fixed income, which convertibles provide in addition to an opportunity to capture any equity upside.

FAVORABLE TAILWINDS. Lastly, certain market participants cite favorable tailwinds evolving in the convertible securities market. Prior to the financial crisis, approximately 75% of all convertible investors were hedge funds, which typically utilize convertible arbitrage strategies; the remaining 25% were traditional long-only investors. Currently, 45% of the convertibles universe is held by traditional investors, which has coincided with declining volatility in the asset class. New issuance has also increased to $77 billion last year from $47 billion in 2011. What’s more, rising rates can increase new issuance, as companies seek financing with lower coupons than straight debt.

Convertibles Have Outperformed Other Fixed Income During Periods of Rising Interest Rates

<table>
<thead>
<tr>
<th>Period</th>
<th>Rates Rise (in basis points)</th>
<th>Convertibles</th>
<th>10-Yr. US Treasuries</th>
<th>Inv. Grade Corporates</th>
<th>High Yield Corporates</th>
<th>Leveraged Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 30, 1993-Nov. 30, 1994</td>
<td>252</td>
<td>-3.2%</td>
<td>-10.8%</td>
<td>-4.3%</td>
<td>1.4%</td>
<td>13.4%</td>
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<tr>
<td>Dec. 31, 1995-Aug. 31, 1996</td>
<td>137</td>
<td>8.6</td>
<td>-5.5</td>
<td>-2.1</td>
<td>4.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Sept. 30, 1998-Jan. 31, 2000</td>
<td>225</td>
<td>58.7</td>
<td>-10.1</td>
<td>-1.3</td>
<td>4.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Oct. 31, 2001-Mar. 29, 2002</td>
<td>116</td>
<td>3.8</td>
<td>-6.9</td>
<td>-2.1</td>
<td>4.4</td>
<td>4.0</td>
</tr>
<tr>
<td>May 31, 2003-May 31, 2004</td>
<td>128</td>
<td>14.4</td>
<td>-5.4</td>
<td>-0.2</td>
<td>11.6</td>
<td>8.3</td>
</tr>
<tr>
<td>June 30, 2005-June 30, 2006</td>
<td>122</td>
<td>9.4</td>
<td>-5.8</td>
<td>-2.0</td>
<td>4.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Dec. 31, 2008-Dec. 31, 2009</td>
<td>163</td>
<td>49.1</td>
<td>-9.7</td>
<td>19.8</td>
<td>57.5</td>
<td>44.9</td>
</tr>
<tr>
<td>Aug. 31, 2010-Mar. 31, 2011</td>
<td>100</td>
<td>19.2</td>
<td>-6.0</td>
<td>0.0</td>
<td>10.3</td>
<td>7.4</td>
</tr>
<tr>
<td>July 31, 2012-Dec. 31, 2013</td>
<td>156</td>
<td>33.9</td>
<td>-8.7</td>
<td>0.9</td>
<td>13.8</td>
<td>10.1</td>
</tr>
<tr>
<td>July 31, 2016-Sept 29, 2017</td>
<td>100</td>
<td>15.9</td>
<td>-5.7</td>
<td>2.3</td>
<td>12.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Average</td>
<td>150</td>
<td>21.0</td>
<td>-7.5</td>
<td>1.1</td>
<td>12.6</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Source: FactSet, Bloomberg Barclays, Bank of America Merrill Lynch, Credit Suisse, Advent Capital, Calamos Investments, Lord Abbett as of Sept. 29, 2017
Labor Market Tightening Still Leaves Large Employment Gap
Given the falling unemployment rate, economists, including those at the Federal Reserve, have anticipated rising wage pressures. While the Oct. 6 payrolls report showed year-over-year wage growth of 2.9%, the lack of sustained momentum in compensation growth has been a perplexing feature of this postcrisis period. One driver may lie in this cycle’s differentiated labor participation rates. While the US unemployment rate has reached cycle lows at 4.2%, the employment-to-population ratio indicates that the labor market recovery has not followed the pattern of previous expansions (see chart). This ratio indicates that a significant group of workers has not returned to work, either due to discouragement, disability or a skills gap. While the economy’s production has nearly caught up with potential GDP, this data suggest that a noteworthy “employment gap” remains. Filling that gap may be a prerequisite to upward pressure on wages.—Steve Edwards
Source: Bureau of Labor Statistics as of Sept. 30, 2017

Looking for Tax Losses? Check Your Master Limited Partnerships
After a strong year in stocks, few sectors stand out as targets for tax-loss selling—except for master limited partnerships (MLPs). As of Oct. 27, the Alerian MLP Index is down 10.1% for the year to date on a total-return basis (see chart). Of course, investors may have significantly greater embedded losses given the prolonged slide in 2015 and recent downturn following 2016’s partial rebound. MLP exchange-traded funds and closed-end funds (CEFs) look set to participate in the selling. In our view, CEFs are apt to experience more choppiness as investors engage in swaps between the category’s numerous offerings. In our experience, tax-loss selling usually peaks in early to mid-December, but it may endure through this year’s end. While many funds can serve as solid replacements for MLP CEFs sold at a loss, investors should be mindful of underlying holdings’ overlap and the potential for swap-rule violations.—John Duggan

Current Spreads in High Yield More Attractive Given Reduced Duration
High yield credit spreads (the additional yield earned over equivalent-maturity US Treasuries) have tightened along with other risk assets, driven by low global yields, declining net supply and solid fundamentals. While the spread of the Bloomberg Barclays High Yield Index is at its lowest in more than three years, the index’s duration, a measure of interest rate risk, has declined nearly 0.8 years during that time and is now at 3.7 years. While spreads are undoubtedly tight and unlikely to tighten materially from here, the lower duration of the high yield market means investors are better compensated at these absolute spread levels per unit of interest rate risk than at similar points in the past. In the context of improving macroeconomic fundamentals and generally sound balance sheets, there remains a role for high yield in a diversified portfolio.—Darren Bielawski

*Morningstar US CE Energy Limited Partnership
Source: Bloomberg, Morningstar as of Oct. 27, 2017

*Option-adjusted spread
Source: Bloomberg as of Oct. 23, 2017
Much like artificial intelligence within the technology sphere, smart beta strategies have received significant attention in financial circles, yet many investors struggle to understand them. What makes them “smart,” and what value might they add to a portfolio? We provide some responses to those questions and share some guidance on implementation.

With preselected baskets of securities, smart beta strategies allow investors to gain exposure to fundamentally or technically attractive traits, sometimes called factors. These strategies occupy a middle ground between active and passive investing (see chart). They are intended to capture the excess returns that these factors have achieved historically relative to traditional market capitalization-weighted indexes, in which the market value, or size, of each constituent determines its weight in the index.

Index providers have tailored factor indexes to establish transparent, rules-based methods for tracking and accessing these baskets of securities. In turn, sponsors of exchange-traded funds (ETFs) have made these strategies readily available to investors through single-factor and multifactor products. As of Sept. 30, more than 500 US-listed strategies command in excess of $300 billion in total assets.

Both single- and multifactor strategies appear to offer a compelling opportunity for investors, having historically yielded long-term positives, diversifying excess returns. Nonetheless, these strategies have experienced cyclical periods of underperformance, leading to meaningful drawdowns. While smart beta strategies appear to have added value over time, most factor ETFs have limited track records and, consequently, have not been tested through a full market cycle, which warrants appropriate caution.

We believe implementation plays a crucial role in determining long-term outcomes. As a result, we recommend that investors build diversified factor portfolios in order to take advantage of potential excess returns while mitigating potential drawdowns.

Factor Investing’s Middle Ground Between Passive and Active Strategies

<table>
<thead>
<tr>
<th></th>
<th>PASSIVE</th>
<th>SMART BETA</th>
<th>ACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Returns</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benchmark Total Returns</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Factors Excess Returns</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Market Timing and Security Selection Excess Returns</td>
<td>✓</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Source of Returns</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index Replication</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Transparency</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Rules-Based Construction</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Potential Alpha</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Low</td>
<td>Low-Medium</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Turnover</td>
<td>Low</td>
<td>Varies</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Wealth Management Market Strategy and Portfolio Analytics as of Sept. 29, 2017
approaches. They allocate to baskets of securities whose constituents share predetermined characteristics and are weighted, at least in part, according to criteria other than market capitalization. These strategies typically select and weight constituent securities based on quantitatively measurable characteristics, such as performance data or valuation multiples. They gain exposure to those baskets of securities believed, in aggregate, to provide potential excess returns relative to comparable market capitalization-weighted indexes. Leveraging more than 40 years of research and experience, active managers and institutional investors have long leaned on these strategies in their quest for excess returns.

Following this research and by investor demand, index providers have designed transparent factor indexes to capture these baskets’ returns. These indexes typically draw their potential constituents from a well-known market capitalization-weighted index, such as the S&P 500. Index providers regularly reconstitute these indexes to maintain consistent exposures to intended factors. A sample momentum index might track an equal-weighted basket of 100 stocks within the S&P 500 with the highest returns over the past six months, reconstituted quarterly.

Index providers have created a plethora of indexes, deciding for each which factors to target and to what degree to concentrate relevant exposures. Multifactor indexes consider multiple factors simultaneously, constructed through either a portfolio optimization targeted to maximize certain exposures (top-down) or according to predefined decision rules (bottom-up). ETF sponsors have launched vehicles to facilitate convenient, cost-effective access to these factor indexes. These firms mechanically rebalance their factor ETFs’ holdings when the indexes are reconstituted, while potentially limiting realized capital gains. Since factor ETFs track transparent indexes, they allow us to review longer-term performance characteristics, even prior to the ETFs’ inception dates.

Establishing the middle ground between active and passive strategies. Incorporating elements of fundamental and technical security analysis, factor investing allows investors to reap the benefits of passive investing but retain the upside potential of active strategies. Starting with Eugene Fama and Kenneth French, many researchers have argued that active managers’ factor exposures help to explain their excess returns. Factor investing may also satisfy investors’ hunger to take advantage of

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### Key US Large-Cap Equity Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Shared Characteristic</th>
<th>Benchmark-Relative Risk Level</th>
<th>Relationship to Business Cycle*</th>
<th>Excess Returns (20yr., Annlzd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multifactor</td>
<td>Optimized portfolio to maximize exposure to momentum, quality, size and value</td>
<td>Similar</td>
<td>Neutral</td>
<td>3.0%</td>
</tr>
<tr>
<td>Aggressive Growth</td>
<td>High growth in company fundamentals, including revenues and earnings</td>
<td>Higher</td>
<td>Cyclical-Neutral</td>
<td>2.6</td>
</tr>
<tr>
<td>Deep Value</td>
<td>Inexpensive valuations, based on price vs. book value, earnings and revenues</td>
<td>Higher</td>
<td>Cyclical</td>
<td>2.9</td>
</tr>
<tr>
<td>Dividend Growth</td>
<td>Companies that have increased dividends for 20 straight years and offer high dividend yields</td>
<td>Lower</td>
<td>Defensive</td>
<td>3.0</td>
</tr>
<tr>
<td>High Beta</td>
<td>High exposure to market returns, as measured by individual stocks’ beta to the S&amp;P 500 Index</td>
<td>Higher</td>
<td>Cyclical</td>
<td>-2.8</td>
</tr>
<tr>
<td>Low Volatility</td>
<td>Low realized volatility in price returns, perhaps suggesting more stability in fundamentals</td>
<td>Lower</td>
<td>Defensive</td>
<td>1.2</td>
</tr>
<tr>
<td>Momentum</td>
<td>High beta-adjusted realized returns in the recent six- and 12-month periods</td>
<td>Higher</td>
<td>Neutral - Defensive</td>
<td>3.5</td>
</tr>
<tr>
<td>Quality</td>
<td>Companies with healthy balance sheets and consistent, high profitability</td>
<td>Lower</td>
<td>Defensive</td>
<td>1.0</td>
</tr>
<tr>
<td>Size</td>
<td>Equal portfolio exposure to each stock, increasing weightings to smaller-cap and value stocks</td>
<td>Higher</td>
<td>Cyclical</td>
<td>2.2</td>
</tr>
</tbody>
</table>

*In this column, we present each factor’s historical relationship to the business cycle, as indicated by those environments in which they have historically outperformed. Factors with a “Cyclical” designation have tended to outperform during times of economic expansion, while “Defensive” factors have tended to outperform when economic growth has slowed. The “Neutral” designation indicates that the factor has not demonstrated a strong tendency in either direction.

Note: Data for 20-year annualized excess returns is from Oct. 1997 to Sept. 2017. Excess returns were computed by first calculating the total annualized returns for the relevant factor index and the S&P 500 Index and then reporting the difference. Past performance is not necessarily a guide to future performance.

ready opportunities and to apply new solutions to the challenge of generating better returns. Given the Global Investment Committee’s expectations for muted equity and fixed income returns for the next seven years, these strategies may support efforts to boost returns, without taking undue risks or incurring hefty management fees.

Which equity factors should we consider? While researchers have discussed many hundreds of factors and combinations, we recommend focusing on those widely recognized factors for which low-cost, highly liquid ETFs closely track their relevant indexes. We also advise choosing factor-concentrated strategies, in which the index contains a select group of stocks that most strongly exhibit the factor characteristic. We believe the resulting factor isolation may promote greater consistency in performance patterns across market environments.

The table on page 9 lists one multifactor strategy and eight underlying factors that meet these standards. We provide the shared characteristics that each factor index seeks to target; its estimated market-relative risk level, based on our expectation of its absolute volatility versus a relevant capitalization-weighted index; and its relationship to the business cycle, as indicated by those environments in which the factor has historically outperformed.

Research suggests that the factors’ excess returns either compensate investors for taking greater risk or flow from the mispricing of securities. In our view, this underlying economic intuition explains the persistence of their excess returns through multiple market cycles. Excluding high beta, these factors have “worked,” delivering positive excess returns throughout the past 20 years.

Factors’ excess returns: Long-term positive, diversifying and cyclical. We notice that several factors have delivered annualized excess returns materially greater than zero over the past 20 years, supporting the case for adding long-term value. Furthermore, the factors’ excess returns have historically diversified one another, implying potential benefits from combining multiple factors together in a portfolio. These benefits resulted from factors’ differentiated causes and relationships to bullish and bearish market environments. Yet, the factors appear vulnerable to not working for extended periods. The annualized excess returns hide the noteworthy cyclical nature that becomes evident from studying year-by-year results. Each factor has encountered multiyear drawdowns in its excess returns, which, aside from the multifactor index, have reached meaningful, double-digit levels.

Reviewing multifactor strategies. Having observed factors’ cyclical nature, ETF providers have recently increased the breadth of their multifactor offerings. Typically, these multifactor strategies select their constituents according to their simultaneous exposures to multiple factors, either through a top-down portfolio optimization process or through a bottom-up construction in which the index combines several subportfolios to maximize certain factor exposures.

Underscoring the points on factors’ cyclical nature, we note that, during their short histories (many came to market in 2015), most multifactor ETF strategies in the US large-cap space have underperformed relevant market capitalization-weighted benchmark indexes. While the ETFs have performed essentially in-line with their multifactor indexes, the multifactor indexes, on average, have not kept pace with their market capitalization-weighted counterparts during this period.

Taking advantage of equity factor opportunities. While equity factors have historically outperformed market capitalization-weighted indexes, excess returns have varied widely across factors and across time. This cyclical nature argues against taking isolated buy-and-hold positions in any single factor, as doing so may provide too little compensation (excess returns) for the risk assumed (deep, long drawdowns in excess returns). Moreover, the performance of any individual factor tends to mean-revert in the intermediate term, pointing to the possible downside of chasing “hot” factors.

Instead, we prefer strategies that capture factors’ potential excess returns, take advantage of their low cross-correlations and limit potential underperformance versus market capitalization-weighted benchmarks. We therefore recommend considering either multifactor strategies or well-diversified portfolios of single-factor exposures, or a combination thereof. These diversified approaches may potentially diminish the resulting portfolios’ tracking-error levels and mitigate drawdowns, both in depth and length. In addition, while single factors’ inherent cyclical nature may afford opportunities for factor rotation, we caution against aggressive “timing” strategies that shift abruptly between single-factor strategies.

For a full copy of the special report, “Decoding Smart Beta,” please contact your Financial Advisor.
Encouraging Signs for Europe

After a decade in which the S&P 500 outperformed the MSCI Europe Index by some 5.6 percentage points annually, things appear to be looking up for the Continent. For the year to date through October, on a total return basis, European equities are up 23% compared with a 17% rise for US stocks. Even so, Simon Webber, a portfolio manager for Hartford Schroders, believes the best is yet to come. “I think we’ll see increased confidence when we start to get a normalization of interest rates,” he says. In a discussion with Morgan Stanley Wealth Management’s Tara Kalwarski, Webber shared his outlook and pointed out the risks to it. The following is an edited version of their conversation.

TARA KALWARSKI (TK): Do you think Europe is officially on the mend?

SIMON WEBBER (SW): At a high level, I think the continental European economy is in its best shape in over a decade. The momentum is broad and strong.

What I think is particularly interesting is that there is still a very large component of financial markets colored by the Euro Zone crisis, or the view that the Euro Zone is inevitably going to break up at some point. My view is that there are clearly issues with the political, structural and institutional framework, but the Euro Zone is stronger than that. Right now, there’s a lot of good, underlying momentum in the economy.

One thing to bear in mind with Europe is that the population is growing slower than the US population. So when we look at where economic growth is coming in—at the moment, we think the second half for this year will be more than 2%—that should be put in the context of 0.25% annual population growth in Europe compared with 0.75% in the US. So on a per capita basis, Europe actually is growing very strongly at the moment.

TK: Can you describe how Europe has evolved since the financial crisis?

SW: It has taken Europe much longer than the US to deal with the problems, which is one of the weaknesses of the European Union system. You have 27 sovereign nations that aren’t always easy to get to agree—but a crisis is sometimes what it takes to focus and to achieve agreement, and Europe has a habit when crisis comes around of reaching decisions under pressure.

Ideally you wouldn’t have to have a crisis, but the peripheral southern European debt crises of 2011 and 2012 really did lead to some structural reform in those nations, in addition to the development of financial and monetary frameworks and measures that could ease the problem.

They started off with a very significant Quantitative Easing (QE) program; the European QE program was larger in size relative to its economy than the US QE. The banking system has been progressively cleaned up, though nowhere near as fast as in the US. But just this year in Spain and Italy—two of the big problem banking markets—we’ve seen very important developments, with consolidation of some of the weakest banks into stronger players.

Strong underlying markets in those economies are allowing nonperforming assets to be sold down into private equity, or to be recognized as well. So we are gradually cleaning up. There’s still quite a high level of bad debt in southern Europe, but it is being cleaned up and the banks are much better capitalized. A healthier banking system that is willing to lend is one part of the equation that’s supporting the better current growth.

TK: How is the UK doing, and relative to continental Europe?

SW: The UK is the slowest growing of the G7—or even possibly G20—countries at the moment. Our outlook for the UK continues to be pretty modest and cautious. We are clearly seeing the effects of Brexit in company investment decisions, as investment is being held back. It’s a consumer-driven economy, and with parts of the population very nervous about Brexit, consumer spending is also slowing. An inflationary shock from a weaker pound also came from the Brexit decision.

So there are a lot of headwinds for the UK. We wouldn’t expect it to be returning to trend with normal growth anytime soon, and that’s reflected in our portfolios, where we have a very cautious approach to domestic UK exposure. The UK companies we hold are generally much more global and internationally focused.

TK: What is your outlook for the euro?

SW: We have felt that the euro was likely to appreciate, but it has moved a long way this year and is less undervalued. I think that if the euro hadn’t appreciated as much, then we would probably be talking about higher rates—or the elimination of negative rates—in the Euro Zone more quickly than we are today. We think the euro will essentially be flat against the dollar over the next year or so, or maybe slightly down. Basically, a stable outlook, but if the euro is weaker, then I think that would be good for the exporters, particularly in Germany. We could then expect to see a slightly faster end to QE and return to normal interest rates. That scenario would be good in the way that it has in the US—a signal of confidence and normalization.
TK: Where else are you finding attractive investment opportunities?

SW: We see it in a broad number of industries in Europe, but I’ll single a few out where I think we may be a bit different than consensus. Take our financial holdings; we have a positive view of the European banking industry.

We’re quite cautious toward the insurance sector where we don’t see much growth or value, but the banking sector is benefiting from improved economic growth and demand for loans. Lending has picked up and the credit cycle also is still very much a tailwind.

Contrasted with the US, which is starting to see a pickup in credit costs in a number of types of bank lending products, in Europe there is still scope for normalization pretty much everywhere. We’re not even back to average levels of unemployment yet. Employment growth is very fast at the moment, at about 1% per year, but the unemployment rate is still about 9%. That’s above the long-term average, so there’s scope for employment to keep growing without inflating wage pressure. We think there will be quite a lot of positive surprises coming to European bank earnings.

We also are very interested in an emerging growth scene around electric vehicles, which is going to be a long-standing theme. There are a number of European companies that have strong technology. We hold one German automaker that we think has a very good product-development profile for electric vehicles, and this year we bought a German power-management semiconductor company. In electric vehicles, you need four or five times as much heavy duty power-management equipment, so we like the growth outlook there.

TK: Are there any sectors you are avoiding?

SW: Regulated utilities and real estate, which are bond proxy sectors. We think that QE has probably depressed bond yields on average by probably 40 to 80 basis points. It’s pretty clear now that during the next 12 months, the European Central Bank will be winding down its monthly QE bond purchases from about €50 billion to zero. As that happens, we’d expect bond yields to go up a bit. Real estate and regulated utilities are really just bond proxies—they have had a lot of money flow into them because of the yield, and we’re very wary, because we don’t see a lot of fundamental growth in those companies.

TK: Europe seems to be lacking in the types of large tech companies that have driven much of the US market gains. Will this value vs. growth setup impact Europe’s overall return potential?

SW: Google, Amazon, Facebook are dominant platforms in Europe, and there’s no equivalent technology company that is domiciled in Europe. There are a number of good technology companies, but you’re right. There isn’t as high a representation as in the US.

When Europe performs well, I think it will be when sectors like the banking sector do well. We also quite like the telecom sector, which has been through a decade of price deflation and is showing clear signs of emerging from that.

Europe may be seen as a bit more value, but actually we would characterize it as being at an inflection point in growth—or at least maybe slightly more cyclical growth. There are some very good European companies in sectors like banks, telecoms and materials, and I think we could see a good few years for them.

TK: What are some scenarios that might impede Europe’s growth prospects?

SW: I should definitely call out the political roadmap on that front. The Catalan referendum and secession saga that is ongoing is to some extent important to sentiment, but put in perspective, Catalonia is about 20% of Spanish GDP, making it around 1.0% to 1.5% of European GDP. So a big slowdown in Catalonia—which is likely to happen because businesses are moving away from Catalonia towards the rest of Spain—isn’t enough to derail the very strong economic momentum across the Euro Zone.

During the next 12 months, there could be national elections in Spain as one of the consequences of what’s going on there.

We’re likely to have elections in Italy, where the populist movement is still doing quite well in the polls and it’s not clear that a strong government will emerge, but with France and Germany having had very important general elections this year, the core of Europe has moved beyond short-term political risk. I think Angela Merkel and Emmanuel Macron will work quite well together.

I’d say we need to watch Italy, but keep in mind that these issues are no different than many of the same issues that came up in last year’s US presidential election. There is a significant section of the population who are unhappy with the inequality that they see and that is manifesting itself in more populist parties, but even in Spain and Italy, the populist parties are not necessarily anti-EU. I wouldn’t see that as existential risk to whether either of those countries remain in the EU.

TK: How might a downturn or recession in the US impact Europe’s fortunes?

SW: I wish I knew the answer. I definitely feel confident in saying that if the US market goes down because of central bank tightening, then Europe should be a much better place to be, because there is a lot more slack in the European economy. When global growth is as good as it is now, and the US has to start raising rates because of inflationary pressures, those pressures will be more muted in Europe because we still have 9% unemployment keeping a lid on it.

The need for tightening in Europe is going to be a lot less—but if it’s a downturn because of a recession or a big slowdown in economic growth, then Europe will be affected by that, too. Exports are an important part of the European economy and there would definitely be a knockdown impact, so I don’t think Europe will be immune.

Simon Webber 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**
- 6% MLPs
- 14% Ultrashort Fixed Income
- 20% US Fixed Income, Taxable
- 3% Absolute Return Assets
- 2% Inflation-Protected Securities
- 18% US Equities
- 6% International Equities
- 4% Emerging & Frontier Markets

**Income**
- 4% Absolute Return Assets
- 7% MLPs
- 5% High Yield Fixed Income
- 2% Inflation-Protected Securities
- 24% US Equities
- 16% US Fixed Income, Taxable
- 3% Short-Term Fixed Income
- 15% Emerging & Frontier Markets
- 6% Emerging & Frontier Markets

**Balanced Growth**
- 7% MLPs
- 4% Absolute Return Assets
- 4% Equity Hedge Assets
- 4% Ultrashort Fixed Income
- 4% Equity Hedge Assets
- US Equities 32%
- 9% US Fixed Income, Taxable
- 3% Short-Term Fixed Income
- 2% Inflation-Protected Securities
- 12% International Equities
- 7% Emerging & Frontier Markets

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

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

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

Source: Morgan Stanley Wealth Management GIC as of Oct. 31, 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.

### Capital Preservation
- **6%** opportunistic assets
- **14%** ultrashort fixed income
- **19%** US fixed income taxable
- **19%** short-term fixed income
- **8%** international equities
- **5%** MLPs
- **2%** inflation-protected securities

### Income
- **8%** opportunistic assets
- **16%** US fixed income taxable
- **32%** short-term fixed income
- **5%** emerging & frontier markets
- **6%** MLPs
- **5%** high yield fixed income
- **2%** inflation-protected securities

### Balanced Growth
- **16%** international equities
- **9%** US fixed income taxable
- **9%** short-term fixed income
- **4%** equity hedge assets
- **2%** absolute return assets
- **6%** MLPs
- **4%** high yield fixed income
- **2%** inflation-protected securities

### Market Growth
- **21%** international equities
- **10%** US equities
- **2%** absolute return assets
- **4%** equity hedge assets
- **1%** US fixed income taxable
- **2%** inflation-protected securities
- **3%** high yield fixed income
- **2%** short-term fixed income

### Opportunistic Growth
- **11%** opportunistic assets
- **5%** MLPs
- **4%** equity hedge assets
- **4%** equity return assets
- **9%** emerging & frontier markets
- **27%** international equities
- **42%** US equities

### Key
- Ultrashort fixed income
- Fixed income & preferreds
- Equities
- Alternatives

Source: Morgan Stanley Wealth Management GIC as of Oct. 31, 2017
## Tactical Asset Allocation Reasoning

<table>
<thead>
<tr>
<th>Global Equities</th>
<th>Relative Weight Within Equities</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td><strong>Overweight</strong></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 progrowth 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><strong>International Equities (Developed Markets)</strong></td>
<td><strong>Overweight</strong></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><strong>Emerging Markets</strong></td>
<td><strong>Overweight</strong></td>
<td>Emerging market (EM) equities have been the best 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Fixed Income</th>
<th>Relative Weight Within Fixed Income</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US Investment Grade</strong></td>
<td><strong>Underweight</strong></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 reverse and begin surprising to the upside as the European Central Bank tapers its bond purchases. Within investment grade, we prefer BBB-rated corporates and A-rated municipals to US Treasuries.</td>
</tr>
<tr>
<td><strong>International Investment Grade</strong></td>
<td><strong>Underweight</strong></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><strong>Inflation-Protected Securities</strong></td>
<td><strong>Overweight</strong></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><strong>High Yield</strong></td>
<td><strong>Equal weight</strong></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>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative Investments</th>
<th>Relative Weight Within Alternative Investments</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REITs</strong></td>
<td><strong>Underweight</strong></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><strong>Master Limited Partnerships/Energy Infrastructure</strong>*</td>
<td><strong>Overweight</strong></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><strong>Hedged Strategies (Hedge Funds and Managed Futures)</strong></td>
<td><strong>Equal Weight</strong></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>
</tbody>
</table>

*For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 16 of this report.*

Source: Morgan Stanley Wealth Management GIC as of Oct. 31, 2017
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.
Treasury Inflation Protection Securities’ (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

The majority of $25 and $1000 par preferred securities are “callable” meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per $25 or $1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

The initial interest rate on a floating-rate security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security’s underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of convertible bonds and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Some $25 or $1000 par preferred securities are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional ‘dividend paying’ perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Principal is returned on a monthly basis over the life of a mortgage-backed security. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO’s average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO’s average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO’s market price to fall. Some MBS/CMOs may have “original issue discount” (OID). OID occurs if the MBS/CMO’s original issue price is below its stated redemption price at maturity, and results in “imputed interest” that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, 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.

Investing in foreign and emerging markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. These risks are magnified in frontier markets.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Besides the general risk of holding securities that may decline in value, closed-end funds may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

Companies paying dividends can reduce or cut payouts at any time.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

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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