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On the Markets

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TABLE OF CONTENTS

2	**Reregulation Is the New Deregulation** Deregulation is a key Republican goal, but reregulation is faster and easier.
5	**Our New Currency Hedging Strategy** Currency swings can impact investment returns. A hedging plan may be helpful.
6	**Drivers of Market Volatility** We can't predict volatility levels, but we may be able to identify volatility regimes.
8	**MLPs Sag, but Industry Fundamentals Remain Strong** For master limited partnerships, balance sheets and distribution coverage are healthy, and cash flow is set to grow.
9	**Ratings Matters More in an Aging Credit Cycle** Keep an eye on bonds that hover between investment grade and high yield.
10	**CEOs Act on a New Set of Ideals** Business leaders have taken on the role of social and moral arbiters.
11	**Short Takes** We look at midterm elections and presidential approval ratings, growing risk in leveraged loans and homebuilder sentiment.
12	**Q&A: Emerging Markets Equities Have Surged, but Are Relatively Cheap** Lazard's James Donald explains why he is still bullish on the emerging markets.

Growing Pains

This past week, I said goodbye to my oldest son as he left for college. For those of you that have experienced this event, you know it comes with mixed emotions—pride, excitement, nervousness and, of course, sadness. The day before he left, I sat down and wrote him a letter telling him how proud I was of his accomplishments and the young man he has become. I was desperately trying to share whatever last words of advice I could before he started this next stage of his life. In the end, the letter was a positive message because it focused on the vast opportunities he has at 18—something very few of us appreciates at that age.

As I thought more about it, I couldn't help but make the analogy to our great country. Given the economic size and military might, it's easy to forget that the US is less than 250 years old—a relative babe in the woods when compared to the much older Asian and European civilizations that have been around for thousands of years. I also couldn't help but think we are undergoing some massive growing pains at the moment, too.

During the past 25 years, our future has been challenged on many fronts—terrorism, excessive debt, demographics, a decade of excessively high oil prices, global competition, income inequality and political partisanship that keeps us trapped in a loop of bad policy choices. These challenges resulted in a period of subpar growth—secular stagnation—and two financial crises that have left most people unable to see the vast opportunities that still lie before us.

A year ago, we wrote about the end of secular stagnation as bond yields were plummeting to all-time lows and investors shunned anything perceived to be risky. Our view at the time was that asset markets were too pessimistic about the future. Fast forward one year and asset markets are no longer pricing in such a dire outcome. We think the markets understand that the US will likely get past these growing pains by focusing its energy on the upside potential of things like autonomous electric vehicles/transportation as a service, genomics, horizontal drilling, cloud computing, solar/wind power, drones, online education, 3-D printing, robotics and artificial intelligence—just to name a few! Until these exciting stories are viewed by the mainstream as opportunities rather than threats, this cyclical bull market is unlikely to be over. ■

Reregulation Is the New Deregulation

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With key legislation currently stalled, it is time to examine the deregulation, or "reregulation," effort. Given constraints, we expect little near-term macro stimulus. At a sector level, reregulation offers benefits to financials and directional catalysts for pharma, telecom, tobacco, utilities and oil refining.

Congress faces a crowded calendar, calling into question the timing of and capacity for legislative execution on other policies that impact the market and economy, such as tax reform and infrastructure spending. As such, we think it wise to examine the possible effects of actions within presidential authority.

Though we concede the president's clear intent to deregulate has helped business sentiment, we focus on potential actions, given our view that those taken to date are already well reflected in risk markets (see chart).

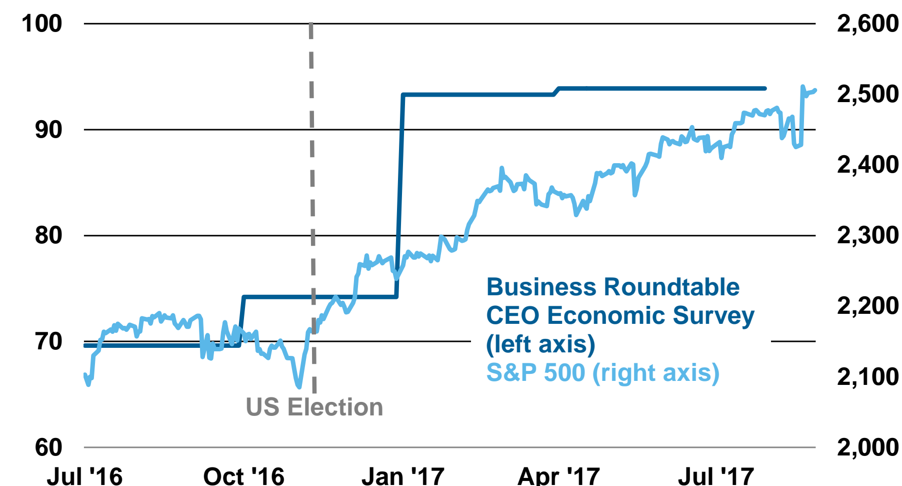
Herein, we identify five important takeaways for investors based on our view of the administration's much-publicized efforts at remaking regulations:

Deregulation Is a Key Republican Goal

Republicans have long stated that they want to cut "harmful" regulation in order to unleash economic growth. The Trump administration considers deregulation a goal unto itself; three mentions of regulatory changes were in then-candidate Trump's "100-day action plan to Make America Great Again," and in a meeting with CEOs shortly after his inauguration, President Trump stated, "We think we can cut regulations by 75%—maybe more—but by 75%."

The Office of Information and Regulatory Affairs, an executive-branch office tasked with reviewing economically significant rules and guiding regulatory policy for the administration, recently issued its Unified Agenda, a biannual report on the regulations agencies plan in the near and long term. Under Trump, agencies have withdrawn 469 actions proposed in the fall-2016 agenda under the Obama administration and reclassified 391 actions as long term or inactive. It is unclear from the data how many of the rules were considered economically significant (meaning an impact on the economy of $100 million or more), but the data did indicate that there were only 58 economically significant regulations proposed—50% fewer than last fall.

CEO Sentiment and Stocks Both Rallied Post-Election



Source: Morgan Stanley Research, Business Roundtable, Bloomberg as of Aug. 3, 2017

Reregulation Is More Likely Than Deregulation

Deregulation may be the goal, but what is likely politically and legally achievable is reregulation, or a reinterpretation of existing regulation governed by existing laws. This distinction is important. We see deregulation as a clearly definable reduction in the regulatory burden for an industry and/or the economy as a whole, with a foreseeable starting point. Reregulation has the potential for reducing regulatory burden, but in a lesser manner and at a difficult-to-define time.

To explain further, we define deregulation as the wholesale undoing of policies created by legislation, which necessitates congressional approval. Those rules are a function of the rulemaking process of executive-branch agencies after the passage of new legislation. The judiciary branch also plays a role in forcing rule creation, since failure to make rules that effectively enforce the laws passed by Congress opens the government to lawsuits.

Hence, true deregulation requires laws to be repealed or rewritten. We don't see much scope for this to happen because Republicans do not hold a 60-seat, filibuster-proof majority in the Senate and would need Democratic votes to pass legislation. Republicans can use the reconciliation process to pass legislation affecting spending or revenue with 51 votes, but are expected to use reconciliation for tax reform, not anything else. This limits what can be accomplished through legislation.

Accordingly, the opportunity to change regulations lies primarily in executive-branch action. Specifically, the president can instruct his agencies, through executive orders and informal requests, to review and revise rules through the rulemaking process. Agencies can also undertake this action on their own. In some areas, appointment of key personnel who may be more lenient on enforcement could constitute an effective loosening of the regulatory burden. In either case, we view these actions as reregulation more than deregulation. Under the right conditions, reregulation can dilute or blunt the impact of a current regulation by changing regulatory rules or enforcement activities—but success in this regard is typically achieved only over time and must navigate legal restrictions.

Reregulation Is Burdensome, Time-Consuming and Subject to Legal Challenges

To amend or repeal an existing rule, agencies must provide “a reasoned analysis for the change” and go through the same rulemaking process that originally created the rule. Policy statements and other agency guidance that did not go through the rulemaking process and do not have the force and effect of law can be changed more quickly. For example, the Comptroller of the Currency, the Federal Reserve and the Federal Deposit Insurance Corp. are responsible for issuing leveraged lending guidance, which could be changed without going through the rulemaking process, but would still require interagency coordination. However, much of the regulatory changes that would dependably impact investors do not fall under this category.

The rulemaking process requires much effort and diligence to ensure compliance with existing statutes. Not surprisingly, then, the process is time-consuming. Because rulemaking varies by agency and by the complexity of the rule being proposed, the time it takes to complete the process can vary. In 2009, the Government Accountability Office (GAO) published a report that reviewed 139 major rules and conducted 16 case studies on rulemaking. While admitting that the information available was limited, it concluded that the average time needed across the 16 case studies was about four years, with a range from about one year to nearly 14 years and considerable variation among agencies and rules. GAO found that, in its case studies, the length of time between publication of the proposed rule and final rule in the *Federal Register* ranged from approximately six months to five years.

Although the administration has made it clear that regulatory reform is a priority, it is unknown whether agencies will be able to act on an accelerated timeline. Because the rulemaking process is a bureaucratic one, President Trump can influence regulatory reform by naming political appointees to fill the relevant positions in each agency. Currently, the administration is behind in naming appointments to critical positions that require Senate confirmation.

Judicial review can further slow and/or derail the process. The most common review that courts apply is the “arbitrary and capricious” standard. Although agencies are not held to a heightened standard when repealing or changing a rule, the agency must “display awareness” that it is changing its position and provide a “reasoned analysis for the change.” The rule can also be challenged for not following the proper procedure required by law. For these reasons, it behooves the agency to properly follow procedures so as not to have their rule challenged in court.

Reregulation Benefits Are More Micro Than Macro

Focusing first on the macro, we note that there’s no consensus on the near-term impact of regulation, calling into question the reliability of macro stimulus from reregulation. While we don't argue against the notion that deregulation should increase long-term economic potential, there appears to be far less evidence to suggest its actions boost near-term growth. Rather, the impact of regulation on the economy is inconclusive and difficult to measure. In a January 2016 report about measuring the cost of federal regulation, the Congressional Research Service stated, “Estimating the total cost of regulations is inherently difficult. Current estimates of the cost of regulation should be viewed with a great deal of caution.” Not all agencies are required to estimate costs and benefits for all regulations, and the cost and benefits of regulations can be difficult to monetize. Again, agencies are only required to conduct cost-benefit analyses on rules deemed “economically significant.” Academic studies on the accuracy of cost-benefit analyses of rules have found that the agencies frequently overestimated both costs and benefits of regulations.

Even if financial reregulation frees up bank capital, it isn't a sufficient condition for a near-term economic boost. An increase in bank capital correlates with an increased capacity for risk-taking that could spur economic activity. However, this doesn't necessarily mean that capacity will be utilized in a near-term stimulative fashion. For example, capital could be deployed to create credit and deposits, but it can also be used for stock buybacks and dividends. Indeed, banks and nonfinancial firms have options for capital deployment, and they will likely use them in whichever manner boosts their return most favorably, which may not include economically stimulative activity.

What We're Watching for in Reregulation and the Potential Sectoral Impact

Sector	What We're Watching For	Impact
Pharma	Executive order announcing initiatives to control drug prices	Negative
	FDA actions to identify rules that could be changed to spur drug competition	Neutral
Telecom Services	Makan Delrahim confirmation as Dept. of Justice's antitrust chief; antitrust deal decisions in other sectors	Positive
	Federal Communications Commission progress on net neutrality rules	Positive
Power & Utilities	Federal Energy Regulatory Commission confirmations, currently no quorum	Positive
	Dept. of Energy report on federal support for coal and nuclear	Neutral
	International Trade Commission findings on petition for relief on importation of solar panels	Neutral
Banking	Confirmations to key positions	Positive
	Release of five remaining Treasury Dept. reports on regulation	Positive
	Proposed rules released by agencies	Positive
Refining	Finalized renewable volume obligations expected in November	Neutral
	Environmental Protection Agency indicated that it will move point of obligation for renewable fuel standards	Positive
Tobacco	Proposed rule on regulating nicotine and flavors	Negative

Source: Morgan Stanley Research as of Aug. 3, 2017

Reregulation Is Already a Catalyst for Financials

Although reregulation is lacking macro "investability"—little credible and timely macroeconomic benefits—reregulation events in key sectors are investable. We believe reregulation could be a catalyst for pharma, telecom, tobacco, utilities, oil refining and financials (see table). We believe that the strongest link is in financials, where we think reregulation should already be treated as a positive catalyst, though subsequent actions may further help.

For example, the recommendations from the Treasury's recent report on bank regulations do not need congressional action, and we expect that new agency heads nominated by the Trump administration will look to implement several suggestions from the Treasury report based on their speeches and published articles or op-eds. While the changes being proposed by the recent Treasury report would still have to go through the rulemaking process, our bank analysts estimate that such maneuvers could drive earnings per share for the sector 16% higher. This makes sense when you consider the capacity for reregulation to change existing bank practices.

Existing regulations are based on a recent law with a broad purview but lack precise descriptions on implementation of the Dodd-Frank Act. The act was passed in response to a financial crisis and had aggressive goals to deal with the relatively unprecedented challenges of the modern banking system. Now, some years removed and with experience gained in implementing new financial regulatory rules, the Treasury's report suggests willingness and scope to reform the methods of Dodd-Frank's implementation with meaningful results. Hence, we think reregulation in financials is already credible. ■

A Systematic Approach to Currency Hedging

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The US dollar has been on a roller-coaster for more than a year. After the Brexit vote and the US election, investors became exuberant on dollar-denominated assets, pushing the US Dollar Index (DXY) to its highest point since 2003. Economic data and policy disappointments this year have led to a reversal.

The dollar plays a vital role in asset allocation and portfolio construction. In order to reduce volatility and mitigate return drag due to currency depreciation, investors often choose to hedge some or all of their foreign-currency exposure. To help with such decisions, we are introducing a systematic currency framework.

FOCUS ON G7 CURRENCIES. Our system develops views on G7 currencies—the US dollar, British pound, euro, Japanese yen, Swiss franc, Canadian dollar and Swedish krona—which cover the majority of the developed world's economic output and trade, and together, their exchange rates against the US dollar constitute the DXY. The euro alone accounts for 58% of the index.

What drives currencies? We look at the five broad categories: the currency's valuation; the economic strength of the country; momentum of the currency and the associated equity market; investor sentiment and positioning around the currency; and how much the currency and its local government bonds yield (see table). Each driver has an economic rationale and a relationship to currency performance. We built the framework by measuring the underlying factors in each of the five categories, and gave these factors different weights to mitigate excessive turnover and to adjust for the variation in the factors' signal frequency.

TESTING THE HEDGE. To test the framework, we created an unhedged basket, a 100% hedged basket and a dynamically hedged basket guided by our framework. Cumulatively since 1999, our dynamically hedged basket doubled in value while the others added little value. This framework appears to be most effective when implemented with a higher frequency. Thus, we set the framework to a one-to-six-month outlook horizon and approximately 200% annual turnover.

Currently, the framework suggests hedging Japanese yen and Swiss franc exposure, as depreciation versus the US dollar appears likely. Consistent with our methodology, the Global Investment Committee is recommending not to hedge euro equity exposure and to half-hedge Japanese equity exposure. Given its status as a safe-haven currency, the yen has rallied against the US dollar since early July amid growing geopolitical turmoil and recent economic disappointments. We believe this trend is poised to reverse, as suggested by slowing currency momentum and fading bullish positioning data.

DOLLAR STRENGTH INDICATOR. In addition to guiding currency hedging, the framework also provides insight into the short-term direction of the overall US dollar. This Dollar Strength Indicator (DSI) combines the individual signals from the framework according to each currency's DXY weight. Given the importance of the US dollar to global financial conditions, commodity prices, and economic and earnings growth, the DSI can help confirm growing or receding risks to dollar-sensitive markets. Currently, the indicator suggests that dollar weakness may continue. For more details on this systematic framework, please see the August issue of *Topics in Portfolio Construction.* ■

Factor Inputs and Rationale for Our Currency Hedging Framework

Categories	Factors	Criteria to Currency Hedge
Value	REER	Real effective exchange rate of foreign currency higher than the US dollar
	PPP	Purchasing power parity of foreign currency higher than the US dollar
Economics	Core CPI	Inflation in foreign country falling faster than US inflation
	Industrial Production	Foreign industrial production falling faster than US production
Momentum	Currency Momentum	Foreign currency momentum slowing against US dollar
	Equity Momentum	Foreign equity market underperforming the US equity market
Sentiment	CFTC Net Positioning	Foreign currency futures net positioning trending down
	Volatility	Foreign currency volatility trending up
	Crude Price	Large monthly decline in oil price (Canadian dollar only)
Carry	Nominal Yield	Foreign government bond yields falling faster than US Treasury yields
	Forward Implied Yield	Foreign currency implied yields falling faster than US dollar implied yields

Source: Morgan Stanley Wealth Management GIC, Bloomberg, Haver Analytics as of July 31, 2017

Fundamental Drivers of Market Volatility

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"How's the weather? What are the markets doing today?" These two questions certainly take up a fair amount of our daily attention. Much like the weather, market volatility provides healthy fodder for conversation. As with stormy conditions, heightened volatility, as seen in sharp, rapid swings in stock prices, grabs our attention and can trigger anxiety.

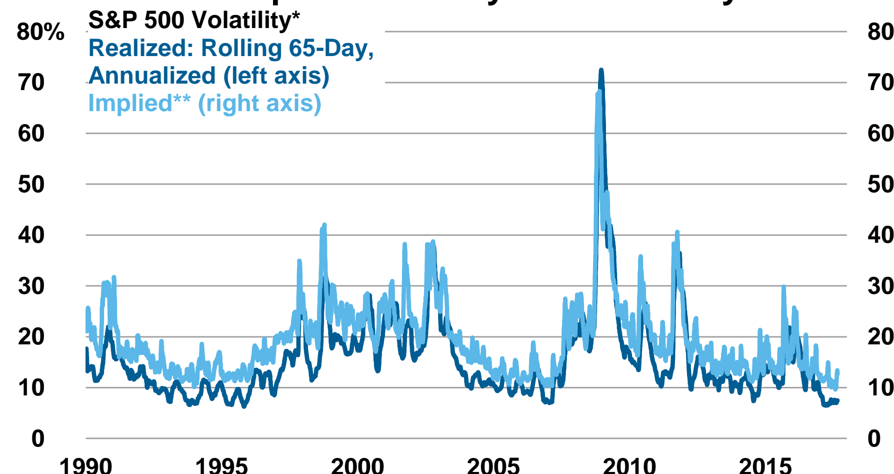
This hasn't been much of an issue for most of this year. Global markets have generally enjoyed sunny, tranquil conditions—so much so that many market commentators fret that this calm suggests investors have become complacent and a more unsettled period will inevitably follow. Other observers have noted volatility has remained muted for extended periods before, such as during the 1960s.

While we have no control over either the weather or market volatility, we seek to understand the causes and effects so that we may respond appropriately. We would like to provide some context for understanding volatility, how we measure it and what it means for investors. In addition, while we do not try to predict volatility levels, we believe diagnosing the volatility regime yields important insights for asset allocation. We therefore consider what fundamental factors influence volatility, what signals they provide on today's environment and what may trigger shifts in the volatility regime.

Realized and Implied Volatility

Investors use volatility to assess the perceived risk in financial markets. We measure it through calculating the standard deviation of either macroeconomic or market variables, such as returns, typically annualizing the value for consistency. Standard deviation gauges dispersion of a set of data from its mean; the more spread apart the data, the greater the deviation.

Realized and Implied Volatility Track Closely



*Smoothed 10 days **VIX
Source: Bloomberg as of Aug. 25, 2017

Realized volatility captures recent movements in these data series. Higher levels of market volatility, marked by more variability in returns, reflect investor uncertainty in future outcomes. Historically, rising volatility for risky assets has corresponded with declining prices, while lower volatility has often been associated with bullish environments for risky assets. That has certainly been the case recently.

Meanwhile, implied volatility captures investors' expectations for forthcoming realized volatility. The options market offers a ready window to these expectations, as each options contract includes an implied volatility derived from its price. The Chicago Board Options Exchange Market Volatility Index, better known as the VIX, is a measure of one-month forward expectations based on S&P 500 index options. The Merrill Lynch Option Volatility Estimate Index, also known as the MOVE Index, plays a similar role for the bond market, using options on US Treasury bonds.

Options work like insurance products by attempting to protect the buyer against some future outcome, such as a stock market decline. For homes close to the shore, the greater risk of water damage makes flood insurance more costly than those on higher ground. As with insurance, options prices increase with a higher likelihood of a given outcome.

Insurance contracts should appropriately price the likelihood of future outcomes, not merely what has happened to date. Similarly, options prices should provide a real-time look into investors' expectations. Yet, all expectations bear uncertainty, and investors need to have some starting point for pricing the future.

Investors appear to rely heavily on the recent past when forming expectations for future volatility. For example, three-month realized volatility for the S&P 500 Index correlates strongly to the VIX, which seeks to price expected future outcomes (see chart). Typically, the VIX's indicative

implied volatility exceeds realized volatility, pointing to the insurance premiums embedded in the underlying options.

Index volatility depends on the volatility of each component and the correlations between them. During flight-to-quality events, such as the 2008 failure of Lehman Brothers or the 2011 downgrade of US debt, cross-correlations for S&P 500 Index constituents tend to rise, along with constituents' individual volatilities. These two effects compound together to propel spikes in both realized and implied volatility.

Why Volatility Matters

Based on calculations alone, we might consider volatility merely as a by-product of market realities and not itself an influence on investors' decisions. Yet, both theory and practice suggest otherwise. While higher volatility may trigger emotional responses like anxiety, research has found that volatility directly influences investors' actions, too. Volatility is a "cost" to investors, as it may hinder them from achieving their objectives—or at least call them into question.

Rational investors seek to maximize their returns per unit of risk, or risk-adjusted returns. To accept higher volatility, investors will demand higher levels of return. This concept forms the basis of the Capital Asset Pricing Model, which prescribes that optimal portfolios include a mix of investments selected to achieve maximum returns per unit of risk. The series of portfolios that meet these criteria make up the "efficient frontier."

On a shorter-term basis, investors often react sharply to changes in volatility. During flight-to-quality events, investors tend to rotate to safe-haven assets and away from risk assets. Some investment strategies employ a "risk-parity" approach or "volatility targeting," which may drive managers to reduce risk levels during times of heightened volatility.

Active managers may shift their exposures in order to navigate different environments. In higher-volatility regimes, like bear markets, active equity managers have typically been able to outperform while lower-volatility regimes, like bull markets, present challenges (see *The Case for Active Management,* Jan. 10, 2017). Higher-volatility regimes often feature greater dispersion between individual stocks' performance, to the detriment of lower-quality stocks, which active managers tend to underweight.

What Drives Volatility

Given that volatility influences investors' shorter- and longer-term decisions, we have taken steps to understand what drives volatility. Due to the changeability of volatility itself, we seek not to pinpoint future volatility levels, but rather to find factors that help to define "high" and "low" volatility regimes. Efficient portfolios for lower-volatility regimes may have greater weights to risky assets, while higher-volatility regimes suggest underweights for risky assets.

Volatility tends to rise during periods of greater uncertainty. Consequently, we focused on identifying some signposts for that uncertainty. Macroeconomic trends, earnings growth and shifts in monetary policy affect changes in equity prices, bond yields and credit spreads. That observation triggered a question: How might the volatility in these variables relate to market volatility?

We first considered the volatility of macroeconomic data. We believe that financial market variables reflect macroeconomic reality over the intermediate term; as an example, US economic growth and aggregate corporate revenues should move together. We surmised that greater volatility in economic data itself would drive greater uncertainty about future outcomes, whereas steady economic activity would reduce uncertainty. We found that the volatility of macroeconomic data did corresponded to volatility for equities and interest rates, but the relationships appeared only modestly strong.

We then drilled down to the derivative effects of changing macroeconomic variables. Financial markets move on changing macroeconomic data, due to its impact on corporate profits and monetary policy. We therefore looked at the volatility of these measures, reasoning that their variability should correspond with times of increased uncertainty and greater market volatility. Indeed, the volatility of one-year forward earnings and the VIX show a consistently positive relationship. Similarly, in fixed income, the volatility of G7 monetary policy expectations closely tracks with the MOVE Index.

Volatility both in earnings expectations and monetary policy has remained low in the era of Quantitative Easing (QE), as global central banks have purchased large amounts of assets to hold down long-term interest rates. Policymakers have also issued forward guidance, giving strong signals on their likely course of action. Both elements have reduced investor uncertainty, and economic data have become less volatile, too, as best reflected in tight ranges for real GDP growth.

In our view, central banks will continue to exert tremendous influence over the volatility regime. Central banks have begun their gradual exit from QE in order to guide interest rates slowly enough not to derail the recovery. A too-abrupt change may take the market by surprise and trigger higher volatility. Monetary policymakers face two-sided risk: Tightening too slowly or too little may allow inflation to run out of control, while tightening too quickly or too much may push the global economy back toward deflation and stalling growth.

So, for now, the volatility regime could be described as fair weather. While you can probably leave your umbrella at home today and tomorrow, we are watching key climate metrics to check on stormy conditions in the longer-range outlook. ■

MLPs Sag, Fundamentals Remain Strong

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In last month's *On the Markets,* we refreshed our thesis on master limited partnerships (MLPs), suggesting fundamentals were improving even though performance had disappointed of late. With commodity prices stabilizing, oil and gas production rising and interest rates low, MLPs seemed to be better than markets recognized, and the perfect storm of MLP headwinds of recent years appeared to have cleared. Yet, one month later, the selling has accelerated and MLPs have now corrected 20% since the February high. So the question remains: Is this weakness in MLPs a dip to be bought or a harbinger of bad things?

IDIOSYNCRATIC ISSUES. We firmly believe this is the former, and advocate holding exposure to midstream MLPs. We do not believe they are about to see a 2015-2016 or 2008-style downturn, and believe the thesis we laid out last month is still relevant. Company-specific developments put pressure on MLPs last month, but the issues were idiosyncratic. Cash flows across the industry appear set to grow, driven by robust volume growth. Balance sheets and distribution coverage are healthy as leverage has been much reduced and coverage has significantly improved. In our view, distribution cuts or equity recapitalizations at individual MLPs are likely to be the exceptions, not the rule.

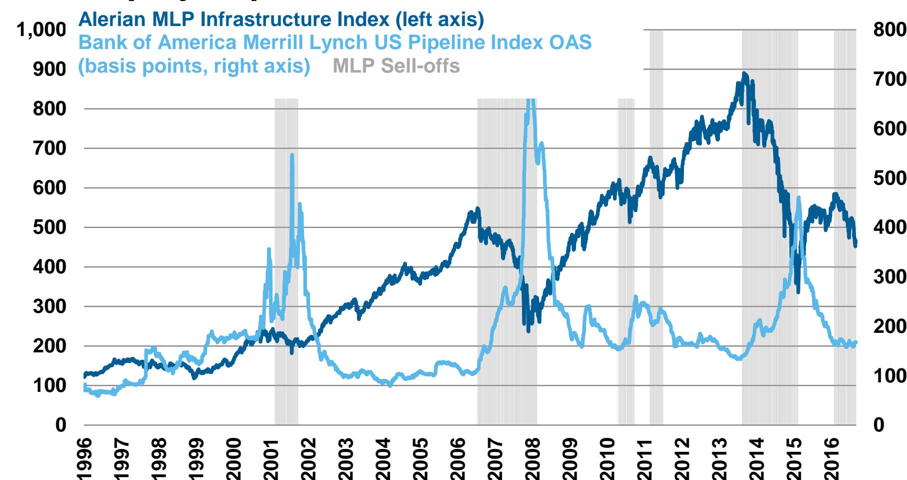
The improving backdrop has not been lost on markets; it just depends where you look. While midstream MLPs have come under pressure in recent months, their debt has traded very well, with pipeline credit spreads near their historically tightest levels (see chart). In fact, this latest sell-off is the first time in 20 years that MLPs, as measured by the Alerian MLP Infrastructure Index, have corrected 20% without an associated widening in pipeline credit spreads. The resilience of midstream credit suggests to us that underlying cash-flow generation remains solid.

THE MARKET'S MESSAGE. So, what is the divergence between midstream credit and equity telling us? Much of the restructuring/strategic action undertaken by midstream companies through the 2015-2016 downturn was credit-friendly at the expense of equity holders, and thus some credit outperformance is warranted. The market may also be questioning growth prospects and/or assigning higher risk to the equity. While we can debate whether, structurally, MLP equity should trade at lower valuations due to industry dynamics, we believe further downside is limited as long as credit holds up.

As for valuation, MLPs are attractive on a host of cash-flow and yield-based metrics. In fact, one comparative indicator we have used generated a notable buy signal in August—the valuation comparison with utilities. Utilities are generally seen as a peer-set for MLPs, given similar industry dynamics. Historically, MLPs have nearly always traded at a premium to large-cap utilities based on the enterprise value (EV) to earnings before interest, taxes, depreciation and amortization (EBITDA). Why do MLPs trade at a premium? Industry bulls would point to a better growth outlook, and even in energy bear markets, MLPs should trade at a premium to utilities given that they are not subject to corporate taxes.

SHORT-LIVED DISCOUNT. To this end, utility multiples have historically provided support for MLP valuations. However, at the depths of the August sell-off, the EV/EBITDA multiple on the Alerian MLP Infrastructure Index dipped below that of the S&P 500 Utilities sector. Historically, such a discount has never lasted longer than a few weeks, and only occurred previously in two months, November 2008 and February 2016. If those months sound familiar, they should—both marked major historical bottoms for the sector. While too small a sample size to draw conclusions, we wouldn't be surprised if the current discounted valuation in MLPs were to coincide with a similar reversal of fortunes. As a result, we are sticking with our MLP exposure. ■

MLP Equity Slips, but Debt Continues to Trade Well



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management as of Aug. 28, 2017

In an Aging Credit Cycle, Ratings Matter Even More

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Building on the momentum of the past three years, credit markets have performed well in 2017. The Bloomberg Barclays US Corporate Investment Grade Index is up 5.2%, while the Bloomberg Barclays US Corporate High Yield Index has gained 5.8% (as of Aug. 29). While stable corporate fundamentals and favorable technical conditions remain, the corporate credit cycle is an aged one. That means paying more attention to credit ratings, which determine the credit-worthiness of an issuer and compare relative valuations.

JUDGING CREDITWORTHINESS. Credit ratings agencies assess most issuers of corporate and sovereign bonds for their ability to pay interest and repay principal on schedule. The agencies use quantitative tools and qualitative judgments to evaluate the creditworthiness of an issuer and assign a rating along a scale from AAA, the best, down to D, which is for a bond in default. Bonds considered to have low likelihood of default are "investment grade" and rated BBB or higher by Standard & Poor's and Fitch, and Baa or higher by Moody's. Those companies rated below BBB and Baa3 are considered "speculative grade" or "high yield." They have a higher risk of default.

Perhaps the most impactful ratings actions are those that put issuers in the "crossover zone," where a move up or down could mean the difference between investment grade and high yield financing. Crossover credits can be defined as "fallen angels" and "rising stars." A fallen angel is a bond that was given an investment grade rating but has since been reduced to high yield status due to the issuer's weakening finances. The main reason for downgrades is a decline in revenues, which jeopardizes an issuer's ability to service debt.

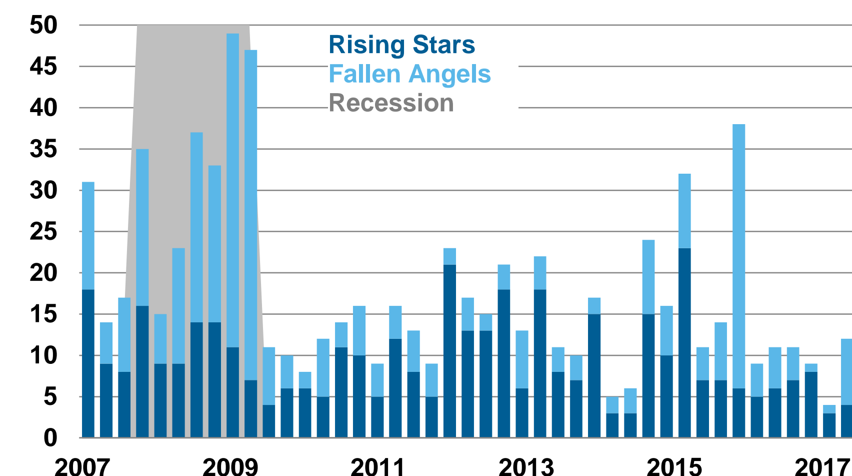
DOWNGRADE POTENTIAL. When declining revenues are combined with rising debt, the potential for a downgrade increases. A bond with a rating that has declined far enough to qualify as a fallen angel will often see further price declines as some investors, required by policy to hold only investment grade bonds, are forced to sell. This drop in value can have serious repercussions for a company and lead to further rate cuts and declines. Conversely, rising stars, or bonds that have been upgraded to investment grade from high yield, may exhibit dramatically improved prices due to new demand.

So far this year, 11 issuers have entered the crossover zone as fallen angels, which is on par with historical averages. As the chart shows, the number of fallen angels tends to rise and remain elevated when economic conditions deteriorate, as during the 2008-2009 financial crisis. However, in the current quarter, the count is the highest since the first quarter of 2016, the height of the commodity-induced minirecession. Moreover, the number of rising stars remains well below historical averages. In fact, 2017 is on pace for the lowest number of rising stars for the past 10 years. These trends are typical of late-cycle behavior, as companies tend to increase leverage in pursuit of growth.

RATINGS ARE OPINIONS. While credit ratings are helpful tools in making an investment decision, they are purely a guidance measurement on credit risk and reflect the opinions of the credit rating agencies. The agencies rely primarily on data provided by the companies themselves, which are seeking a rating. In addition, while the agencies attempt to identify important industry trends and general economic activity, they have tended to be lagging indicators when it comes to weighing balance-sheet health.

Overall, credit ratings are one of many indicators that can be used to assess the attractiveness of a bond and may be used in conjunction with indicators such as interest rate and inflation risk. The credit market is dynamic and credit ratings can and do change, so be selective. ■

So Far This Year, Fallen Angels Outrun Rising Stars



Source: Moody's as of Aug. 29, 2017

CEOs Act on a New Set of Ideals

LILY S. TRAGER
Director of Investing With Impact
Morgan Stanley Wealth Management

Emerging from the events of the past few weeks, which included terrorism in Spain and demonstrations by hate groups in Charlottesville, Va., is a new type of corporate actor—a social and moral arbiter to which investor reaction appears to be positive. This was observed through the letters written by CEOs following President Trump's response to the violence in Charlottesville. While making corporate public statements is not new, what makes these different is the magnitude and swiftness of the response, the unequivocal denunciation of hate and intolerance, and the pursuit of equality and diversity as companies' core values.

Business leaders also disbanded the American Manufacturing Council and the Strategic & Policy Forum, two CEO councils established by the current administration. Before the full council dissolutions, others had already resigned in protest; Elon Musk of Tesla and Space-X and Robert Iger of Walt Disney Co. left in June after the president announced his intention to withdraw the US from the 2015 Paris Climate Agreement.

INTERNAL AND EXTERNAL PRESSURE. While many members of the CEO councils had been facing pressure both internally from employees and externally from activists, there was a belief that participation would ultimately benefit both the company, as a place to discuss tax reform, infrastructure and regulation, and the country. Following Charlottesville, the council members seemed to conclude the reputational risk of participation outweighed any benefit. That CEOs distanced themselves from the president was a business decision.

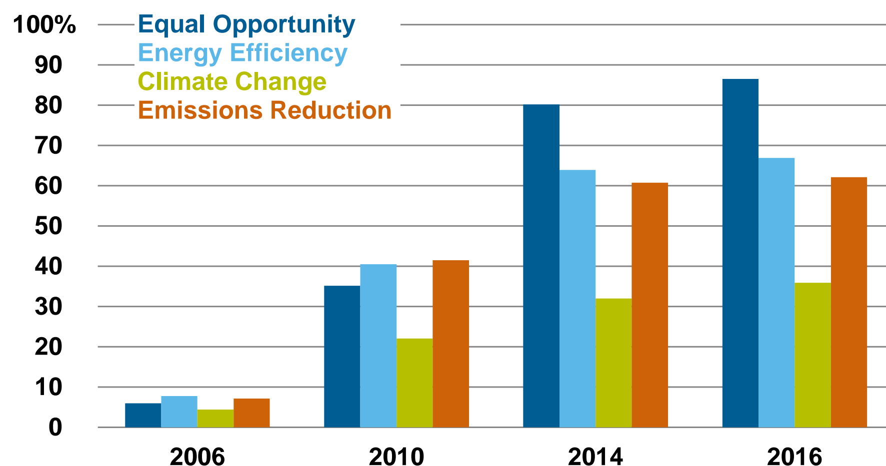
With regard to politics, CEOs have historically prioritized transparency, stability and the status quo. But for some years now, businesses have been codifying a new status quo around social and environmental issues. Diversity, equality and climate change are now largely mainstream, and many companies have adopted strategic plans, internal policies and procedures and support for corporate action on these issues of environmental, social and importantly, economic importance.

SOCIAL AND ENVIRONMENTAL POLICIES. In fiscal year 2016, 87% of the S&P 500 companies disclosed commitments to ensure nondiscrimination against any type of demographic group, most often in the form of an equal opportunity policy (see chart). That's up from 6% in 2006.

As for climate change, nearly 62% of companies indicated they implemented initiatives to reduce their environmental emissions in 2016, up from 7% 10 years earlier. Only 27% did not explicitly indicate an emissions reduction policy in 2016. Furthermore, these companies are outlining their intentions to help reduce global emissions of greenhouse gases. This is seen through efforts to derive energy from cleaner/alternative sources, energy efficiency improvements or investments in products that reduce generated emissions in the company's products and services. As of 2016, 36% of S&P 500 companies indicated having a policy addressing climate change, up from 4% 10 years earlier.

NEW IDEALS. This new public push from corporations show a further alignment of the business community around a new set of ideals, one that encourages and supports diversity of all kinds and sets forth an agenda to mitigate climate change through business activity. Business seemingly finds itself as an emerging check on government policy. Although there may not be immediately positive economic implications for corporations around these new ideals, the efforts are likely to help in attracting and retaining the most talented and educated employees and building a diverse customer base. ■

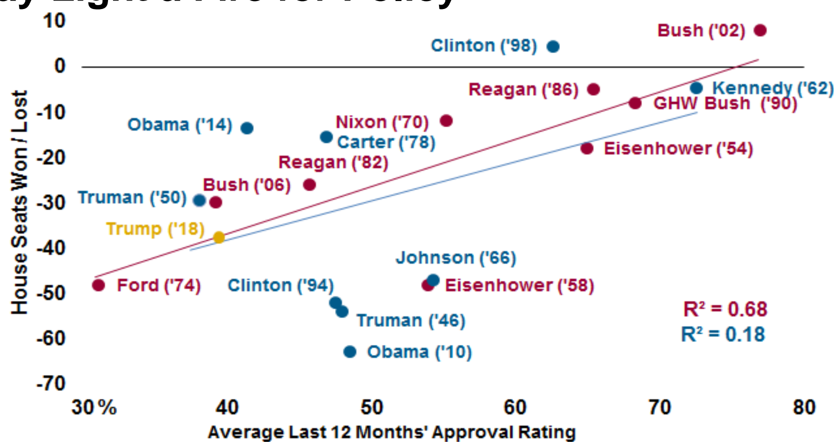
S&P 500 Member Companies' Proactive Commitments to Various Workforce Policies



Note: Filings are by a company's fiscal year.
Source: Bloomberg as of Aug. 25, 2017

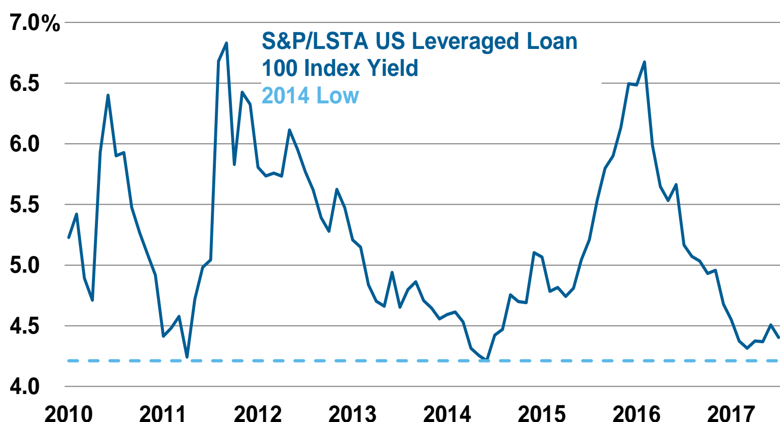
Declining Approval Ratings May Light a Fire for Policy

In midterm congressional elections, Republicans tend to lose more House seats under a Republican president than Democrats under a Democratic president (see chart, red signifies Republican presidents; blue, Democratic). If at election time, President Trump's trailing 12-months' approval rating is about 40%, as it is now, the GOP could lose at least 40 seats—and their majority. In our view, recent events provide a new catalyst for the Republicans to find fiscal solutions soon, especially because the president is at war with not only the Democrats, but some within his party. While the debt ceiling and 2018 budget resolution may yield anxiety-producing headlines, we think market volatility should be bought. With the market discounting little in the way of tax cuts or reform, anything happening on those fronts should be an upside surprise.—*Lisa Shalett*



Source: Morgan Stanley Wealth Management as of Aug. 29, 2017

Burgeoning Risks in the Leveraged Loan Market

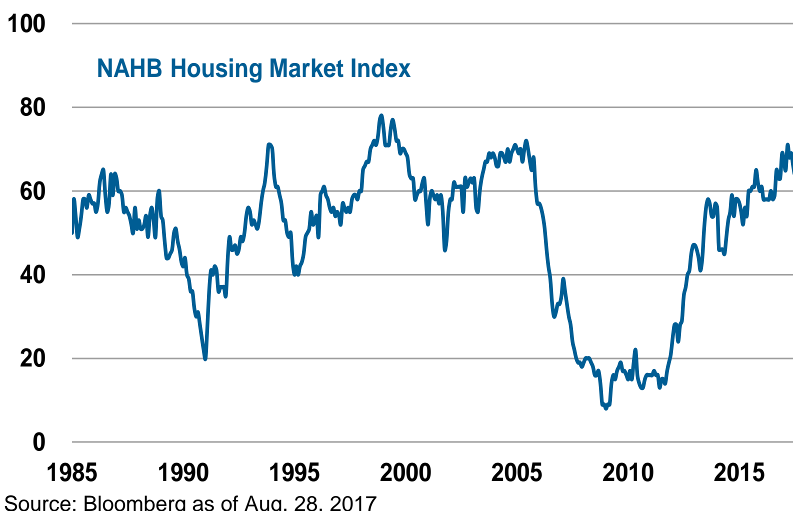


Source: Bloomberg as of July 31, 2017

So far this year, nearly $15 billion has flowed into funds that invest in floating-rate leveraged loans. As a result, valuations look stretched: Leveraged loan yields are near 2014 cycle lows (see chart) and nearly 70% of leveraged loans trade above par. Companies have taken advantage of this insatiable demand by issuing new "covenant-lite" loans, which lack covenants that have historically ensured certain credit conditions were met by the issuer. With these structures, issuers have the ability to reprice loans at lower fixed spreads to Libor, usually after six months. The richer the valuations, the more issuers take advantage of repricing at the expense of the loan holder. In fact, repricings have constituted more than 60% of this year's new-issue volume—a record high. Leveraged loans' floating-rate structure offers some protection against rising rates, but the covenant-lite feature presents risks that may outweigh that benefit.—*Lynn Bernabei*

Homebuilder Sentiment Remains Strong, Near Cycle Peaks

The NAHB Housing Market Sentiment Index, a measure of homebuilder confidence, rose in July to 68, near a cycle high (see chart). This survey reflects favorable fundamentals, including decent demand, limited supply of available properties and continued low interest rates. While sales volume sits approximately at half of 2005's peak, median sales prices have increased to approximately $320,000. Slower household formation by millennials, lenders' caution and more prudent activity from home-builders have contributed to these changed dynamics. Collectively, homebuilders find themselves with only two months' supply of completed homes, a 20-year low, as perceived labor shortages and more expensive land acquisition may have depressed builders' activity. We also find that this survey provides a helpful indicator for housing activity, often an early sign of slowing consumer demand. Robust confidence among homebuilders lends credence to a continuing recovery into 2018.–*Steve Edwards*



Source: Bloomberg as of Aug. 28, 2017

EM Equities Have Surged, But Are “Not Yet Hot”

Many see emerging market (EM) equities as on fire this year—with gains of 25% through July—besting all developed market regions. James Donald, head of Lazard Asset Management’s emerging markets group, would beg to differ. “Even though the emerging markets have outperformed and are seeing inflows, it's not yet hot, because for more than six years we saw net outflows.” As a group, he notes that, “There are signs that they are bottoming out and economic growth is starting to accelerate.” What’s more, Donald says that despite this year’s run-up, “EM equities still trade at discounted valuations compared to other parts of the world.” He recently shared his bullish views with Morgan Stanley Wealth Management’s Tara Kalwarski. The following is an edited version of their conversation.

TARA KALWARSKI (TK): Have the emerging markets turned a corner?

JAMES DONALD (JD): They're slowly showing signs of strengthening overall, but there is a range: Some are growing rapidly, like India and Indonesia, while others, like Brazil and Russia, are still bottoming out.

During the past six or seven years, they dramatically underperformed. The biggest negative effect was weak commodity prices. Emerging markets are also subject to more risk from deflationary pressures than the developed markets, so that had a negative impact, too.

From a valuation perspective, the MSCI Emerging Markets Index is trading at about 13 times earnings, which is in line with its 15-year average. I can't say that it's cheap against itself, but it’s cheap against developed markets. The emerging markets also have relatively impressive levels of profitability.

TK: What sectors are contributing to the overall outperformance?

JD: Commodity prices peaked in 2010 and fell consistently until the beginning of 2016. I think it’s hard for EM equities as a whole to do well when commodity prices are falling because investors think of them as a commodity play.

The interesting thing this year is that although the emerging markets have outperformed developed markets, the economically sensitive and commodity sectors are underperforming the sectors that are not economically sensitive—and when I say economically sensitive, I don't just mean energy and materials. I also mean industrials, financials and some consumer discretionary companies—the areas that have been favored by investors are industries where you haven't seen that much in terms of price discounting, including health care and consumer staples. Internet-related stocks have been favored because some of the companies have been showing revenue growth that is the most uncorrelated with economic activity.

It's almost like investors believe that things are going to get better in the emerging markets, but they haven't yet come to the belief that commodity prices have found a floor. I think if they think commodities have found a floor, that's important because you could suddenly have a rotation into the more economically sensitive sectors, which are no doubt the cheaper ones.

TK: To what extent do Brazil, Russia, India and China—the “BRICs”—influence this asset class?

JD: The BRICs are critical because they comprise almost 50% of the index, so the way these markets move is important to EM performance as a whole.

TK: Which of these larger nations have the biggest hurdles to overcome?

JD: The two that are under the microscope are Russia and Brazil. Russia has been the worst-performing market in the MSCI Emerging Markets Index, which I think is more of a political issue to do with Ukraine and Crimea. Our sense is that there's a reasonable chance that the economy could stabilize. However, there have been a lot of rather strange things politically between Russia and the Trump administration, and it's hard to gauge the effects that will have. Investors thought the political situation would improve, and clearly that hasn't happened yet. Russia also has been weak because of oil prices. Even so, when you discount for various types of risks, there's still very good value in Russia.

Brazil’s situation is sad because it was doing so well and was benefitting from an incredible commodity dividend. Unfortunately, it also had politicians who were prepared to give that money away via social programs instead of trying to put it into investments that would create new forms of employment and new opportunities for future productivity. That changed a year ago, when President Dilma Rousseff was impeached and replaced by Michel Temer.

It’s been a complicated situation since then. In May it looked like Temer was out because he said things that seemed to condone corruption. He has been able to remain president, although there seem to be a lot of people eager to remove him. At this point it looks like they are still moving forward with pension reform—and they're also trying to enact labor and tax reform. This is really critical for Brazil. The economy is about 80% of the size it was three or four years ago, so it's gone through a deep recession. With some

meaningful reforms, they may be able to straighten out the fiscal situation. At the same time, if they deregulate tax and labor regulations enough so that there can be meaningful productivity improvements in the next 20 years, it could be exciting. Brazil is on a knife's edge at this time.

TK: What about the outlook for India and China, two of 2017's top performers?

JD: India is a real bright spot. It's doing pretty well economically, and I would say Prime Minister Narendra Modi is incredibly important because he doesn't have to answer pretty much to anyone. So far, he's been able to take some quite radical measures. The demonetization of large bills, in particular, was courageous because a lot of the merchants and businesspeople who are supporters of his party suddenly had to put their bills into bank accounts or else they'd lose the money. It's a remarkable thing to force through in a short period of time, and he doesn't seem to have lost meaningful political support from that.

China still has a problem with credit. They've had to grow it just to keep the economy growing, and there's a significant nonperforming portion, and presumably someone in the Chinese administration knows roughly what it is—but the world at large does not, because it's not disclosed. What's really caused concern is that nonperforming loans of private-sector companies have gone up a lot but not those of state-owned enterprises. That's difficult to believe.

The concern is that credit has been increasing and if this issue of nonperforming credit persists, it means that credit has to keep on growing. There are two solutions. One of them is the world grows faster and companies, particularly state-owned companies, become naturally profitable and don't need credit to grow or to function. The other scenario would be that these value-subtracting companies are closed down. I think the government has closed down some, and at the margin that has helped, but there probably was a plan at one stage to close down a lot more, especially in industries like steel and coal. If that had happened, you'd have been closing down companies that demand credit and get credit—state-owned enterprises have a constitutional right to credit—and then make losing investments with that money. If those companies had been closed down, you would have had the economic benefits and also would have gotten rid of significant capacity that isn't needed right now.

I believe that [Communist Party General Secretary] Xi Jinping probably considered closing down more of these companies, but didn't do it because, for one, a large number of these companies were in the industrial rust belt of China, which has been in recession for two to three years. The potential for high unemployment would have just been too big a risk politically, even with an enhanced safety net. Secondly, I think the election of Trump and the rhetoric about Chinese trade and currency manipulation probably was enough of a concern for Xi Jinping to want to see how it would play out.

TK: Do you think China's credit bubble could be the sneeze that causes the rest of the world to catch a cold?

JD: There's no question China is the bellwether of the EM asset class. When China is doing well, you tend to get a pretty good situation overall because so much of the demand comes from China. So yes, it could—but my sense right now is that it's unlikely because there doesn't seem to be a liquidity issue with the banks. Could it happen? It certainly is not beyond the realm of possibility. I do think China is the biggest risk in the world.

If US interest rates go up too quickly, that, too, is a risk. If rates continue to go up the way they are now, markets would be comfortable. If we go into periods where rates need to go up by much more, then that would have a negative impact on the emerging markets. Alternatively, if we don't have any interest rate hikes, that means the world economy just isn't doing well, and that wouldn't be good, either.

TK: What other key risks might compel you to change your opinion on the emerging markets?

JD: Large-scale political change. If nothing gets enacted in Brazil, for example, and there are further problems in the economy that are difficult for the companies in which we're invested, that could be something that forces us to reevaluate.

Also, everyone's understandably scared about North Korea. Do I really think that Kim Jong Un is going to do something? Well, the one thing you could say about the North Koreans is they've been good at self-preservation—but they sure are pushing the envelope this time, and they're doing it against a man who at least competes on the unpredictability factor.

TK: If global economies continue to muddle along at about 2% growth, do you see the EM scenario playing out as rosy?

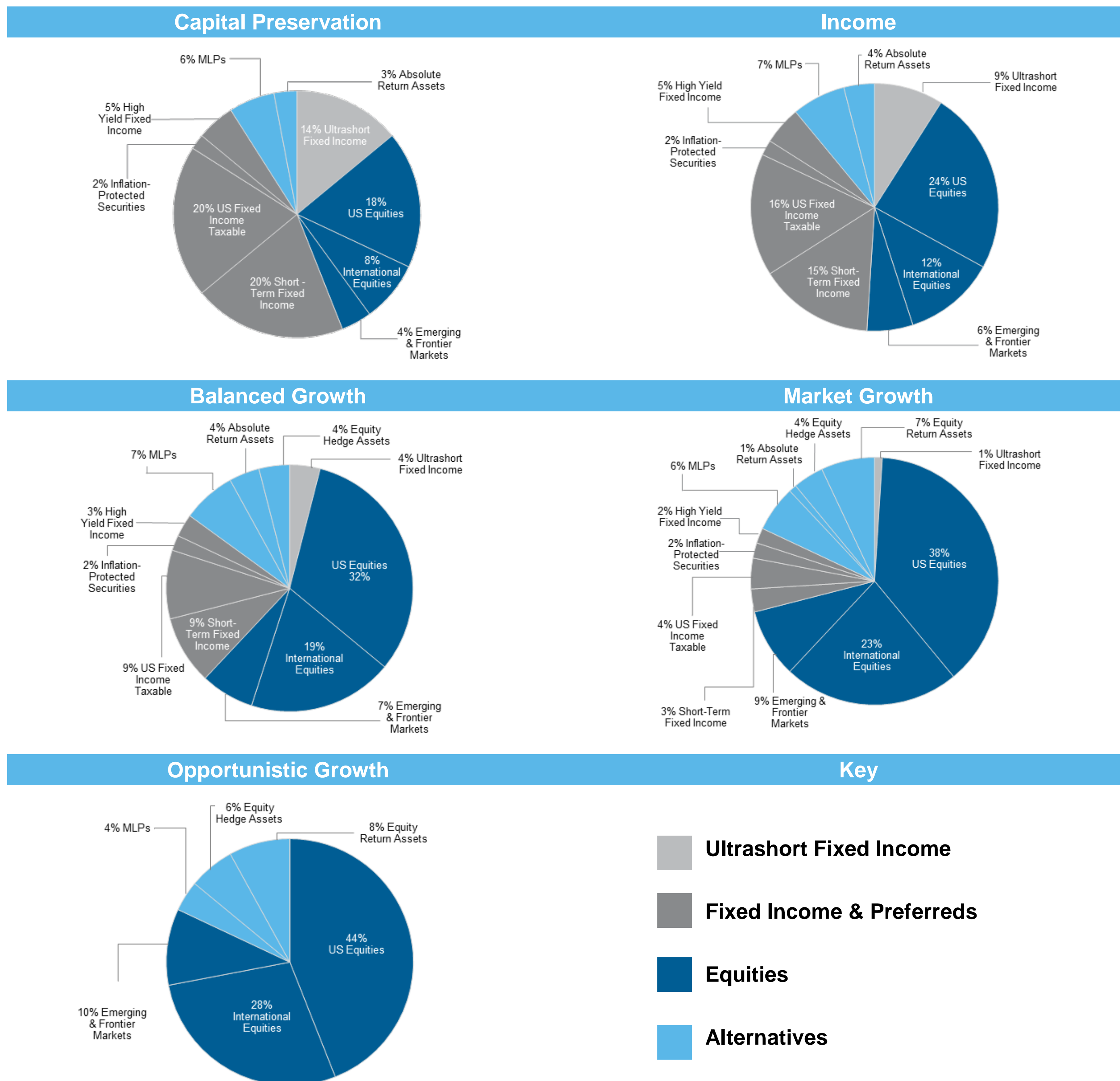
JD: I think 2% to 4% global growth is pretty good for emerging markets. It's either negative growth or an almost-stalling type of world economy that is not good.

If you have a 15% pullback in US equities, I would imagine you'd probably see something similar in EM equities in the short term. Long term, I think emerging markets are still what I would call a cold asset class. We've done lots of general meetings around the world over the past few years, and have found that people are interested, but when it actually comes to dipping the toe in the water, people have found it quite difficult. If EM equities are really embraced by investors, you could get a big move up over time. ■

James Donald 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

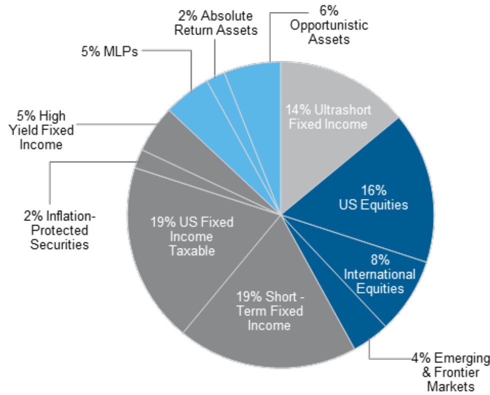
The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with up to $25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.



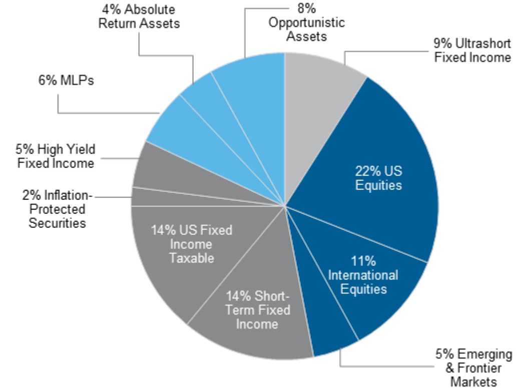
Source: Morgan Stanley Wealth Management GIC as of Aug. 31, 2017

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.

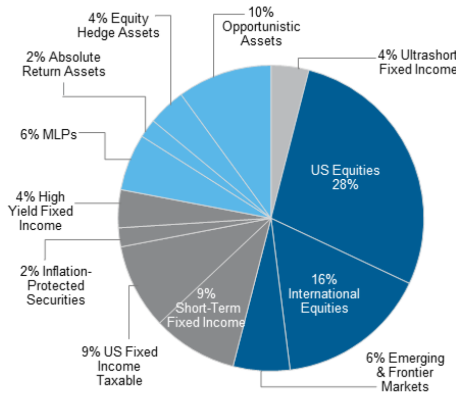
Capital Preservation



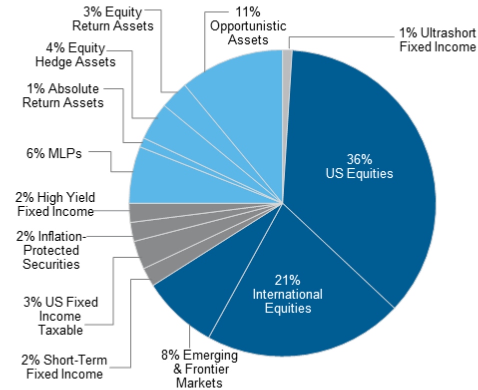
Income



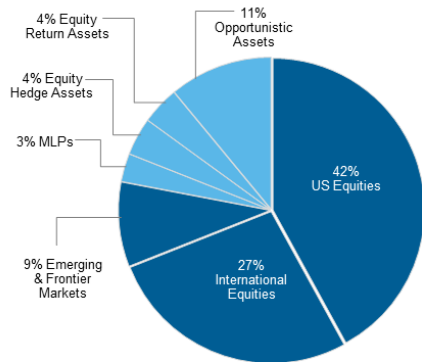
Balanced Growth



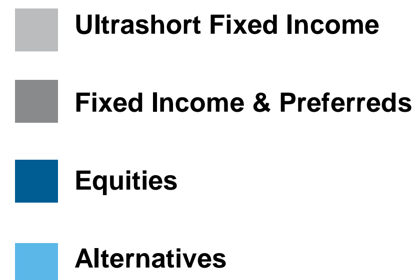
Market Growth



Opportunistic Growth



Key



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

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Overweight	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&P 500.
International Equities (Developed Markets)	Overweight	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.
Emerging Markets	Overweight	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.
Global Fixed Income	**Relative Weight Within Fixed Income**	
US Investment Grade	Underweight	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.
International Investment Grade	Underweight	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.
Inflation-Protected Securities	Overweight	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.
High Yield	Equal weight	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.
Alternative Investments	**Relative Weight Within Alternative Investments**	
REITs	Underweight	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.
Master Limited Partnerships/Energy Infrastructure*	Overweight	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.
Hedged Strategies (Hedge Funds and Managed Futures)	Equal Weight	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.

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

For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 17 of this report.

Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following:
http://www.morganstanleyfa.com/public/projectfiles/id.pdf

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.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

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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