On the Markets

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Just Peachy

With the arrival of the Memorial Day holiday, the anticipation of summer begins to consume our thoughts—the end of school, outdoor activities and barbeques—accompanied by the voices of children running around the neighborhood well past 9 p.m. as the days stretch to their longest of the year. Things tend to slow down just a little, allowing us catch our breath and take stock of the year to date.

In the investment world, it's no different. Memorial Day marks that critical time of reflection and invokes the proverbial question of, "How we doin'?" On that score, I'd have to say we're doing just peachy. Markets have continued their trance-like rise on low volatility, with global equities up 11.5% and global bonds up 4%—pretty heady returns for a full year and even more impressive considering we are only five months into 2017. In January, we forecasted 2017 to be the strongest year for global equities since 2013 because global economies and earnings surprises would override political and geopolitical risks. So far, so good. As we take stock and think about what could go wrong from here, we remain confident in our original forecast.

Last month, we got another political curveball thrown our way with allegations that President Trump may have improperly tried to influence former FBI Director James Comey with respect to the investigations of former National Security Advisor Michael Flynn and, in particular, Flynn's ties to Russia. This has led to the appointment of a special counsel to formally investigate the situation, including any ties President Trump's campaign had with Russia's influence on the US election. Could this be the event that finally derails the tranquil market environment and ruins our summer? When the story first broke, it looked as though it might be the straw to break the camel's back as the S&P 500 suffered its worst day in almost nine months. Three days later, the S&P was making all-time highs.

While we acknowledge this is serious stuff and the allegations are troubling to say the least, we also know from experience that earnings and economics will ultimately determine the direction of markets more than the outcome of the Trump/Flynn/Russia investigation. So, be prepared for the usual summer turbulence, but nothing that is likely to unravel our forecast that the market will have its strongest year since 2013. ■

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Sizing Up Recession Risk

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We believed the US economy moved into the late phase of this business cycle in 2016 owing to such late-business-cycle hallmarks as challenged credit markets, corporate earnings under pressure, slowing job creation and monetary policy tightening. Coupled with an uncertain global outlook, we gauged the risk of a US recession within the next 12 months to be 40% in July 2016. By the end of the year, we thought that Republicans' sweep of Congress and the White House would deliver a fiscal spending boost that could stretch the cycle. Accordingly, we lowered our 12-month risk of recession to 30%.

Now, we propose that the recession probability has fallen further to around 25%. Tax reform is delayed but remains central to President Trump's agenda, and our policy strategists still expect some form of deficit-funded spending to be delivered in the first half of 2018. One could argue that late in the cycle the promise of tax reform is actually better than the delivery, lest the latter deliver disappointment. Global activity has also turned upward, with our global growth and trade measures at or near multiyear highs. This has led to a sharp increase in US exports and investment. The prospects for incremental deregulation—something our financials analysts have noted will likely enable incremental lending—also seem to be driving investment at small- and medium-sized businesses. Together, these developments point to a stronger domestic backdrop than we had previously anticipated.

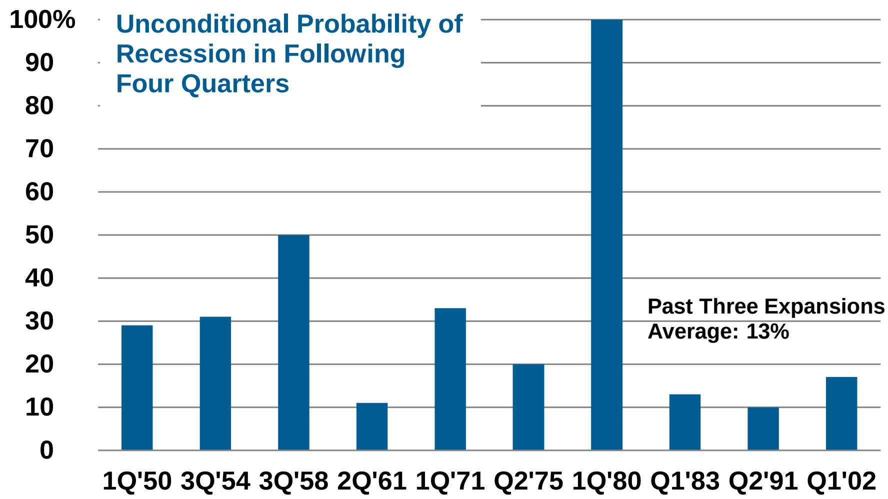
WHY NOT LOWER RISK? When moving through the late phase of a business expansion, recession probabilities will naturally rise. Typically, this is because more and more sectors of the economy show signs of overheating while the Federal Reserve is tightening monetary policy more aggressively in order to slow the economy. While our equity strategists are not worried about overheating and see more upside for equity valuations, and our housing strategists believe residential investment is in the early innings of a nine-inning game, the unemployment rate, at 4.4%, is inarguably in the range that indicates a labor market at full employment. In the past, this has led to a higher risk of recession, which we explore as a conditional element in our framework below.

Economists have used a wide variety of recession risk models during the past several decades. Many, such as the New York Federal Reserve Bank's model, rely on the yield curve to estimate probabilities. Others, like our own MSRISK model, are based on binary frameworks that separate the world into two regimes (recession and expansion). We propose a simplified method that aims to answer a simple question: If we sum up all the quarters in which the economy was in an expansion, and all those in a recession, what does that tell us about the baseline probability of recession?

MEASURING EXPANSIONS. Between 1950 and 2008, there are 201 quarters in which the National Bureau of Economic Research (NBER)—the accepted arbiter of business-cycle dating—has identified to be part of an economic expansion. In hindsight, we know that in 40 of these 201 quarters, the economy would enter a downturn within a year's time. Dividing the 40 quarters that presaged recession by the 201 expansionary quarters, the unconditional or "blind" probability of a recession in the next 12 months is about 20% (see chart).

However, the length of expansions has been trending up, so recession probabilities have been trending down.

Unconditional Probability Method Gives 20% Chance of Recession in Next 12 Months



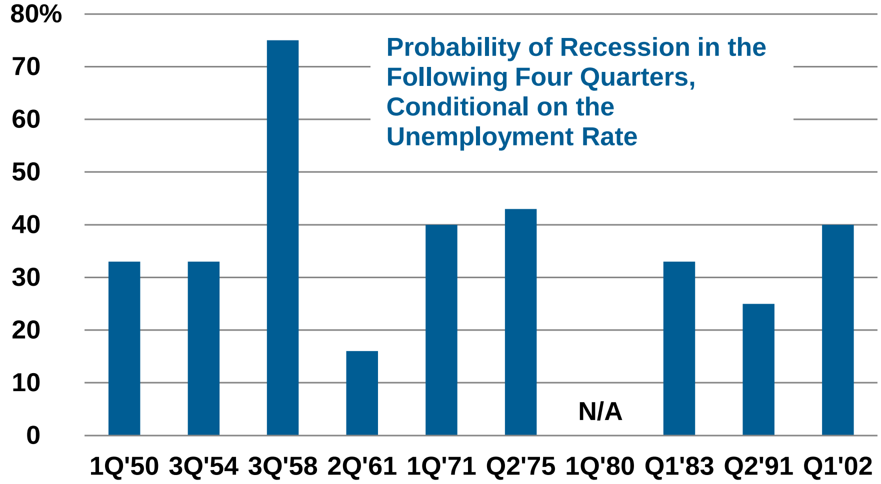
Source: National Bureau of Economic Research, Morgan Stanley Research as of May 1, 2017

This is true particularly during the past three expansions, when the average unconditional recession probability for the next 12 months is only 13%. Therefore, the unconditional probability of recession could very well be lower than 20% once we take into account a declining time trend and recent examples. However, the probability of recession should increase as the business cycle matures, and since we consider the economy currently to be in the late phase of the cycle, the 20% probability is likely understated.

THE JOBLESS FACTOR. To control for this, we include in our calculation only those quarters in which the unemployment rate has fallen below the natural rate—that is, the unemployment rate associated with an economy growing at potential, also referred to as full employment. Typically, a labor market at or beyond full employment indicates an economy in the later stages of the cycle. To identify these "late cycle" quarters, we use the natural rate estimated by the Congressional Budget Office (CBO), currently at 4.7% for the first quarter of January 2017.

Once we make this conditional adjustment, the average probability of recession over the next 12 months rises to 31% from 20% in the unconditional estimate (see chart). In this case, there is no time trend that biases the average since 1950. The average late-cycle recession probability in the past three expansions is roughly the same as that for the entire period from 1950 onward.

Using the Jobless Rate, Chance of Recession in the Next 12 Months Jumps to 31%



Source: National Bureau of Economic Research, Morgan Stanley Research as of May 1, 2017

MAKING ADJUSTMENTS. The 10 percentage-point change in recession probability from the unconditional case ("blind") to the conditional case (accounting for unemployment) is meaningful, so it's worth asking whether the economy is truly operating beyond full employment. Indeed, as the unemployment rate has continued to decline over the past few years, so have economists' estimates of full employment. As of February 2014, the CBO estimate for full employment in the fourth quarter of 2013 was 6.0%. Since January 2016, it has been at 5.2%.

Accordingly, we would argue that the 4.7% level of full employment in our conditional probability calculation is likely too high, suggesting we should discount the 31% indicated by that calculation. We ultimately think that blending the two measures is an adequate qualitative adjustment, bringing our assessment of the 12-month probability of recession to about 25%. ■

Is There a (Tech)nical Floor for Profit Margins?

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Experience suggests that after a seven-year bull market, which took the major stock indexes to all-time highs, subsequent years would inevitably bring lower returns. Still, when the Global Investment Committee recently published its strategic, or seven-year forecasts, it trimmed the annualized US equity returns only modestly to 4.9% from 5.3%, in part because it does not expect a significant contraction to profit margins.

This view contrasts with several prominent market forecasters who predict profit margins will revert to lower historical averages, an outcome that would be more reminiscent of prior cycles. While “this time is different” are four of the most dangerous words in investing, below we outline why margins today may be more sustainable than in past cycles. The reason is the dominance of high-margin technology companies.

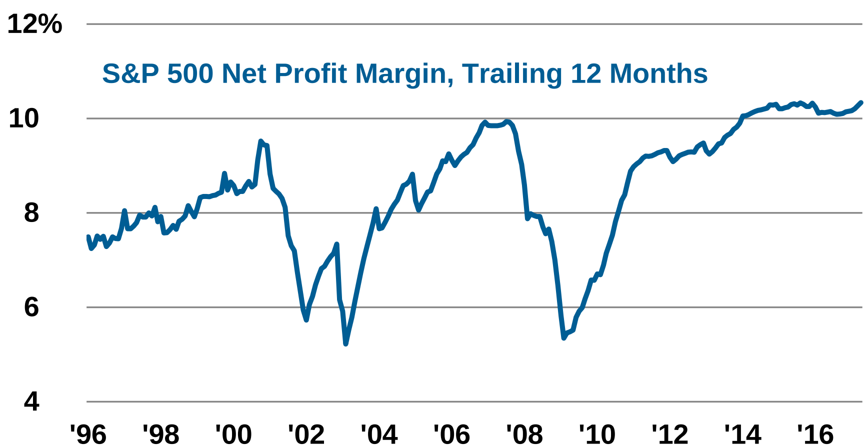
RECORD-HIGH MARGINS. On a number of metrics, corporate profit margins have reached multiyear highs and exceeded prior-cycle levels (see chart). For example, the net profit margin for the S&P 500 is now 10.3%, versus the prior-cycle high of 9.9%. Additionally, this cycle stands out for its divergence between the lackluster economic growth—average real GDP is 1.3% since 2009—and the stock market, which, thanks in part to unprecedented monetary stimulus, is up nearly fourfold since its 2009 low. One way to represent this juxtaposition is by noting that labor-compensation’s share of GDP fell to 53% by 2016 from a recent high of 58% in 2001 while corporate-earnings’ share of GDP rose to 11% from 2001 levels of 7%— illustrating the vast outperformance of financial assets versus the real income gains of the populace.

BOOST FROM TECH. While companies throughout various industries cut costs and managed to boost their margins during the past seven years, technology companies in particular, with their inherently high profit margins, were a significant contributor to overall margin growth. Indeed, the technology sector accounted for 45% of the expansion of the S&P 500’s overall margin. While tech has worked well this year, Morgan Stanley & Co. Chief Equity Strategist Mike Wilson continues to overweight the sector given its earnings momentum, benefits from late-cycle capital spending and the potential for a tax repatriation holiday that would disproportionately benefit tech, given its outsized share of cash held overseas.

NOT YOUR FATHER’S S&P. In our view, today’s margin levels will not revert to previous cycle lows given the S&P 500’s current makeup. Four of the five largest companies in the index are technology companies that were not in the top 10 in 1990. They have margins in excess of 20%, which raises the index’s overall margin level. Also, these companies carry little or no inventory on their balance sheets and are inherently less capital-intensive than many of the more cyclical top holdings of the market index in past cycles. As such, they may be able to maintain margins better in an economic downturn, as they won’t have to write off idle inventory.

REGULATORY RISK. Many of these high-margin tech businesses benefit from secular growth in trends such as online advertising, social media, cloud adoption and e-commerce. Here, the barriers to entry and benefits from scale make it harder for new competitors to disrupt the market leaders and their profit margins. One potential risk, however, is that the government starts to scrutinize this monopoly-like behavior. While we don’t see this as a base-case scenario, it is possible that the unconventional administration in the White House, with its populist roots, may take a harder look at these dynamics. Should these tech giants experience margin pressure, it raises downside risk to our more sanguine outlook for overall margins and returns. ■

Are the S&P 500’s High Profit Margins Sustainable?



Source: S&P as of April 28, 2017

E-Commerce Pressures Store Margins, but Has Profitability Issues, Too

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Online shopping is changing the dynamics of retailing. Today's shoppers have become increasingly channel agnostic, making purchases when they want, how they want, where they want—and with fast free delivery expected. US e-commerce sales were about $395 billion in 2016, a 15% gain, according to the US Census Bureau. By our estimates, e-commerce accounts for roughly 11% of total retail sales and could reach 13% in 2018 (see chart).

This growth has come largely at the expense of brick-and-mortar stores, driving fixed-cost deleverage—in which expenses like rent become a higher percentage of sales—ultimately eroding profitability. Retailers are trying to fight back by boosting productivity and closing stores, but we see room for further declines as e-commerce continues to chip away at traditional store sales. Earnings before interest and taxes (EBIT) margins are under pressure throughout the industry.

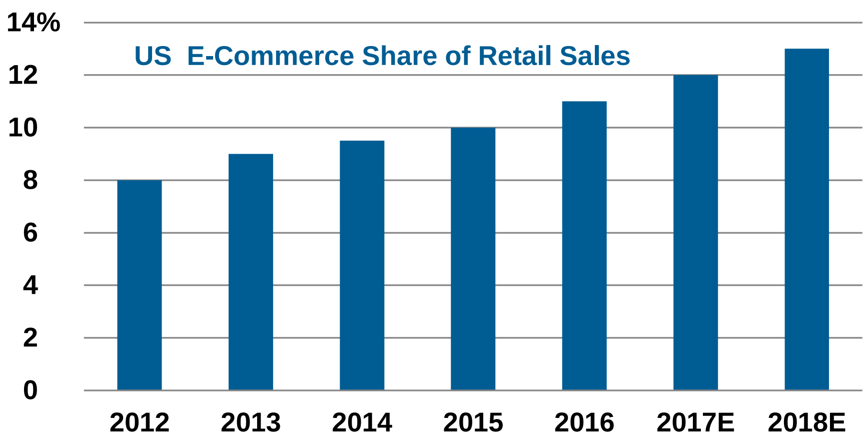
Even traditional retailers who sell online face profit margin pressures, too. For example, less than five years ago, shipping fees were a source of revenue for many retailers; today, many are lowering free-shipping thresholds, offering free shipping on more items or faster shipping speeds in an effort to win or maintain customers. A recent study by comScore, a consumer research firm, found 60% of all third-quarter 2016 online orders included free shipping, versus about 45% just three years ago. What's more, 53% of individuals identify free shipping as the most important factor dictating their purchasing decisions.

HARDLINE AND BROADLINE. The competition from e-commerce hits the various retail sectors differently. In our view, hardline retailers (those that sell nonpersonal items such as sports goods, appliances and electronics) and broadline retailers (mainly mass-market retailers with a wide range of wares) will both likely see EBIT margins contract an additional 50-to-60 basis points to about 6.1% by 2019. While we forecast a wide range of potential outcomes based on segments such as home furnishings and electronics, the decline is a function of accelerating e-commerce penetration, which is currently 5% on average for the companies in our coverage. Penetration is increasing about 30-to-40 basis points annually, and we expect this trend to persist.

For every 1% increase in e-commerce penetration, hardline and broadline retailers have experienced about 55 basis points of erosion in the EBIT margin, which we expect to continue as a function of store-expense deleveraging being offset by modest improvement in e-commerce profits. We estimate average hardline/broadline store-only margins of about 6.7% versus an average e-commerce margin of 2.5%. It will take multiple years for the two margins to converge, in our view, though we do see online margins moving higher over time as investments subside and as retailers gain in scale and efficiency.

DEPARTMENT STORES. Harder hit are department stores, where eroding store volumes and a shift to lower-margin e-commerce puts pressure on profitability. Department stores' e-commerce channel has scaled, driving slight improvement in margins based on our analysis. However, this is more than offset by deteriorating in-store margins, as store sales remain firmly negative, deleveraging fixed costs. Taken together, department-store operating margins are declining, with the spread

E-Commerce Share of Retail Sales Is on a Slow but Steady Climb

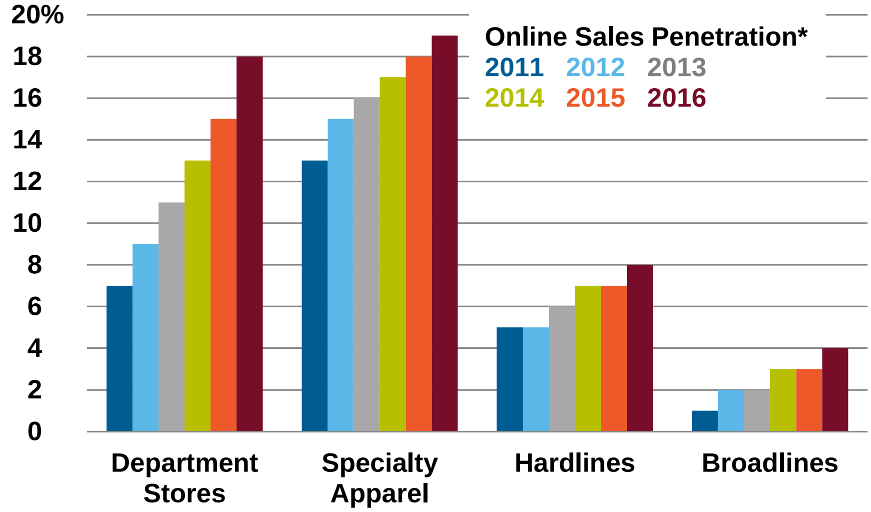


Source: US Census Bureau, Forrester, comScore, Morgan Stanley Research as of April 28,. 2017 between online and in-store margins narrowing. We estimate department-store e-commerce margins trail stores by some 600 basis points on average, compared with roughly 800 basis points last year. Since 2013, department-store EBIT margins have fallen about 270 basis points to 7.2% on average, while e-commerce penetration has grown some 670 basis points to an average 18% (see chart). That implies 40 basis points of EBIT margin decline per point of increase in e-commerce penetration. By implication, should e-commerce penetration increase another seven percentage points, department-store EBIT margins could decline an additional 280 basis points, reaching a 4.4% average by 2019.

SPECIALTY APPAREL. For specialty apparel, e-commerce margins are generally higher than for stores given these stores pay a high 10% to 11% of sales in rent, while department-store rent is in the 2% to 3% range. However, the shift to e-commerce is only beneficial to specialty retailers' margins if sales are incremental and not cannibalizing store sales. Unfortunately, for most of the retailers in our coverage, e-commerce sales come largely out of stores, leading to deleverage on fixed store costs, and thus declining store EBIT margins—even more than for department stores. Specialty apparel EBIT margins have declined about 200 basis points on average since 2013, while online penetration has increased more than 300 basis points to get to 19.4% in 2016. Overall, we estimate specialty EBIT margins have fallen 70 basis points on average for every additional point of e-commerce penetration. Should e-commerce penetration increase another three percentage points, specialty apparel in-store EBIT margins could decline an additional 200 basis points, reaching an 8.8% average by 2019.

OFF-PRICERS. About the only part of the retail space that has remained relatively unaffected by e-commerce is off-price stores, which have a minimal online presence. Perhaps this is because it's difficult to replicate the treasure-hunt experience online or make a profit, particularly given the 50%+ off-price/flash sale return rates. Publicly traded off-price/flash sale sites have failed to scale and/or make a profit despite years of experience, supporting our assertion that off-pricers are the most insulated from e-commerce. Our work suggests off-price stores can continue to deliver strong comps, higher sales per square foot and slight EBIT-margin expansion, in part due to fixed cost leverage, including rent. More importantly, this gives us confidence off-pricers can continue to open stores even as store closures accelerate among other retailers. ■

Online Sales Have Had the Most Penetration in Department Stores and Specialty Apparel



*Sales-weighted
Source: US Census Bureau, Forrester, comScore, Morgan Stanley Research as of April 28, 2017

Also contributing to this report were Joshua Siber, CFA, CPA, Lauren Cassel, Benjamin G. Zerman and Cynthia A. Robertss.

China's Coming Stock and Bond Market Reforms

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China's successful transition to high-income status over the next decade will be partly built on policymakers being able to deal deftly with liquidity conditions and avoid financial shocks. We think that ongoing market reforms, thoughtfully paced, are an integral way of accomplishing this. Key financial liberalization measures have been achieved during the past two years, including the Shanghai/Hong Kong and Shenzhen/Hong Kong Stock Connect programs and the elimination of approval requirements for foreign institutions. Admittedly, the process had mostly moved in fits and starts, as authorities focused on addressing broader issues such as disinflationary pressures and the US rate-hike cycle. As these challenges become more manageable, we think that we'll see acceleration in the pace of market reforms.

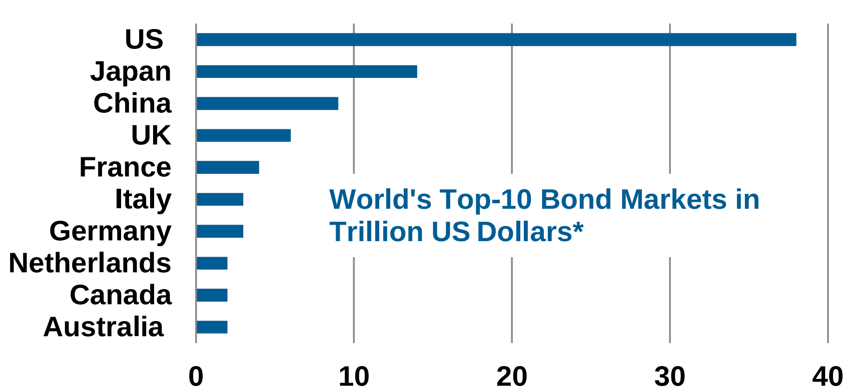
The liberalization of China's sizeable bond market is the next critical step. Recently, policymakers have expressed a strong desire to liberalize China's bond market further to foreign investors. In our view, further liberalization can help to attract foreign portfolio investment, ease capital outflow pressures and continue the renminbi's internationalization. Indeed, during the past 12 months, we've already seen reforms in this area, including measures to scrap approval requirements and improve foreign-investor access to currency markets. We expect more measures to lower barriers to onshore bond markets and improve foreign investors' access to more hedging tools.

INDEX INCLUSION. In recent months, major index providers like Bloomberg Barclays and Citi have either included, or announced plans to include, Chinese government bonds (CGBs) in regional/emerging market indexes and parallel benchmarks. We see these parallel indexes as a halfway point to full inclusion, a way for index providers to flag their intent and a guide to help investors better prepare for the eventuality of CGBs joining global flagship benchmarks like the Bloomberg Barclays Global Aggregate Bond Index and the Citi World Government Bond Index. We expect CGBs to join the main benchmarks fully within the next 36 months, as market liberalization progresses and outstanding concerns such as barriers to entry for foreign investors and currency hedging are addressed. The time frame should allow investors adequate time to plan, given current liquidity/access constraints, as well as CGBs being an unfamiliar asset for most developed market/global investors.

Given the sheer size of the onshore bond market, CGBs, once included, could make up 3% to 5% of global-focused indexes—about the same size as UK gilts or German bunds—or even up to 35% to 50% of uncapped regional/EM benchmarks (see chart). The large index weight, and our view that China is transitioning to high-income status during the next decade, mean that the CGB market will be hard to ignore. This could potentially drive about $250 billion to $300 billion in benchmarked assets to onshore bonds, likely at the expense of flows to large development markets such as the US, the Euro Zone and Japan, as well as smaller emerging market countries like Turkey, Malaysia and Colombia.

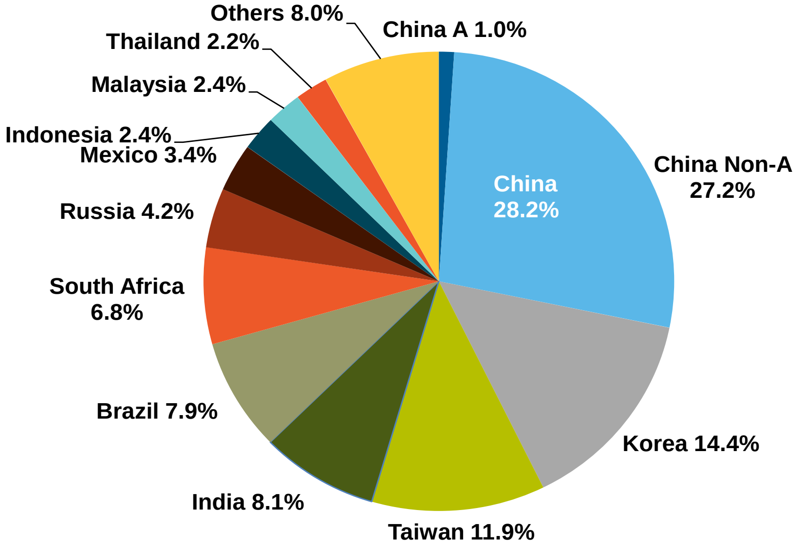
RISE IN FOREIGN OWNERSHIP. We expect a large, structural rise in foreign ownership of CGBs on index inclusion, based on case studies of past index entrants. However, the impact on price action is less clear; although, in the past cases of Malaysia and Thailand, yield curves flattened on benchmark inclusion. The curve shape in CGBs is in line with other Asian government bond curves, and swap spreads are unusually well supported. Taken together, even with passive benchmark inflows, the foreign investor share of the bond market is likely to be small, and we would expect a modest positive impact on CGBs.

China's Bond Market Is the World's Third Largest



*Data as of year-end 2016 for China and second-quarter 2016 for other countries
Source: Wind, BIS, Morgan Stanley Research

Makeup of the MSCI Emerging Markets Assuming Inclusion of China A Shares



Note: The percentage number refers to the inclusion factor applied to the free-float-adjusted market capitalization of China A-share constituents in the pro forma MSCI China Index. China A-share securities are subject to a 30% foreign-ownership limit.
Source: MSCI as of January 2017

While CGBs offer substantial volume-adjusted real yield pick-up versus other constituents in the Citi World Government Bond Index, in the near-term we view risks as skewed toward Chinese rates going higher, given the modest countercyclical tightening bias from the People's Bank of China. The trajectory for the Federal Reserve, policymakers' intent to lower bond market leverage and the extent of capital outflows will be important factors to watch to gauge the inflection point for rates. As such, we think that entry levels should improve for CGBs in the medium term.

Capital market liberalization and bond market inclusion should help the renminbi move toward greater flexibility over the medium term, as two-way flows help to stabilize the People's Bank of China. The immediate impact of bond index inclusion on the currency is less clear as questions remain over the timing of the inflows that would be needed to offset the domestic outflows as the capital account is opened.

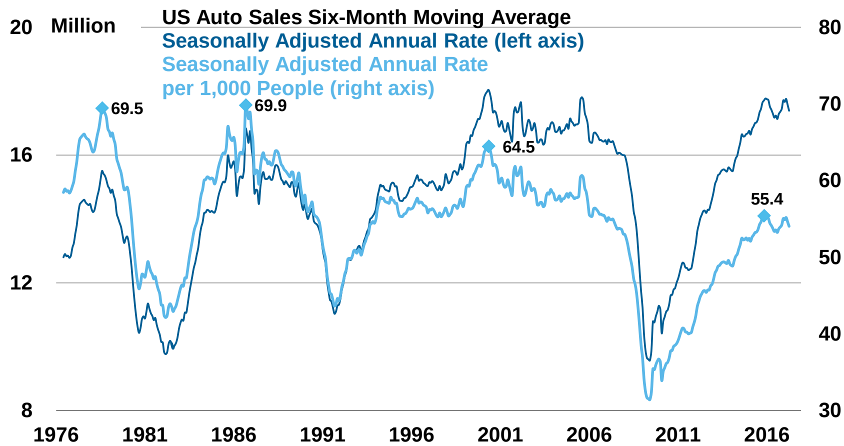
EQUITY MARKET REFORMS. As for equities, the most notable recent reform developments have been: reform of the procedure for stock suspension; the removal of the overall quota on the Shanghai/Hong Kong Stock Connect program; the Shenzhen/Hong Kong Stock Connect program launch in December; and this past February's decision to halve the initial margin requirements for equity futures trading for the CSI300 index from 40% to 20% and reduce the margin requirement for the CSI500 futures contract from 40% to 30%.

A-SHARE IMPACT. The next major step in opening up the equity market is the MSCI index decision point, scheduled for mid-June. In each of the prior two years we have argued that index inclusion was less likely than further delay. However, on this occasion we think there is a better than 50/50 chance for inclusion. With an initial inclusion factor of just 5%, A-shares will comprise only a little over 1% of the MSCI Emerging Markets Index, roughly in line with where we think existing qualified foreign institutional holdings are on a funds-under-management-weighted basis (see chart). However, on a 10-year horizon, domestically traded A-shares could well end up with a weighting on par with the existing Hong Kong-based H share and US American Depository Receipt names, taking the overall weighting of China in the MSCI Emerging Markets Index to above 40%. We reiterate our Shanghai A-share target price of 3,700, up 19%.We also believe that, for diversification benefits alone and apart from whether valuations are attractive, investors should consider adding exposure to the onshore markets. ■

Also contributing to this report were Wanting Low, Robin Xing, Jenny Zheng, Pankaj Mataney, Corey Ng, Laura Want, Kritika Kashyap and Jesper Rooth.

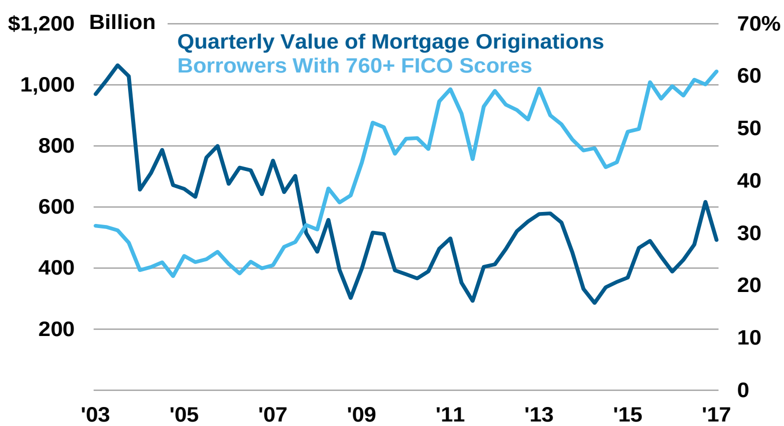
Can Lifestyle Changes Be Affecting Auto Sales?

US auto sales appear to have plateaued at an annualized rate of 17 million vehicles (see chart). Adam Jonas, auto analyst for Morgan Stanley & Co., notes that manufacturers have maintained these sales levels through incentives are averaging about $3,000 per vehicle, up 13.6% year over year. Discouragingly for automakers, these greater incentives have not translated into better sales. Looking at population-adjusted auto sales, we note that the cycle highs have declined to 55.4 today from nearly 70.0 in the mid-1980s. With the rise of ride-sharing services and more people living in urban areas, perhaps auto ownership has become less desirable. Fewer young people are driving, too. University of Michigan researchers Michael Sivak and Brandon Schoettle found that for Americans aged 20 to 24 only 76.7% had a driver's license in 2014, down from 82.0% in 2008 and 91.8% in 1983.—*Steve Edwards*



Source: Bloomberg, IMF as of April 30, 2017

Wary Lenders Are Focusing on the Borrowers With Highest Credit Scores

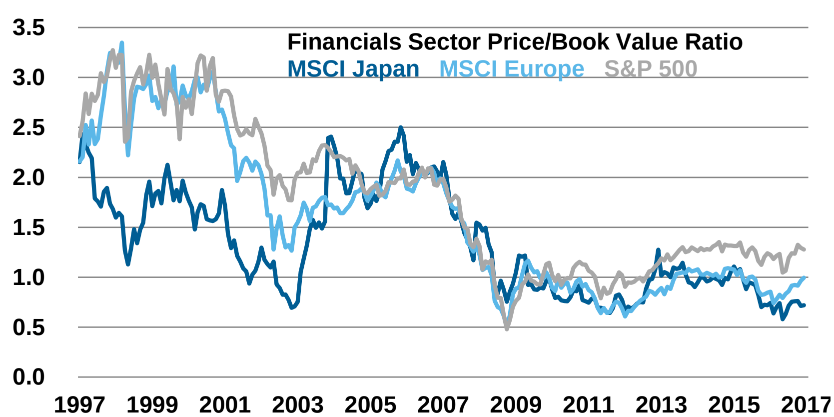


Source: New York Fed Consumer Credit Panel, Equifax as of March 31, 2017

In this cycle, total mortgage origination has not returned to prior peaks (see chart). Perhaps one reason is that lenders have become more cautious in extending credit. In the first quarter of 2017, high-quality borrowers—those with a 760 or higher credit score on a scale of 280 to 850—accounted for 60.9% of the value of mortgage originations, up from 21.8% in the fourth quarter of 2004. This prudence likely reflects banks' wariness of creating the same sort of subprime lending bubble that led to the 2007 to 2009 credit crisis. That's understandable, but the data also indicate other borrowers may be having a tougher time buying a home. Roughly 35% of borrowers have scores of 760 or above.—*Steve Edwards*

Japanese and European Financials Offer Attractive Opportunities

As GDP growth around the world continues to inflect higher, global financials may present some of the most attractive reflation plays as stronger growth should ultimately lead to an increase in banking and lending activity. Even so, global banks appear cheap. Japanese financials trade at a 0.72 price/book value ratio and European financials trade at book value (see chart). These are discounts to both sectors' histories, as well as to the US financial sector, which trades at 1.28 times book value. Another plus is the potential for higher earnings should benchmark interest rates rise. The market appears to be adopting the notion that the European Central Bank and the Bank of Japan may tighten sooner than expected, providing a catalyst for financial sector profits.
—*Joe Laetsch*



Source: FactSet, Morgan Stanley Wealth Management as of April 28, 2017

How Shrinking the Fed's Balance Sheet Could Play Out

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We believe the Federal Reserve will start shrinking its balance sheet in October by halting reinvestment of both mortgage-backed securities (MBS) and US Treasuries. In our view, this shift in policy has important implications that go well beyond the Fed. Multiple rounds of Quantitative Easing (QE) during the past eight years supported markets, with US Treasuries and MBS getting direct support and the credit market getting indirect support via the portfolio balance channel. The result has been tighter spreads and lower volatility, and we think a shrinking Fed balance sheet—especially if not countered by sufficiently expanding central bank balance sheets elsewhere—could have the opposite impact.

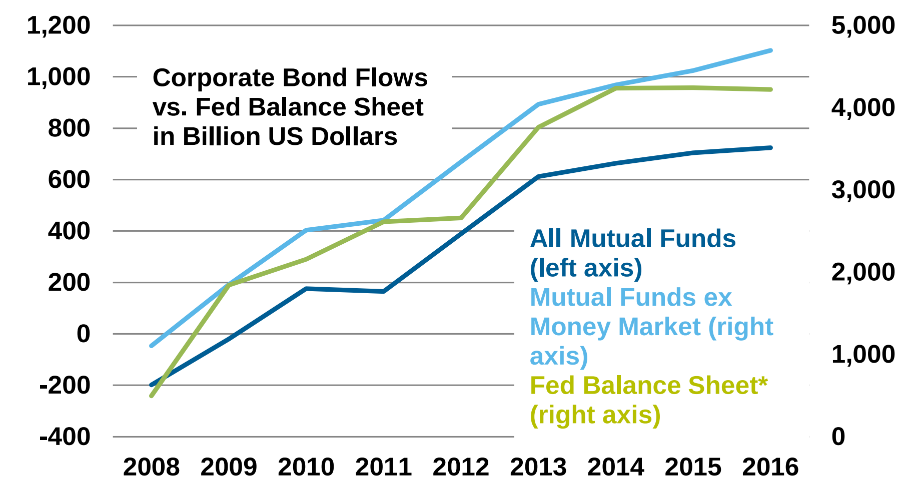
First, the impact on markets is not solely dependent on the Fed's communication. In part, this is just math. A large, programmatic buyer will be exiting the market, increasing the amount of high-quality fixed income assets needing to be absorbed by price-sensitive buyers. At the very least, technicals in fixed income should weaken, which matters, given how important technicals and liquidity have been in this cycle.

SUPPLY/DEMAND TRENDS. More specifically, let's look at the supply/demand trends in this cycle. First, after accounting for global central bank purchases, net sovereign issuance was negative in 2015 and 2016 and should remain negative in 2017. In the MBS market, net issuance has been negative in this cycle after accounting for Fed purchases, and this lack of supply helped drive MBS spreads tighter and real yields lower, resulting in solid fixed income returns and inflows. Credit was a particular beneficiary of these flows, in part due to the need for yield and in part due to the simple challenge of finding enough supply elsewhere. For example, within fixed income, mutual fund allocation to credit is now at 55%, from 43% in 2008 (see chart). Companies took advantage of this demand by issuing debt and locking in record-low yields. As a result, US credit markets have roughly doubled in size since 2007 (see chart, page 11).

These supply/demand dynamics will change. In 2018, mortgage investors may have to absorb $400 billion in MBS supply if you add in the Fed wind-down, a level last seen in 2008. For the first time in decades, the agency mortgage market will no longer have an official buyer; the Fed and the Treasury have been buying MBS since 2008, and before that there were government-sponsored buyers such as Fannie Mae and Freddie Mac. In addition, G4 sovereign net supply, excluding central bank purchases, is apt to increase to $563 billion in 2018 from negative territory now. Larger fiscal deficits related to US tax reform could increase this number further. If the Fed decides to halt reinvestments of Treasuries, which is not our base-case expectation, the net supply figure will rise even more.

STRONG TECHINCALS, BUT ... So adding everything up, the technical backdrop for fixed income has been strong, but that may change. Certainly, a smaller Fed balance sheet will not catalyze weakness in markets on its own. If the balance sheet's decline is sufficiently offset by increases in the balance sheets of the European Central Bank (ECB) and the Bank of Japan (BOJ), and if growth expectations—importantly in the US, but

Demand for Credit Has Been Strong, as the Fed Took Duration Out of the Market



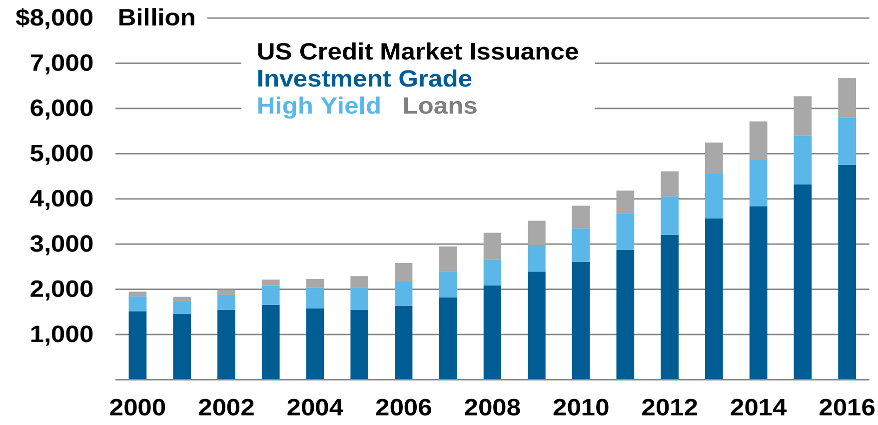
Source: Federal Reserve, Morgan Stanley Research as of May 10, 2017 also globally—remain buoyant, then this policy tightening could be manageable.

The good news is that the ECB and BOJ balance sheets are in fact increasing. However, our economists in Europe expect the growth of the ECB's balance sheet to slow next year, during the same period that the Fed balance sheet may be shrinking. What's more, our economists expect the ECB's balance sheet to plateau by the end of 2018.

Keep in mind, too, that the first synchronous global economic recovery since the financial crisis will not last forever. When growth expectations falter, an expanding Fed balance sheet will no longer be there to buffer declines in risky asset prices. Quite the opposite—the Fed balance sheet will be shrinking. Inflows will turn into redemptions. When liquidity is tightening, shocks are no longer as easy to absorb, high leverage become less manageable and cycle risks rise more meaningfully.

THE FED TO THE RESCUE? If financial conditions tightened unexpectedly while the Fed was shrinking its balance sheet, wouldn't the Fed come to the rescue? We think the Fed would try, but we would not expect resuming MBS reinvestments to be its first option. With the Fed's balance sheet shrinking in a passive way, we think the Fed would first hold off on further rate hikes, and then cut interest rates to counter any downturn. While cuts to the target rate would help support the fundamentals, the technical backdrop would continue to deteriorate until the Fed finally decided to reinitiate reinvestments. Investors should also remember that the environment in which a dovish Fed rode to the rescue over the past eight years was also one in which the Fed's balance sheet, the ECB's balance sheet, and/or the BOJ's balance sheet were all increasing in size or expected to resume increasing in size. We believe dovish Fedspeak alone, or an extended pause in the rate-hiking cycle, would not have the same impact when the Fed's balance sheet is shrinking and other central bank balance sheets are not growing sufficiently.

Demand for Credit Also Drove Yields Lower, Incentivizing Companies to Issue Debt



Source: Morgan Stanley Research, Citigroup Index LLC, S&P LCD as of May 10, 2017

The Federal Open Market Committee (FOMC) meetings in June and September will be key risk events in the timeline toward the commencement of balance sheet normalization. Policymakers have been debating how to cease reinvestments with details of the debate showing up in the March meeting minutes. After the debate, “nearly all participants agreed that the Committee's intentions regarding reinvestment policy should be communicated to the public well in advance of an actual change.” If the Fed hikes rates at its June and September meetings, and/or if the Fed delivers clarity on its intentions regarding reinvestment policy at these meetings, we believe markets will react accordingly.

SPREADS COULD WIDEN. If investors pull forward their expectations on the timing of balance sheet normalization, or as we approach the timing investors already expect, we think MBS spreads will drift wider, and Treasury yields may rise toward the higher end of their range for the year to date. At the same time, credit may hold up better over the next few months because it’s slower to react as it is indirectly exposed to Fed buying. Better liquidity in Treasuries and agency MBS could make these asset classes move first. Then, as investors more broadly start thinking about the implications of a shrinking Fed balance sheet—and other central bank balance sheets grow at a slower pace—credit should weaken versus Treasuries and agency MBS. At this stage, likely later in the second half of 2017, we expect investors to demand a larger liquidity premium for less-liquid products, weaker technicals to start exposing cycle risks, and lower-quality corporates to underperform as a result.

Where markets go from there will depend in large part on US and global economic data and the evolution of financial conditions. Still, at the least, as central bank balance sheets shrink or fail to keep pace with previous growth rates, episodes of tighter financial conditions should be more severe and prove longer lasting, in our view. When this happens, the tightening in credit conditions will bite more meaningfully, given how late we are in the credit cycle, leading to more dramatic underperformance in corporates relative to MBS. Treasury yields should then decline.

To be sure, we will not be sailing these seas with a nautical chart. Markets have navigated uncharted waters for the past eight years and the stars were not particularly bright. Finding our way back to land is not as simple as turning the boat around. There are few precedents for tightening policy via central bank balance sheets while rate hikes are underway. Don’t expect an uneventful voyage. ■

Pieces Falling Into Place For a Bull Market in Japan

The Nikkei 225 Index peaked at 38,916 in 1989, and despite gaining nearly 180% since the financial crisis low, Japan's benchmark equity index is still about 50% below its all-time high. For market bears, the story of Japan's "lost decades" continues. For Jesper Koll, head of WisdomTree Japan, the pieces are finally in place for an equity market renaissance. "The structural bull market for risk assets is well on track in Japan," he says, while noting that policy changes and the emergence of a new middle class are "setting the stage for the next sequence of asset allocation rebalancing." Koll recently spoke with Morgan Stanley Wealth Management's Tara Kalwarski. The following is an edited version of their conversation.

TARA KALWARSKI (TK): What supports your bullish views on Japan?

JESPER KOLL (JK): I'm happy with the way that things are developing—in particular, that the structural tailwind from the labor-market tightness is improving the quality of jobs. There's a pickup in full-time employment, as opposed to part-time employment, which gives further credibility to the notion that domestic demand and consumer spending will have better traction.

With full-time employment, there's greater job security, greater confidence, and—importantly—as a full-time employee in Japan, you get access to credit. As a part-time employee, you cannot get a credit card, you cannot get a mortgage. So the fact that full-time employment is now on an upward trajectory is very encouraging. As the quality of jobs is improving, I am looking carefully at the consumer finance data and the mortgage credit data. The economy is not having a V-shaped recovery, but it's growing at a faster rate than it was a year ago. That improvement also verifies this thesis that consumer demand is actually on a solid footing.

There's also a pickup in business investment. Over the last couple of months, several companies have announced that they are building new factories in Japan. On top of that, the Japanese financial industry is now stepping up its investment in information technology, upgrading their mid offices and back offices to better computer systems. So the business investment expenditure cycle is turning positive.

In the next two to three months, I expect to see further evidence of this growth acceleration, with rising machinery orders and business confidence indicators expected to add further credibility to my positive-cycle thesis. Importantly, this likely means that the leverage cycle is also poised to start kicking up because, while large businesses may not need financing to build factories because of their high retained earnings, small- and medium-sized companies will need to borrow.

TK: What else supports this thesis?

JK: The second positive driver is portfolio rebalancing. It appears that Japanese financial institutions have finally recognized that no matter what happens in China, no matter what happens with US interest rates, Japanese rates are likely to remain around zero.

The realization that Tokyo Stock Exchange Index (TOPIX) has a dividend yield of slightly above 2%, while the 10-year bond yield is zero, is also allowing for Japanese domestic institutions to actually come back into the equity markets. It's still early days, but since April we have begun to see acceleration in the portfolio rebalancing of the Japan insurance companies and the Government Pension Investment Fund out of bonds, and into international securities as well as domestic equities. On top of that, the focus on shareholder value is for real. The number of share buybacks is actually beginning to pick up again. Japanese companies are now beginning to pay dividends—and dividend growth is beginning to accelerate.

TK: Do you anticipate individual investors in Japan will follow suit?

JK: Japan passed a corporate governance code and a stewardship code over the last couple of years, so institutional managers and corporations are being held more accountable for increasing capital returns. In late summer/early autumn 2017, Japan is likely to introduce a fiduciary code—which means that brokers and advisors are going to be held accountable to work in the investor's best interest. It's going to be Japanese style, which is to say there's no legal liability like there may be in the US, but it's going to be full transparency. In Japan today, if I buy a mutual fund or any security product, the seller has no responsibility to even disclose fees, and the average fee on a mutual fund sold in Japan is 4.3%. It's no wonder why there is so little investment activity—and the core part of this fiduciary code is going to be that you've got to disclose all fees, which is going to be very interesting.

The net outcome, and definitely a core focus of what Prime Minister Abe's government wants, is further upside in Japanese risk assets. Portfolio rebalancing is how we get there. It was started by the public pension funds in 2015 and 2016 and now, private sector institutions. The final phase will be individuals rebalancing their portfolios, and here the coming fiduciary code is beginning to set the stage.

TK: You mentioned capital expenditures and buybacks are increasing. Where do you think Japan is in the cycle?

JK: Japan is the undisputed world champion when it comes to retained earnings. If you look at cash and marketable securities on the asset side of the balance sheet at Japanese companies, 10 years ago it was 20% of GDP. Today, it's 130% of GDP—higher than any other country. If half of this money gets out into the system, the economy can grow by what, 20% to 30%.

Japan's shareholders are poised to benefit from corporations beginning to work their asset base harder. If you look at the payout ratio, dividend and buybacks as a percent of operating cash flow, Japan is at about 20%—the tail end of the world. So there's a lot of room for improvement. The combination of corporate stewardship code, the corporate governance code and the coming fiduciary code makes it likely that the buybacks and the dividends have entered a structural upcycle. I am impressed by the leaders of the Government Pension Investment Fund and the pressure they apply on companies to raise returns. In Japan, where government leads, the private sector will follow.

TK: What impact do you expect this to have on Japanese equity prices?

JK: I can't look you in the eye and say that the new fiduciary code is what's going to drive the market higher in the second half of this year. This is not a sprint, it's a. marathon. But I am certain that Japanese equities now have a structural tailwind from steadfast improvements in capital stewardship and returns. In turn, the retail shift out of deposits and into domestic equities is poised to support for Japan's structural bull market into 2018 and 2019.

In the immediate future, the yen exchange rate is poised to be the dominant performance drive. By the end of 2017, the yen will 125 or 130, to the US dollar, and I expect earnings revision momentum in Japan is going to continue to inflect positively into the second half of the year. Overall earnings growth on the order of around 25% to 30% is possible. As a result of that, I think one should be doubling up on the exposure to Japan.

TK: What investment opportunities look most attractive?

JK: My favorite structural investment idea is the small- and mid-cap space. This is where the domestic demand traction translates into equity performance. It is also where entrepreneurship has its most immediate impact. If you look at what actually creates economic growth, it is entrepreneurship. In the large-cap space, I think filtering out the Japan component from global developed markets exposure—with an overweight tactical allocation—is where you're going to get the most bang for your buck.

The Japanese financials are absolutely my favorite sector, because net interest margins are at their peak compression rate and from here on it is going to get better at the margin. Whatever President Trump may or may not be doing, bank rules and regulations are not going to be tightening anymore. As a bonus, Japanese banks have become successful lenders to Asia (excluding China) and the profit contribution from the overseas lending is picking up smartly.

TK: Are you avoiding any areas?

JK: One sector that's tricky at the moment: commercial real estate. The problem is overbuilding. There was the announcement of the Tokyo Olympics, on top of zero interest rates and deregulation of the zoning laws. There is the equivalent of 15% of the grade-A office stock coming on to the market in Tokyo in the next two and-a-half years. So you're going to see rental pressures. It's a buyer's market from the commercial point of view.

Residential real estate is better because you've got this underlying demand from the younger generation who are now getting better jobs, access to credit, and finally can move out on their own. Of the people between 20 and 35, slightly more than half are still living with their parents, compared to around 42% 10 years ago. It has picked up over the last decade because the only jobs that they could find were part time. Now that you can find full-time jobs, I do expect that that ratio is going to start to be coming down.

TK: Do Japan's demographic trends concern you?

JK: The birth rate fell below 1.25 five years ago. Now it's at 1.47—not enough for replacement, but there is a positive inflection. With full-time employment, it will likely climb higher. If I get a full-time job, my probability to be able to get married in Japan goes up to 92%.

The other thing is that immigration is happening. Tokyo is 30% of the Japanese economy, and six years ago, 3.1% of all the people employed were not Japanese. Today it's 6.4%. And Japan is changing the rules so you can apply to become a permanent resident after three years, instead of 10 years, providing you don't fall afoul of the law.

Japan is also the world leader in applied robotics and factory automation, which is spreading to the service sector. For example, Japanese banks are emerging as key investors in bitcoin and blockchain technology. Why are they so aggressive all of a sudden? Demographic trends. The baby boom generation is retiring, so they've got attrition that quite aggressively frees up the mid office and back office.

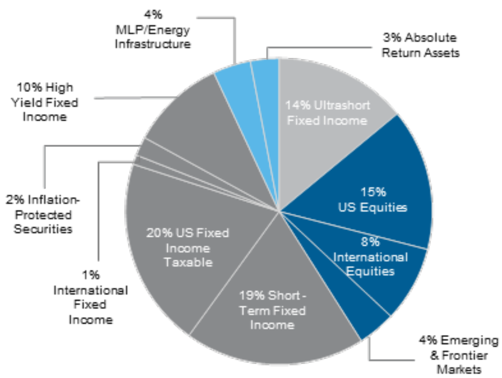
I've tried to make money out of investing on demographic principles, and I've never been successful. The demographics guy will tell you I haven't waited long enough, which is fine. My flip line is that, well if the academics and futurists are right and half of our jobs are going to be done by machines one day, trust me, you want a declining population. Consider this: The Japanese population declines by 50 every hour. I think this puts Japan in a demographic sweet spot. It forces more investment in applied automation and at the same time it allows companies to do so without creating social problems. ■

Jesper Koll 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.

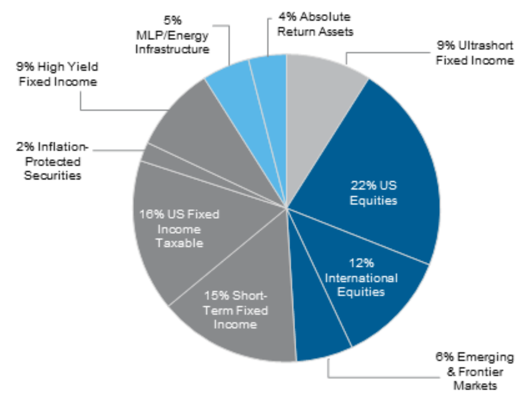
Global Investment Committee
Tactical Asset Allocation

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.

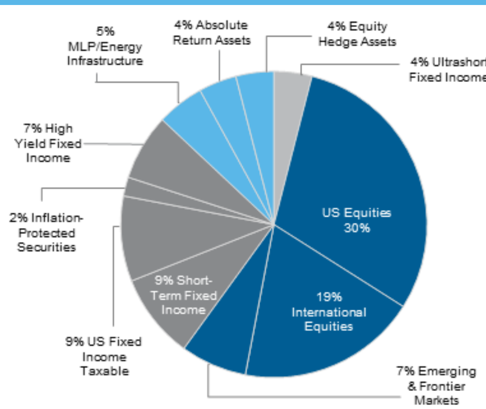
Capital Preservation



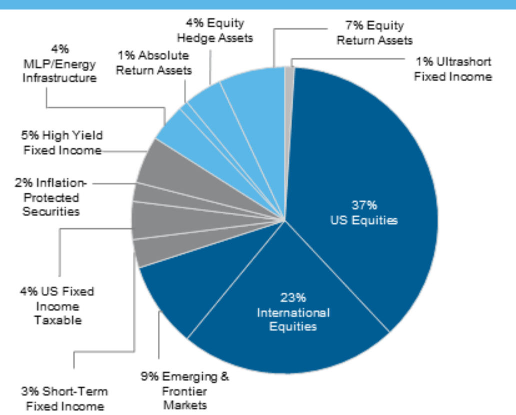
Income



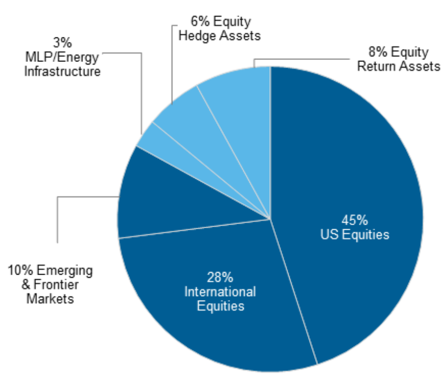
Balanced Growth



Market Growth



Opportunistic Growth



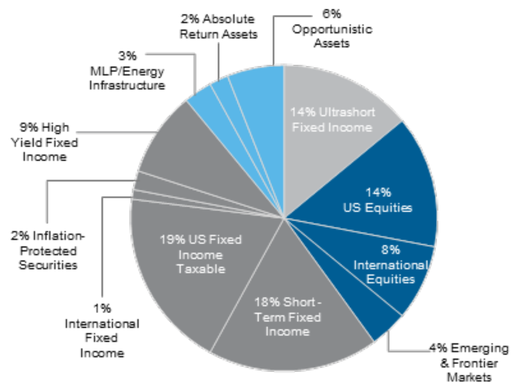
Key

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

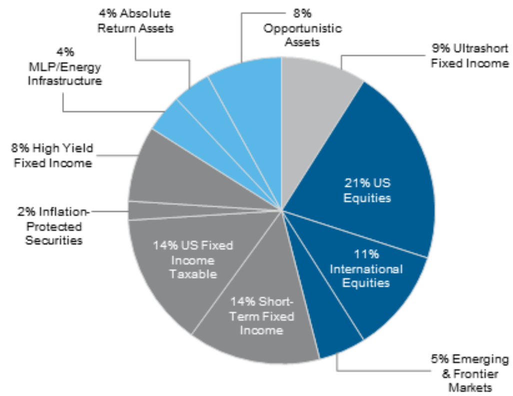
Source: Morgan Stanley Wealth Management GIC as of May 31, 2017

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.

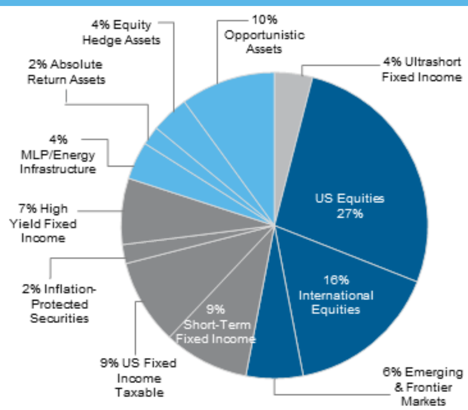
Capital Preservation



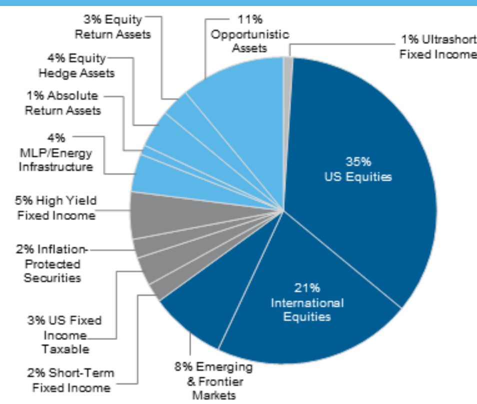
Income



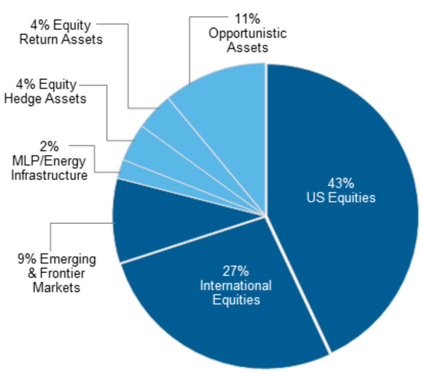
Balanced Growth



Market Growth



Opportunistic Growth



Key

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

Source: Morgan Stanley Wealth Management GIC as of May 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 recession and political events. With the recent Trump/Republican win, it appears that investors are getting more excited about potential growth and animal spirits are on the rise. This is likely to lead to the final euphoric stage of this cyclical bull market which could be quite powerful in 2017's first half.
International Equities (Developed Markets)	Equal Weight	We maintain a positive bias for Japanese and European equity markets despite the political challenges that both markets faced in the past year. Ironically, the populist movement around the world is likely to drive more fiscal policy action in both regions, which is desperately needed to make the extraordinary monetary policy offered in both regions more effective. Both are still at record levels of cheapness. We continue to recommend hedging currency risk for 50% of European and Japanese positions.
Emerging Markets	Overweight	Emerging market (EM) equities have been much better performers during 2016 than in the prior three years. However, new concerns have arisen with the recent strength in the US dollar and the rise in interest rates. With global growth and earnings accelerating and financial conditions remaining loose, we think EM equities will perform well again in 2017.
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. The Trump election win has inspired markets to think about inflation again. This has caused a meaningful rise in longer-term interest rates, a move that is likely 75% of the way done and should abate as the Fed raises rates this year. 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, expectations for oil prices and that 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	Overweight	The sharp decline in oil prices created significant dislocations in the US high yield market in 2015. Broadly speaking, we believe default rates are likely to remain contained as the economy avoids recession, while corporate and consumer behavior continues to be conservative. This has led to better performance in 2016, along with lower volatility than equities. We think this can continue but we are getting closer to being fully valued.
Alternative Investments	**Relative Weight Within Alternative Investments**	
REITs	Underweight	Real estate investment trusts (REITs) underperformed in 2016, but 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) were devastated during oil-price collapse and have rebounded sharply. As long as oil remains above $40 per barrel, they should provide a reliable and attractive 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. MLPs should be one of the strongest asset categories in the first half of 2017.
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 May 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

CSI 300 INDEX This is a capitalization-weighted stock market index designed to replicate the performance of 300 stocks traded on the Shanghai and Shenzhen stock exchanges.

CSI 500 INDEX
This is a capitalization-weighted stock market index designed to replicate the performance of 500 stocks traded on the Shanghai and Shenzhen stock exchanges.

For other 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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