

# On the Markets

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**MICHAEL WILSON**

Chief Investment Officer  
Chief US Equity Strategist  
Morgan Stanley & Co.

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## Actions Speak Louder Than Words

As I enter my 53rd year, I have to recognize that I'm middle aged. While that sounds and feels depressing, it sure beats the alternative! Another good thing about making it through another year is that I've had more meetings with investors to discuss and debate world events and the financial markets. It's interesting to hear how views have changed and to get different readings on recent developments. Yet, nothing speaks louder than one's actions—so I pay as much attention to what people are doing as to what they are saying.

In the past six months, my interactions with investors have rarely centered so much around the question: "What is everyone else doing?" Obviously, at the end of last year it was a concern that everyone else was selling—which, of course, prevented many from doing what they knew they should be doing, which is buying. Conversely, the concern now is that everyone is buying, and so nobody wants to sell in fear of missing out. My middle-age experience tells me when people are more concerned about what others are doing, they probably aren't thinking for themselves anymore. That usually marks the end of a trend.

Despite this year's relentless rally, I still think growth is going to be more disappointing than is the consensus. Furthermore, while in January stocks and credit rallied sharply on disappointing fourth-quarter earnings, in our view it's unlikely we'll get a similar reaction if first-quarter results turn out weaker than expected.

I was a lonely voice eight months ago when I called for a US earnings recession in 2019. While consensus estimates have fallen substantially since then, our models suggest they have another 5% to 10% to go. Given equity valuations are back at the high end of our range, I believe you should be prepared for a correction of at least that magnitude.

As support for our view, the Federal Reserve seems to be acting more concerned than they are letting on in their comments. In the past three months, the Fed has made one of the quickest pivots on policy we've witnessed, yet they continue to say the economy is solid and at little risk of recession. The bond market has taken notice: The 10-year US Treasury yield has plummeted, and the yield curve is inverted for the first time since 2007. That may not necessarily mean recession is imminent, but it likely means growth is slowing more than most thought it would six months ago. While that view seems to be getting priced into Treasuries, it's no longer priced into the equity or credit markets. We've always said the Treasury market cares most about the economy while equity and credit care about earnings. A weak earnings season should cause these markets to converge. Think for yourself and fight the urge to do what everyone else is doing. Instead, wait for the convergence and take advantage of the opportunities it creates. ■

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ON THE MARKETS / EQUITIES

# Beware the Fed's Dovish Gifts

**LISA SHALETT**

Chief Investment Officer  
Head of Wealth Management Investment  
Resources  
Morgan Stanley Wealth Management

In January, the Federal Reserve surprised the markets by announcing a “pause” in policy rate hikes, which led to normalized financial conditions, a plunge in cross-asset volatility and an 11% gain for the S&P 500 in the face of falling earnings expectations. Then, on March 20, the Fed surprised again, dashing any rate hikes this year and suggesting only one in 2020. As the economic data are mixed—and not recessionary—the Fed’s latest stance suggests policymakers may be worried about things they see beyond the current numbers. Alternatively, the Fed could be on the verge of compromising its independence and objectivity in the name of peace with politicians in Washington. Neither is good for investors.

**BIG BALANCE SHEET.** Specifically, a majority of the 12 members of the Federal

Open Market Committee (FOMC) reduced their “dot plot” forecasts of the fed funds rate (see chart). Next, they decided to end Quantitative Tightening (QT) by September, which is earlier than previously expected. That will leave the Fed balance sheet at roughly \$3.5 trillion, or nearly four times the size it was in 2009 prior to the start of Quantitative Easing. Importantly, they signaled intentions to keep the policy rate no higher than the economy’s neutral growth rate, also a departure from past practice. While these actions should provide near-term support for valuations and liquidity, we are not convinced that they are bullish for stocks. In fact, this “max dovish” policy may actually be bad news because it will leave the Fed without means to fight a recession should it become necessary.

The most direct impacts of the Fed’s announcement were on interest rates, the shape of the curve and the so-called terminal rate, the peak policy rate for the

cycle. Not only did Fed officials telegraph a high likelihood that their policy rate would remain between 2.25% and 2.50%, but seven of the FOMC members thought the rate would stay there through 2020; five saw rates anchored all the way through 2021. The median dot plots for 2020 and 2021 are the equivalent of removing two rate hikes, leaving only one more 25-basis-point increase on the table.

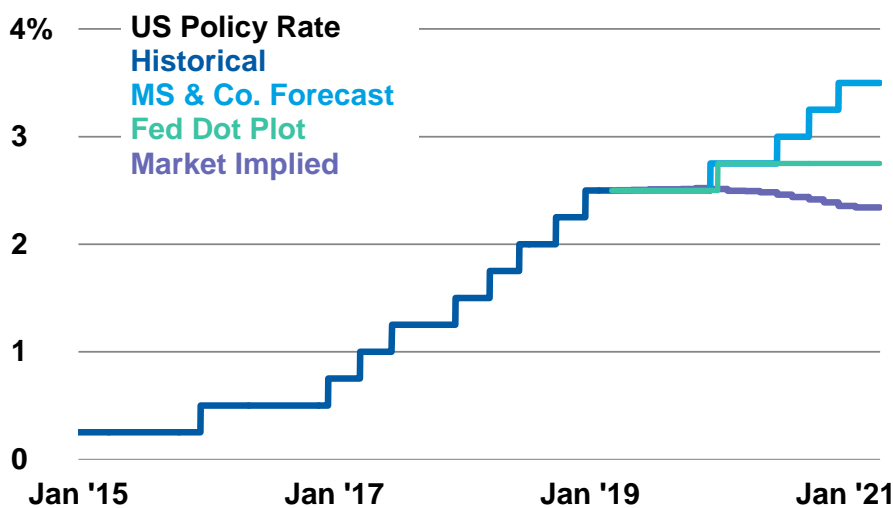
**INVERTED YIELD CURVE.** The Fed’s “max dovish” stance has caused the yield curve to invert out to seven years—a position that usually hurts bank stocks and deters long-term lending. Investors also tend to stay in cash, as there is little to be gained by reaching for yield in Treasuries or in credit (see page 12).

The implications of the Fed’s decision on the balance sheet are perhaps even more profound. While the policy rate operates in the economy’s credit channel, balance sheet operations inject or remove liquidity in financial markets, affecting the level and shape of the yield curve. The Fed also said it will maintain the balance sheet’s maturity makeup. This means longer-term rates are likely to remain lower for longer, keeping the federal government’s borrowing costs near record lows, likely enabling a lax fiscal policy.

**HIGHER INFLATION.** Lastly, in our view, the Fed actions show that it wants to drive inflation higher by overshooting the long-standing 2% target. Headline inflation is by definition backward looking, and we think higher oil and commodity prices, increased wages and a weaker dollar will cause inflation to rise. If so, any inflation surprise—which we expect in the second half—may force the Fed to hike, muddling their message and disarming a complacent market.

All in all, from a portfolio viewpoint we could consider adding gold and real assets such as TIPS as a buffer against stock and bond markets, which are likely to get even more expensive, and as a hedge against higher inflation, which now appears to be the Fed’s goal. ■

## The Fed Goes Dovish to the Max



Source: Bloomberg as of March 20, 2019

ON THE MARKETS / EQUITIES

# Data Deluge

DENNY GALINDO, CFA

Equity Strategist  
Morgan Stanley Wealth Management

Capturing data, moving data, analyzing data and the sheer growth of data—those were among the predominant themes running through the Morgan Stanley Telecom, Media and Tech conference last month. We expect the data era to be every bit as disruptive as the PC, internet and mobile revolutions that preceded it. Companies that excel at facilitating data movement, data analysis and data privacy should create the dominant businesses of the next 20 years.

The growth is showing up in companies building new data centers and spending on the equipment to run it, which is easy to track, but also those building networking equipment and processing chips needed to move and store the data. At the conference, one large chip company saw data center revenue growing 20% annually, powered by 40% annual growth in cloud servers (see chart). One CEO described the world as changing from a

computer on every desk, to one in every pocket, to one everywhere. While industries such as data centers, networking equipment and web services may have been the first beneficiaries, there are many more industries where data growth is just now becoming the dominant driver.

Among our findings:

**Companies are collecting more types of data than ever before.** A company that collects data for medical trials is adding wearable data, genetic data and other series that were never collected before. In the security industry, new businesses offer free end-point security on your computer in order to collect data on threats to the network. Content providers are gathering their viewership data to better understand their audiences. As new companies control new data streams and old ones are disintermediated, the data revolution is bound to shake up many industries.

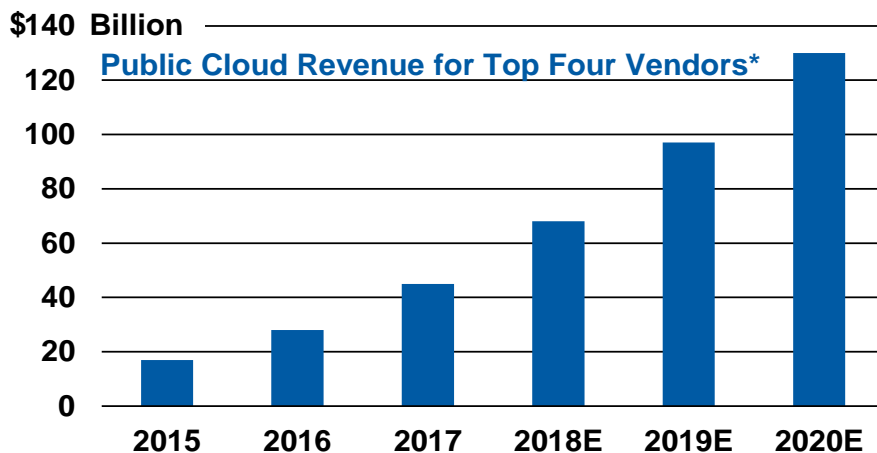
**Navigation technology is critical to staying afloat.** Efforts to make it easier to access and the tidal wave of data are

becoming more of a focus for tech companies. Companies presented new ways to use analytics in advertising to make it easier to launch automated ad campaigns. Chip companies discussed adding new software to make programming chips so easy it did not have to be done by experts, and customer-facing companies are trying to use data to make their content suggestions more relevant. Interestingly, while labor-intensive services like advertising might shrink as a result of the data explosion, others like programming hardware might expand by several orders of magnitude.

**5G wireless technology is coming on faster than expected.** The growth in data is stressing infrastructure in many places. One is in the transmission of data, where 5G wireless technology is expected to play a major role. Unsurprisingly, many companies were queried about 5G. Telecom companies talked about ways they could roll out the next-generation wireless networks faster than expected, while cable companies were more defensive, arguing that their own next-generation cable technology will be faster and better than telecom's 5G. Meanwhile, many telecom equipment companies reported customer spending on 5G has had an impact on revenues sooner than they had previously thought it would.

**Data privacy and security is an industry driver, too.** Some companies aim to make data less permanent through options like expiring posts and the ability to clear history. Despite a newfound affinity for privacy, many users still also prefer targeted ads to generic ads. The trade-offs will continue to be an important avenue for firms to differentiate themselves in the coming months. While for some tech companies privacy was always a core value, for others the shift is necessitating painful changes in their business models. ■

## Strong Growth for Cloud Servers Storing Data



\*Currency-adjusted

Source: Bloomberg as of Feb. 26, 2019

# Women's History Month Is Over. Now What?

LILY S. TRAGER

Director of Investing With Impact  
Morgan Stanley Wealth Management

During March, I watched with interest as every possible media platform produced images, quotes and stories of women innovators and groundbreakers in honor of Women's History Month. From scientists, to politicians, to social advocates and financiers, women have seemingly done it all. That said, as reported by Morgan Stanley & Co. Sustainability Research, there are still significant gender gaps across numerous areas such as education, health and wellbeing, politics, work and finance. Globally, only 49% of women participate in the workforce compared with 75% of men. Just one in four national parliament seats are held by women, and in 18 countries, husbands can legally prevent their wives from working.

As a way to carry on the important work of highlighting these inspiring stories about female innovators beyond the one month dedicated to it, I'm focused on

finding ways to drive long-term capital—from individuals, families, foundations, nonprofits, endowments and more—to create more balanced representation of gender across all dimensions of society. The good news is that opportunities for investors who want to use their financial resources as a tool to drive social change and greater gender equality have grown in both number and sophistication.

According to Bloomberg Professional Services, at least eight funds focusing on gender were created last year. Morgan Stanley Wealth Management's Investing with Impact Platform—which has more than 120 public and private market investments—provides access to separately managed accounts, exchange-traded funds (ETFs) and mutual funds focused on gender investing across six strategies. Furthermore, over 45 additional strategies on the platform not only have environmental and social mandates but also incorporate gender-related criteria when making an investment decision.

## What Is Leading to Product Innovation?

A tailwind for continued product innovation, including investment products and indexes, is the expanding coverage and sophistication of gender-diversity metrics. For example, the share of global companies reporting on their percentage of women employees has grown to nearly 50% in 2017 from 27% in 2010, according to Bloomberg (see chart). The drivers behind this trend include investor and asset manager demand, the rise of organized reporting initiatives such as the Global Reporting Initiative and Sustainability Accounting Standards Board, mandated quotas in California and Europe, increased disclosures in female representation on boards in Australia and the corporate pay gap in the UK, according to Morgan Stanley Research and Bloomberg. In some cases, major stock exchanges incorporate gender into their listing requirements.

## Gender Diversity Investment Framework

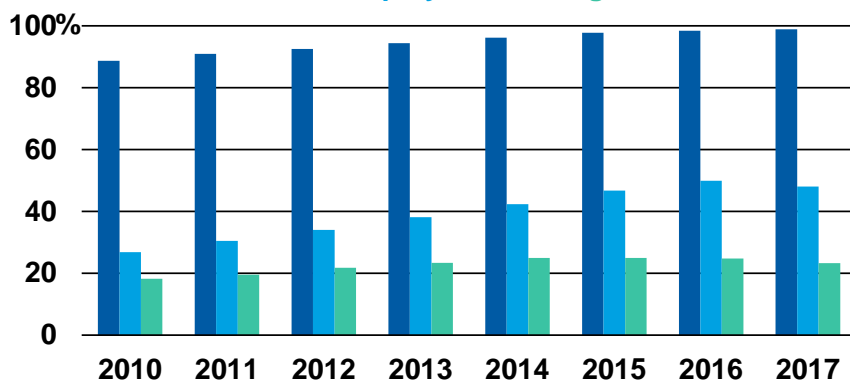
The integration of gender-diversity criteria into an investment portfolio—using one or more of the approaches outlined below—should be considered alongside traditional asset allocation and overall investment strategy decisions. Key approaches as part of our proprietary investment framework:

- **Avoid gender diversity laggards.** Identify investments in public and private markets that screen out companies with poor records on gender diversity or those that are involved in the adult entertainment industry. With this approach, investors are mainly avoiding the risk of investing in companies that could face reputational risk as a result of discrimination or sexual harassment lawsuits, for example, or that may have poor talent retention and productivity practices.

## Tracking Women in the Workplace Has Increased

Percentage of Companies Reporting Women\*

Board Members Employees Managers



\*Companies in the MSCI World Index

Source: Morgan Stanley & Co. Research as of Feb. 25, 2019

- **Seek out gender diversity leaders.** In this category, identify investments across public and private markets, including equity and debt, which provide capital to companies that are peer leaders in promoting gender diversity at the board and senior management level, as well as firms with strong programs in place for supporting women in the workplace. This includes maternity and paternity leave as well as professional development opportunities. These firms may be better positioned for productivity, decision-making and innovation—plus they may have better customer acquisition and retention records, as well as improved employee talent retention and recruitment. Those factors can lead to long-term financial outperformance.
- **Invest in companies that seek to elevate women and girls.** “Gender-

lens investing,” a term that was coined in 2009, is about making investments that not only embrace gender balance and representation in the workplace, but also offer products and services aimed at improving the lives of women and girls, especially those who are marginalized because they are poor, uneducated, live in rural areas or are raising their families as single mothers. Investors can aim to have more direct impact on the causes they care about by choosing this approach across both public and private markets, including equity and debt.

### Tracking Performance and Reporting on Outcomes

Increasingly, we are working with clients to track the social and/or environmental impact of their investments alongside financial returns, including

through the United Nations Sustainable Development Goals (SDGs), a global framework of 17 goals for sustainable development through 2030. Goal 5, which addresses gender equality, is useful in this regard. From an investing perspective, this is an issue that all companies can address through their actions, and there is a growing body of research that shows increased diversity and a more inclusive workforce can be attributes of strong financial performance as well. Specifically, MS & Co. research on the topic demonstrated that stocks with high gender diversity delivered better risk-adjusted returns. ■

*For more information about gender-diversity investing, please contact your Financial Advisor.*

# Finding Sustainable Fund Managers

**SUSAN K. MCDOWELL**

*Investing With Impact Investment Officer  
Morgan Stanley Wealth Management*

**EMILY G. THOMAS, CFA**

*Investing With Impact Lead Analyst  
Morgan Stanley Wealth Management*

Each year we see more investors interested in putting their money to work to help achieve environmental and social goals, so there is no shortage of offerings. More than 1,500 asset managers worldwide, with in excess of \$63 trillion in assets, have signed the United Nations’ Principles for Responsible Investing. Nearly 40% of the 300 asset managers we cover at Morgan Stanley Global Investment Manager Analysis (GIMA) offer at least one impact-investing approach.

With this proliferation, it is getting harder to tell which ones are truly trying to achieve environmental, social and governance (ESG) goals. We want to avoid those managers who may be “greenwashing,” a term describing those who claim an environmental focus without providing any real benefits. GIMA has a multistep process that helps identify sustainable funds that are driving positive impact while generating market-like returns. This process is in addition to our quantitative and qualitative analysis, and business and operational reviews.

For managers who claim an ESG focus, we also look for:

**A documented sustainable investment process.** Is there specific language in a prospectus or offering document that describes the ESG factors emphasized and what role they play in the investment process?

**An experienced sustainable-investing team.** We find the most successful asset

managers hire leaders in sustainable investing to develop an investing framework and team that include portfolio managers and analysts who perform ESG research alongside fundamental financial analysis.

**A clear and intentional process for creating positive change.** We expect the process to be repeatable and defensible, with clearly drawn lines for when they will or won’t invest due to ESG factors.

**A well-defined and repeatable method for evaluating data.** ESG data vary by sector, region and data provider. We look at how asset managers use data from providers and how they deal with gaps in data and incorporate their own research.

**Demonstrated shareholder engagement around sustainable initiatives.** Managers can file shareholder resolutions, vote proxies and speak directly to company management to further sustainable goals.

**Strong impact performance.** We compare performance with both sustainable and traditional peers and benchmarks. Our highest-conviction

managers are added to the GIMA Focus List. Today, 18% of Morgan Stanley Wealth Management’s Investing With Impact Platform offerings are on that list.

**Sustainable outcomes measurement and impact reporting.** Managers are developing reports investors can use to assess a fund’s investments against its impact objectives and measure the effects.

When it comes investing, managers can deploy one or more of four approaches (see table). Currently, around two-thirds of the investments on our platform integrate ESG criteria into their financial analysis to identify opportunities and risks.

**MORE GROWTH AHEAD.** We expect the number of sustainable-investment offerings to continue to grow. A recent survey from the Morgan Stanley Institute for Sustainable Investing and Morgan Stanley Investment Management found that 84% of the 118 global asset owners surveyed (60% of which had assets over \$10 billion) are pursuing or actively considering pursuing ESG integration in their investment process.

Our evaluations should allow Financial Advisors to identify those managers that can help their clients achieve both their investment and sustainability goals. Just as important, our process can help clients avoid investments that have a sustainable focus in name only. The value proposition to clients is clear: We kick the tires so you don’t have to. ■

## Investing With Impact Approaches

Minimize Objectionable Impact		Create Targeted Impact	
Restriction Screening	ESG Integration	Thematic Exposure	Impact Investing
Intentionally avoid certain companies, industries or countries due to value or risk-based criteria	Proactively consider ESG criteria alongside financial analysis to identify opportunities and risks	Themes solving sustainability-related domestic challenges across sectors, populations or geographies	Investment funds delivering specific positive social and/or environmental impact through their business model, products and services
← Public and Private Market →		← Private Market	

Source: Morgan Stanley Wealth Management Resources

ON THE MARKETS / CHINA

# China's Race for Foreign Capital

**JAMES K. LORD**

Strategist  
Morgan Stanley & Co. International PLC

**ROBIN XING**

Economist  
Morgan Stanley Asia Limited +

China's relationship with the global economy is undergoing a structural transformation. The nation's current account is in long-term decline and the future growth of the economy will be increasingly dependent on foreign capital. Indeed, 2019 will likely mark China's first annual current account deficit since 1993 (see chart). Unlike that year, though, this coming shift to a deficit position should be sustained, and we expect the reliance on foreign capital to grow in 2020 and beyond. This will bring both uncertainty and opportunity for investors, with major implications not only for China, but also for the global economy and other economies dependent on foreign capital.

China's current account is slipping for several reasons. From an international trade perspective, China's share of global

goods exports has hit a plateau, domestic demand for consumer and capital goods imports is rising and a service-trade deficit is slowly growing, led by demand for outbound tourism. From a savings-investment perspective, the national savings rate has weakened in recent years due to an aging population and has slipped at a faster pace than the investment rate.

This trend will have a great impact on China's economy and financial markets (see table, page 8). We expect a declining savings rate and aging population to lead to a current account deficit of \$50 billion, or about 0.3% of China's GDP in 2019. We see that figure reaching \$420 billion, or 1.6% of GDP, by 2030. The growing current account deficit will also encourage an opening up of China's economy and financial markets to foreign investors.

## Where Is the Consensus?

We believe the majority of investors expect limited inflows to China and tend to interpret China's shift from a net saver

to a deficit economy more negatively. Investors see minimal reforms and little opening up of the financial market, despite growing pressure for China to move in this direction. The general belief is that the authorities are allowing the financial market door to open wider than before, but it only opens inward and represents symbolic rather than substantive market reform. In particular, concerns tend to focus on China's currency risk, continued capital controls and debt problems, as well as friction caused by regulatory differences.

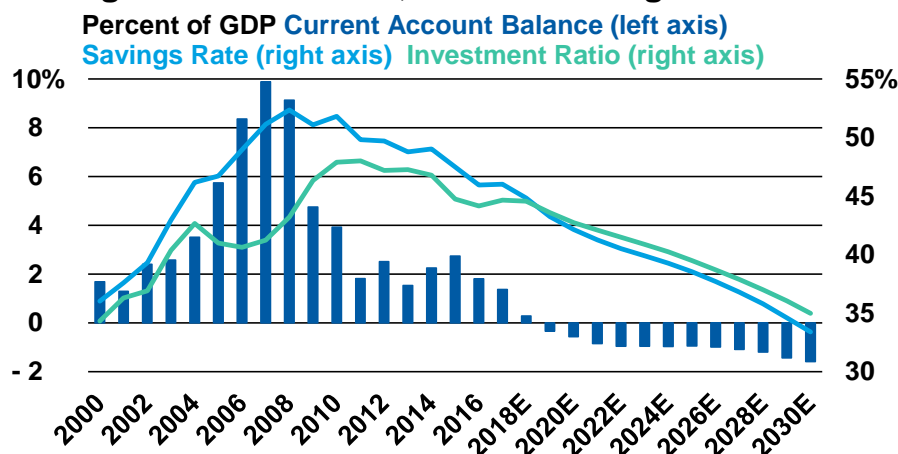
## Big Picture Conclusions

**Transforming financial markets.** The biggest changes are likely to be seen in the structure of China's financial markets, which at present are not particularly integrated into the global economy. China has received limited levels of portfolio inflows over the past two decades and, as a consequence, foreign ownership of the domestic equity and bond markets is very small, at 2.6% and 2.0%, respectively. This is very likely to change. We expect to see a large increase in portfolio flows as China's share of global bond and equity indexes looks certain to grow, while global reserve managers will probably only gradually increase the share of renminbi-denominated fixed income securities in their currency reserve assets.

### Rapid increase in portfolio flows.

This year, we expect to see \$80 billion to \$100 billion of inflows into the government bond market, compared with \$35 billion on average in the 2015-to-2018 period. Potentially that will grow to as much as \$120 billion on average between 2020 and 2030. For equities, we expect 2019 to be a record year of inflows for China's A-shares, with as much as \$70 billion to \$125 billion entering the market. In the longer run, we expect annual inflows to normalize in the range of \$100 billion to \$220 billion. Lastly, in China's onshore corporate bond market, we are forecasting a total of \$300 billion to

## China's Current Account Surplus Shrunk Rapidly During the Past Decade, and Is Heading for Deficit



Source: CEIC, Morgan Stanley Research as of Feb. 11, 2019

\$400 billion of inflows by 2030. However, most of the inflows will come in the back years due to the asset class's last destination status for foreign fixed income investors.

**Rising reserve currency status.** We think that renminbi-based assets could reach 5% to 10% of global currency reserves in the next 10 years, surpassing the significance of Japanese yen and British sterling. A further opening up of China's financial markets should help to internationalize the renminbi, encouraging inflows from reserve managers. We expect only a gradual increase though, as a more serious challenge to the euro—let alone the US dollar—as a share of global currency reserves entails deep reforms, which for now seem less likely.

**We expect resilient foreign direct investment (FDI) financing.** China will likely remain a large recipient of FDI for two reasons. First, China still possesses competitive advantages, including a highly skilled labor force, a well-sourced supply chain with efficient logistics, rising innovation capability and an enormous domestic market. Second, China will open up more sectors of the economy to foreign involvement as policymakers accelerate the pace of reforms. We thus expect to see net FDI inflows of \$110 billion to \$230 billion per year through 2030 versus an annual average of \$126 billion in the past decade. These flows should offset half or more of the \$210 billion average annual current account deficit and help to keep China's external funding risks at bay.

**A great diversifier.** Chinese assets have a very low correlation with global stock and bond benchmarks and thus represent a strong source of portfolio diversification attractive for global multiasset managers.

## Where Could We Be Wrong?

The main area where our thesis could come undone is the willingness of the authorities to open up the financial market to more foreign investment. If we are wrong, and the authorities fail to do so, this runs against the economic forces

## MS & Co. Forecasts for China Capital Flows

<b>Current Account</b>	China to shift to current account deficit (0.3% of GDP) in 2019, gradually widening to 1.6% of GDP by 2030
<b>Portfolio Flows</b>	For 2019, \$80 billion to \$100 billion inflows into the government bond market; \$70 billion to \$125 billion for A-shares market
<b>Foreign Direct Investment</b>	Net inflows remain robust at \$110 billion to \$230 billion per year in 2019 through 2030
<b>Reserve Currency</b>	Renminbi could gradually reach 5% to 10% of global foreign currency reserves in the next 10 years, surpassing the yen and the pound
<b>Bond Inclusion</b>	Limited impact on developed market bonds, but smaller emerging market countries such as Colombia could be more affected
<b>China Equity</b>	Overweight China equities; growth in A-share market cap over the long run, rising weight of A-shares in the MSCI EM Index, and a stabilization in China's growth
<b>Foreign Exchange</b>	Renminbi to dollar exchange rate 6.55 by the end of 2019, and 6.30 by year-end 2020
<b>Interest Rates</b>	Bond index inclusion, reserve manager diversification, disinflationary pressure and further easing by central bank
<b>Corporate Bonds</b>	About \$300 billion to \$400 billion inflows into the corporate bond market by 2030, mostly coming in the back end as the asset class is the last destination for foreign fixed income investors

Source: Morgan Stanley & Co. Research as of Feb. 11, 2019

driving the current account deterioration. There are two potential consequences. First, it could simply mean that the currency weakens to make it more attractive for foreign investors to purchase assets in China and mitigate the deterioration in the current account position. Second, the adjustment could come through lower growth, via a larger slowdown in investment. Our base case is that the decline in savings outpaces the decline in investment, leading to a wider current account position. However, without the external funding, it could be that investment drops faster, reducing the need for funding and preventing the emergence of a large current account deficit.

Another area where we could be wrong is on the trend of internationalization of the renminbi and the willingness of reserve managers to add renminbi-denominated bonds to their portfolios. After all, the bulk of the increase in China's share in reserve

assets comes from Russia and it is not yet clear that others will follow suit, particularly if the broader opening up of the economy does not take place. Our 2019 call on the currency—6.55 to the dollar by the fourth quarter, up from 6.71 now—also factored in an eventual trade deal between the US and China, so further escalation of trade tensions would go against our forecast. ■

*Also contributing to this report were Min Dai, Laura Wang, Kelvin Pang, Jenny Zheng, CFA, Jonathan F. Garner, Anil Agarwal, Zhipeng Cai and Chun Him Cheung of Morgan Stanley Asia Limited+; Sheena Shah, Jan Kozak and Daniele Antonucci of Morgan Stanley & Co. International PLC+; and David S. Adams, CFA, and Matthew Hornbach of Morgan Stanley & Co. LLC.*

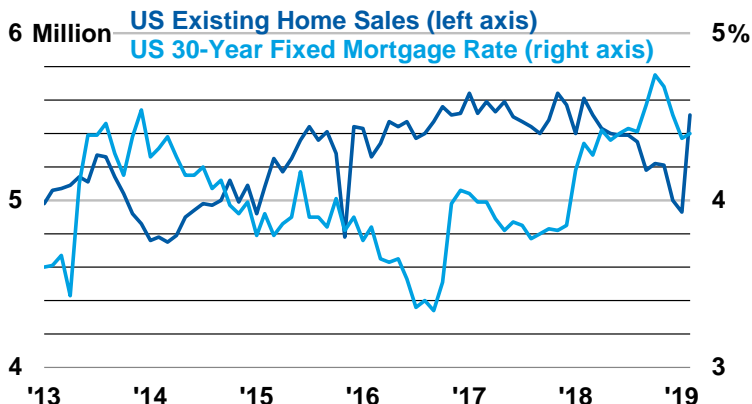
*For the complete report, "The Transformation of China's Capital Flows," contact your Financial Advisor.*



ON THE MARKETS / SHORT TAKES

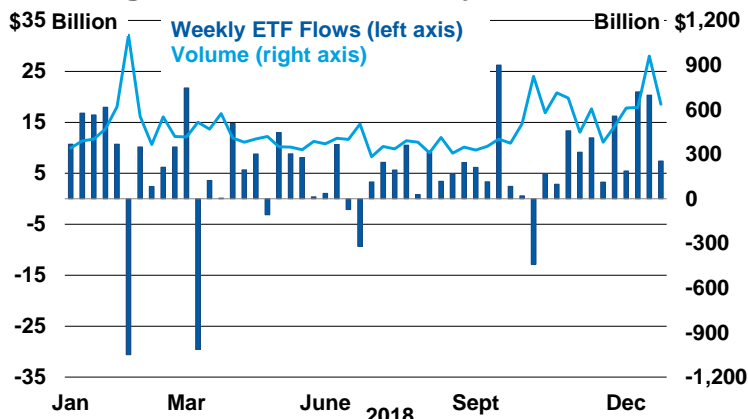
## US Existing Home Sales Rebound With Largest Gain in More Than Three Years

US existing home sales increased 11.8% on a month-over-month basis in February, the largest gain since December 2015 (see chart). Falling mortgage rates and higher consumer sentiment, supported by a dovish Fed, helped drive sales. Despite this surprise report, home sales have largely fallen since late 2017. Mortgage rates finished modestly higher last year, after having risen sharply in the first half. In addition, tax reform has weighed heavily on the housing market because it caps state and local tax deductions at \$10,000—a low number for taxpayers in states and municipalities with higher income and property taxes. For example, on a year-over-year basis, new home sales declined 51% in the Northeast for the period ending in September 2018. —*Vibhor Dave and Chris Baxter*



Source: Bloomberg as of March 26, 2019

## Exchange-Traded Funds May Buffer Market Volatility

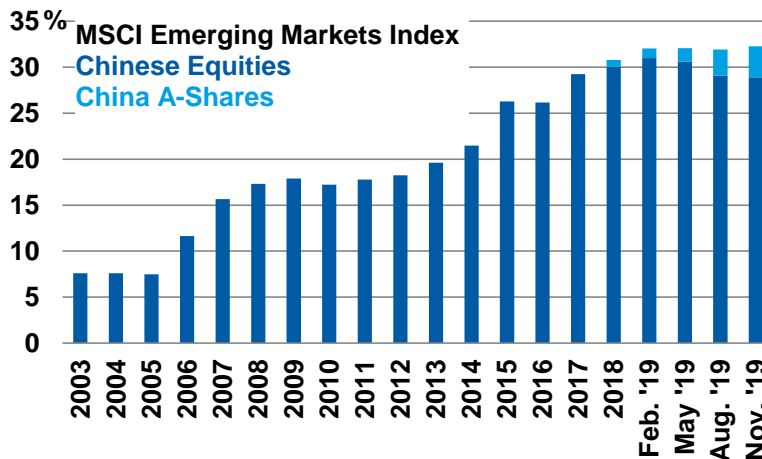


Source: Morgan Stanley Wealth Management ETF Research, Bloomberg, NYSE Arca as of Dec. 31, 2018

There recently has been renewed concern about what role exchange-traded funds (ETFs) play in equity market volatility. For example, in December 2018, the VIX spiked and ETFs had their second-highest weekly trading volume of the year, as \$961 billion of ETFs changed hands (see chart); however, 98% of the volume took place on the secondary market. As such, most ETF volume was buyers and sellers swapping existing shares, rather than money entering or exiting underlying markets via creations and redemptions. Furthermore, the month had positive ETF inflows of \$54.2 billion. While acknowledging the smallness of this sample, we believe this shows that market volatility does not always result in massive ETF outflows. Furthermore, the structure may absorb selling pressure on underlying securities, as buy and sell orders for ETF shares are matched on exchanges. This is no coincidence, but a feature of ETFs that traces back to their origins in the wake of the 1987 stock market crash. —*Gray Perkins*

## Why More China A-Shares Could Show Up in Investors' Portfolios

Chinese stocks make up about 30% of the MSCI Emerging Markets Index, but they mainly comprise large companies, some of which trade in the US and Hong Kong. China A-shares, those formerly reserved for Chinese investors only, make up about half of China's total market capitalization and weren't even in the index until last year. As China continues to move toward open markets, MSCI is increasing the presence of A-shares in its emerging markets index to 3.3% by November, up from 0.7% now (see chart). These changes will take place in three steps in May, August and November, and will incorporate large- and mid-cap companies. Index funds and exchange-traded funds—a popular way for foreigners to invest in the world's second-largest equity market—will then have to add those shares to the portfolios. Given the size of the A-share market, we expect their representation in the index will continue to grow. —*Laura Thomas*



Source: MSCI, FactSet as of March 13, 2019

ON THE MARKETS / HEALTH CARE

# Click Here for Health Care Savings

**ZACK SOPCAK**Equity Analyst  
Morgan Stanley & Co.

Health care costs in the US have become an outsized burden, increasingly borne by the elderly and the poor. Health care spending rose to 18% of GDP in 2017 from 6% in 1970, far outpacing the comparable country average, which increased to 11% from 5%.

According to a Kaiser Family Foundation study, 14% of total per capita income in 2013 for traditional Medicare beneficiaries went to health care—and that is likely to reach 17% by 2030. Approximately 10% of Medicare beneficiaries spend as much as 59% of total income on health care, which is expected to increase to 74% by 2030. These rising costs are exacerbating income inequality: Kaiser estimates that those with income between 100% and 300% of the federal poverty level spend 15% to 16% of their budgets on health care, versus 14% for the average Medicare beneficiary.

Compounding the problem, waste accounts for an estimated 34% of US health care costs. Health care has been plagued by inefficiencies, given the lack of transparency and fractionalization of the industry. A study in the *Journal of the American Medical Association* estimated that \$910 billion of 2011 health care outlays were wasted, including \$300 billion of Medicare and Medicaid spending. Waste comes from overtreatment, pricing failures, fraud/abuse, administrative complexities and failures of care coordination/delivery. The first three sources make up 60% to 70% of the total.

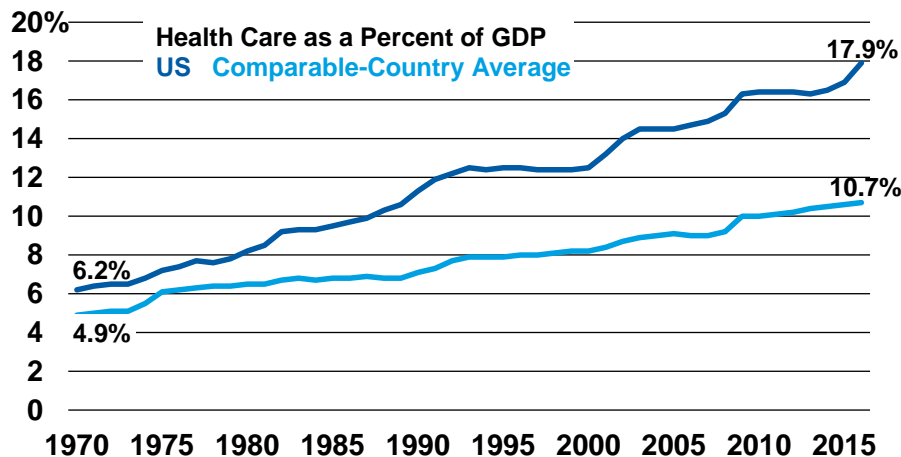
**THE HCX SOLUTION.** We believe an online shopping tool—we call it “Health Care Expedia,” or HCX—could be one answer. Although some pricing tools and review sites for health care exist, adoption has been extremely low. We envision a site along the lines of an online travel agency, with physicians, facilities and procedures searchable for reviews and

costs. We note that as costs increasingly shift to the patient, individuals are starting to approach health care as consumers, empowered by technology and the accessibility of information. Enabling patients to directly book appointments and pay for procedures could further engage them in managing their care.

We envision HCX being created in the private sector and initially deployed in Medicare. The Medicare market is based on a single federal policy and has taken a significant step toward a managed care approach with Medicare Advantage, which makes up about 35% of the eligible pool. From the standpoint of the stakeholders involved in managing a population, Medicare has the most concentrated pool of money and is the least complex to navigate. In contrast, the employer-sponsored market is made up of hundreds of thousands of companies making individual decisions. Decisions about Medicaid and the Children’s Health Insurance Program are made at the state level, which helps increase the concentration of decision-making. Certain Medicaid populations would not be suited for this tool, which includes the serious mental illness cohort; also, the temporary assistance for needy families population is fairly transient due to frequent eligibility changes, which slows uptake.

**PERFECT STORM.** We see a perfect storm for HCX: Aging boomers are more tech savvy. E-commerce penetration varies by age, with younger cohorts more likely to shop online than older consumers. As these younger groups age into the 65-plus category and adopt Medicare as their insurance, we expect penetration to increase in tandem with willingness to use an online shopping tool for health care. By the end of 2029, the boomers will have all aged into Medicare. In the US, 24% of the population is projected to be 65-plus by 2060, versus 15% in 2015. Once proven within Medicare, the adoption could rapidly increase once it hits the employer market—the largest cohort in the US.

## Health Care Spending in the US Takes a Greater Share of GDP Than in Comparable Countries



Source: KKF, MS &amp; Co. Research as of Jan. 16, 2019

## Who Could Create HCX?

We see three sets of candidates that can create HCX. We do not believe that government can do an effective job, but it could be a good administrator of a ready-made tool.

**Amazon/Berkshire/JPMorgan joint venture.** In January 2018, Amazon, Berkshire Hathaway and JPMorgan Chase announced that they would partner to create an independent entity focused on health care costs for US employees. Notably, they stated that the new venture will be “free from profitmaking incentives and constraints” and will use technology to tackle rising costs and increase transparency. The three companies employ 950,000 employees, or some 2.4 million insured members by our count, spending \$13 billion a year on health care. With these companies stepping in as stakeholders and agents of change, we expect more employers to join over time. We think recently appointed CEO Atul Gawande, a Harvard surgeon, public health researcher and journalist, will bring ideas to be tested. He does not believe in a blanket solution and envisions pilot programs to experiment and discover what works.

**New tech entrants.** Consumer-centric technology companies are more likely to create this tool than industry incumbents. We believe they have a better understanding of consumer behavior and how to influence it. Their high brand recognition and trust generally drive loyalty, which can pave the way for changes in behavior. According to Hubspot, a company whose Net Promoter Score (NPS) measures customer satisfaction, insurers carry an NPS of 13 on average versus 45 for online shopping.

**Incumbents.** Insurers have been working toward a version of HCX but have hit snags. Historically, health care providers have had no incentive to increase price transparency because the traditional fee-for-service model rewards volume and higher prices over quality. However, insurers have developed solutions to improve transparency and

quality of care, but adoption has been low. Health care incumbents generally cite regulatory complexities, contractual relationships and the fragmented nature of the health care system as barriers for an online tool. While insurers and providers must maintain a delicate balance, we think incumbents on both sides can play a role.

## Barriers to Change

Of course, there are significant barriers to an HCX type of approach to health care:

### Need for behavioral change.

Currently, there are no incentives or comprehensive ways to shop for health care, so when HCX is introduced, people will need to adjust how they consume care. For the Medicare population, saving money on out-of-pocket costs would be incentive enough.

**Data fragmentation.** Information is highly fragmented with limited interoperability, making a standardized database difficult to create. Electronic health records, which were intended to reduce friction, have yet to achieve that goal. The systems that have been developed cannot communicate, and there is no seamless integration from physician to physician or hospital to hospital. Several efforts are underway to address these issues, potentially leading to open data and standardization. A standardized data collection and storage system could simplify price transparency.

**Physician resistance.** Some practitioners argue that price shopping medical care would encourage patients to favor cost over quality in an industry that should not be commoditized.

**Providers' vested interests.** In the current fee-for-service environment, providers are incentivized to increase volume of services, even if there is no value add. Encouraging price shopping or reviews could drive patients away and negatively affect profitability.

## The Outlook

Our proprietary cross-sector work, encompassing Morgan Stanley's Healthcare, Technology, Financial and Sustainability teams, includes an

evaluation of the existing landscape, evidence for the power of online shopping tools and a model of potential savings. We started with the \$3 trillion-plus in annual US health care spending, analyzing how much is spent and by whom. Then we looked at changes driven by mergers and acquisitions and technology disruption, and the tools that are already available. Finding the existing technology infrastructure inadequate, we looked for evidence that price comparison and the use of reviews for health care could lower costs. We found that interest is high but the use of reviews is low. Assuming that HCX could reduce waste by as much as 50%, we model up to \$800 billion savings across all health care and \$260 billion in Medicare alone. This opportunity could create a new revenue stream for the creators of the HCX tool. We estimate the revenue opportunity could reach \$240 billion for the total health care system and \$70 billion for Medicare alone.

Longer term, this work supports our current positive outlook for managed care companies and our negative stance on health care facilities. This report includes a proprietary model that estimates savings in 2025, when the youngest of the baby boomers have aged into Medicare. We see this as the most logical entry point for online tools, given stakeholder alignment and expected outsized growth in costs, and how they accrue to the government and the insurers. We also expect the HCX approach to empower people to take ownership of their care, choosing cheaper sites for care and preventative medicine, a potential negative for facilities stocks, which could see continued pressure on admissions and utilization rates. ■

*Also contributing to this report were Ricky R. Goldwasser, Leigh Pressman, CFA, Betsy L. Graseck, CFA, Brian Nowak, CFA, Kai Pan and Mark Savino of Morgan Stanley & Co.*

*For the complete report, “Click Here for Healthcare Savings: Transitioning Trillions to Online Shopping,” contact your Financial Advisor.*

ON THE MARKETS / FIXED INCOME

# Flat Treasury Curve Flattens Corporate Yields

**DARREN BIELAWSKI, CFA**

Fixed Income Strategist  
Morgan Stanley Wealth Management

We often write about credit from an excess return perspective—that is, isolating the credit spread component by comparing returns versus duration-matched US Treasuries. However, it is also important to consider “yield to worst” valuations. That’s because, assuming no default, this is the return investors can expect if the bonds are held to maturity or called prior to maturity. Also, it helps inform how issuers may issue new debt, which could affect spreads and the makeup of the index against which investors build portfolios and measure performance.

Now that the US Treasury yield curve has flattened, there is little extra yield to be had in longer maturities. Going to a 10-year note from a two-year increases yield just 14 basis points, and extending to a 30-year adds only 55 basis points. Naturally, investors may seek higher yields by stepping down in quality into investment grade corporate bonds. To wit, the yield-

to-worst for investment grade bonds of 10 or more years is 4.41%, compared with 2.41% for a 10-year Treasury and 2.81% for a 30-year Treasury.

**CHANGING VALUATIONS.** We caution, however, that tightening spreads in investment grade corporates have also shifted the relative valuations within Bloomberg Barclays US Corporate Index. As demonstrated in the chart below, bonds maturing in one to three years currently capture 88% of the yield-to-worst of bonds maturing in three to seven years, 77% of bonds maturing in seven to 10 years and 66% of bonds maturing in 10 or more years. These figures all exceed 10-year averages of 62%, 48% and 39%, respectively. As with Treasuries, investors gain less by increasing duration than they have at most other times this cycle.

While flatter curves reduce incentives for investors to extend duration, they may prompt companies to refinance or issue new debt. According to CreditSights, an independent global credit market research

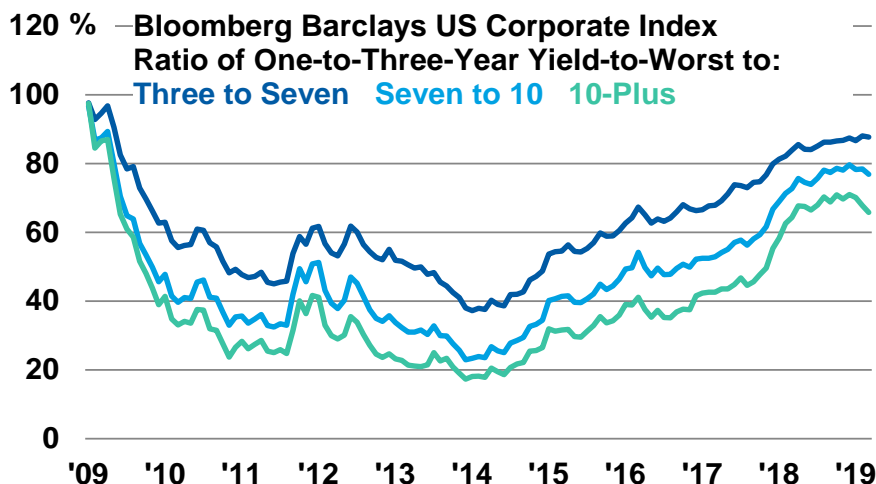
firm, the percentage of US investment grade corporate debt issued in the one-to-five-year maturities has fallen to 43% in 2018 from 54% in 2014. Much of this supply has shifted to the long end of the curve (11 or more years), as issuance in this bucket increased to 29% in 2018 from 17% in 2014.

**LIABILITY MANAGEMENT.** So far this year, several issuers have extended the duration of their liabilities and eased refinancing concerns by tendering near-term maturities and issuing debt of 10 or more years. Others have opportunistically issued at the long end. Managing the maturity ladder and interest expense is paramount for BBB-rated issuers given risks posed by a ratings downgrade. Credit curves for BBB issuers remain near their flattest levels of the past decade and only approximately 15 basis points steeper than their A-rated peers, further incentivizing issuance out on the curve.

We have seen the impact of longer-duration issuance, combined with an increase in overall supply, on the duration composition of the Bloomberg Barclays US Corporate Index. Overall duration has increased to 7.42 years from 7.04 years at the end of 2015. Within the index, maturities of 10 or more years now contribute 61% of the duration, up from 57% in 2015. For investors managing portfolios versus this index or the broader Bloomberg Barclays US Aggregate Index, of which the corporate index is a subset, this duration extension will also lengthen the duration position of the portfolio or increase tracking error with respect to the benchmark.

**FRONT END RECOMMENDED.** Given current valuations for risk assets at this stage of the cycle, we continue to recommend a relative overweight to corporate credit at the front end rather than further out on the curve. Much of the yield generated across the curve is captured in the first several years, while shorter-dated exposure reduces sensitivity to changes in both interest rates and credit spreads. ■

## Not Much to Gain in Yield by Increasing Duration

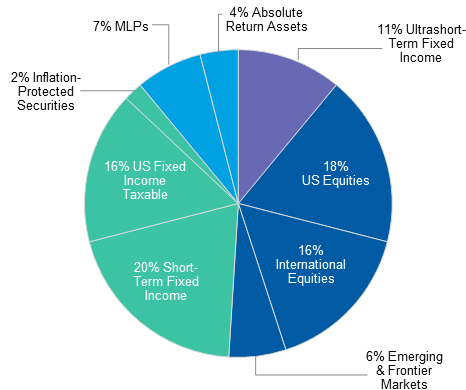
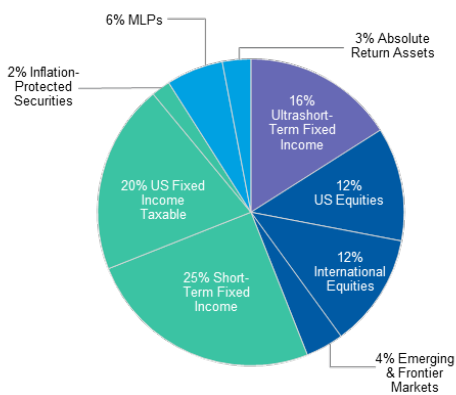


Source: The Yield Book as of March 29, 2019

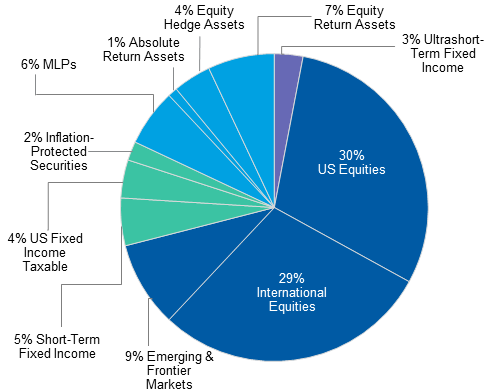
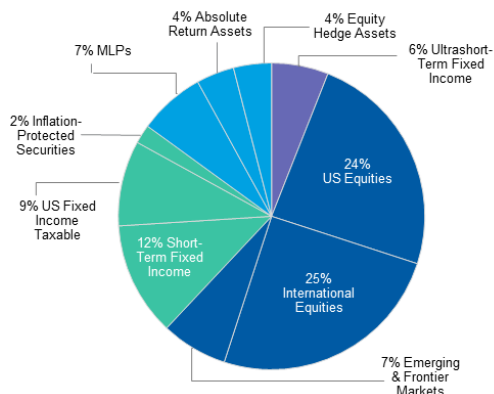
# Global Investment Committee Tactical Asset Allocation

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.

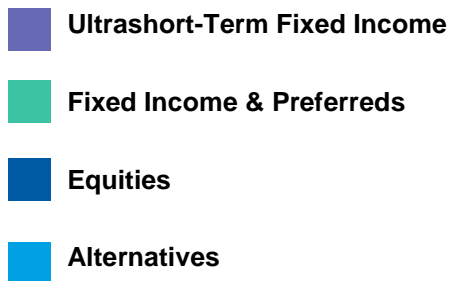
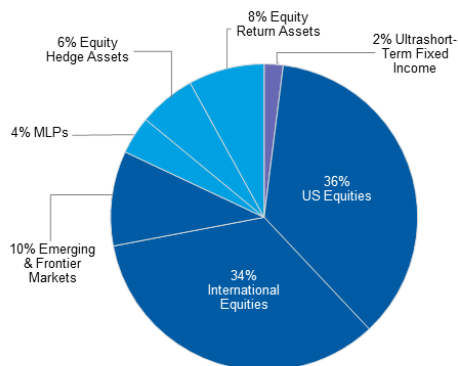
## Wealth Conservation Income



## Balanced Growth Market Growth



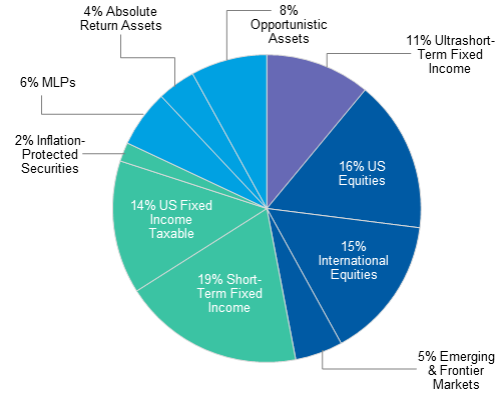
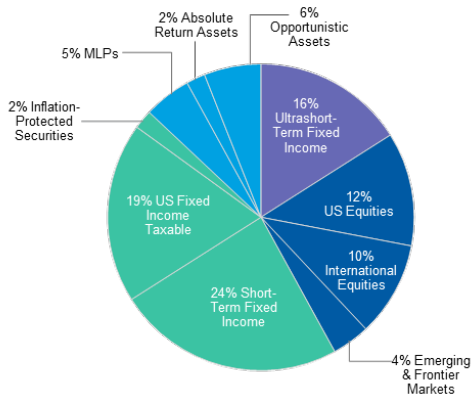
## Opportunistic Growth Key



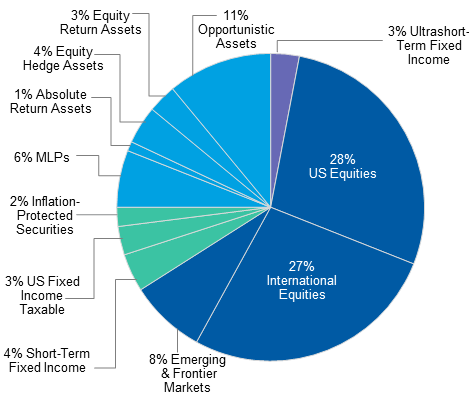
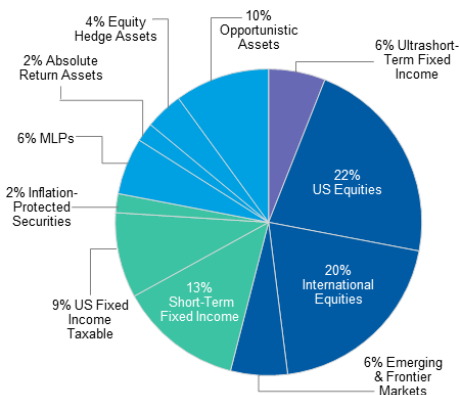
Source: Morgan Stanley Wealth Management GIC as of March 31, 2019

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.

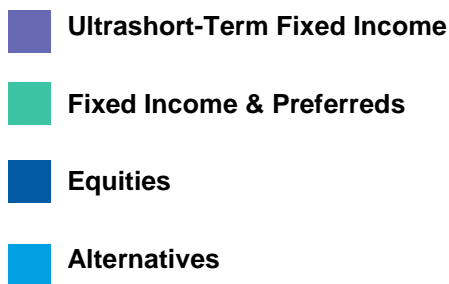
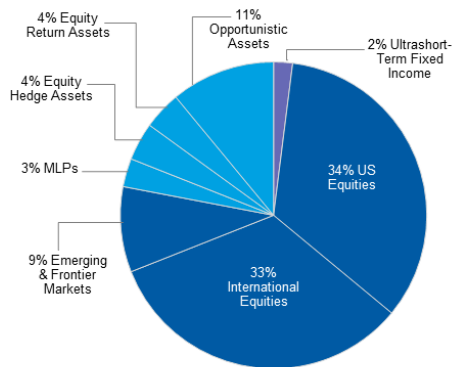
**Wealth Conservation** **Income**



**Balanced Growth** **Market Growth**



**Opportunistic Growth** **Key**



Source: Morgan Stanley Wealth Management GIC as of March 31, 2019

## Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Underweight	After the worst fourth quarter since 2008, the S&P 500 had its best first quarter since 1998. This kind of volatility is unusual and was precipitated by a Federal Reserve that appeared too hawkish in December, only to reverse course on its policy perhaps faster than we've ever witnessed. Meanwhile, economic and earnings fundamentals continue to deteriorate, leaving us with an unexciting target of just 2,750 for the S&P 500 this year. As a result, we remain underweight the US.
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, especially in Europe, which will allow the central banks to exit their extraordinary monetary policies and help valuations to rise.
Emerging Markets	Overweight	After a difficult first 10 months of 2018, emerging market (EM) equities have performed relatively well, a positive sign for future leadership. With our view for the US dollar to make a secular top this year, global nominal GDP growth should accelerate faster than the US GDP, particularly as China's fiscal stimulus takes hold. This should disproportionately benefit international equities, led by EM equities.
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. We are also increasingly concerned that credit spreads do not reflect the current earnings recession in the US nor the significant leverage now present on corporate balance sheet. Therefore, we are underweight US IG.
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 the recent collapse in real yields from the Fed's pivot, these securities offer little relative value in the context of our expectations for global growth to eventually accelerate, oil prices to trough and the US dollar to top. In short, inflation risk is underpriced.
High Yield	Underweight	High yield bonds have rebounded with equity markets this year as the Fed pivoted to a more dovish policy. Since February, high yield has underperformed investment grade as it starts to reflect earnings recession risk in the US. With a zero weighting in high yield since January 2018, we will revisit our allocation to high yield bonds during 2019 if spreads widen appropriately.
Alternative Investments		Relative Weight Within Alternative Investments
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded this year. With oil prices recovering and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. Global supply shortages from Iranian sanctions 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. With the recent surge in volatility, these strategies could perform better on a relative basis.

Source: Morgan Stanley Wealth Management GIC as of March 31, 2019

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

## ON THE MARKETS

The **Global Investment Committee (GIC)** is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

*Chris Baxter, Darren Bielawski, Vibhor Dave, Kevin Demers, Scott Helfstein, Daryl Helsing, Daniel Hunt, Tara Kalwarski, Suzanne Lindquist, Ian Manley, Dan Skelly and Zi Ye are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.*

## 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.



## ON THE MARKETS

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.

***An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.***

### ETF Investing

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs, along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

***Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund or mutual fund before investing. The prospectus contains this and other important information about the mutual fund. To obtain a prospectus, contact your Financial Advisor or visit the mutual fund company's website. Please read the prospectus carefully before investing.***

### 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** and **frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

**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.

## ON THE MARKETS

**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.

Although they are backed by the full faith and credit of the U.S. Government as to timely payment of principal and interest, **Treasury Bills** are subject to interest rate and inflation risk, as well as the opportunity risk of other more potentially lucrative investment opportunities.

**CDs** are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum of \$250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g. individual account, joint account, IRA etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information visit the FDIC website at [www.fdic.gov](http://www.fdic.gov).

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

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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.

**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.

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.

**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. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

**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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