

Global Investment Committee | March 2020

# On the Markets

## A Balanced Portfolio Helps Combat a Correction

In the last week of February, financial markets had one of their sharpest corrections in history. The culprit is growing concern that the coronavirus outbreak, which began in China two months ago, last month, has now spread to other countries, including the US. Many equity indexes are now 10% to 20% below recent all-time highs as Treasury yields make all-time lows.

As I discussed in last month's *On the Markets*, equity markets have had a significant rally over the past year and were due for some kind of pullback. Oftentimes, overbought equity markets are looking for a reason to correct and the coronavirus has presented a good one. Second, much of the rally since the fall has been driven by the extraordinary liquidity conditions provided by the Federal Reserve and other central banks. During the past month, the Fed's program has become a bit less aggressive as policymakers wound down their expanded repo operations from the end of last year. This may have played a role in taking equity markets down so quickly—a risk we have discussed many times. Finally, according to our data there has been intense buying from both institutional and retail investors over the past several months, and that exuberance needed to be checked. We think that exuberance may still be too high in certain high-flying growth and concept stocks.

As I have highlighted many times, we believe much of the strength in stocks and bonds can be attributed to financial repression—central banks keeping interest rates artificially low. This has provided extraordinary valuation support to all financial assets, especially high-quality growth and income stocks. However, with interest rates falling to all-time lows, the positive relationship between stocks and bonds seems to have finally broken down, as it did last summer and in early 2016. In other words, equity markets are now rightly worried about the message from the bond market and what that means for growth, and the risk of recession.

The bottom line is that, until it becomes clear to the market that the economic risk from the coronavirus has truly passed, equity markets are likely to remain choppy at best and bonds will remain well bid. While stocks are down close to 10% for the year to date, long-term US Treasuries are up almost 15%, demonstrating once again how a well-balanced portfolio of stocks and bonds is built to weather storms like those we are experiencing now. We would not be surprised to see equities down another 10% before this correction is over as interest rates continue to plumb new lows. ■

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### Michael Wilson

Chief Investment Officer  
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ECONOMICS

# Disruption , Dislocations and Delayed Recovery

Chetan Ahya, Chief Global Economist and Global Head of Economics, Morgan Stanley & Co.

With economic activity disrupted and capital markets dislocated, investors are debating whether the Covid-19 coronavirus will derail the global cycle. Facing sharp drops in asset markets, pessimistic prognoses are easy to make, but it times like this when some perspective is warranted.

Coming into the year we had a growing body of evidence that, after a tough 18 months, the global economy was on the mend. Purchasing managers indexes (PMIs) showed new orders were improving from October and that headline PMIs troughed then, too. Global trade was growing again in December after contracting for six months. While at the time there was still skepticism, we thought these data points were lending support to our thesis of a global recovery taking hold from 2020's first quarter.

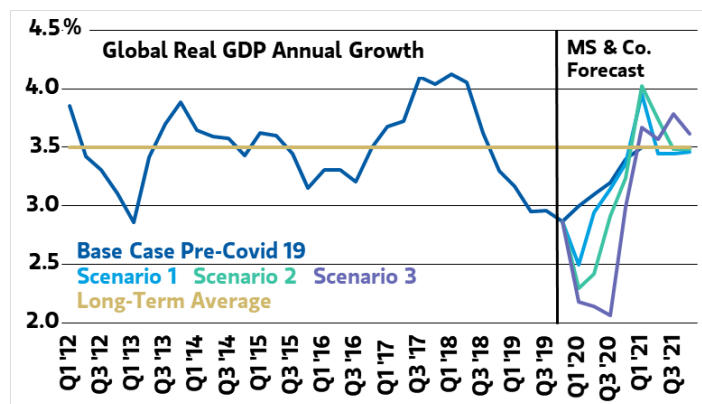
Now, the outbreak has certainly changed the near-term narrative. It is an untimely shock, considering that the starting point of global growth was weak, and the recovery was very nascent. The disruptions to economic activity will create a pronounced impact on global growth in the current quarter.

The question is whether this is an exogenous, transitory shock or one that fundamentally challenges the cycle. We are in the transitory shock camp. Indeed, throughout this expansion cycle, we have had a series of shocks to the global economy, which have led to a number of minicycles in global growth but have actually helped to extend the cycle, as we did not have the typical runway of a traditional overheating situation. With economic activity disrupted and capital markets dislocated, investors are debating whether the Covid-19 coronavirus will derail the global cycle. Facing sharp drops in asset markets, pessimistic prognoses are easy to make, but it times like this when some perspective is warranted.

Given the uncertainty over the virus outbreak, we see three possible scenarios for the road ahead (see chart):

**Scenario 1—Containment by March:** The virus outbreak is contained by the end of the month and production disruption is limited to the first quarter. Policymakers in China and Asia provide meaningful policy support, and China expands its fiscal deficit by 120 basis points, keeping it high for the second year running. Global growth dips to an annualized 2.5% rate in the first quarter, down from 2.9% in 2019's fourth quarter, but recovers meaningfully from this year's second quarter.

## Global Growth Is Disrupted in the Near Term, Recovery Is Delayed



Note: Global real GDP growth includes economies under Morgan Stanley Research coverage, and is the PPP-based GDP-weighted average. Source: Haver Analytics, IMF, Morgan Stanley & Co. Research as of March 1, 2020

**Scenario 2—Escalation to new areas, with disruption extending into the second quarter:** New cases continue to rise in other parts of the world, before peaking by the end of May. The disruption extends into the second quarter of 2020, affecting corporate profitability in select sectors, risking the emergence of corporate credit risks. If the dislocations in asset markets also persist into the second quarter, the sharp tightening in financial conditions may well become the overwhelming factor and exacerbate the impact on growth via weaker corporate confidence and capital expenditures, as well as cutbacks in hiring activity.

In response, policymakers around the world step up easing measures, with fiscal policy in Asia and Europe and monetary policy in the US doing the heavy lifting. Indeed, Ellen Zentner, our chief US economist, expects the Federal Reserve to cut rates by 25 basis points this month and to maintain an explicit promise to continue if growth damage extends. Global growth averages just an annualized 2.4% in the first half of 2020, but picks in the third quarter.

**Scenario 3—Persistence into third quarter, with escalating recession risks:** The virus continues to spread into the third quarter, encompassing all the large economies. China faces a renewed rise in new cases as it restarts production. Disruption also continues into the third quarter. The extended disruption to economic activity damages corporate profitability and brings about a rise in corporate credit risks and significant tightening in financial conditions, which exacerbate the slowdown in global growth.

Central banks embark on a renewed easing cycle, with the potential for a coordinated response. We expect the global weighted-average monetary policy rate dips to its lowest level since 2012. The Fed extends the cuts from March-June

## ON THE MARKETS

and becomes more aggressive in 50-basis-point increments to take rates to close to the lower bound by the third quarter of 2020. The fiscal response across key developed and emerging market economies also becomes more aggressive, with China taking up 200 basis points of fiscal expansion. The cyclically adjusted primary fiscal deficit for G4 and China widens to 5.1% of GDP in 2020, from 4.1% in 2019. Global growth stays weak—below a 2.5% annual rate—between the first and third quarters of 2020.

At the current juncture, we believe that we are heading toward the second scenario. Our strategists believe that

more liquid markets, such as equities and US Treasury yields, may well see a bounce from oversold levels soon, but credit has not cheapened enough, given greater return asymmetry. Developments related to the outbreak of the virus remain key to watch, and we are monitoring the following signposts: (1) The ability to bring the outbreaks under control in affected areas and the scope of the spread across Europe and into the US; (2) whether China faces a rise in new cases as it continues to restart production; and (3) updated data from the therapeutics in development. ■

THEMATIC INVESTING

# Welcome to the Next Roaring '20s

Scott Helfstein, PhD, Investment Strategist, Morgan Stanley Wealth Management

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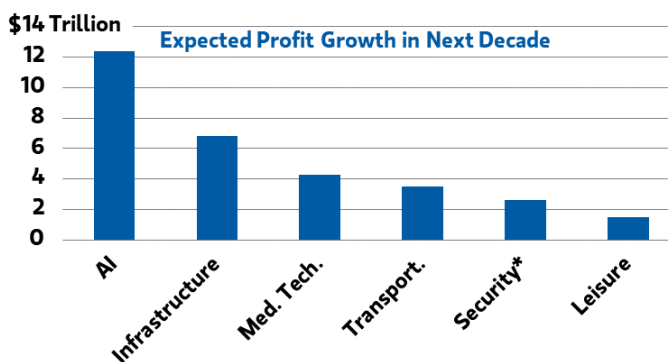
Editing genetic code. Personal robotic assistants. Autonomous cars and flying cars. Micro drones, micro satellites and micro surgical bots. Fantastical as this may sound, and there's much more, we believe all of this can be realized in the 2020s.

We believe the pace of innovation and technological development in the new decade will be unlike any other in history—and that's a high hurdle. The 1760s saw revolutionary changes to the steam engine that altered labor practices. Widespread growth of railroads in the 1850s connected disparate populations. Electricity lit up the night in the 1880s. The telephone of the 1910s and automobiles of the 1920s brought people together. The digital revolution of the 1980s changed the nature of work.

**GREAT CHANGES.** The 1920s, remembered as the Roaring '20s, was a decade of great social, commercial and technological change. Henry Ford's assembly line built automobiles that could be bought by the workers who built them. Advances in aviation enabled the first transatlantic flight in 1927. Radio became the first broadcast medium and movies became talkies. The Dow Jones Industrial average had one of the best decades in history, gaining 220% between 1920 and September 1929, a 12.7% annualized return. US GDP was up 41%, or 3.5% annually, and gains were reasonably well distributed. Per capita GDP grew at an annualized 2.0% compared with just 1.1% since 2008.

We believe the Roaring 2020s will see drastic changes in all these areas and more as innovation and disruption impact connectivity, energy, transportation, work, health and even leisure. Robots will be ubiquitous. Advanced materials will change terrestrial and space travel. Genetic diagnosis and treatment will alter medicine. Data analysis and algorithms will drive efficiency for the aggregate economy. Such innovations could have a material impact on global growth, adding as much as 2.5% annually to the IMF's 3.6% a year global GDP forecast through 2024. Profit growth in artificial intelligence and robotics appears to be exceptionally strong (see chart).

## Themes Set to Benefit in the Coming Decade



\*Includes cybersecurity  
Source: Bloomberg Wealth Management as of Dec. 31, 2019

**ECONOMIC DYNAMISM.** Take caution when drawing lessons from history, but the parallels with the 1920s are palpable. After a decade rocked by the Great War, the world turned inward, restricting immigration and raising trade barriers. Innovations from the radio to widespread adoption of the automobile changed both the economy and culture. As President Calvin Coolidge said: The business of America is business.

Can America reproduce the economic dynamism from 100 years ago? There is concern that US and global profit margins have peaked after expanding for 30 years on the back of lower labor costs, increased globalization and scalable business models. Just as a series of secular factors contributed to improved profitability in the early part of the century, we believe that innovation such as the transition to asset-lite investment will push companies and economies further. The next decade could deliver incremental growth of \$31.1 trillion, much of which is cost savings as companies can spend less and get more from every dollar invested. If global growth can realize even part of that 2.5% incremental benefit, the outlook for the Roaring 2020s is strong. ■

*This article was excerpted from the Feb. 13, 2020, issue of AlphaCurrents. For the complete report, contact your Financial Advisor.*

**BUSINESS DEVELOPMENT COMPANIES**

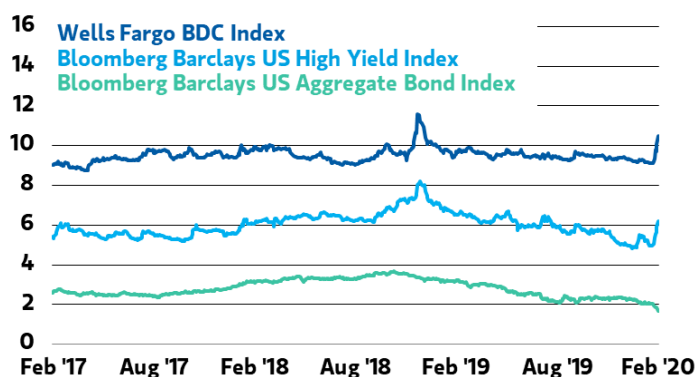
For Public BDCs, Bigger Has Been Better

John Duggan, Investment Strategist, Morgan Stanley Wealth Management

Gray Perkins, Associate, Morgan Stanley Wealth Management

Investor comfort with credit risk fueled sharp gains for business development companies (BDCs) last year to the tune of an average 27.3% total return. Though prices have pulled back with the market correction, portfolio expansion continues to support income generation and still compelling yields, averaging 10.5% (see chart). BDC growth has been accompanied by bifurcation between small and larger components—an important development for the potentially high risk/high reward sector.

**BDC Yields Remain Comfortably Above Those of High Yield and Investment Grade Bonds**



Source: Wells Fargo, Bloomberg as of Feb. 28, 2020

**PASS-THROUGH INCOME.** Public BDCs are exchange-listed portfolios that invest mostly in relatively illiquid and frequently nonrated debt of private, middle-market companies. They seek to finance these businesses while simultaneously generating pass-through income, derived from coupon payments and the appreciation of underlying floating-rate loans. In total, there are 49 publicly traded BDCs.

Private credit watchers have long anticipated advantages accruing to the biggest of such funds, and/or those backed by the largest platforms, at the expense of smaller players. As the argument went, in a competitive environment borrowers would be willing to pay higher rates to lenders that have the capital and expertise to supply more flexible terms and loan structures. Likewise, the most active private equity sponsors would seek to partner with those lenders best able to assure timely execution and with whom they had the deepest relationships. For the BDC industry, this dynamic has arrived.

**INCREASED BORROWING.** Along with organic growth and corporate actions—including mergers with private funds, new listings and follow-on offerings—increased borrowing for leverage has increased BDC assets under management. The percentage of overall market capitalization in the 10 largest BDC names has grown to 70.6%, up from 56.1% in mid-2018. Six BDCs are now above \$2.0 billion in market cap and have averaged 1.0 million shares traded per day over the past three months. Importantly, enhanced volume for the largest cohort—which is nearly 35% above the February levels of a year ago—may attract greater institutional participation in a market that has sometimes been derided for insufficient liquidity.

Having raised more assets, the 10 largest BDCs have been coming through with better results, as exhibited by their 10.9% one-year average return on equity (ROE), which takes into account net income and movement in net asset value (NAV), also known as book value. The one-year ROE average for all other BDCs is 0.4%. Relative performance has been aided by the avoidance of troubled credits, consistent with a modest 2.0% nonaccrual rate, at cost, for the 10 largest BDCs, as of the last fully reported quarterly earnings season.

**ADVANTAGEOUS LOOP.** Investors have rewarded bigger funds with higher prices relative to their NAV. Over the past month, seven of the 10 largest BDCs have frequently traded at premiums to NAV, as opposed to none within the 10 smallest. Such premiums can enhance the ability of BDCs to engage in follow-on transactions, namely the issuance of shares subsequent to initial public offerings. The advantageous loop of performance, valuation and asset growth open to BDCs with access to accretive follow-ons—typically executed at levels between market price and NAV—can be vital, given that these regulated investment companies are required to distribute nearly all their net investment income. Somewhat ironically, select larger funds with successful track records, when trading at moderate premiums, may warrant more investor consideration than some smaller ones at discounts.

Along with positive developments on the growth front, several managers have sought to mitigate leverage risks with greater first-lien debt exposure. Nonetheless, debt-to-equity ratios, recently near 1.0, on average, are headed higher, and typical target ranges of 1.25, though below the new 2.0 regulatory limit, are still meaningfully above prior years. Mindful also of late cycle credit behavior, we encourage investors to take a balanced approach as they pursue the ample yield opportunities in the still evolving BDC universe. ■

FIXED INCOME

# Housing and Mortgages Boom Again

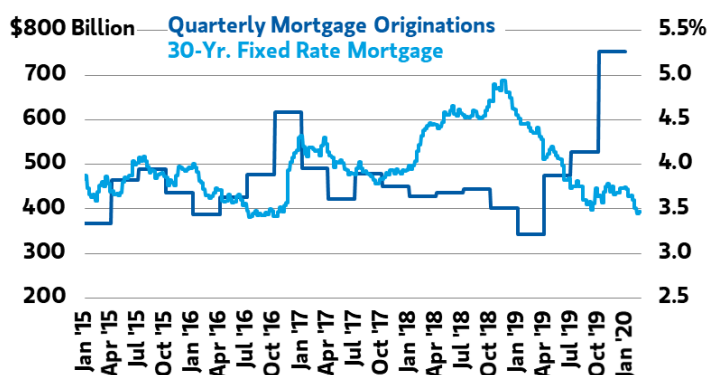
Daryl Helsing, CFA, Associate, Morgan Stanley Wealth Management

After serving as a drag on GDP growth going back to 2017’s fourth quarter, residential investment provided an outsized contribution to growth in the second half of 2019. The large decline in mortgage rates significantly improved affordability at a time of strong demand growth driven by millennials. With the inventory of existing homes at a historic low, builders responded to tight supply by ramping up their activity rapidly toward the end of 2019. Recent data suggests this momentum has extended into 2020. After increasing in December to their highest level since 2006, new-home construction starts were only modestly lower in January. Furthermore, last month applications for building permits reached their highest level since 2007, indicating robust activity is likely through the first quarter.

Historically low mortgage rates have led to a sharp increase in mortgage originations (including refinancings) in the last quarter, reaching their highest volume since 2005 (see chart). Mainly driven by mortgages, household debt rose 4.4% over the course of 2019. Given the role the housing market played in fomenting the last recession, it’s appropriate to consider the health of household balance sheets and assess the quality of outstanding mortgage debt now.

**EASIER PURCHASES.** Despite steady home price appreciation, the more than one percentage point decline in mortgage rates since late 2018 has made home purchases easier. Current affordability, measured by mortgage payment as a percent of income, is around 19%—which is much improved relative to the 28% peak prior to the financial crisis.

## New Mortgages Jumped as Borrowing Rates Fell



Source: Freddie Mac, New York Consumer Credit Panel/Equifax as of Feb. 19, 2020

Fortunately, the recent spike in mortgage origination has not coincided with a loosening in lending standards; in fact, the loans skew toward high-quality borrowers—those with FICO scores above 760 on a scale of 300 to 850. In the third quarter, the median FICO score was 765, which was 44 points above the average median from 1999-2006. Importantly, lending to those with lower FICO scores has been significantly more stringent over this cycle. Disciplined lending behavior, along with a job market that has displayed prolonged strength, has kept delinquencies and foreclosures low. From a fundamental perspective, the overall quality of the mortgage underwriting this cycle is a positive for mortgage-backed securities (MBS).

**RELATIVE OUTLOOKS.** However, the sector’s performance has also faced challenges. The recent surge in originations has weighed on the performance of agency MBS, with new purchases increasing the supply and refinancings leading to faster prepayments. Morgan Stanley & Co.’s agency MBS strategists see several factors that have elevated prepayment risk. These include better refinance efficiency facilitated by financial-technology innovation, higher average loan sizes and better borrower credit.

As mortgage rates have fallen to near all-time lows, the sector has underperformed Treasuries for the year-to-date, generating an excess return of -0.61%. Should coronavirus-concerns lead to further downward pressure on yields, the underperformance is likely to continue. While acknowledging that long-end yields sit around all-time lows, Treasuries likely would have the most upside if the market backdrop were to deteriorate further.

The sector has also underperformed investment grade corporates, which have benefited more from the decline in yields due to their longer duration. However, we’d caution that were the macro outlook to worsen further, there is greater risk of credit spread widening which, in turn, would offset potential upside from lower Treasury yields. We continue to find agency MBS valuations compelling relative to corporates across various scenarios, but believe they are best-suited for a stable rate environment. ■

FIXED INCOME

# Municipal Bonds Are Breaking Records. Is This a Reason for Concern?

Susan K. McDowell, Investment Analyst, Morgan Stanley Wealth Management Global Investment Manager Analysis

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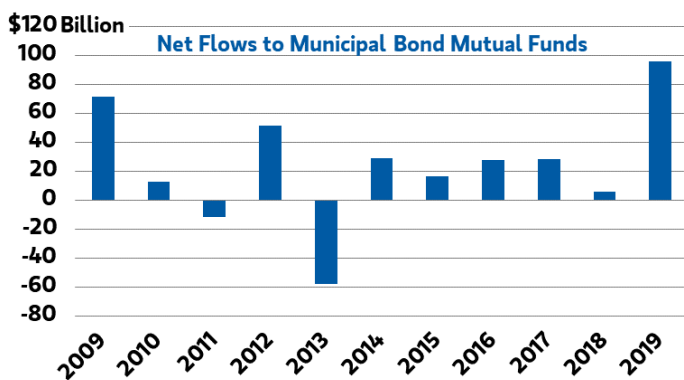
Tax-exempt municipal bonds experienced robust returns this past decade. For many retail investors, a convenient and efficient way to access this market is with a mutual fund. In 2019 alone, municipal bond funds took in \$95 billion in net inflows, and assets under management topped \$800 billion (see charts below and right). This strong demand into tax-exempt mutual funds has been a factor driving yields to near all-time lows for both investment grade and high yield municipal bonds. Despite this solid performance and unprecedented growth, or perhaps in light of it, investors should not get complacent. Investors should understand what has driven the muni market over the past decade in order to make informed decisions about their current holdings and future investments.

All told, a unique combination of dynamics resulted in the extraordinary outperformance of the Bloomberg Barclays Municipal Bond Index relative to its taxable counterpart, the Bloomberg Barclays US Aggregate Bond Index, in the past three-, five-, seven- and 10-year periods.

While 2019 was the culmination of a strong decade for municipal bonds and bond funds, tailwinds in recent years helped drive the returns. Investors should not necessarily expect the level of returns from this past decade, and 2019 in particular, to continue. We believe it is important for investors to continue to monitor macroeconomic factors that may pressure the municipal market.

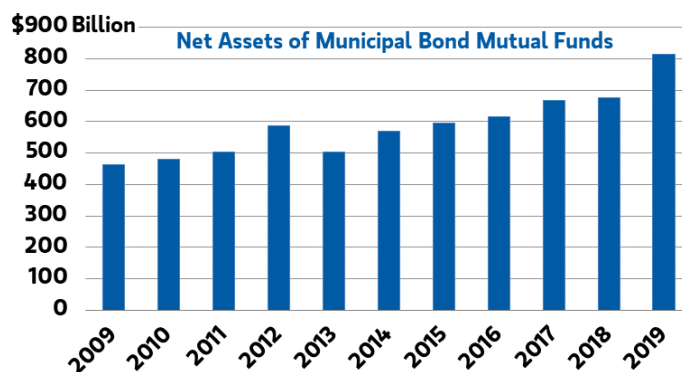
During the past few years, several key developments have included:

## Net Flows to Muni Bond Funds Surged Last Year



Source: Morningstar as of Dec. 31, 2019

## Muni Bond Fund Assets Up Steadily in the Past Decade



Source: Morningstar as of Dec. 31, 2019

**TAX CUTS.** To start with, the federal Tax Cuts & Jobs Act that went into effect in 2018 lowered the top tax rate for individuals to 37.0% from 39.6%. However, it did not eliminate the 3.8% net investment income tax (NIIT), or the Medicare surtax, from which municipal bond interest income is exempt. This affected demand for muni bonds and is likely to continue to do so as the threshold for the 3.8% NIIT is meaningfully lower than the income level that would be needed to reach the highest tax bracket.

The new tax law also capped deductions for state and local taxes at \$10,000. According to the IRS, around 80% and 90% of individuals making more than \$100,000 and \$500,000, respectively, utilized this deduction. As a result, higher earners who have a larger federal tax bill have gravitated to municipal bonds as way to generate income that is exempt from federal and possibly state taxes.

**ELIMINATION OF ADVANCED REFUNDINGS.** In addition, the tax benefits of advanced refunded bonds were eliminated. Advanced refundings are bonds in which a municipality borrows money more than 90 days ahead of the nearest call or maturity date to lower borrowing costs or take advantage of lower interest rates. They are often used as sources of liquidity for municipal bond funds, which increased the demand for advanced refunded bonds currently outstanding that still allow tax benefits for the income generated by holders of these securities.

**TAXABLE SUPPLY AND DEMAND.** Municipalities took advantage of falling interest rates to refinance older, higher interest tax-exempt debt with taxable municipal bonds. Consequently, taxable municipal bonds saw their highest issuance since 2010. This helped to put pressure on muni yields and increased the prices of tax-exempt securities, increasing prices for fund investors.

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**EQUITY VOLATILITY.** Municipal bonds also have provided ballast for portfolios this past decade, with correlations of the Bloomberg Barclays municipal bond and high yield municipal bond indexes to the S&P 500 Index at -0.17% and -0.02%, respectively. Also in those 10 years, the S&P 500 Index saw 13 months with losses greater than 2%, with an average loss of 4.79%. In those months, the average gain for the Bloomberg Barclays Municipal Bond and Bloomberg Barclays High Yield Municipal Bond Indexes were 0.74% and 0.75%, respectively.

**RISE IN MANAGED MONEY.** There has been an industry trend to migrate toward fee-based accounts as a result of various regulatory changes, some of which have prompted investors to consider municipal bond funds in lieu of buying individual securities. At Morgan Stanley Wealth Management, for example, fee-based assets grew to \$1.267 trillion by the end of 2019 from \$877 billion in 2016. Investors in these types of accounts can purchase a professionally managed, diversified fund without upfront charges, which is often the cheapest version available when compared to a brokerage account. Since funds will purchase and hold dozens or even hundreds of bonds and investors continued to purchase these investment vehicles, yields continued to fall as prices rose.

No matter how strong the returns have been, investors need to be vigilant. For example, in 2013 the muni market experienced a sharp sell-off sparked by concerns about Detroit's bankruptcy filing, growing concerns about Puerto Rico's debt and ongoing Illinois pension issues. At the end of the year, the Bloomberg Barclays Municipal Bond and Bloomberg Barclays High Yield Municipal Bond Indexes had negative returns of 2.55% and 5.51%, respectively, and some funds that held riskier issues suffered outsized losses.

Additionally, a 2015 Morningstar study found that over 20% of muni bond mutual funds owned Puerto Rico debt. Today, many funds still hold lower-quality credit securities, which may enhance yield but also significantly increase risk. Therefore, it is imperative to understand the credit quality and liquidity associated with the underlying portfolio holdings when aligning investments to desired levels of risk, as these will continue to impact capital preservation and income.

As we enter a new decade, investors should approach 2020 with an understanding of what could go wrong as much as what has gone right. ■



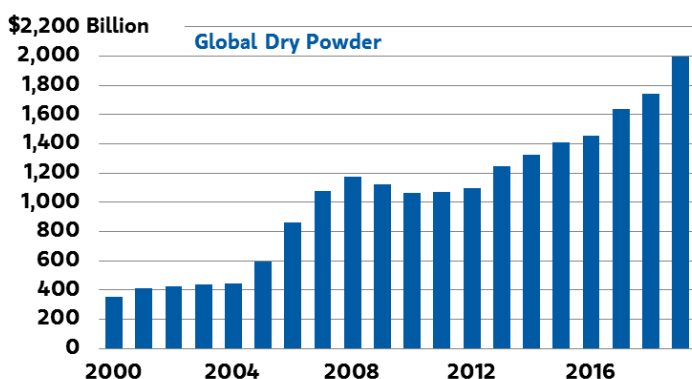
ALTERNATIVES

## Are Private Equity's Best Days Gone?

Lisa Shalett, Chief Investment Officer and Head of Wealth Management Investment Resources, Morgan Stanley Wealth Management

We believe the historic decade of double-digit returns for limited partners in private investment funds—in particular, private equity—is coming to an end as the perfect storm of Federal Reserve financial repression and negative real borrowing rates, low valuations, capital-lite business models and easy credit markets have given way to extended business-cycle pressures. Current high public market and purchase valuations, all-time high corporate leverage, deteriorating credit protections, falling interest coverage, weakening economic growth and nearly \$2 trillion of “dry powder”—funds committed but not yet invested—suggest the best days for private equity are behind us (see chart).

### Private Equity Firms' Record Dry Powder



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

**HALF THE RETURN.** We forecast that future vintages of private investments are likely to provide annual returns below 10% per year, at least half that of the past decade. Against a backdrop in which we expect annual average US stock returns to fall in the 4.5%-to-5.5% range, and 0%-to-2% for bonds, those opportunities may still shine. However, narrower illiquidity premiums could complicate investment decisions for those with intermediate time horizons.

Beyond returns, we are also skeptical that often-mentioned portfolio diversification attributes of the private asset classes will survive the next cycle unscathed. Much of private investments' perceived lower volatility is a function of illiquidity and the mark-to-market process, not differing underlying economic exposures, which would actually reduce correlation. We expect that the next major market dislocation will show the extent to which private investments' correlations with passive public stock and bond indexes have increased alongside the past decade's surge in liquidity.

**POTENTIAL DIVERSIFICATION.** Specifically, the Global Investment Committee (GIC) believes that history will see WeWork's aborted initial public offering as a seminal event, exposing the risks of opaque investments. We are not necessarily encouraged by the recent efforts of private equity managers to expand beyond their core competency into venture capital, infrastructure funds and secondary offerings. Though such moves offer potential diversification, they only reinforce our expectations for lower median returns. Furthermore, attempts to “democratize” private investing through mutual funds and structures with more frequent valuations and redemption windows are also suspect. They increase volatility and create risks of asset/liability mismatches, and their mark-to-market transparency adds to their volatility. Finally, we remain skeptical that “it's different this time” for venture capital, as liquidity alone cannot deliver what the technology innovation ecosystem typically does not.

Although investor returns are likely to be lower and the diversification value diluted, private investments in the US have never been larger and their economic and market influence have never been greater. In private equity, the major general partnerships manage more than \$6 trillion in assets, including ownership of more than 8,000 companies—a figure that has doubled during the 2010s—while the number of publicly traded firms has fallen to nearly half that level. Still, overall portfolio exposure to the private asset categories remains underdeveloped, with most investors holding only one-third of recommended allocations.

**PUBLIC MARKET OPPORTUNITIES.** As a consequence, we suggest that investors wishing to exploit the infatuation with private investing may find opportunities in the public market. One approach is to invest in potential private equity targets, which are concentrated in the small-cap/mid-cap value cohort. The other approach is to invest in the stocks of private investment asset managers, whose valuations are not demanding and show revenue and earnings growth that is likely to average 10% to 15% per year, according to Michael Cyprys, a senior research analyst at Morgan Stanley & Co. who covers asset management companies.

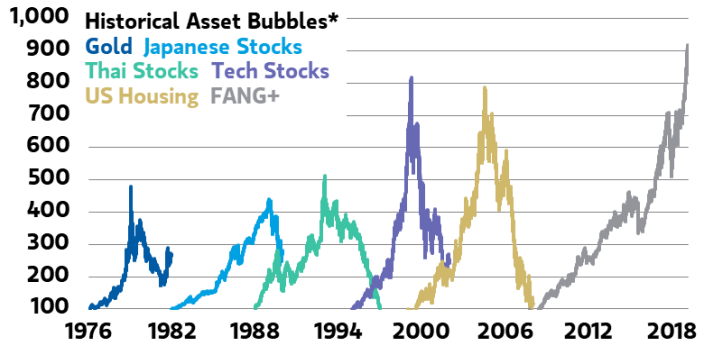
Lastly, investors looking to supplement cash/stock/bond portfolios through alternatives may be better served now by hedge funds. In our view, hedge funds will likely have a chance to leverage active investing in a public market characterized by extremes and dispersion. Specifically, relative value, market neutral and equity long-short strategies should find ways to deliver mid-single-digit absolute returns. ■

*This article is an excerpt from the Jan. 27, 2020 Special Report, “Are Private Equity's Best Days Gone?” For a copy of the complete report, please contact your Financial Advisor.*

## Short Takes

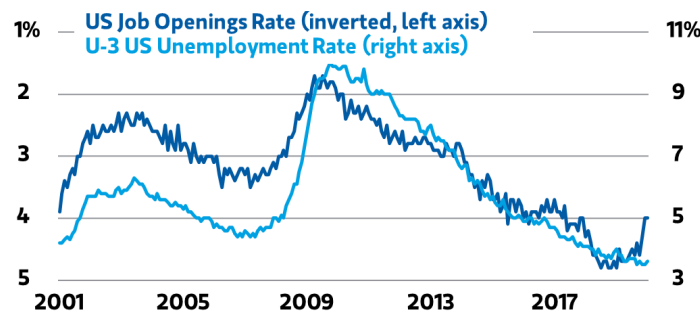
### Asset Bubbles: “Is This Time Different?”

Asset bubbles are not a new market phenomenon, and when prices heat up the question is always the same: “Is this time different?” Past bubbles include gold in the late 1970s, tech stocks in the late 1990s and early 2000s, and the US housing market in the mid 2000s (see chart). The rise of bubbles happens slowly over time, but, once cracks in the fundamentals are acknowledged, their demise is rapid. The FANG+ group of stocks has raised questions about their status as a bubble. Returning more than 1,100% since the depths of the financial crisis, this run-up is so far 10% greater than the bubbles of the past 40 years. That said, times are different. Compared with tech in 2001, valuations are more grounded in earnings—and importantly, the 10-year US Treasury yield is at a record low.—*Nick Lentini*



\*Dec. 31, 1976=100.  
Source: BofA Global Investment Strategy, Bloomberg as of Feb. 28, 2020

### Declining US Job Openings Could Push the Unemployment Rate Higher



Source: Bloomberg as of Feb. 26, 2020

US job openings declined for second straight month in December 2019, reflecting a softening demand for hiring (see chart). While some of this drop could be attributed to an increase in labor-force participation, the decline was broad-based and could point to a potential headwind for the US labor market. December’s Job Openings and Labor Turnover Survey (JOLTS) showed a weakness in hiring demand for retail and manufacturing—sectors that could face a double shock of decline in both demand and supply if the coronavirus epidemic spreads to the US. Services and manufacturing are already showing signs of retraction, with February’s Markit US purchasing managers index declining to a multiyear low. The

JOLTS data could be a challenge for unemployment rate, which sits near historically low levels at 3.6%.—*Vibhor Dave*

### Global Growth Fears and Negative Interest Rates Abroad Push Dollar Higher

As global growth fears mount, investor angst supports US dollar strength and confirms the greenback’s perceived safe-haven status. The US Dollar Index, which measures the value of the dollar versus a basket of foreign currencies, remains elevated. Recent strength, driven by capital inflows and negative interest rates abroad, has pushed the dollar index to 98, which is a top-decile reading for the past 15 years (see chart). While the dollar faces technical resistance around 100, coronavirus fears and negative global rates in Europe and Japan could support a stronger dollar in the near term. While a strong dollar could contribute to the outperformance of dollar-based assets, the negative effects on the already shrinking the international corporate profits of US-based companies, weaker business sentiment and the downside risk from tighter financial conditions may offset the positive outcomes.—*Chris Baxter*



Source: Bloomberg as of Feb. 28, 2020

PORTFOLIOS

# Active Management: 2019 Review and 2020 Outlook

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During this cycle, unconventional central bank policy has powered financial assets’ risk-adjusted returns. This liquidity-driven market environment has had a profound effect on active management. In 2019, assets under management (AUM) of passive US equity funds surpassed actively managed funds for the first time—a watershed event for the markets and investment managers. Given this backdrop, we reviewed active managers’ exposure and performance in 2019 and also explored the prospects for active managers in 2020.

## 2019 Review

We looked at active management by considering managers’ historical performance across major equity, fixed income and alternatives asset classes. When evaluating managers’ success, we prefer “alpha,” which is a manager’s excess returns adjusted for the level of risk relative to the benchmark. In alpha terms, active managers’ performance broadly disappointed last year, particularly for those managing US equities. However, looking back over 25 years, we recognize that certain categories of managers have provided greater and more consistent streams of alpha returns.

Among US equity managers, history suggests that small-cap managers have generated the greatest and most consistent alpha versus their large-cap and mid-cap counterparts. Internationally, active managers with non-US mandates have historically delivered more alpha than their US-focused peers. Emerging markets (EM) equity managers in particular have stood out among non-US equity categories, generating the most alpha on average in 2019 and exhibiting the most positive trend in alpha generation during the past decade.

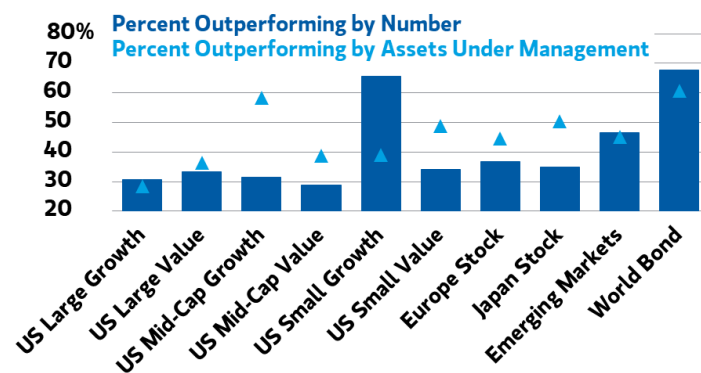
Among fixed income categories, we found that the alpha ranking of major categories proved far more stable across multiple investment horizons, suggesting that alpha may be somewhat more persistent among fixed income managers than with equity managers. Additionally, categories with broader mandates—including core-plus, global and multisector—historically delivered the highest alpha on average, suggesting that greater flexibility and broader opportunity sets associated with these categories may enable active managers to add more value.

We also studied the percentage of active managers who beat their benchmarks across categories to identify trends

over time. In 2019, the proportion of managers outperforming their benchmarks fell below long-term cycle averages. Only 31% and 33% of US large growth and large value managers, respectively, topped their benchmarks last year. What’s more, of the nine Morningstar US styles, only in the small growth category did more than 50% of managers beat their benchmarks last year.

In this simple percentage analysis, we implicitly assume an equal weight for each manager. To better assess the likely impact on client portfolios, however, we also calculated the percentage of AUM of outperforming managers (see chart). Interestingly, we found that the 2019 performance record for multiple categories appears significantly better when factoring in AUM, including mid-cap value and mid-cap growth, small value and international developed market equity managers. While active managers struggled overall, it appears that larger managers found more effective ways to add alpha than their smaller peers, suggesting that actual investor outcomes may have looked more heartening than the simple percentage analysis would suggest.

## In Equities Last Year, Larger Active Managers Outperformed



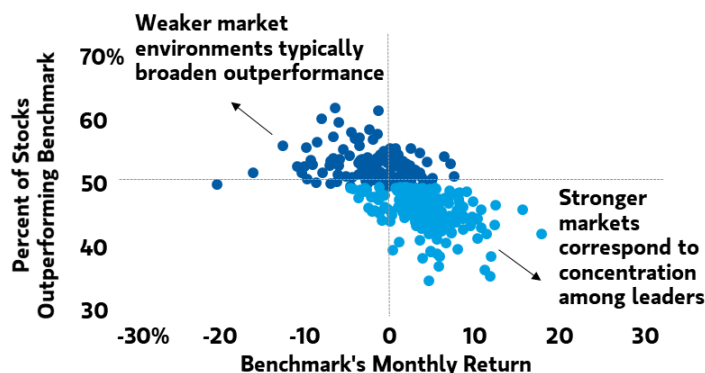
Source: FactSet, Morgan Stanley Wealth Management GIC as of Dec. 31, 2019

## 2020 Outlook

As we review global equity markets in 2020, we believe that there are reasons for investor optimism about active management. In 2019, the S&P 500 Index rallied 31.5%, driven almost exclusively by an expansion of valuations as earnings growth flat-lined. In such environments, fundamentally focused active strategies will naturally struggle to keep pace with passive indexes. Looking to 2020, however, analyst consensus suggested (as of mid-February) earnings growth for US companies of 8%, with most of the pick-up occurring in the second half of the year. With extended valuations leaving little room for further multiple expansion, investors may refocus their attention on company fundamentals and earnings growth, enabling stock-picking active managers to better differentiate themselves from broad indexes.

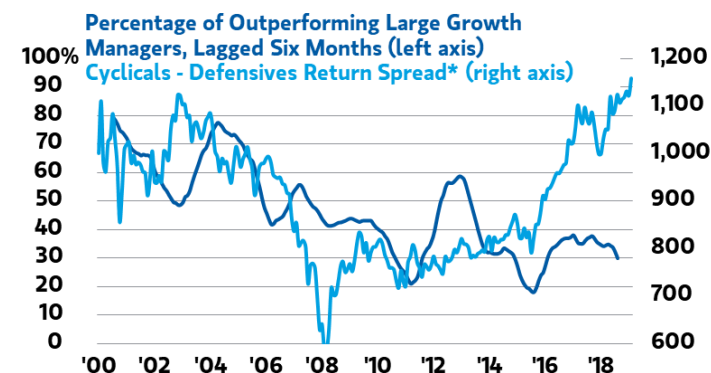
## ON THE MARKETS

### Average US Stock Tends to Outperform Index in Weaker Markets



Note: For period Jan. 31, 1990 through Jan. 31, 2020  
Source: FactSet, Morgan Stanley Wealth Management GIC

### Historically, Active Managers Have Prospered When Cyclical Have Outperformed Defensives



\*Index  
Source: FactSet, Morgan Stanley Wealth Management GIC as of Jan. 31, 2020

We also examined the performance of active managers relative to passive strategies during up and down market scenarios. Our analysis revealed that active strategies have tended to add more value over their passive benchmarks in more challenging years, while trailing the indexes in bullish years. Moreover, flat-to-down months can often coincide with growing apprehension among investors over the sustainability of the recent stock market leaders, which active managers tend to underweight but are naturally concentrated in market capitalization-weighted indexes (see chart, above). Given the mean-reverting nature of markets, periods in which market breadth has become exceedingly narrow (with fewer stocks outperforming) are typically followed by periods of expanding market breadth (with more stocks outperforming). When market breadth is expanding, active managers, who tend to overweight value and underweight concentrated names, are more likely to generate alpha.

Finally, we examined the S&P 500 Index's composition for implications on active versus passive strategies. During the past few years, the index's sector and style composition has shifted significantly. The difference in weightings between defensive and growth stocks and cyclical and value stocks has reached a record high of 42%. Amid the low-yield, low-growth environment, investors have demonstrated a preference for defensive growth sectors over cyclicals (see chart). Despite the coronavirus scare, the Morgan Stanley & Co. economics team expects global growth to improve later in 2020. That could support cyclicals' relative earnings growth prospects, given their inherently greater leverage to economic growth. Historically, the outperformance of cyclicals over growth and defensive exposures has benefitted active managers, which tend to hold higher value and cyclical exposures compared to the diminished weightings in benchmark indexes. ■

*For more details, ask your Financial Advisor for the February 2020 issue of Topics in Portfolio Construction.*

Q&A

## Emerging Markets: Will Long-Term Gains Follow Short-Term Pain?

The MSCI Emerging Markets lagged the S&P 500 Index by nearly 10 percentage points per year on average for the last decade. Now, the coronavirus outbreak remains a threat in the emerging markets, too. Still, Justin Leverenz, senior portfolio manager for the OFI Emerging Markets Equity team at Invesco, takes a long view. “The context that the last decade was very difficult for emerging markets is what makes today’s market look even better,” he explains. He recently discussed the risk versus reward—for both the long and short term—with Sachin Manchanda of the Model Portfolio Solutions Group at Morgan Stanley Wealth Management. The following is an edited version of the interview.

**SACHIN MANCHANDA (SM):** How do you think about the longer-term structural case for investing in emerging markets versus the relative attractiveness of the short term?

**JUSTIN LEVERENZ (JL):** In 2010, there was a lot of enthusiasm for the emerging markets, but US equities ended up being where all the action was, and emerging market (EM) equities saw really miserable returns for the subsequent decade; in part that came from broad strength in the US dollar, the slump in global trade and a very weak environment for commodities. That said, I think the current structural case for EM equities is really based on that decade of disappointment.

Structural reform, which has been haphazard and hesitant since the last big EM crisis in the late 1990s, is really stepping up the pace across many countries outside of China. I think this will lift endogenous growth because I don't think that the global trade environment is necessarily going to get better across many of the big non-China economies in the emerging markets. These include labor reform, fiscal reform and improved state capacity in places like Indonesia, the Philippines, Brazil, Mexico and Chile.

There's a renewed emphasis on improving social mobility, which could really inspire higher levels of domestic savings, productivity and ultimately more stable growth. There's also a big focus across many markets on improving business conditions. This includes places like Russia, India, Indonesia and Philippines through tax and administrative reform.

Then, largely because of fiscal compulsion, there's also renewed focus in many of the non-China emerging markets on privatization, which obviously has tremendous benefits. So I think structural reform is really going to lift the capacity quite considerably over the next few years.

Beyond that, the other big structural case is about investor opportunities. We're going to see significant expansion of market depth with the large investments that are starting to

incubate—and will eventually come to scale—in things like fintech, e-commerce and some of the online-to-offline businesses, which will start to go public in places like southeast Asia and Latin America. Southeast Asia and Latin America historically have been very focused on property, banks and commodities in terms of listings, so it's going to be a whole rash of really interesting companies that can create new structural opportunities for investors.

I'm also optimistic about the cyclical case for emerging markets, both absolutely and relatively. I expect that there will be a gradual but increased recovery in growth in emerging markets other than China over the next few years following the difficult conditions since the plunge in commodity prices over five years ago.

The current backdrop for global growth looks reasonable, and I think the context of low rates, low inflation and five years of extraordinarily weak investment across the developing world means that growth is going to start to really pick up cyclically. On top of the structural reform, some liberalization in some of these economies will also embellish growth.

**SM:** What are the short-term effects versus the longer-term trends in China?

**JL:** Let me preface by sharing that I am extremely bullish on China and, in particular, Chinese equities. If you look at the last decade or even the last two decades, we've seen some really extraordinary unparalleled macro growth; China has been the growth engine of the world—but what you really haven't seen outside of idiosyncratic opportunities is very strong stock market performance overall.

I think this is going to be the decade that China not only continues to be the world's growth engine, but is going to start to be one of the most interesting capital markets on the planet. That said, the backdrop for growth in the short term is going to be really poor. I'm not an epidemiologist, and I have no foresight or particular edge in predicting how the coronavirus will evolve in terms of the economic implications, but I think it's going to be relatively brief but painful in the short term.

**SM:** And the long term?

**JL:** I am very encouraged, especially given what China has done in the last couple of years. The leadership is focusing on lower, but higher-quality growth. As a result, we see that China is in a position to have stable, durable growth without the need for excess stimulus.

China has also had some really significant accomplishments that I think haven't been appropriately appreciated in terms of reducing tail risks in the economy. They were largely associated with the explosive growth in credit in the decade after the financial crisis. There have been efforts to redirect credit and support for the private sector and small and

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medium enterprises. They're embryonic in nature, but I think they will become a persistent feature.

In terms of improving long-term productivity in the economy, forced liberalization alongside the US-China trade wars is also going to be really good for China. Additionally, China has been fairly consistent over the last few years in terms of trying to address inequality and enable greater social mobility. This will likely mean more significant social investments away from China's historic focus on physical infrastructure and toward things like pensions and health care. This should increase the durability of China's transformation of its economy away from fixed capital formation and trade, and toward a new-normal economy of service and consumption.

**SM:** What about capital market reform?

**JL:** The efforts that China is starting to undertake with its capital markets could be really important. For example, there have been initial efforts to improve capital allocation. We've also started to see the redirection of China's enormous pool of domestic savings away from its historic—almost myopic—focus on real estate and toward the capital markets. At the end of the day, China is one of the greatest savers in the world, so there's massive flow of capital. China is arguably the single most important pool of human talent in the planet, and on top of that it's got the domestic market, which as you know is only paralleled by the US.

In the next decade, I think you'll see growth continuing to be good and capital markets getting a lot more interesting. There's a whole series of unicorns that are going to embellish the attention around China—and I think you'll start to see more Chinese companies going global.

**SM:** Beyond China, where else do you see opportunities?

**JL:** Today we're sitting in a world that's highly bifurcated. Growth stocks have really been where most of the action has been—not only in places like the US, but also in countries like China. So I would say on the margin—and it's really on the margin rather than a core change—I'm kind of tilting toward fresh investments in more value-oriented countries and companies.

From a geographic perspective, I see significant opportunities in Latin America such as Mexico, Peru and Chile. They're all countries where growth has been extraordinarily disappointing for many different reasons, including political, yet you have companies with unique advantages, sustainable growth and a whole host of real options—and which are trading at very attractive valuations.

On the other side of that, over the last year I have taken gains in areas that look crowded and where valuations are less

attractive. For example, we sold some of the Chinese internet companies that we had held for a long time and also took profits on some of our European luxury goods companies.

India's cyclical slowdown has been painful, and I don't think that's going to turn around in the near term. Valuations simply just don't reflect the reality of the fact that India is probably an economy that isn't going to be growing at China-like levels really ever; it's an economy that will potentially have 5% to 6% real growth in the medium term. I think prices really reflect where opportunities lie, and my preference is to start to fight against the bifurcated world that emerged over the last few years.

**SM:** What might change your thinking?

**JL:** Scenarios that I focus on are the consistency and durability of reform, which, in a world with less global integration, is really important to driving developing countries. The second thing that we all have to focus on is China, because China is driving the developed world and the developing world in many different ways—which we are becoming increasingly aware of with the coronavirus in terms of its connectivity and importance in the world.

The thing everybody should be worried about are potential policy mistakes, like excessive easing as it relates to credit, which could have disastrous kinds of medium-term consequences. Or the failure to permit the private sector the foreign capital to compete with the state-owned enterprises.

**SM:** Any parting thoughts?

**JL:** I think today presents a very good opportunity for global investors that have experienced significant capital appreciation in the US to really recognize that this is a new decade and that, cyclically, emerging markets are aligned with a meaningful recovery and growth over the next couple of years. Structural reform will embellish that, and earnings expectations, which have been decimated over the last five years, are going to start rising. There is going to be an earnings recovery broadly across the emerging world.

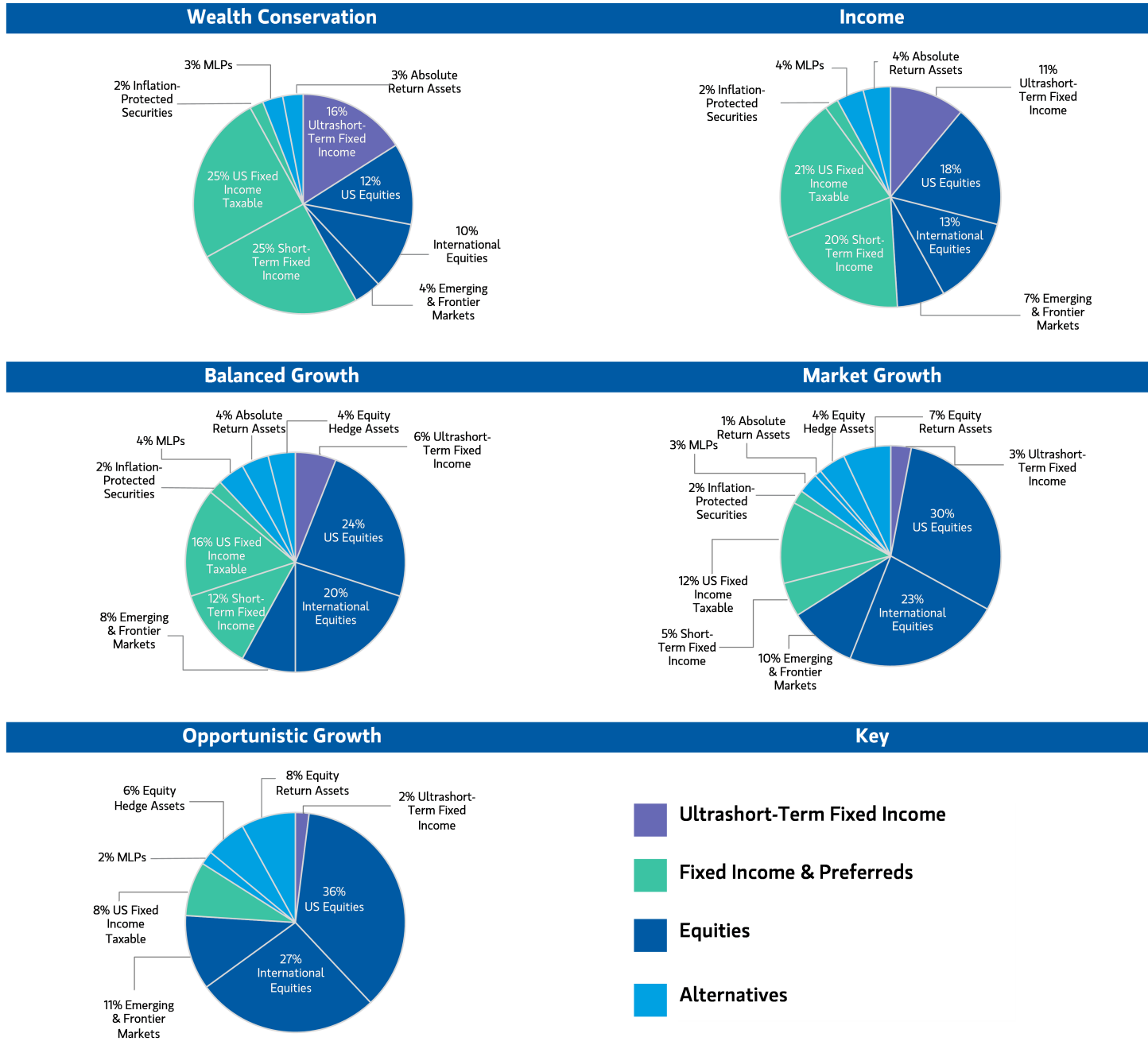
Beyond policy mistakes or political risks, another concern is that part of the great wealth creation of the last 10 years has been because we've been in an environment of very low inflation and aggressive central bank policy. So, one cannot discount that one day inflation will recover, and rates won't always necessarily remain at these levels.

*Justin Leverenz is not an employee of Morgan Stanley Wealth Management or its affiliates. Opinions expressed by him are his own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.*

**ON THE MARKETS**

# Global Investment Committee Tactical Asset Allocation

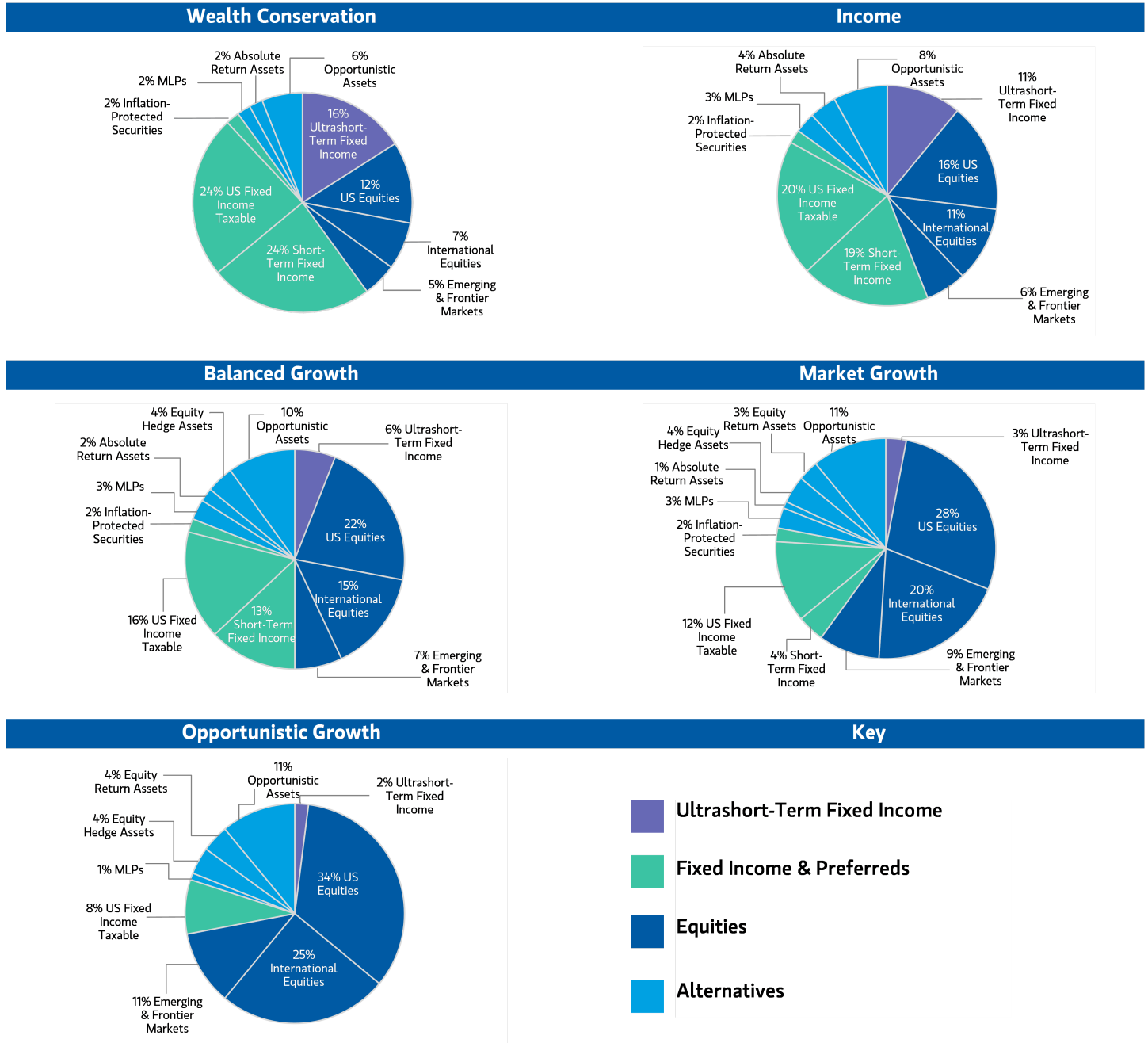
The Global Investment Committee provides guidance on asset allocation decisions through its various models. The five models below are recommended for investors with up to \$25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.



Source: Morgan Stanley Wealth Management GIC as of Feb. 28, 2020

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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.



Source: Morgan Stanley Wealth Management GIC as of Feb. 28, 2020



## Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Underweight	Global markets have corrected on concerns about the negative growth impact of the coronavirus. Some of these dynamics have restored valuations and reset expectations more realistically. Falling interest rates in the US Treasury have plummeted, begging the question about whether going forward price/earnings multiples will face headwinds from reflation. When rates get too low, as they are now, risks of slower growth and deflation need to be considered. The presidential election raises issues of policy uncertainty that might keep markets range-bound even if the economy stabilizes in the second half.
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. Christine LaGarde's leadership at the European Central Bank and resolution of Brexit uncertainty are catalysts.
Emerging Markets	Overweight	The combination of trade tension resolution, global growth rebound, ample liquidity from the Fed and a weakening dollar should catalyze investor interest. China stands to gain the most from US tariff rollbacks and global trade dynamics should improve. Valuations are attractive and local central banks should be able to maintain accommodation and stimulus.
Global Fixed Income		Relative Weight Within Fixed Income
US Investment Grade	Market Weight	We have recommended shorter-duration* (maturities) since March 2018 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels, but added to long-dated Treasuries in mid-2019 as a hedge against recession risks. We are also increasingly concerned that credit spreads do not reflect the earnings recession in the US or the significant leverage on corporate balance sheets. While interest coverage remains benign, overall ratios of debt/equity are stretched. Therefore, we are market weight US investment grade.
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 relative value in the context of our expectations for global growth to eventually accelerate, oil prices to trough, the US dollar to top and US wages to continue to benefit from tight labor markets. The Fed's guidance to "let inflation run hot" should be trusted and bought.
High Yield	Underweight	High yield bonds have rebounded with equity markets this year as the Fed pivoted to a more dovish policy and option-adjusted spreads once again are closing in on cycle tights. We see this as dangerous given signs of stress in CCC-rated bonds, leveraged loans and collateralized debt.
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	With oil prices recovering and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. Global supply/demand dynamics in light of OPEC-plus production discipline remain supportive for fracking activity and pipeline construction, both of which should lead to an acceleration in the growth of distributions.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	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, a scenario that is increasingly probable given valuations and year-end stock market euphoria. We prefer very active and fundamental strategies, especially equity long/short.

\*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. Source: Morgan Stanley Wealth Management GLC as of Feb. 28, 2020

## Disclosure Section

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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.

*Chetan Ahya, Chris Baxter, Spencer Cavallo, Aili Chen, Vibhor Dave, John Duggan, Steve Edwards, Justin Epstein, Lisha Ge, Scott Helfstein, Daryl Helsing, Ian P. Manley, Sachin Manchanda, Susan K. McDowell, Gray Perkins and Nick Lentini 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: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

### 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.

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*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 economies. 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.

**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

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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 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

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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.

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.

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