Morgan Stanley

WEALTH MANAGEMENT

INVESTMENT STRATEGY

Global Investment Committee | April 2021

# On the Markets

## Running With the Bulls Is Tricky

**Michael Wilson**
Chief Investment Officer
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At this point, the bullish narrative of a fading pandemic, reopening economy and plenty of stimulus is very much the consensus view. That doesn't make it wrong, but markets are discounting machines and may already reflect the speed and scope of recovery. So far in 2021, equity markets have continued to advance but with sharp rotations that have left many investors upside down like those who choose to run with the bulls in Spain every year.

As the economy actually reopens, we are likely to see consumers behave the same way investors have for the past year. Since it's much easier to turn off an economy than it is to start it up, some consumers and businesses are likely to be stampeded as many investors have been this year as we experience higher costs or missed sales altogether. Furthermore, we are now at the anniversary of last year's recession trough, and marking the peak 12-month rate of change in many key variables we monitor. Typically, a rollover in the growth rate of such variables has a negative effect on asset prices even though it may be far from the end of the economic cycle. Instead, it's the normal transition from early-cycle to mid-cycle leadership we see at this stage of any recovery.

We think this economic cycle will be shorter than the prior two expansions for several reasons. To start with, the last three cycles were exceptionally long in duration, roughly 10 years. This was a product of below-trend growth and inflation. These conditions allowed the Federal Reserve to remain accommodative for longer. Due to the extraordinary fiscal support and potential supply shortages,this time we expect better above-trend growth and inflation. This means the Fed may need to respond with tighter policy sooner than normal. Next, real investment has been absent for the past few decades as companies outsourced production and focused on cost-cutting and financial engineering to enhance shareholder value. The pandemic has exposed the flaws of such a strategy, and that means a higher-velocity economy that is prone to more frequent booms and busts; in other words, shorter cycles.

The good news is that this can still be a rewarding investment environment if one is willing to be more tactical and flexible. In the near term, we are recommending investors upgrade their portfolios with higher-quality stocks that can better manage increasing costs and supply shortages. Two sectors that look more attractive in this context are real estate investment trusts and health care. ■

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**CROSS-ASSET STRATEGY**

# A Shorter, Hotter Cycle

**Andrew Sheets**, Chief Cross-Asset Strategist, Morgan Stanley & Co.

Our experience informs our beliefs. The past four US economic expansions have been unusually long, ranked by the National Bureau of Economic Research as the first, second, third and sixth in length among 34 business cycles over the past 164 years. We think the current cycle could burn hotter and shorter—with important implications for investment strategy.

This discussion needs to start with an obvious question: Is this even a new cycle? COVID-19 brought the global economy to a sudden stop, while an aggressive policy response drove a rapid recovery. Morgan Stanley & Co. economists, for example, expect the US real GDP will have returned to the pre-COVID 19 level in the just-completed first quarter and will surpass the pre-pandemic growth path in the third quarter. This has not been seen any of the prior four recessions (see charts). Some investors argue that both the recession and the recovery were so fast that conditions never reset in the way they usually do during recessions.

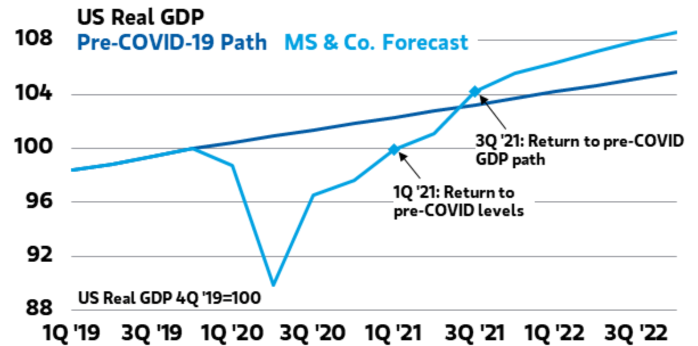
**CYCLE QUIRKS.** All cycles have their quirks. The past three US recessions were adjacent respectively to the largest equity bubble in history, the largest financial crisis since the Great Depression and a global pandemic. If you're looking for a "normal" recession, good luck. Surprisingly, as different as these three recessions were, they were all preceded by similar phenomena: an inverted yield curve within approximately six months of when they started; a Federal Reserve hiking cycle and core Consumer Price Index (CPI) above 2.4% annualized; and high consumer confidence, low unemployment and declining breadth in the equity market.

Those are an awful lot of similarities—and they carry through to the recovery. Since the lows of activity in April 2020, normal early cycle investment strategies have worked very well, and corporate default rates have been similar to other recessions when measured on a rolling two-year basis. If it walks like a new cycle and talks like a new cycle, we think that investors should treat it like a new cycle.

**UNIQUE EVOLUTION.** While this cycle has so far followed many normal patterns, its evolution could be unique. For several reasons, in the US and globally, it could burn unusually hot. The first reason is stimulus. The global economy is seeing record levels of fiscal and monetary stimulus at the same time. "Unprecedented" is an overused word in our business, but this cycle qualifies and is unique among other post-recessionary periods.

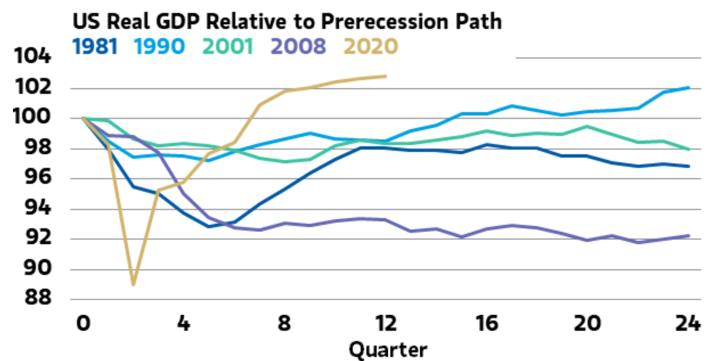
The second reason is savings. Savings rates stand at historical highs in the US, Europe and China. While the distribution of these savings is uneven, they provide substantial fuel for consumption. Corporate cash balances are also elevated, a buffer against COVID-19 uncertainty that could find its way into spending as confidence returns.

### US GDP Forecast to Return to Pre-Pandemic Path in the Third Quarter




Source: BEA, Haver Analytics, Morgan Stanley & Co. Research forecasts as of March 16, 2021

### US GDP Could Overshoot Prerecession Path at a Faster and Stronger Pace Than in Past Cycles




Source: BEA, Haver Analytics, Morgan Stanley & Co. Research forecasts as of March 16, 2021

**LABOR NORMALIZATION.** Third is the labor market. Our economists note that most recent job losses were in COVID-19-related sectors. If the economy can reopen safely, it seems reasonable that we could see an unusually fast labor normalization as these sectors come back. Finally, there is the future path of policy. Global central banks are signaling a strong commitment to supporting growth and returning inflation to more normal levels. Governments are showing little desire to eventually raise taxes or cut spending. Both stances suggest a hotter cycle, less likely to be restrained by policy tightening than in previous expansions.

For all these reasons, our economists think that growth and inflation will exceed expectations over the next two years. Still, just like in the cosmos, what burns hotter may also burn shorter. Unlike the long expansions that defined the past 40 years, this one might look more similar to the late '40s or the

'50s. Short cycles can still mean good growth and multiyear expansions. The Roaring '20s saw recessions in 1920, 1923 and 1926 (and, of course, 1929). The US economy grew at 3.7% rate between 1947 and 1960, despite recessions in 1948, 1953, 1957 and 1960. Each expansion lasted at least three years.

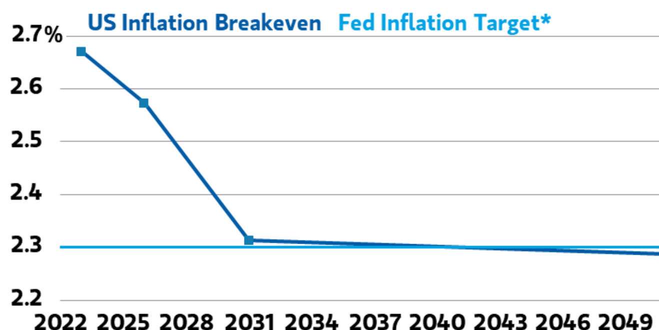
**TIME TO ROTATE.** Investors may need to be more nimble. Different investments work in different parts of the economic cycle. If this cycle burns hotter and shorter, we need to start thinking about rotating out of early cycle winners. Where should we look? US small-cap versus large-cap equities, copper versus gold and corporate credit are all strategies that we've liked given historically strong performance following recessions—but all do less well as the cycle extends.

Sector and regional leadership can also vary significantly as the cycle progresses. Emerging market equities historically do best following a recession, but then lag. Stocks in Europe and Japan have done better as the economy matures. For more details, see *Global Strategy and Economics: This Cycle Could Run Hotter but Shorter*, March 17, 2021.

**POTENTIAL OVERHEATING.** Will conditions run too hot? One metric I'm following closely is the US breakeven expectations curve. At the moment, it reflects a modest overshoot of inflation over the next two to five years, followed by lower levels of inflation (see chart). That would appear to be exactly what the Fed hopes to deliver, wrapped up with a nice little bow.

As long as that curve remains inverted, the market is signaling that inflationary pressure will be transitory, and there is little need for central banks to sharply change tack. Maybe this is correct. Maybe it is an example of expectations being driven by recent experience. Either way, it's an important dynamic to watch. ■

### Bond Market Sees Inflation That's Higher Sooner and Then Starts to Decline




*Represents 2.0% annual inflation measured by the Personal Consumption Expenditure Index and adding 30 basis points to account for the higher readings of the Consumer Price Index.
Source: Bloomberg, Morgan Stanley & Co. Research as of March 24, 2021

## EQUITIES

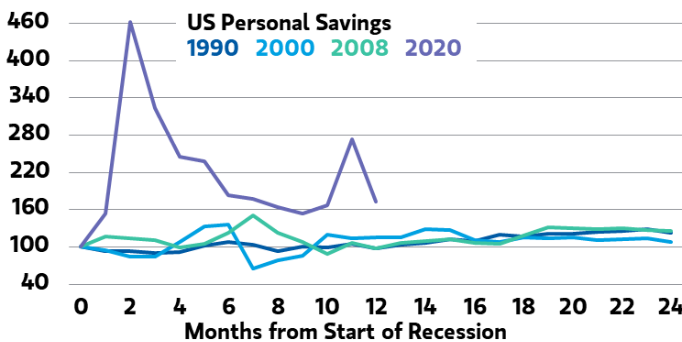
# These Megatrends Could Provide Upside Fuel for Stocks

**Daniel Skelly**, Head of Market Research and Strategy, Morgan Stanley Wealth Management

With heightened investor focus on daily vaccination progress and week-to-week market rotations amid rising interest rates, we also need to step back and consider the longer-term implications of the pandemic, and the unique policy and industry responses to it. The question is not what it means for the stock market next week, next month or even next year. What about the two-to-three year time horizon? We see three megatrends coinciding in this market cycle to an extent that has not occurred in the previous three recoveries—and they are bullish for stocks.

**CONSUMER SURGE.** Perhaps the most immediate driver of economic growth stems from a continuation of strong consumer spending as additional fiscal stimulus powers the lower income consumer and the vaccine rollout drives spending on services, especially from higher-end consumers. Indeed, Ellen Zentner, Morgan Stanley & Co.'s chief US economist, recently increased her 2021 US real GDP estimate to 7.3% year-over-year growth. She raised the forecast given the earlier-than-expected passage of $1.9 trillion additional fiscal stimulus as well as the potential for consumers to draw on their historically high level of savings (see chart). What's more, in contrast with 2008 when the housing market was the epicenter of the financial crisis, this time neither the consumer nor the banks are deleveraging, which should drive a faster GDP rebound.

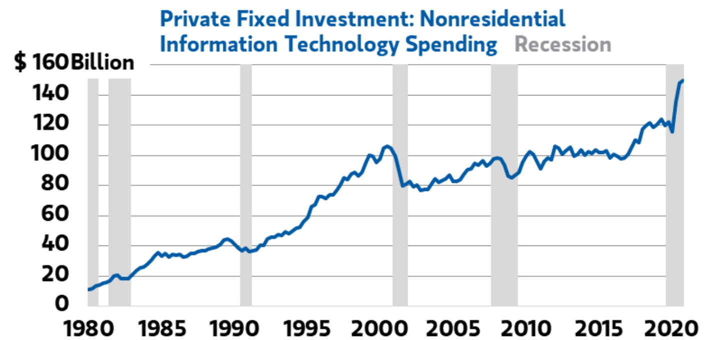
### Personal Savings Are Much Greater Than in Earlier Recessions




Source: Bloomberg as of Feb. 28, 2021

**DIGITAL DEMAND.** While we may dine out more, and even venture to the movies (maybe) later this year, it's unlikely the world is ever going back to exactly how it was in 2019. The forces of digital transformation were already pervasive throughout the consumer and corporate spheres prior to COVID-19, and the pandemic has only accelerated those trends. The pandemic was a wake-up call for every industry, and with Newton's Third Law of Physics in mind, "for every action, there is an equal and opposite reaction," we expect see a multiyear trend toward digitization. Katy Huberty, MS & Co. analyst for information technology hardware, sees early evidence that business models are shifting in anticipation of permanent changes in consumer preferences and accelerating trends in e-commerce and e-services. She also sees wider adoption of productivity-enhancing technologies like cloud computing, collaboration tools, automation and data analytics. As the pandemic emphasized work from home, in contrast to the 2008 and 2000 recessions, the past year saw a sharp 30% increase in corporate spending on tech hardware (see chart).

### Sharp Jump in Corporate IT Spending Reflects Strong Digital Demand



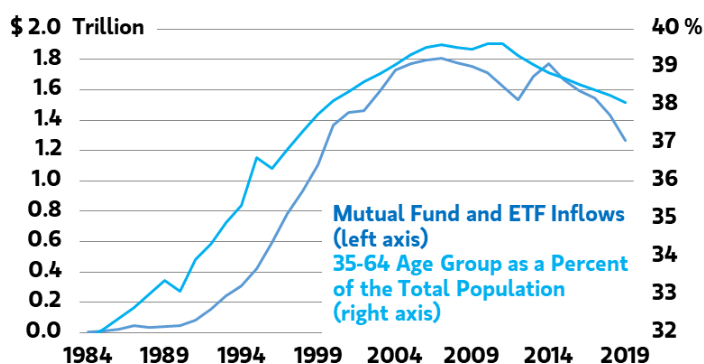

Source: FRED, Bureau of Economic Analysis as of Dec. 31, 2020

In addition, we see higher spending on digital services as the economy recovers and companies adjust to a "new normal." Lisa Shalett, chief investment officer for Morgan Stanley Wealth Management, believes that this imminent diffusion of technology throughout sectors like financials, industrials and health care will define this cycle, in contrast to the consumer focus that dominated the last tech cycle. Notably, the tech sector allocates 16% of its revenue to capital spending and research and development (R&D) while all other sectors only allocate 8%. So, overall tech spending can accelerate as new industries position for a digital future. All told, the productivity benefit to the economy from greater tech and R&D spending over the next several years also contrasts with the 2008 and 2000 cycles.

**DEMOGRAPHIC TAILWINDS.** Evolving demographics are another important driver of our sanguine view and truly illustrate how "this time is different." Recent headlines regarding young traders, and rallies fueled by social media notwithstanding, there actually is a much larger positive trend at hand: the broadening out of the equity investor base to a newer generation.

First, the background: In 2019, millennials overtook the baby boomers as the largest cohort in the population. Gen Z, those born after 1996, account for another 20%. The first millennials turn 40 this year, and their investment path looks similar to what boomers experienced during their "investing age" in the 1980s and 1990s. Furthermore, just 6.5% of millennials' assets are in equities, similar to the 6.0% allocation boomers had at age 40. In subsequent years, the boomers' allocation to equities grew to over 25%, implying further inflows (see chart).

### Historically Equity Flows Have Tracked the "Investing Age" Portion of the Population




Note: Before 2000, inflows are for mutual funds only. Since 2001, inflows include ETFs.
Source: US Census Bureau, Morningstar Research, Morgan Stanley Wealth Management Global Investment Office as of Dec. 31, 2019

This demographic dynamic resembles the 1990 recovery. Indeed, from 1984 to 2000, as baby boomers rolled through their peak investment years, significant equity inflows and strong performance followed. However, despite the comparison to the millennials, we highlight that valuations are higher today with the S&P 500 Index's forward price/earnings ratio at 21 versus 12 in 1990. So while demographic-driven inflows may support a multiyear upward trend, it is unlikely to repeat the magnitude of gains realized in the 1990s, during which the S&P 500 saw average annual returns of 16%.

**MANAGEABLE RISKS.** With the expectation for resurgent growth powered by tremendous fiscal spending and a Fed committed to letting inflation run hot, MS & Co.'s global macro team thinks this cycle could be "hotter, but shorter" than previous eras as inflation eventually picks up. That said, inflation is still rising from historically and persistently low levels, and equities have actually done best amid a low but rising inflation backdrop.

While the debate on inflation cuts both ways, one thing that is usually more certain in life is taxes, and many investors think the Biden administration will seek to increase corporate and individual taxes. However, aspects of the tax agenda may be delayed until after the 2022 midterm elections if the Democrats try to appeal to a broader base and boost their majority. Even so, in years when taxes are increased, such as 1993 and 2013, markets can produce positive gains as long as underlying economic and profit trends are heading higher, as we currently expect. ■

*Daniela Haigian also contributed to this report.*

EQUITIES

# Cyclicals Might Do Even Better With an Infrastructure Plan

**Kevin Demers, CFA**, Investment Strategist, Morgan Stanley Wealth Management

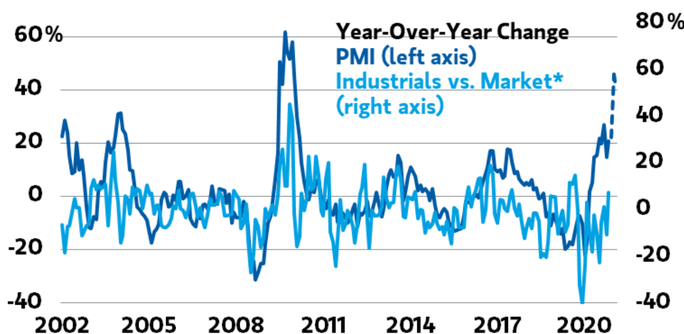
**Monica Guerra**, Investment Strategist, Morgan Stanley Wealth Management

Cyclical stocks have rallied sharply on a positive economic momentum that resulted in upward earnings revisions. Industrials, materials and energy are up between 90% and 120% since the March 2020 lows—however, we still see upside opportunity in certain cyclicals given our expectations for increased industrial activity and federal infrastructure spending. Besides the usual roads-and-bridges approach, the Biden infrastructure plan is expected to include climate change mitigation initiatives.

## Industrial Recovery

Typical indicators of industrial activity such as purchasing managers indexes have recovered from pandemic lows, a positive signal for cyclical stocks. Accommodative monetary policy, fiscal spending and vaccine distribution all should support real GDP growth, and Ellen Zentner, Morgan Stanley & Co.'s chief US economist, recently upgraded her 2021 forecast to 7.3%. Notably, we believe that even, if PMIs stay at current year-over-year levels without further acceleration, there is an opportunity for a performance catch-up (see chart). Further, secular tailwinds should support higher capital spending, including the "nearshoring" of supply chains, 5G technology that should drive broad adoption of automation and the internet-of-things and, due to lessons learned from the COVID-19 pandemic, improving air filtration technology. As the secular tailwinds coincide with the cyclical uptrend, companies in the industrial automation, transportation and machinery industries appear well positioned.

### Strong PMI Movement Signals Upward Move in Cyclicals' Relative Performance




*S&P Industrials Index vs. S&P 500 Index Note: Dotted line forecasts the year-over-year rate of change if PMI stays at current levels.
Source: Bloomberg as of Feb. 28, 2021

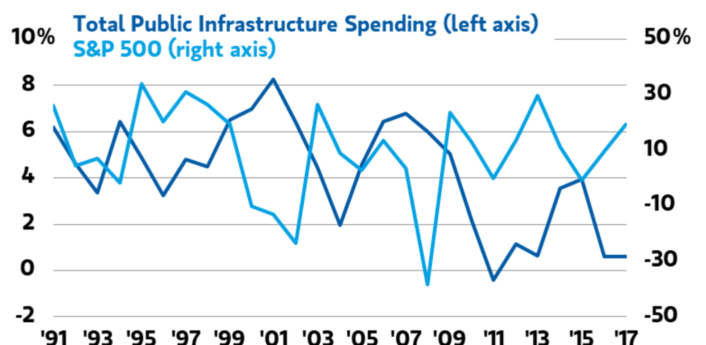
## Infrastructure

The Biden administration is expected to propose a $2 trillion package, with approximately $1 trillion to $1.5 trillion in new spending for traditional and green infrastructure projects. This is important for cyclicals for two reasons. One is the multiplier effect: MS & Co. economists estimate that $1 spent on infrastructure generates $2 in further economic spending. The other is that the timing of the infrastructure package could extend the industrial cycle, as it coincides with an expansion.

Historically, infrastructure spending has been countercyclical with the business cycle (see chart). As we are in an early economic expansion, this stimulus could provide an extended tailwind for capital spending. This also reinforces the positive relationship between the year-over-year change in industrial production and the year-over-year change in infrastructure-related fiscal stimulus spending going back to the 1950s; spending on roads, bridges and public transportation requires machinery and a robust raw materials supply chain. With PMIs and industrial production still in expansionary territory, infrastructure spending could keep industrial capital spending elevated for longer than expected.

The administration's focus on green infrastructure should also drive spending in new areas such as clean energy and utilities, broadband connectivity and electrification. As the country rethinks what "infrastructure" means, we believe that industries like autos, broadband communications, renewable energy and water will become critical in the government's response to both the nation's decaying infrastructure and an increased incidence of severe climate-related disasters. Notably, Old Economy industrial and materials companies will provide the necessary raw materials and manufacturing capacity to execute on these plans. Therefore, investors should consider a mix of traditional cyclicals and new beneficiaries that will gain from the combination of strong economic growth, as well as federal initiatives to bring the US infrastructure into the 21st century. ■

### Increased Infrastructure Spending Is Countercyclical to Market Performance




Source: Congressional Budget Office, Bloomberg, Morgan Stanley Wealth Management as of March 3, 2021

EQUITIES

# How Do Rising Rates Affect Stocks? Look at the Equity Risk Premium

**Doug Moglia**, Associate, Morgan Stanley Wealth Management
**Nick Lentini, CFA**, Associate, Morgan Stanley Wealth Management

So far this year, the benchmark 10-year US Treasury yield has climbed to 1.71% from 0.91%, reflecting a backdrop of stronger economic data, robust fiscal stimulus and accelerating vaccination efforts—as well as a pickup in inflation expectations. Stocks have made all-time highs on much of the same news, as the S&P 500 Index is now up 5.4% for the year to date (through March 30). However, with long-term rates moving higher, while short-term rates remain anchored by a zero-bound fed funds rate and stable monetary policy, the relevant question for investors now is: "When do higher interest rates start to put pressure on equities?"

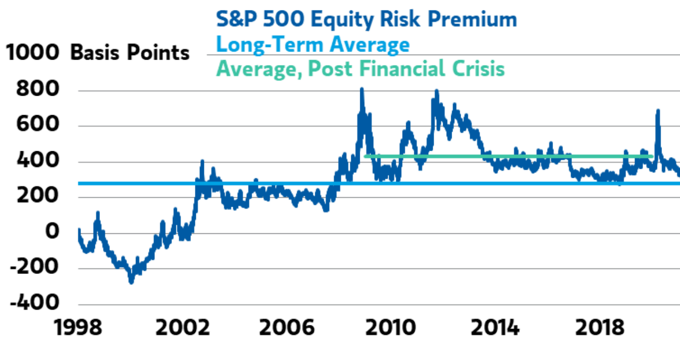
We can address this question with a simple relative valuation framework: the equity risk premium (ERP). The ERP is the spread between an equity index's earnings yield and the risk-free rate, usually the 10-year US Treasury yield. In other words, it calculates the premium an investor receives for taking equity risk as opposed to buying a "risk free" asset. The earnings yield is determined by taking the estimated next 12 months' earnings per share (EPS) for the index and dividing that by the index price; it's also the reciprocal of the forward price/earnings (P/E) ratio. The higher the ERP, the more attractive stocks are considered to be relative to bonds. This could be the result of higher earnings expectations for stocks or a lower risk-free rate.

**THE CALCULATION.** To calculate the current ERP, we start with a forward 12-month EPS of $179 divided by the S&P 500 Index price of 3,958, which gives an earnings yield of 452 basis points. Then, we subtract the current 10-year yield of 1.71%, or 171 basis points, to arrive at 281 basis points. That's slightly higher than the long-term average, which is 280 basis points—but it's also well below the average of 436 basis points logged since the financial crisis (see first chart). From an ERP valuation perspective, stocks are less attractive relative to bonds than they have been for years.

**GROWTH STOCK IMPACT.** The ERP also demonstrates growth stocks' sensitivity to higher rates (see second chart). So far this year, value stocks have outperformed growth, with the Russell 1000 Value Index up 11%, while the Russell 1000 Growth Index is flat. There may be other factors at play, but we think the backup in rates is the predominant contributor to growth's underperformance. The Russell 1000 Growth Index now trades at a 28 P/E, or a 3.6% earnings yield, while the Russell 1000 Value holds an 18 P/E, a 5.6% earnings yield. Now consider what happens if the 10-year Treasury yield moves up 1.0% to 2.7%. The growth index's ERP would fall to 0.9%, while the value ERP should decline to 2.9%. This means that, for the ERP to stay constant, the growth index P/E would need to come down to 22, a 22% drop, while value P/E would fall to 15, a 17% decline.

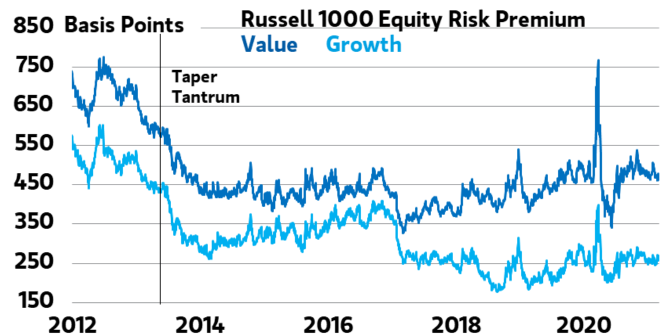
This simple scenario helps demonstrate that growth stocks may still be vulnerable to higher rates, while value stocks may be less so. However, as with valuation frameworks, the ERP is not predictive. Whether it's high, low or average still provides investors with useful guidance. ■

### S&P 500's Equity Risk Premium Is Slightly Above the Long-Term Average




Source: Bloomberg as of March 17, 2021

### Given Their Higher ERP, Value Stocks Are More Attractive Than Growth Stocks




Source: Bloomberg as of March 17, 2021

Please refer to important information, disclosures and qualifications at the end of this material.

EQUITIES

# EM Index Funds Come With a Large Allocation to China

**Michael Suchanick**, Investment Strategist, Morgan Stanley Wealth Management

**Laura Thomas**, Investment Analyst, Morgan Stanley Wealth Management

An index fund is a popular way to gain exposure to the emerging markets (EM), where information about specific companies may be hard to find and transactions may be costly. The MSCI Emerging Markets Index, launched back in 1988, has been generally regarded as the standard index for emerging markets. The index contains some 1,300 companies in 27 countries. At first blush, those statistics might suggest that passive funds tracking the MSCI Emerging Markets Index are well diversified—but look again: 39% of the index's capitalization is China.

More than anything, China's outsized share is a reflection of its success as an economy and the growth of its capital markets. A decade ago, China's weight in the index was just 17%, and the index included 140 Chinese companies—now there are 714. China surpassed Japan as the world's second-largest economy in 2010, and it is widely expected to eclipse the US later this decade. Unless other emerging markets start growing significantly faster, China's place in the EM firmament seems secure (see chart).

**INVESTMENT IMPLICATIONS.** What are the implications for passive investors? Will they become even larger stakeholders in China, either willingly or unwillingly? What are the implications for active managers? More than ever, managers need to be aware of their allocation to China equities. They might be wary of straying too far from the EM index—but, with China counting for so much, if Chinese equities falter, what does that mean for investors, both passive and active?

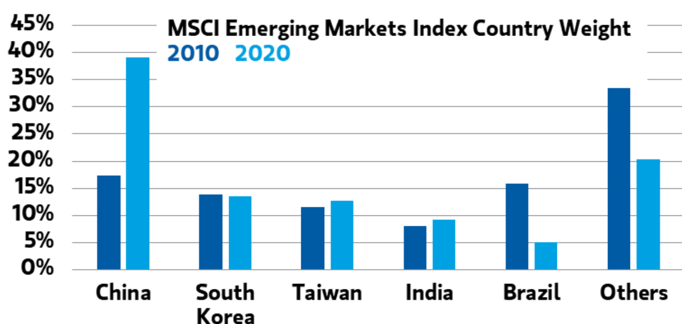
Since mid-February, the MSCI Emerging Markets Index has fallen by more than 9%, but the China portion has declined by 17%. For the year to date, China is the index's second worst-performing country, trailed only by Turkey, which is down 21%. A-shares, which unlike many Chinese stocks are available to non-Chinese investors, have declined by nearly 17% during this same period. The Global Investment Committee (GIC) views the recent sell-off—largely driven by the spike in US Treasury yields, concerns around China's recovery, its sustainability and the direction of policy—as an opportunity for investors to add China A-shares. The GIC views China A-shares favorably in the long term based on catalysts such as improved capital spending, excess consumer savings and softening inflation.

**RUNNERS UP.** After China, none of the other 26 emerging markets are even close. South Korea and Taiwan, the second- and third-largest index weights, combine to make up only 26% (see chart). India, at 9%, has the fourth-largest share. A decade ago, Brazil's weight was nearly 16%, just behind China. Today, it's merely 5%, as Brazil's markets have struggled for years. In 2010, the so-called "BRICs"—Brazil, Russia, India, and China—were thought to be the powerhouses of the emerging markets; they comprised 47% of the index weight. The BRICs still dominate today, but their 56% share is largely China.

Looking at the index by sector, technology and consumer discretionary account for nearly 40%, so index investors have a big stake in these sectors' growth. From 2000 to 2010, technology was the second worst-performing sector in the index, but it was the best performer in the following decade. The index has become more concentrated, too. The five-largest companies now account for 23% of the index, up from 9% 10 years ago.

Active managers can add value through superior security selection by placing more or less emphasis on companies held by the index or its peers. They may invest in companies that are not in the index or not domiciled in emerging market countries, which can help with diversification. In addition, active managers may keep cash to deploy during market dislocations. In a bull market, passive investors will likely benefit if emerging markets outperform developed markets. However, active managers have more levers to pull and, for investors who want something beyond the index, options include actively managed ETFs, mutual funds and/or separately managed accounts. ■

## In the Past Decade, China More Than Doubled Its Presence in the MSCI EM Index

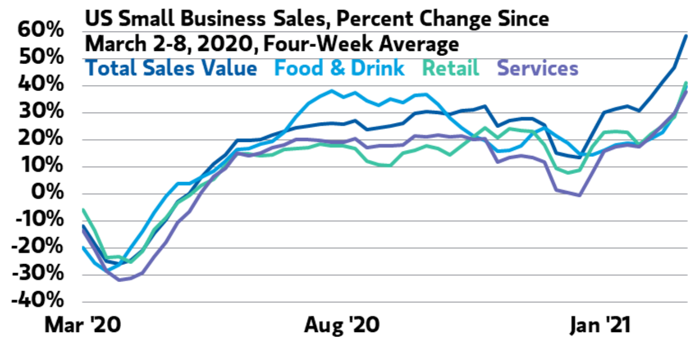



Source: MSCI, FactSet as of Dec. 31, 2020

# Short Takes

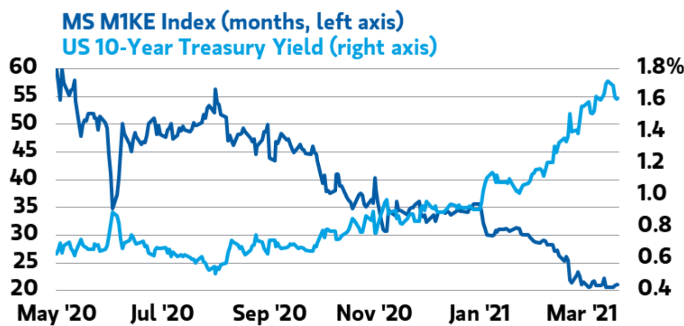
## Small Business Sales Accelerate on Stimulus, Reopening and Sentiment

In a sign that the US economic recovery is accelerating, sales at small businesses are now up 56% over their pre-COVID-19 levels, according to Cardflight, a payments firm serving small businesses. The firm tracks the four-week percent change in sales using the week prior to the COVID-19 lockdown as a basis of comparison (see chart). In the slight economic reopening, food and drink showed the strongest performance. Then sales declined leading into winter as climbing COVID-19 cases, poor weather and uncertainty around fiscal stimulus dampened spending, especially in retail and services. However, with vaccinations well underway, and a $900 billion stimulus bill passed in December followed by $1.9 trillion last month, spending and sentiment have improved dramatically. The most recent University of Michigan Consumer Sentiment Index reading was 83.0, its highest level since the pandemic began. That should be a positive for small businesses in the near term.—*Jonah Silverman*




Source: Cardflight as of March 21, 2021

## Bond Market Believes Fed Will Hike Interest Rates Sooner Than It Now Says

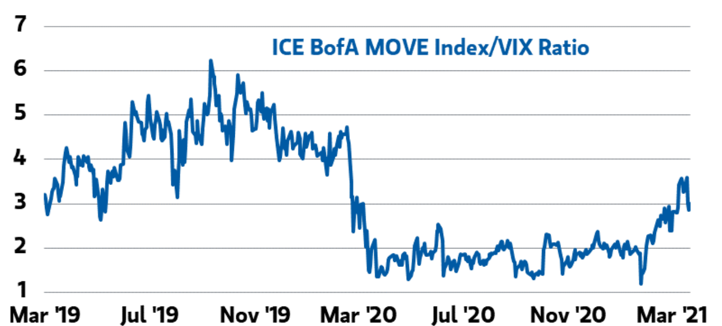



Source: Bloomberg as of March 25, 2021

Following the sharp market drop in March 2020, the Federal Reserve pushed the fed funds rate to near zero. Now, one year after the stock market trough, Fed Chair Jerome Powell maintains the Fed will not hike the rate until the end of 2023, continuing this same policy even as economic conditions seem to be rapidly improving. In light of this guidance, the fixed income markets now appear to be doubting the Fed. The proprietary MS M1KE Index, which captures the market's expected timing of rate hikes, implies that the first hike will be nearly a full year sooner than implied, at the beginning of 2023 (see chart). With the 10-year US Treasury yield and inflation expectations on the rise, investors are cautiously awaiting a change in the narrative.—*Nathan Wagener*

## Fed Dovishness Has Heightened Volatility in Bonds and Lowered It in Stocks

Last month, Federal Reserve policymakers affirmed their dovish monetary policy in the face of rising long-term rates and an improving economy. Not surprisingly, volatility jumped in the Treasury bond market as measured by the ICE BofA MOVE Index. At the same time, equity investors showed their appreciation for Fed support, which would improve corporate earnings prospects, with lower volatility as measured by the VIX. The two markets' reading of policy resulted in high relative volatility. An increasing MOVE/VIX ratio suggests that markets are expecting notably higher volatility from their fixed income and less from their equity portfolios (see chart). In the past, lower bond volatility served as a foundation for equities. A more normal relationship between equity and fixed income volatility suggests a bumpier ride ahead.—*Brad Fulton*




Source: Bloomberg as of March 25, 2021

ALTERNATIVES

# Cryptocurrency as an Asset Class in a Diversified Portfolio

**Lisa Shalett**, Chief Investment Officer and Head of the Global Investment Office, Morgan Stanley Wealth Management

**Denny Galindo, CFA**, Investment Strategist, Morgan Stanley Wealth Management

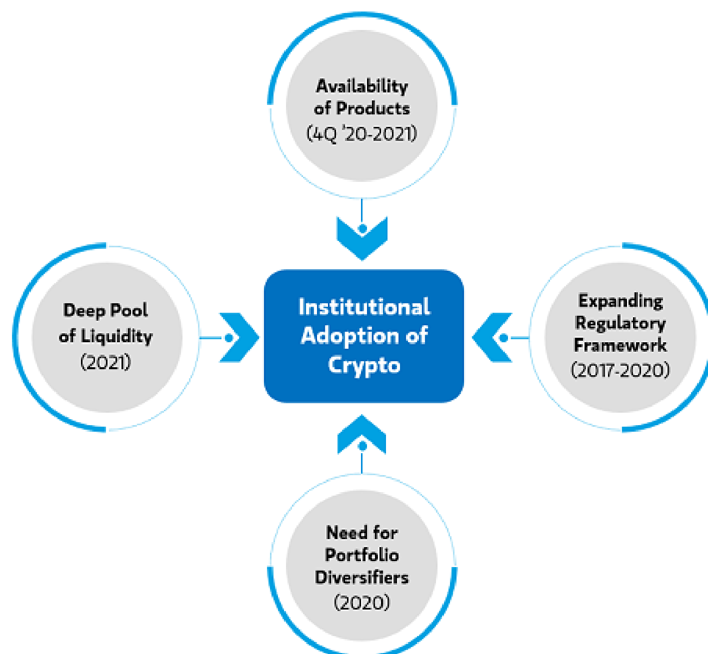
Periodically, technological and product innovation—in tandem with policy and regulatory evolution—converge with the demands of the macroeconomic backdrop to pave a path for the emergence of a new investable asset class. This was the case with gold nearly 45 years ago, and it is currently the case with cryptocurrency, which has crossed the critical thresholds of market liquidity, regulatory scrutiny and institutional acceptance at a time when managing cash and achieving portfolio diversification has become ever more challenging and meaningful.

Our recognition of cryptocurrency as a likely permanent investment category acknowledges its potential to power decentralized, tamper-resistant, anonymous transactions on blockchains leveraged for myriad applications. That is undeniably exciting. On the other hand, it represents a radical new invention lacking a known sponsor, centralized standards-setting body or actual physical incarnation; it continues to search for the "killer app" or best applications and could prove challenging to sovereign governments, climate advocates and market regulators. Thus, in acknowledging cryptocurrency as a viable asset class, we suggest that qualified investors approach it as speculative.

**INFLECTION POINT.** Cryptocurrency's viability as a financial investment for qualified investors was cemented in 2020 during the COVID-19 pandemic. Specifically, we see four catalytic forces that have coalesced in the past six months to create a genuine inflection point: the broader adoption of digital wallets/payment systems, by dint of the need for contactless business models during the COVID-19 crisis; a surge of policymaker-driven global liquidity that rendered most traditional asset classes fully valued in a historical context; a dwindling list of diversifying and uncorrelated assets; and rising risks of debasement of traditional fiat and reserve currencies.

Not only has rampant central bank money printing fueled financial assets, but the backdrop of negative real yields for both cash and bonds denominated in fiat currencies has raised the specter of long-run debasement—implicitly, a structural punishment for savers and cash owners. At the same time, even with the recent backup in global interest rates, there is still close to $16 trillion in nominal negative-yielding debt outstanding. Aggressive fiscal stimulus has exacerbated matters, pressuring national debts and deficits to unsustainable levels and raising the odds that higher inflation will become a necessary strategic tool for governments.

**Four Catalytic Forces Drive Institutionalization of Cryptocurrency**




Source: Morgan Stanley Wealth Management Global Investment Office

Long-term investors, pension funds and corporate treasurers have begun to seek out new "stores of value," and cryptocurrency has emerged as an option (see chart). In 2020, we saw publicized interest in crypto soar from multiple corners. We view such interest as a type of validation, confidence and "institutionalization" that ends up being self-reinforcing, ensuring that cryptocurrencies continue to evolve.

**SPECULATIVE PHASE RISKS.** As with any asset class still in its speculative phase, there are many risks—some traditional and some unique to cryptocurrencies. Such risks limit prudent advice to maintaining exposures in small positions. Our initial modeling, replicated in spirit by a recently published CFA Institute study, identifies diversification benefits from the low correlation of cryptocurrency to other assets and suggests that Sharpe ratio improvements can be achieved with positions as small as 2.5%.

We recommend that investors get educated and consider how to achieve exposure to this asset class. For qualified investors, we suggest starting with publicly traded products—preferably ones that are multiasset and potentially access growth opportunities through a venture capital/private equity investment in the blockchain ecosystem. ■

**For additional information about the risks of cryptocurrencies, please see the Important Information in the Disclosure section of this report.**

*This article was excerpted from, "The Case for Cryptocurrency as an Investable Asset Class in a Diversified Portfolio," our March 17, 2021, special report. For the full report, contact your Financial Advisor.*

**Q&A**

# Searching for Income in a Low-Yield Market

The current market environment is challenging for income-seeking investors. On the fixed income side, the Federal Reserve's policy of keeping the fed funds rate at the zero-bound quashes returns on short-term investments. As the economy showed signs of strength, longer-term yields have risen, but a 1.7% payout on the 10-year US Treasury bond is not attractive for most income-seeking investors.

On the equity side, the S&P 500 Index currently has a dividend yield of just 1.5%, versus its 2.0% 20-year average. Jeff Chapracki and Olga Pujara, equity and fixed income analysts on Morgan Stanley Wealth Management's Global Investment Manager Analysis team, recently spoke with Scott Davis, head of income strategies, and Gene Tannuzzo, global head of fixed income, from Columbia Threadneedle Investments. The following is an edited version of their conversation.

**JEFF CHAPRACKI (JC):** Is there an opportunity to earn income from equities?

**SCOTT DAVIS (SD):** Valuations are high and the dividend yield is low, but you have to put it in perspective to where interest rates are. The discount rate—the risk-free rate of return—is very low. So that's a reason why equities are trading where they are.

There are a lot of opportunities, though one thing I always tell people is: "Don't just focus on the dividend, focus on the business." Think about the total return, not only the dividend. Remember that the dividend is tied to the growth of the company over time.

We had a recession last year, but it wasn't because of the normal things that typically bring on a recession. It was the pandemic, an outside shock. If I look back, it reminds me why we have to stay engaged with markets. We learned that some companies could have a disruption in short-term cash flow and still have pretty solid businesses.

More than 80% of our holdings increased their dividends, and the remaining ones didn't reduce their dividends. Of those that held steady, most were financials and23acq industrials. The banks were told by the Treasury and Federal Reserve that they couldn't increase their dividends or buy back stock until we saw how everything turned out. With industrials, there was a lot of uncertainty on what was going to happen.

We're seeing some good dividend increases, and I think we'll see some acceleration in dividends, and some makeup dividends, too.

**OLGA PUJARA (OP):** Gene, what's your view on fixed income?

**GENE TANNUZZO (GT):** If we think historically, the example of 2009 is particularly relevant. While the economy is different for a host of reasons than it was in 2009, we do have a similar player in the White House now.

When President Obama assumed office in 2009, recall that his roadmap was to stimulate with fiscal policy as much as possible to get the economy back on its feet. We're at a very similar time now and President Biden is following a similar path. The latest stimulus bill is aimed at exactly that.

The fiscal impulse is something that is key here, particularly as monetary policy has mostly done its job. The handoff from monetary to fiscal policy, particularly as the economy reopens, is something we've speculated about, but we're just now putting a finer pencil to what it means from a growth perspective.

Right now, we've had about 29 million cumulative cases of COVID, and we've just crossed over 100 million vaccine doses administered. So there is reason to be quite optimistic on the economic outlook.

What do you do with that from a fixed income perspective? I look back to 2018. We had a new fiscal package, a tax cut; a little different, but certainly stimulative to growth. We also had interest rates that were slowly rising, causing a headwind for the highest-quality fixed income returns that had worked really well in 2017.

As in 2018, we're now looking to navigate an environment where, fundamentally, the economy is improving. So, we want to have exposure to credit that can benefit from it. However, we don't want so much interest rate exposure that total return can be undermined as long-term rates move up.

**OP:** What's your outlook for inflation and how it could potentially affect interest rates?

**GT:** Last fall, the Federal Reserve introduced flexible average inflation targeting. What the Fed basically said was: We're going to keep interest rates low, and we're going to let inflation go higher, and when inflation does go higher we're going to keep interest rates low, not doing anything about it, to let the economy overheat a bit. Hopefully, this will be a path to healing, and allow jobs to come back. We will raise rates at some point, but don't ask us about it now and don't ask us about it tomorrow.

The bond market was collectively underwhelmed with this announcement. It had little market impact at that time, but interest rates inched up a little and a little more and a little more. Now, we look back at the last six months, and interest rates have nearly tripled—albeit coming up from a very low level. Almost all of that increase has been on the back of rising inflation expectations.

I'd say a few things about inflation. First, there's a lot that

markets don't know about inflation, and we have to be humbled by the fact that inflation has been low and stable for the last 30 years: Core PCE inflation has been between 1.0% and 2.5% for 95% of that time.

Of course, there are reasons to expect temporarily higher inflation. It could be the result of supply constraints as we reopen the economy, or year-over-year changes in oil prices. Yes, oil prices have been going higher, but let's remember a year ago they were briefly negative. So, any comparisons are going to look elevated.

What we're really concerned about, and where the biggest question marks reside, is: How are we going to get—or will we get—into a positive wage price spiral where companies believe demand will continue to drive higher prices than consumers are willing to pay? Will employers pay their employees more to produce those goods and services?

The jury is still out on that. The reason we want to be cautious now is the fact that we haven't seen this scale of fiscal and monetary response at the same time and, additionally, the two occurring at a moment in which a good portion of the global economy would be reentering sectors in which they haven't been able to participate in the past 12 months, like leisure and hospitality.

The evidence over the last 30 years says you should not be afraid of inflation in developed markets, but I think we simply have to be humble in the fact that inflation could run a little above our expectations for a while. It's likely that the Fed is not going to do anything about it such as raising short-term interest rates. The bottom line is that longer-term interest rates will move with the direction of the economy and the momentum of growth as economies reopen, and short-term interest rates will stay low.

Now, how high can long-term rates move? Look at the shape of the yield curve between two-year yields and 30-year yields. Right now, it's just above 2%. In other business cycles, that's gotten to 3%. As long as the economy is still growing and the equity side is still performing well, I think the Fed will be comfortable with interest rates drifting up toward that level.

What's critical is the speed of that upward move. If it's an abrupt move, we can certainly see indigestion in other credit and risk assets. If it happens gradually, as we have seen in the last six months, I think the Fed will be just fine with it.

JC: Scott, what might this do to equities?

SD: I agree with Gene. It really depends on how fast it happens and the reason for it. It will affect equities, though I don't think a good economy and a 2% to 3% rate of inflation derails us in any way. Oftentimes, that could be reflected positively in earnings, but it does provide some uncertainty.

If we look back at 100-basis-point rises in Treasuries in the past 20 years, on an absolute basis you'll find that equities do decently if the move is contained—but what has worked well in one rising rate environment doesn't necessarily work the next time.

Diversification is critical, as sector performance can vary greatly between different periods. That really has to do with the valuations that you start off with. There are reasons to be diversified not just in sectors and stocks but across asset classes, too.

Whenever we look at a stock, first and foremost, we're looking at the free cash flow from operations. Then, we're assessing the growth rate of that cash flow going forward and the conviction that we have about that stock.

We are willing to buy high-yielding stocks, but when you fixate on yield alone, you can set yourself up for disappointment. So you really have to understand what sources that dividend, and what makes that dividend "safe."

Unlike income from bonds, dividends are at the discretion of the board of directors and they reflect the fundamentals of the business. That said, we prefer companies that can grow their free cash flows and dividends over time—but we are looking for some balance. So we might be willing to invest in a company that has a lower dividend yield now that has the ability to increase the dividend faster than the market expects. In the end, what matters is total return, meeting valuation criteria and thinking through the growth of the cash flow, which is the source of dividends. You have to consider the risks to that cash flow.

JC: Are there areas that you avoid?

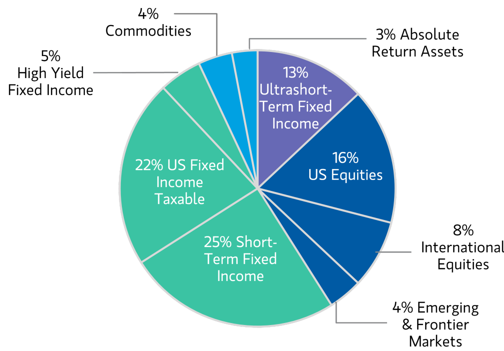
SD: We do get nervous when a company is just increasing their dividend because they've done so for the last 20 years. The fact that a company is a "dividend achiever" does not mean it's going to be a dividend achiever in the future. In the long run, any dividend that's not covered by cash flow from operations has to be suspect. The company is either depleting reserves or they are selling assets to pay it. ■

*Scott Davis and Gene Tannuzzo are not employees of Morgan Stanley Wealth Management or its affiliates. Opinions expressed by them are their own and many not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.*

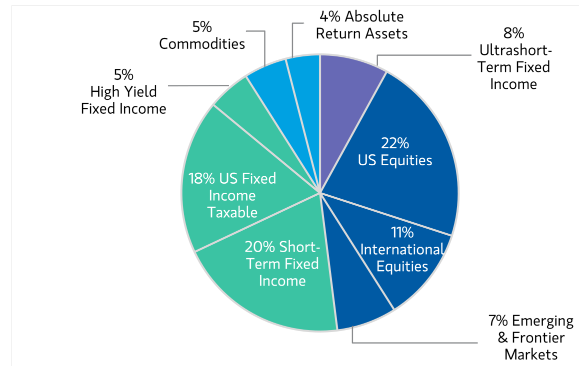
# Global Investment Committee Tactical Asset Allocation

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

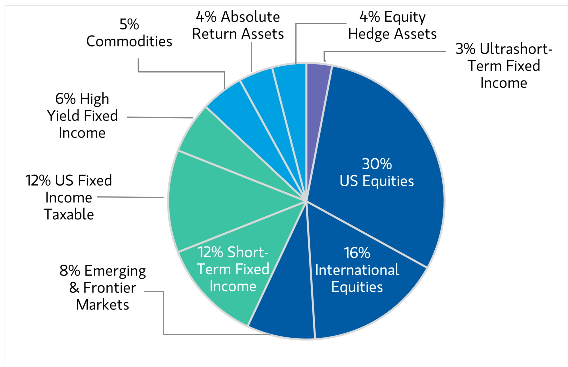
## Wealth Conservation



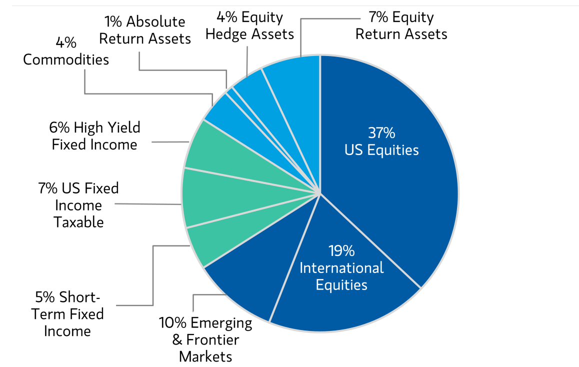

## Income



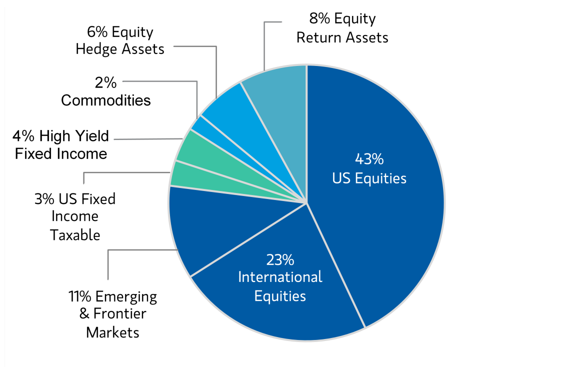

## Balanced Growth



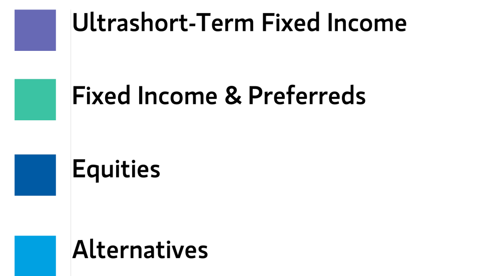

## Market Growth




## Opportunistic Growth

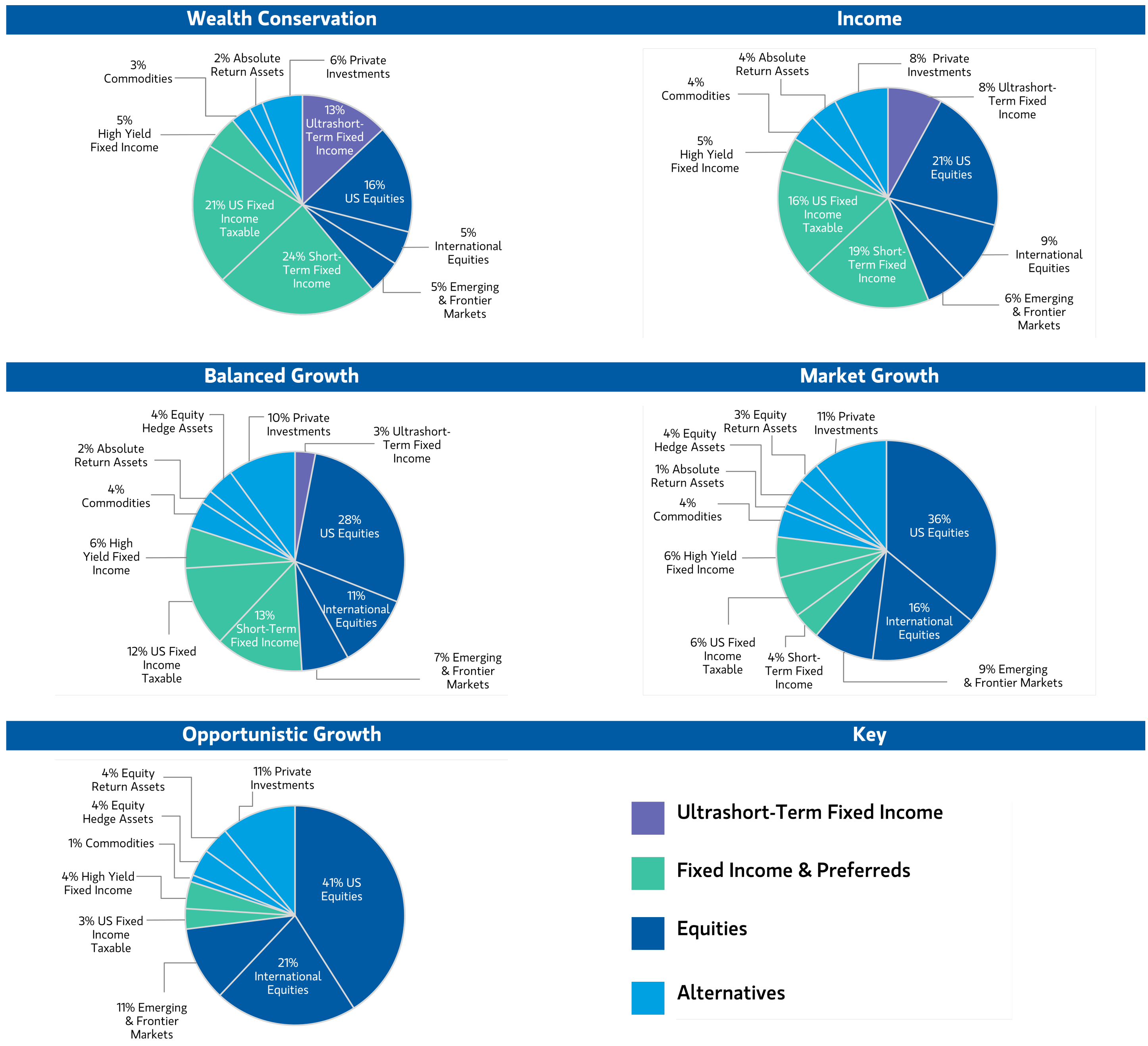



## Key




Source: Morgan Stanley Wealth Management GIC as of March 31, 2021

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 March 31, 2021

# Tactical Asset Allocation Reasoning

| Global Equities | Relative Weight Within Equities | |
|---|---|---|
| US | Overweight | A V-shaped recovery is central to our thesis that a new business cycle and bull market have begun. Risks remain around policy changes, fiscal stimulus and the COVID-19 vaccine, but we expect 2021 GDP growth of 7.3%, which should improve profits among cyclical and small-/mid-cap companies. We prefer active stock-picking rather than holding the S&P 500 Index, which is overly concentrated in large tech stocks. Those leaders are likely fully priced, facing tough year-over-year comparisons and decelerating sequential momentum. |
| International Equities (Developed Markets) | Market Weight | In Europe, prospects for fiscal stimulus and concrete moves toward pan-Europe fiscal integration are game-changers. In Japan, economic recovery is gaining momentum, and we expect shareholder-friendly and positive return-on-equity policies to persist. The weakening of the US dollar is a tailwind. |
| Emerging Markets | Overweight | China was the first country to enter the COVID-19 crisis and appears poised to be the first out. Resumption of economic activity during the second quarter should jump-start global growth, especially given huge government stimulus programs. 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, and had been pairing that position with a large exposure to long-term US Treasuries to hedge what we expected would be a modest correction in stocks. With long-term Treasury yields troughing for the cycle, we recently removed that position and resumed a benchmark exposure to duration. Recent dislocation of investment grade credit spreads and market illiquidity have created opportunities. Fed programs aimed at backstopping this market give reason to be an active bond selector. |
| International Investment Grade | Underweight | Negative interest rates suggest that this is not a preferred asset class for US-dollar clients at this time. Actively managed funds may provide very patient, risk-tolerant clients with income opportunities in select corporate credits. |
| Inflation-Protection Securities | Underweight | The "sudden stop" recession has caused a severe pricing of real interest rates, pushing them negative and near all-time lows. In the near term, upside appears limited. |
| High Yield | Overweight | High yield bonds remain at the epicenter of the dual risks from COVID-19 and the collapse in oil prices from the failure of OPEC negotiations. In our view, some of the most extreme risks have been discounted, especially in light of unprecedented monetary and fiscal policy intervention aimed not only at market liquidity but in bridging cash flow requirements. It's time to ease in opportunistically, using active managers. |
| **Alternative Investments** | **Relative Weight Within Alternative Investments** | |
| REITs | Market Weight | Real estate investment trusts (REITs) were laggards in 2020 as the pandemic's impact on retail and urban office space weighed heavily on the sector. With real interest rates still negative and inflation expectations rising, we expect to be selective opportunistic investors in the sector this year. |
| Commodities | Overweight | The "sudden stop" global recession has driven commodities such as oil to multidecade lows. The rush to the "safe haven" US dollar, which is near its multiyear high, has exacerbated these dynamics. While we recognize the complexity of the geopolitical issues that surround oil, we believe that on a six-to-12-month basis the outlook for the global economy and overall demand will improve materially. Thus, we suggest risk-oriented clients establish exposure to the broad diversified asset class through the use of active managers. Pure passive exposure is not advised at this time. |
| Hedged Strategies (Hedge Funds and Managed Futures) | Overweight | The bear market associated with COVID-19 has driven volatility to historic extremes and led to wide dispersion in price performance and stock-level idiosyncratic risk. These factors tend to create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management techniques to amplify returns. We prefer very active and fundamental strategies, especially equity long/short. |

*For more about the risks to Duration, please see the Risk Considerations section beginning on page 17 of this report.
Source: Morgan Stanley Wealth Management GIC as of March 31, 2021

# Disclosure Section

Important Information

***Buying, selling, and transacting in Bitcoin or other digital assets, and related funds and products, is highly speculative and may result in a loss of the entire investment.*** Risks and considerations include but are not limited to:

- Bitcoin and other digital assets have only been in existence for a short period of time and historical trading prices for Bitcoin and other digital assets have been highly volatile. The price of Bitcoin and other digital assets could decline rapidly, and ***investors could lose their entire investment***.
- Certain digital asset funds and products, including Bitcoin funds and products, allow investors to invest on a more frequent basis than investors may withdraw from the fund or product, and interests in such funds or products are generally not freely transferrable. This means that, particularly given the volatility of digital assets, including Bitcoin, an investor will have to bear any losses with respect to its investment for an extended period of time and will not be able to react to changes in the price of the digital asset once invested (for example, by seeking to withdraw) as quickly as when making the decision to invest. Such digital asset funds and products, including Bitcoin funds and products, are intended only for persons who are able to bear the economic risk of investment and who do not need liquidity with respect to their investments.
- Given the volatility in the price of Bitcoin and other digital assets, the net asset value of a fund or product that invests in such assets at the time an investor's subscription for interests in the fund or product is accepted may be significantly below or above the net asset value of the product or fund at the time the investor submitted subscription materials.
- Certain digital assets, apart from Bitcoin, are not intended to function as currencies but are intended to have other use cases. These other digital assets may be subject to some or all of the risks and considerations set forth herein, as well as additional risks applicable to such other digital assets. Buyers, sellers and users of such other digital assets should thoroughly familiarize themselves with such risks and considerations before transacting in such other digital assets.
- The value of Bitcoin and other digital assets may be negatively impacted by future legal and regulatory developments, including but not limited to increased regulation of Bitcoin or such other digital assets. Any such developments may make Bitcoin or such other digital assets less valuable, impose additional burdens and expenses on a fund or product investing in such assets or impact the ability of such a fund or product to continue to operate, which may materially decrease the value of an investment therein.
- Due to the new and evolving nature of digital currencies and the absence of comprehensive guidance, many significant aspects of the tax treatment of digital assets including Bitcoin are uncertain. Prospective investors should consult their own tax advisors concerning the tax consequences to them of the purchase, ownership and disposition of Bitcoin and other digital assets, directly or indirectly through a fund or product, under U.S. federal income tax law, as well as the tax law of any relevant state, local or other jurisdiction.
- Over the past several years, certain Bitcoin exchanges have experienced failures or interruptions in service due to fraud, security breaches, operational problems or business failure. Such events in the future could impact any fund's or product's ability to transact in Bitcoin if the fund or product relies on an impacted exchange and may also materially decrease the price of Bitcoin, thereby impacting the value of your investment, regardless of whether the fund or product relies on such an impacted exchange.
- Although any digital asset product, including a Bitcoin-related product, and its service providers have in place significant safeguards against loss, theft, destruction and inaccessibility, there is nonetheless a risk that some or all of a product's digital asset, including Bitcoin, could be permanently lost, stolen, destroyed or inaccessible by virtue of, among other things, the loss or theft of the "private keys" necessary to access a product's digital asset, including Bitcoin.
- Investors in funds or products investing or transacting in Bitcoin and/or other digital assets may not benefit to the same extent (or at all) from "airdrops" with respect to, or "forks" in, the Bitcoin (or other relevant digital asset's) blockchain, compared to investors who hold Bitcoin (or such other relevant digital asset) directly instead of through a fund or product. Additionally, a "fork" in the Bitcoin blockchain could materially decrease the price of Bitcoin.
- Digital assets such as Bitcoin or other digital asset product is/are not legal tender, and is not backed by any government, corporation or other identified body, other than with respect to certain digital currencies that certain governments are or may be developing now or in the future (of which Bitcoin is ***not*** one). No law requires companies or individuals to accept digital currency as a form of payment (except, potentially, with respect to digital currencies developed by certain governments where such acceptance may be mandated). Instead, other than as described in the preceding sentences, Bitcoin's and other digital asset products' use is limited to businesses and individuals that are willing to accept them. If no one were to accept digital currencies, Bitcoin and other virtual currency products would very likely become worthless.
- Platforms that buy and sell Bitcoin or other digital assets can be hacked, and some have failed. In addition, like the platforms themselves, digital wallets can be hacked, and are subject to theft and fraud. As a result, like other investors have, you can lose some or all of your holdings of digital assets, including Bitcoin.
- Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to digital assets, such as Bitcoin, held in digital wallets by their providers or by regulators.
- Due to the anonymity Bitcoin and other digital assets offer, it has known use in illegal activity, including drug dealing, money laundering, human trafficking, sanction evasion and other forms of illegal commerce. Abuses could impact legitimate consumers and speculators; for instance, law enforcement agencies could shut down or restrict the use of platforms and exchanges, limiting or shutting off entirely the ability to use or trade Bitcoin or other digital asset products.
- Bitcoin and other digital assets may not have an established track record of credibility and trust. Further, any performance data relating to Bitcoin, Bitcoin-related products or other digital asset products may not be verifiable as pricing models are not uniform.
- Investors should be aware of the potentially increased risks of transacting in digital assets, including Bitcoin, relating to the risks and considerations, including fraud, theft, and lack of legitimacy, and other aspects and qualities of digital assets, before transacting in such assets.
- The exchange rate of Bitcoin or other virtual currency products versus the USD historically has been very volatile and the exchange rate could drastically decline. For example, the exchange rate of Bitcoin versus the USD has in the past dropped more than 50% in a single day. Bitcoin may be affected by such volatility as well.
- Digital asset exchanges have limited operating and performance histories and are not regulated with the same controls or customer protections available to more traditional exchanges transacting equity, debt, and other assets and securities. There is no assurance that a person/exchange who currently accepts a digital asset as payment will continue to do so in the future.
- The regulatory framework of digital assets is evolving, and in some cases uncertain, and digital assets themselves may not be governed and protected by applicable securities regulators and securities laws, including, but not limited to, Securities Investor Protection Corporation coverage, or other regulatory regimes.

- Morgan Stanley Smith Barney LLC or its affiliates (collectively, "Morgan Stanley") may currently, or in the future, offer or invest in digital asset products, services or platforms. The proprietary interests of Morgan Stanley may conflict with your interests.
- The foregoing list of considerations and risks are not and do not purport to be a complete enumeration or explanation of the risks involved in an investment in the any product or fund investing or trading in Bitcoin and/or other digital assets.

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.

*Jeff Chapracki, Kevin Demers, Brad Fulton, Danny Galindo, Monica Guerra, Nick Lentini, Doug Moglia, Olga Pujara, Jonah Silverman, Daniel Skelly, Michael Suchanick, Laura Thomas and Nathan Wagener are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.*

*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 appropriate 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 appropriate 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.

***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.

**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 appropriate 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 appropriate 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.

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

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

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

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

Principal is returned on a monthly basis over the life of a **mortgage-backed security.** Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely

causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

**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.

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