



Global Investment Committee | November 2021

On the Markets

Risk-Reward

As someone who is regularly asked his opinion on the direction of markets, one thing I'm almost never asked is: "What's the risk-reward?" I find that amazing, because it is really the only way to think about any investment—at least as an asset owner. There are many ways to measure the risk-reward of an investment, but the simplest way to think about it is as the upside from the current price versus the downside. In short, saying an investment is likely to go up or down in the near term does not say anything about its risk-reward.

In the current environment, it appears that equity markets may have a little more gas in the tank, as seasonal strength and strong retail inflows keep prices elevated even in the face of growing risks. More specifically, while the collective earnings picture remains OK, there are many companies struggling with the high costs of materials and labor, and some are missing sales altogether due to supply shortages. Second, the Federal Reserve appears to be on track to officially announce the tapering of its asset purchase program—a major support for prices over the past 18 months. Third, valuations have rarely been this elevated, and there are many assets that resemble the tech bubble of the late 1990s.

From our seats, at current prices the risk-reward is unattractive for most broad asset classes, which is why we reduced our overall portfolio risk in early September. The market experienced a decent correction that month—10% or more for most assets—but we didn't feel like that was a large enough drawdown to re-risk our portfolios, given what we viewed as the still deteriorating fundamental outlook. Since then, markets have rebounded sharply, and we're right back to where we started in early September.

Should we have bought the dip in September? Maybe. Should we be more bullish now? We don't think so. We see no way the risk-reward is better today than it was three weeks ago when prices were lower and the outlook the same. This is where being an asset owner instead of an asset manager has its advantages; there is no pressure to chase when you don't have an attractive risk-reward. Instead, we will remain patient for that fat pitch—when most people think prices are going down, but the risk-reward is actually great—which is the opposite of today. ■

Michael Wilson

Chief Investment Officer
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ECONOMICS

The Great Resignation

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

Accelerating wage growth, a downtrend in unemployment claims and a record level of job openings are all positive developments for the labor market. Yet, despite decent job creation and hiring, and an unemployment rate that fell to 4.8% in September, the labor force participation rate has stalled at 61.6%, which is well below the 63.4% logged prior to the pandemic. Furthermore, total employment remains nearly 5 million below the pre-pandemic level and as much as 8 million below February 2020 if we include part-timers, even though job openings are bountiful.

So, what's going on?

The simplistic hypothesis of most stock market bulls is that the disappointing absorption of the unemployed into the labor force is temporary—a vestige of lingering concerns around the Delta variant, resistance to workplace vaccine mandates and the overhang of expiring extended unemployment benefits. Unemployment claims have been trending downward consistently since the summer, yet the pace of hiring has not picked up. Employer surveys suggest the gap between job openings and the unemployed has grown. In fact, wage growth has accelerated, and on a two-year basis it's running at the fastest rate since 1983. Labor strikes have suddenly reappeared in the headlines and, increasingly, we see these developments as suggesting broader, more structural changes may be afoot.

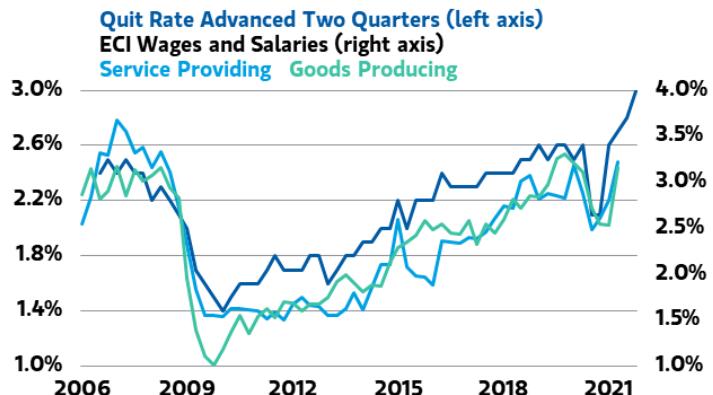
FEWER WORKERS. One of the more obvious but overlooked sources of shrinkage in the pool of available labor is those who have permanently left the job market. First remember that COVID's toll matters. Of the more than 750,000 deaths in the US, the Centers for Disease Control and Prevention (CDC) estimates that at least 200,000 people were part of our calculation of the eligible working population. Perhaps more provocative is the finding that "long COVID" sufferers—those who had COVID but still experience debilitating symptoms that keep them from full-time work—represent between 1.5% and 4.5% of all pre-pandemic employees.

In addition, some 1.5 million to 2.0 million more workers retired than demographic trends had predicted, according to Ellen Zentner, chief US economist for Morgan Stanley & Co. This is understandable given that COVID risks are higher for those over 65. What's more, for baby boomers, retirement savings are up sevenfold in the last 13 years, and their housing assets have finally fully recovered from the financial crisis. Don Rissmiller, chief research officer of Strategas, notes that in the past six quarters alone household financial and real estate assets have increased more than 21%. And just last month, the Social Security Administration announced a 5.9%

cost-of-living increase for retirees in 2022. That's 60 basis points higher than the current consumer price index (CPI) and the largest boost in 40 years.

BEHAVIORAL CHANGES. The second, and perhaps more interesting, set of factors driving labor force separation is the behavioral changes around work attitudes that have recently been labeled by popular media as "The Great Resignation." Since April, the quit rate, most recently at 2.9%, has made an all-time high each month (see chart). Our observation is that the pandemic cast an immediate and traumatic framework around the labor force. For white-collar workers, the pandemic accelerated an already burgeoning trend of technology-enabled remote work, untethering employees from offices, desks and onerous, traffic-laden commutes. For these workers, the triumph of road warrior-like productivity and Zoom calls promulgated a geographic realignment of available labor and new demands for hybrid work models and on-site flexibility.

All-Time High Quit Rate Should Not Be Ignored

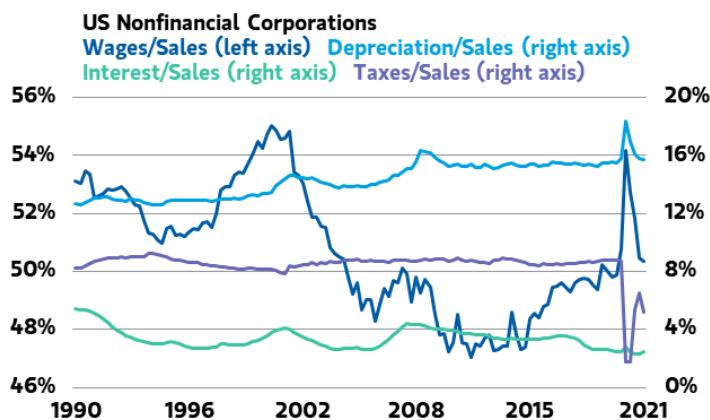


Note: ECI is Employment Cost Index.
Source: Bloomberg as of Oct. 14, 2021

For "front line" workers, the burnout, stress and daily health risks of carrying on through the pandemic took a toll. For this population, the realization of poor working conditions and uncompensated risks has created new demands around wages and benefits. For those who were deemed "nonessential"—an assaulting characterization that hit services industries such as leisure, hospitality, dining and media the hardest—the pandemic promoted a surge in retraining and labor force repositioning via online learning and professional certification options. These workers, who are younger and more ethnically diverse, have been leaving payrolls with the hopes of living in the "gig economy"—dreams that have been enhanced by savings cushions and the stock market boom. Business formations during the pandemic have surged, though only time will tell if these new entrepreneurs will create living wages for themselves or will need to reenter the work force.

IMPACTING BOTTOM LINES. The final point is that labor dynamics are not only important to the pace of Federal Reserve policy but also to companies' bottom lines. While much has been made of Corporate America's transformation to asset-lite business models not dependent on inventories, labor is still the largest cost in most companies' profit-and-loss statements. For the S&P 500 Index in aggregate, labor frequently accounts for more than 50% of expenses, which is several times more than other line items (see chart).

Labor Costs Make Up Companies' Largest Expense



Source: BCA Research as of June 30, 2021

Importantly, the quit rate, which leads wage rates by as much as two quarters, should not be ignored. It suggests that inflationary pressures from higher labor costs may be the latest risk to the bull market. Since its trough in February at 2.0%, the quit rate has been surging, first setting an all-time high in April and continuing through the latest report in August. At close to 4.3 million voluntary job separations, it suggests a turnover rate of nearly 3% in the US workforce. Historically, quit rates correlate strongly with the business cycle. If we're at 3% 18 months into the cycle, where might we be in three years?

Labor market dynamics have risen to the top of the list of investment concerns, with implications for the resolution of supply chain bottlenecks, the outlook for inflation, the pace of policy tightening and the strength of consumption growth. We see this weighing on corporate profit margins and restraining earnings growth momentum in the most labor- and talent-intensive companies and sectors. This trend threatens some of the highflying asset-lite business models that dominate the benchmark stock market indexes. If higher wages don't outrun inflation, real income growth can be suppressed, creating a headwind to consumption. On the other hand, if personal income growth is strong, the Federal Reserve risks remaining behind the curve. Such a scenario could mean a faster tightening cycle and a rapidly flattening yield curve. ■

ECONOMICS

So, What Do You Mean by "Stagflation"?

Andrew Sheets, Chief Cross-Asset Strategist, Morgan Stanley & Co. International PLC+

Near where I live in London, service stations were recently out of petrol. In Europe, natural gas prices have doubled in the last three months. Year over year, consumer price inflation is up 5.3% in the US, 6.8% in Poland, 7.4% in Russia and 10.3% in Brazil. It's not hard to see why one term seems to come up again and again in conversations with investors: stagflation.

It's equally hard to miss that this widely cited fear isn't well defined. If "stagflation" means "the 1970s"—a time of wage-price spirals and high unemployment—this clearly isn't it. Unemployment is falling around the world, and inflation markets imply pressures will moderate rather than spiral upward over time.

Asset pricing also couldn't be more different. The 1970s represented a high in the past century for nominal interest rates and a low for equity valuations. Today, we're near a low in yields and a high in those valuations. Saying "it's not the 1970s" isn't that bold of a statement; if you think it's the 1970s, stop reading this and pick up the phone because there are trades to make!

Instead, what if we say that stagflation is a period where inflation expectations are rising and growth is slowing? That's appealing as a softer definition and easier to apply. There's just one problem: It hasn't necessarily been the case. In the US, breakeven rates, which are a gauge of inflation expectations, have been relatively stable and are only moderately above where they were in early June. The US manufacturing purchasing managers' index (PMI), meanwhile, has risen over the past two months.

2005 AS A REFERENCE POINT. This isn't a simple story, but we think there are three takeaways for investors. First, recall that stagflation was a hot topic from 2004 to 2005. PMIs surged in 2003 as growth (and markets) rebounded, but by mid-2004 they peaked as the rate of change in growth

slowed. Meanwhile, rising energy prices started to push up inflation at the same time that rates markets moved to price in a more hawkish Federal Reserve. Today offers important differences, but some elements certainly rhyme.

By spring 2005, the market started to worry it could be the worst of both worlds: In April of that year, the US consumer price index (CPI) hit an annualized 3.5%, while the manufacturing PMI had fallen to 52, and "Stagflation" graced the cover of *The Economist*. These fears eventually passed, as growth rebounded and inflation moderated, but we think that 2005 may be a useful reference point for a scare that comes far short of the 1970s.

Second, inflation is already showing up and impacting monetary policy. Since September, central bank rates have increased by 25 basis points in New Zealand, by 50 in Peru and Poland, by 75 in the Czech Republic, by 100 in Russia and by 250 in Brazil. We continue to forecast higher 10-year US Treasury yields, targeting 1.8% by the year's end.

Third, while stagflation means different things to different people, past periods of rising inflation and slowing growth often had one thing in common: higher energy prices. As such, we think that some of the best cross-asset hedges for stagflation are in the energy space. Specifically, we note our commodity strategists recommend focusing farther out on the commodity curve. Energy futures curves imply prices will fall sharply over time as supply pressures ease. Buying longer-dated oil can hedge against a scenario in which strong price pressures aren't transitory, and it does so with positive carry. Furthermore, according to our systemic indicators, energy over gold remains a key strategic view.

The takeaway remains that while the market is focused on stagflation, it hasn't quite decided what the term really means. Given that, we suggest focusing on three things: 2005 is an interesting recent example of a stagflation scare after a midcycle transition; inflation is impacting central banks outside of Europe, Japan and the US, creating movement and opportunity; and, finally, owning longer-dated oil provides a positive carry hedge against a scenario in which current disruptions become more persistent. Now, with that out of the way, I'm off to find some petrol. ■

Q&A

How Wind and Solar Are Shifting the Opportunity Set in Energy

A transition is occurring in the energy sector. This not only presents a secular opportunity but also a timely one, as recent policy and infrastructure support out of Washington should speed up adoption for industries related to renewable energy. "It's a rare case of a true win-win, where consumers benefit, the environment benefits and investors are going to benefit," says Stephen Byrd, head of Morgan Stanley's North American Research for the power, utilities, clean energy and midstream industries. Vijay Chandar, head of thematic investing at Morgan Stanley Wealth Management, spoke with Stephen and Keith Derman, co-head of Ares Infrastructure and Power, about what increased adoption of renewables may mean for the future of energy generation and consumption—and what potential investment opportunities may result. The following is an edited version of their conversation.

Vijay Chandar: How is electricity supplied today and how might that change over the next decade?

Stephen Byrd: A few years ago, coal was above 30% of energy consumption in the US. It's now in the low 20-percentile range, and by the end of the decade it may be close to completely gone. During that same time, renewable energy is going to go from 11% or 12% of US power production to almost 40%.

Solar and wind have become very cheap. In the southern half of the United States, where it's sunnier, solar is cheaper than coal. In the middle third of the US, wind costs about a third of what coal costs, and that's going to improve every year as wind and solar drop in cost. Developers and utilities can shut down coal plants, build a wind or solar farm, and customer bills go down, the air is cleaner—and growth and returns go up for those companies as well.

It's an exciting proposition, primarily driven by pure economics and technology improvements in both wind and solar, with energy storage as a supporting player.

Chandar: A big pushback we hear is that renewables aren't cost effective. Can you break down those economics and how government policy might affect this?

Byrd: The subsidies that the federal government gives are essentially in place now through the middle of the decade. Wind gets what's called a production tax credit (PTC) and solar typically gets an investment tax credit (ITC). Both credits have the function of reducing the cost of renewables.

What's interesting is that every year the cost of renewable energy is dropping by more than 10%, and by the middle of the decade it's going to be incredibly cheap. We don't need the subsidy in the long term—though we may receive it. We

think there's a good chance that solar, wind and storage could get supported in upcoming legislation but, in the long term, you can put all that aside because the fundamental economics are so much in favor of renewables.

Keith Derman: This industry is an incredible nexus of finance and science and technology and policy. At Ares, when we talk about the growth drivers of renewables, we reference the three P's: price, policy and preferences. We've talked about the price already. With policy, the fact is, even on an unsubsidized basis, wind and solar are still the cheapest forms of power generation—but what do those tax credits do? Historically they helped drive adoption and usage from a competitive standpoint. Now the subsidies are a means for continued decarbonization. Another element of incentives or subsidies happens at the state level, where almost 40 states are now setting standards—very high standards in many states—for how much power needs to come from renewables.

Chandar: Another common pushback is the reliability of renewable energy and the ability to store, transport and ultimately scale up to support the grid. How would you address those concerns?

Derman: Twenty years ago, an aggressive goal for renewables in any region or state was 15% to 20%. We've gone way past that—and we couldn't have done that without storage improvements. Now we have about 14 states, plus DC and Puerto Rico, that are saying, "We're going to go to 100% renewables." The industry doesn't think it's crazy because the economics of storage have mimicked the decline of solar and wind.

Does that cost need to keep coming down? Absolutely. Does the performance need to improve? Absolutely. Are there supply chain issues that need to be addressed? Absolutely. Still, we're seeing incredible progress, and I think there's a path toward additional, meaningful decarbonization of the power sector.

Byrd: Because of this issue, many customers now are choosing to buy wind plus storage or solar plus storage. They want to ensure the power's reliable, and the additional cost today is quite small. For example, if the base power contract for wind alone is \$15 or \$20 a megawatt hour, the adder for storage is often \$5 to \$7 a megawatt hour. Compare that to coal at \$45 to \$60. You're still very much in the money.

Eventually, as we get to very high levels of renewables penetration, we are going to need to see either a step change in that storage cost, green hydrogen or a combination of both—but we are excited about what we're seeing on both sides in terms of innovation. I don't see intermittency as an issue that's going to slow down the growth of clean energy.

Chandar: What kind of investment dollars will renewables

require to become a larger share of the pie?

Byrd: With large-scale solar, we expect about 160 gigawatts over the next decade, which would be about \$160 billion spent on large-scale solar installations. Smaller-scale solar put on rooftops and businesses is estimated at about 60 gigawatts, but it's much more expensive per unit, so it's about a \$200 billion opportunity. Wind will be about 200 gigawatts, or about \$300 billion over the next decade. Storage is the smallest today, with about \$10 billion spent on it this year, but it's growing the most rapidly off a very small base.

Derman: The investment opportunity is substantial and durable, with clear economic and environmental benefits—and without compromising returns. When you talk about investing in the renewables sector, this isn't concessionary capital that we are talking about. Plus, there's a lot less volatility and lower operating risk. It's a compelling asset class that is going to continue to grow, while making a difference in air quality, providing employment opportunities and moving us toward the broader goals of decarbonization.

Chandar: Looking to the investment opportunities in the space, what are your thoughts regarding pure plays versus traditional energy players?

Byrd: This whole theme plays from very big traditional utilities all the way to new, entrepreneurial companies that are entering the space. Many large Midwestern utilities, for example, are focused on going to the regulators and saying, "We have these expensive coal plants. We could shut those coal plants down, build wind and everybody benefits. The customer bills would be lower; the air would be cleaner."

For them, it's a great growth opportunity because those coal plants have very little bulk value remaining, and they are not earning very much money; they have very high cash operating costs, which result in the utility earning nothing at all. By shutting down that asset and replacing it with wind—which has a very low cash operating cost and a very high capital expenditures—they earn a rate of return, and the visibility's excellent. We know exactly what those coal plants cost. We know what wind costs.

Those utilities are going to grow at an above average level, but also decarbonize at a very rapid rate. As a whole by 2030, we forecast the US power sector will decarbonize by about 75% off the 2005 baseline—dramatically faster than the Paris Climate Agreement. At the same time, they're going to make a lot of money as they increase their spending profile and keep customer bills low.

Meanwhile, the pure entrepreneurial side has all kinds of interesting business models developing. I think rooftop solar is one of the more exciting: A company can come in, go to a customer who's paying a fairly high price for power now, and

then say, "We can replace your traditional utility power with very cheap solar and storage that we can install and save you money in the process."

Most of these companies are pursuing their growth not in the Midwest, where major utilities are developing wind, or in the South, where they are developing solar. The major utilities are going to be the driving force there, whereas on the coasts entrepreneurs are coming in and driving a lot of the growth.

Chandar: From a portfolio management perspective, how do you think about allocating dollars?

Derman: There are so many opportunities to look at. Take an industry like wind, where there's been consolidation, but that's still growing significantly. And offshore wind is about to take off in the US. There is also solar and storage, which do not have a lot of barriers to entry. You're talking about two resources that are the ultimate scalable technologies. You can make them big, you can make them small, you can make them any size in between—and that creates a lot of different deployment opportunities.

Beyond the asset type, think about what the regional dynamics are and what the policy support is. Even though we're an infrastructure investor, rule number one is management. Who are you partnering with? What are their capabilities and experiences? Then we focus on not taking technology risks. There is a lot of excitement about new things with the energy transition, and sometimes things are too new.

Chandar: Between some of the newer, smaller companies that have entered this space versus the big, traditional players, where is that value going to end up getting captured?

Derman: The majority want to own these companies when they're de-risked. Just think of a wind project, for example. They want to own it when it's spinning, when the contracts are in place and it's been built or its construction is just being completed. They want that long-dated, contractual cash flow stream. So we focus on building a project, making sure it's operating and the contracts are all in place, and then we look to sell to investors with a lower cost of capital.

Byrd: Many of the technology manufacturers do not have that high of a barrier to entry. In other words, what they manufacture looks similar to what others have manufactured. So in areas like solar panel manufacturing, for example, where we see a lot of similarities, we are more cautious. In technologies like fuel cells and some areas of power electronics, we see higher barriers to entry where the manufacturers can capture a lot of margin and value. ■

Keith Derman 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.

FIXED INCOME

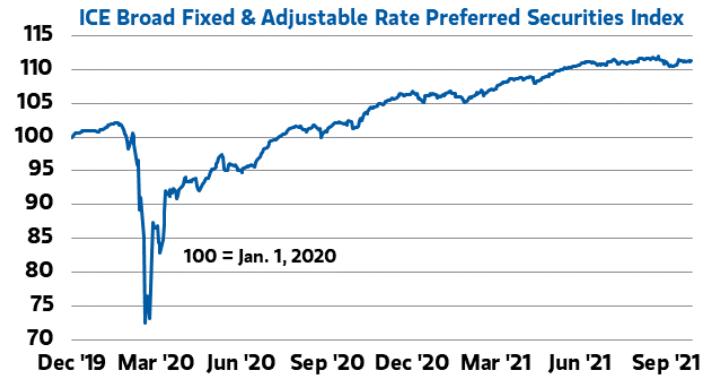
A Standout Year for Preferreds

Daryl Helsing, CFA, Investment Strategist, Morgan Stanley Wealth Management

Many asset classes and sectors have registered strong performance since rebounding off their March 2020 lows. But among traditional income-oriented sectors, the run-up for preferreds, which combine characteristics of both stocks and bonds, has been especially impressive.

As measured by the ICE Broad Fixed & Adjustable Rate Preferred Securities Index, the sector is up an annualized 16.9% since March 31, 2020, which compares to approximately 8.0% for investment grade corporate bonds, 16.2% for large-capitalization utility stocks and 1.6% for the Bloomberg US Aggregate Bond Index. Nearly as notable as the sector's total returns has been the relative steadiness of its recent advance. Indeed, its price path over the last eight months has been almost boring (except for those invested in the space). Finishing 2020 on a tear, preferreds pulled back temporarily at the beginning of 2021 before settling into a pattern of mostly persistent, if unspectacular, gains. Supported by a low yield environment, modest dips in May and September proved short lived (see chart).

PREFERRED GAINS HAVE BEEN BOLSTERED BY SPREAD COMPRESSION



Source: Bloomberg as of Oct. 28, 2021

SOLID FUNDAMENTALS. Fundamentals and credit quality have generally been resilient during the pandemic. In response to the nearly unprecedented economic and financial shock at the outset of COVID-19, US regulators acted quickly to restrict share repurchases and impose common stock dividend caps across the banking sector. Consistent with the seniority of preferred dividends over common stock dividends, however, no such limitations were placed on the former. For US banks, which continue to account for the largest percentage of preferreds outstanding, sound fundamentals were reinforced by regulatory stress tests

indicating adequate capital levels, even under extreme scenarios.

That said, due in part to their subordinated position in bank capital structures, preferreds are typically assigned lower credit ratings than senior bonds from the same issuers. Over the past 12 months, preferreds have easily outpaced investment grade corporate bonds, as their risk premiums relative to senior bonds in the same capital structures have compressed from elevated levels that prevailed for much of 2020. Whereas preferreds were priced at yields around 300 basis points above comparable senior debt earlier this year, that spread has tightened to approximately 250 basis points. Subordination premium is an important consideration, as it indicates the amount of compensation offered to investors for moving down the capital structure and assuming more payment risk.

Consistent with the sector's strong run and healthy demand, several issues have come to market with record low coupons recently. Among bank preferreds, fixed-rate structures have printed with dividends of approximately 4.2%, while those with fixed-to-float structures have been issued with initial fixed rates in the 3.4% to 3.7% range and back-end spreads of 250 to 270 basis points.

STAYING COGNIZANT OF RISKS. Investors have benefited from a mostly smooth ride up, but it's important that they not be lulled into complacency. In addition to possessing characteristics of both stocks and bonds, as a hybrid sector, major portions of the preferred market entail above average vulnerability to both credit and interest rate risk. While the duration of today's market, at approximately four years, on average, is in line with that of high yield bonds, many preferreds, especially fixed-rate retail offerings, could experience duration extension if higher rates result in their being priced to perpetuity rather than to call. Indeed, as rates have trended up recently, segments of the preferred market have begun to weaken. Notably, Morgan Stanley & Co.'s interest rate strategy team forecasts the 10-year US Treasury yield to end the year at 1.8% and to reach 2.0% by mid-2022, which compares to the current 1.6%.

Fortunately, the preferred market has expanded to offer more choices and a greater variety of duration ranges. Fixed-to-float preferreds, for instance, typically pay a fixed rate for five to 10 years until their first call date, after which their dividends are calculated based on a predetermined spread over a benchmark rate, such as LIBOR or the five-year US Treasury note. As we move further into the midcycle environment and as rates continue to come off historic lows, we encourage preferred investors to assume a more flexible and diversified approach. ■

FUNDS

ETF & CEF Tax Loss Harvesting: A Better Crop Than Expected

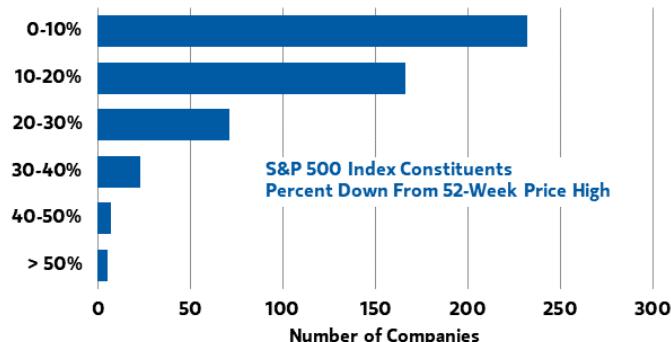
Gray Perkins, Investment Strategist, Morgan Stanley Wealth Management

Michael Suchanick, Investment Strategist, Morgan Stanley Wealth Management

Michelle Chyr, Investment Strategist, Morgan Stanley Wealth Management

As major equity benchmarks continue to flirt with new highs, it's hard to blame investors for assuming that 2021 will be a futile year for tax loss harvesting. The broad exchange-traded fund (ETF) and closed-end fund (CEF) markets, however, offer numerous potential opportunities, especially within the former product type. As they look across US-listed ETFs and CEFs, which together comprise more than 3,000 funds, we encourage investors to scrutinize emerging market (EM) equities, clean energy, precious metals and "thematic" strategies, many of which focus on technological innovation. It's important to note that, despite being up over multiyear periods, many funds in these areas are still off their 52-week highs, having experienced sharp run-ups at various intervals (see chart).

Many S&P 500 Companies Are Below 52-Week Highs



Source: Bloomberg as of Oct. 26, 2021

Tax swap strategies involve the sale of one security or fund to capture a loss and the simultaneous purchase of another with generally similar objectives. These losses can be valuable because they can be used to offset gains realized in 2021 or going forward. Importantly, tax swaps can comply with "wash sale" rules, which are Internal Revenue Service regulations that may negate a write-off. These rules apply if an individual sells or trades a security at a loss and, within 30 days before or after the sale, buys the same or a "substantially identical" stock or security or acquires a contract or option to do so. Swaps of funds with similar objectives may not be subject to the wash-sale provision if they do not hold substantially similar portfolios. Investors contemplating utilizing such strategies should consult a tax advisor.

Tax strategies using ETFs or CEFs include swaps for other ETFs or CEFs, for portfolios of individual securities and for open-end mutual funds. We suggest using tax harvesting opportunities to adjust portfolios toward favored themes and investment recommendations from Morgan Stanley & Co. and Morgan Stanley Wealth Management's Global Investment Committee (GIC). In the case of CEFs, by buying the replacement at a discount to net asset value (NAV), investors have the chance to potentially profit from both portfolio appreciation and discount narrowing (see chart).

Some Fixed Income Segments Are Down on the Year, as Equity Indexes Lead

Index	YTD	One-	Three-	Five-	
		Year	Year	Year	
Equity	S&P 500 Index	23.2	36.5	22.0	18.6
	MSCI World Index	19.1	34.4	18.9	15.3
	MSCI EAFE Index	11.5	29.0	12.5	9.8
	MSCI Emerging Markets Index	2.2	17.0	13.9	9.8
	Alerian MLP Index	50.1	81.6	0.7	-0.6
Fixed Income	Bloomberg US Corporate High Yield Index	4.3	9.6	7.4	6.2
	S&P Preferred Stock Index	6.1	11.7	9.2	6.3
	Bloomberg US Aggregate Bond Index	-1.8	-1.0	5.4	3.0
	Bloomberg US Corporate IG Index	-1.4	1.2	7.7	4.7
	Bloomberg EM Hard Currency Aggregate Index	-2.3	1.9	5.7	3.9
CEF	Bloomberg US Municipal Bond Index	0.4	2.6	5.1	3.4
	Average Equity CEF Market Price	28.2	51.7	12.9	2.4
	Average Taxable Fixed Income CEF Market Price	12.7	25.9	11.0	4.6
	Average Municipal Bond CEF Market Price	5.2	12.4	10.4	3.0

Source: Bloomberg, Morgan Stanley Wealth Management ETF & CEF Research as of Oct. 26, 2021

LOOK TO CHINA EXPOSURE. A major storyline for 2021 has been the regulatory crackdown in China. The spike in uncertainty has helped catalyze sharp declines for China-focused funds, as well as those with heavy allocations to the country. Remember, China now accounts for nearly 35% of the MSCI Emerging Markets Index, so broad EM funds have been hampered as well. The underperformance has not been severe enough to drag popular EM equity indexes into the red for the year, but many investors still have losses. On the positive side, various alternatives exist for executing tax swaps, such as moving from a dedicated China fund to a broad EM equity strategy with still meaningful China exposure. Investors may also consider repositioning toward portfolios of onshore China A-shares, which Morgan Stanley & Co.'s China equity strategist, Laura Wang, currently prefers over offshore-listed companies and H-shares, which are listed in Hong Kong. Many of the internet companies under scrutiny that have suffered relative declines are listed offshore, thereby leaving A-shares more insulated, partly informing Wang's view.

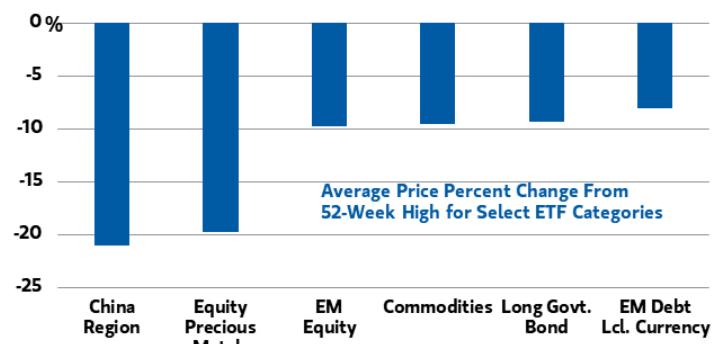
THEMATIC FUNDS HAVE DISAPPOINTED IN 2021. Elsewhere in equities, thematic investments have seen a divergence in returns. Thematic funds encompass a number of areas, but those suffering losses this year tend to focus on technological innovation and, separately, clean energy. Components of the former group have been among the best performing ETFs and CEFs over the last three years; however, they have disappointed in 2021, due in part to prospects for higher interest rates and Federal Reserve tapering, both of which are viewed as headwinds for many of the higher-valuation companies in these portfolios.

While thematic strategies often focus on niche areas, the recent development by leading issuers of funds with broad thematic exposure may provide favorable swap candidates. These funds, which track specialized indexes, may allow investors to maintain allocations to various innovative themes, while switching from active to passive management.

Following outsized returns in 2020, clean energy strategies have also been notable underperformers. Many investors who allocated "early" to the fast-growing category are likely to be above water, but some have losses, given the meaningful pullback from one-year highs. Although the category is relatively thin from an ETF/CEF product availability standpoint, similar strategies do exist and can be utilized as swaps. Importantly, MS & Co.'s clean energy analyst, Stephen Byrd, sees the recent giveback, combined with expected policy support, as a rare buying opportunity.

DON'T FORGET FIXED INCOME. As with pockets of equities, fixed income markets have also experienced losses in 2021. The well-followed Bloomberg US Aggregate Bond Index is down 1.8% so far this year, as many higher-quality sectors with longer-duration securities, including US Treasuries, have lagged, given their vulnerability to rising interest rates. Among credit-oriented funds, losses are more likely to be observed in those with an investment grade focus, as opposed to high yield bonds and floating-rate senior loans. Emerging market debt (EMD) funds are also likely to be negative on the year, especially those with a majority allocated to local currency bonds (see chart). US dollar-denominated EMD funds have fared better, partly due to the currency's resiliency in recent months.

Many ETF Categories Are Well Below One-Year Highs



Source: Morningstar, Bloomberg, Morgan Stanley Wealth Management ETF & CEF Research as of Oct. 26, 2021

We encourage investors with losses in their fixed income allocations to use tax-loss harvesting as a timely opportunity to reposition. Notably, such moves could align well with recommendations from the GIC, which recently boosted short-duration fixed income exposure in its tactical asset allocation model portfolio, as detailed in the September report, ["Playing Out the Last Chapter of Midcycle Adjustment: Fear and Greed."](#) Many funds targeting shorter maturities and/or durations could serve as attractive options. Furthermore, certain funds may incorporate partial non-investment grade allocations, which could be favorable for those seeking to access higher yields.

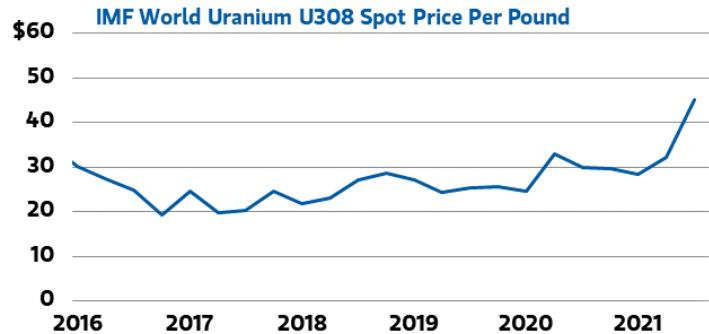
Last, but certainly not least, precious metals funds—especially those with physical exposure—will likely continue to be an area of focus. Following favorable returns over multiple years, gold portfolios in particular seem to have lost some of their luster. While inflation fears, which can act as a tailwind, remain, concerns over higher real and nominal interest rates have weighed on gold's performance. Investors in physical precious metals should be aware of the existence of funds comprising a variety of precious metals, as these more diversified portfolios could be appealing swap candidates. ■

For further details on tax loss harvesting opportunities, please see our October report, "ETF and CEF Tax Strategies: Navigating Year-End 2021."

Short Takes

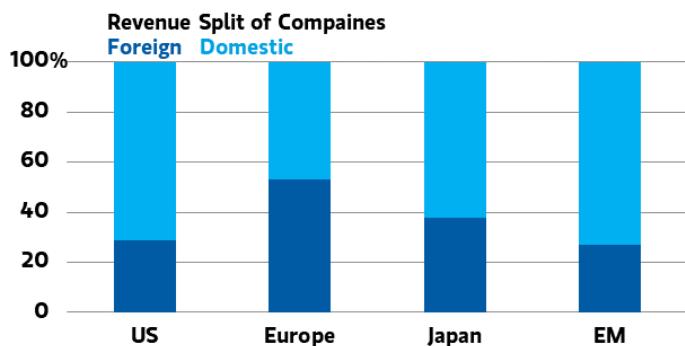
What's Going on With Uranium?

While oil and gas have been in the headlines, another buoyant commodity—uranium—has garnered less attention. Unlike many other energy commodities, it doesn't trade on an open market; rather, buyers and sellers negotiate contracts privately. Based on monthly spot prices, it has rallied to a level not seen since September 2012. Morgan Stanley & Co. commodity strategists attribute the rally largely to a recently launched physical uranium trust, asserting that the fundamentals don't warrant the strong move. Two exchange-traded funds (ETFs) focus on uranium companies. Their asset bases have swollen by 59% and 74% this year, while the funds have returned 77% and 108% on an NAV basis. Following the impressive surge, MS & Co. Research expects uranium to correct through 2022.—Michael Suchanick



Source: Bloomberg as of Sept. 30, 2021

Gauging International Exposure in Europe



Note: Based on company information combined with projections and estimates. Europe exposure refers to Developed Europe.

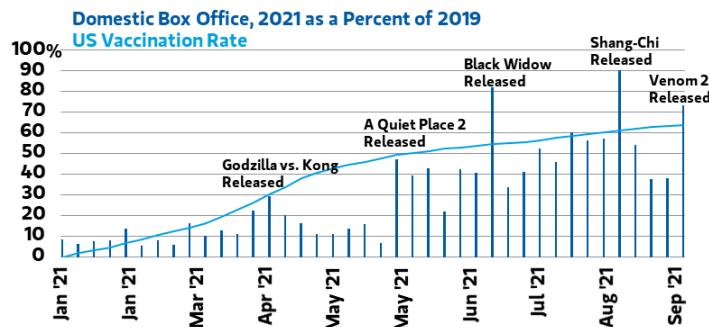
Source: Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of June 13, 2021

Among major regions, European corporations have the greatest foreign exposure, deriving more than half their revenue from outside Europe. Unlike the US, where domestic consumption is a larger driver of profits, Europe's equity outlook is more closely tied to international markets. After peaking in August, the MSCI Europe Index traded lower in September, driven in part by expectations for slower growth in China, disruptions in global supply chains and structural challenges related to energy. While European stocks have recovered in recent weeks, investors seeking to respond to developments around these themes—whether positive or negative—should be cognizant of Europe's potential heightened sensitivity to them.—Jonah Silverman

Pass the Popcorn ...

As detailed recently by Morgan Stanley & Co. Research's media analysts, as vaccination rates have trended upward, box office results have continued to ramp up as well. Despite the accelerating turn toward streaming, the release of films like *Black Widow*, *Shang-Chi* and *Venom 2*, has coincided with ongoing recovery in movie theater attendance. Consistent with the team's views around evolving media company strategies and consumer preferences, early signs indicate that the theater business, though smaller than in prior years, will remain an important and robust part of the industry. A key part of that dynamic are "frequent moviegoers"—the 11% of the population who go more than once a month and are expected to continue to do so post-COVID.—John Duggan

US Box Office Revenues Have Trended Upward With Vaccinations



Note: Vaccination rate indicates percent with at least one dose. Source: company data, www.ourworldindata.org, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of October 2021

Q&A

COP26: The Path to Investing in a Decarbonizing Economy

The United Nations brings together almost every country for "COPs" (Conference of the Parties), and the first week of November marks the beginning of the 26th of these international climate negotiations: The 2021 UN Climate Change Conference (COP26). Since the start of these global summits, climate change has gone from a fringe issue to a global priority. COP26 is particularly exciting, in part because it was delayed a year due to the ongoing pandemic. There's a lot of pent-up anticipation, and corporates and governments are signaling how they intend to approach these negotiations, making announcements about climate-related actions. Lily Trager, head of Investing with Impact at Morgan Stanley Wealth Management, recently hosted a conversation about building a more sustainable future with Jessica Zarzycki, portfolio manager from Nuveen's Global Fixed Income team, Julie Gorte, senior vice president for Sustainable Investing at Impax Asset Management and Jon Quigley, chief investment officer of Disciplined Equity for Great Lakes Advisors. The following is an edited version of their conversation.

Lily Trager: What does COP26 mean to the companies in which you are investing? Are you seeing a change in climate strategy, or significant statements of accountability?

Julie Gorte: I don't know that there are very many companies that don't think about climate these days.

They're not necessarily thinking productively about it yet, but more and more are. We're seeing a lot of net zero commitments—companies signing up to various types of protocols that commit us to do what we need to do as a globe, which is to get to net zero of greenhouse gas emissions by around the middle of the century.

We're probably past the point where we can achieve, or stay below, 1.5° already—but we still can stay below 2.0°. It's going to take a lot of investment and a lot of commitment, and net zero is a place to start. Still, lest I sound Pollyannaish about this, we're also seeing that a lot of those net zero commitments don't have a whole lot of specificity. When we see specificity about how emissions are going to be reduced, we see that as a true commitment; it's an action that we encourage companies to take.

Jessica Zarzycki: When you're talking about targets that are 10 to 20 years away, you need to understand the underlying projects to get there. We applaud companies and issuers that are making commitments—putting plans and actions in place—to net zero, but this is a very challenging goal.

Governments are about to meet for COP26 at a time when balance sheets are more strapped than ever before—and

governments aren't going to be able to deploy all the necessary capital. Grant money's not going to be able to deploy all the necessary capital. Having investors come in and drive this is going to be a powerful way to make companies shift how they're thinking about climate change and climate risk.

Jon Quigley: We look at COP26 as the global climate beacon. Governments have a significant role to play in catalyzing the move toward net zero—whether you think about the regulations that they're going to agree to, the tariffs they'll set, the procurement federal governments can do, the financing and incentives or the tax structures.

Federal, state and municipal governments all have taken on the challenge of net zero by 2050. They're setting the landscape, but we need that global cooperation. Companies are increasingly recognizing this changing landscape and the risks inherent in climate change, whether they're physical risks or the risk of doing business as usual.

They're also recognizing the opportunities, whether it is going to be a new revenue stream for the company or the reputational enhancement that some companies will have by working toward the net zero achievement. Over 40% of the weight of the S&P 500 has a net zero commitment—a reality I think most investors are not aware of. More important from our standpoint, companies from every sector in the S&P 500 have a net zero commitment.

Trager: Net zero is acting as a catalyst for some of these announcements around accountability. What can an investor do to help achieve net zero with their own portfolio?

Quigley: To get to net zero, there needs to be a variety of solutions and methods developed, from efficiency measures to new engineering techniques. From our perspective as an equity investor, net zero is going to impact every sector of the economy; the solution is not just simple divestment of fossil fuels.

Through careful security selection—a great way to reduce emissions from every sector of the economy—you can reduce overall portfolio emissions by about 90% before it starts to increase the tracking error of the portfolio. What does 90% emission reduction get you? For our client portfolios, it is the equivalent of taking 7 million pounds of coal burned per year off the table, or 15 million miles driven.

Gorte: Net zero means we have to get to net zero as a globe by around midcentury; it doesn't mean that every single company needs to reduce its own emissions by 7% per year. That's what we need on average as a globe.

There are some companies whose products are still fairly carbon-intensive, but we need them in order to get to net zero. For example, it takes steel to make a wind turbine. For companies where decarbonization is tough, we're looking for

research, development and demonstration (RD&D) on things that are alternatives to steel, concrete or aluminum with very carbon-intensive materials. There are a plethora of ways and every single company has its own path. One way we have started to deal with that is to calculate the net emissions in a portfolio—not just the emissions of all the companies in the portfolio, but also the reduction or avoided emissions in the portfolio.

Zarzycki: We think any company that subscribes to net zero is absolutely a step in the right direction. For the fixed income markets, we're more talking about the transition, which, for us, goes back to that direct and measurable use of proceeds.

We may invest in a utility company, and somebody looking at our portfolio might say, "You have a carbon-intense portfolio." Our pushback is, "We're actually investing in a project that is helping that utility company transition to a more renewable, greener future." We're not steering away from carbon-intense sectors. By investing in projects that are pushing the carbon intensity down for utility companies, we're supporting them in the transition.

We want to make sure that, when we're investing in a company, they are truly transitioning. They're not putting out something saying they will reduce their greenhouse gas emissions by 30%, and then when you look under the hood, they've already met that target. It's not supposed to be easy. This is not an easy answer to have. We need to continue to push these companies and these issuers to do the right thing.

Trager: What can investors do if they still own some, and are responsible for some carbon emissions that can't be optimized out of the portfolio or avoided in terms of the investment selection process?

Quigley: We spend a lot of time trying to solve for that last 10%, which is always the most difficult. If you get beyond 90% emission reduction in an equity portfolio, you start to see a massive increase in tracking error, and it's not fair to give clients that penalty.

Instead, we've developed a program to buy and retire carbon offset credits—to net out that remaining 10% of emissions. By doing that, not only can you offset that remaining 10%, you can also have other positive impacts. We bought credits from a water filtration project in Cambodia, which not only takes emissions off the table, it's saving the women and children a four-hour round trip to the watering hole. It's preventing them from having to boil that water inside and pollute the air inside their home. It's yet another way to add to the bottom line of the portfolio and something we're excited about.

Trager: Regarding engagement, what are some best practices in influencing companies that you own to ultimately drive toward better environmental outcomes?

Gorte: There are days when you open the paper or get your first news alerts and think, "Half the world is burning, and the other half is flooding." A lot of that is down to climate change.

We took the opportunity to write to every company in the S&P 500 and say, "In order for us to assess your vulnerability to physical risk, we need to know where all of the key points in your value chain are; your assets, key infrastructure that you rely on, key suppliers and so forth." We have talked to about 70-some companies so far and have found exactly three that have thought about physical risk. What we wanted to do with our engagement was to get it on the agenda, to get companies to start thinking about it. To that end, we also petitioned the Securities & Exchange Commission (SEC) to make location reporting mandatory, so that we can assess vulnerability to physical risk.

Trager: Nearly one-third of Americans live in a county that has experienced a climate-related disaster in the three months that ended in September. What can investors do to help accelerate mitigation and adaptation to these climate-related events?

Zarzycki: I would say today, more so than ever before, investors can control how their dollars are being deployed. Whether to the equity or fixed income market, there are strategies out there that will help with your financial performance and also drive change in the marketplace.

Investors should look for opportunities in the marketplace around sustainability because the risks are real and impacting the entire world. The more money we put toward these projects and investments, the more ability we have to change what's going on in the world and do it in a positive way.

Gorte: Another thing that a lot of investors can help with is public policy. Our markets are only efficient if we have enough information to make them that way. Getting information from companies is something the SEC can do that no one else can.

Quigley: It's important to invest in alignment with your climate goals. Invest like the climate matters. Ultimately, what that does is it changes the risk/reward paradigm.

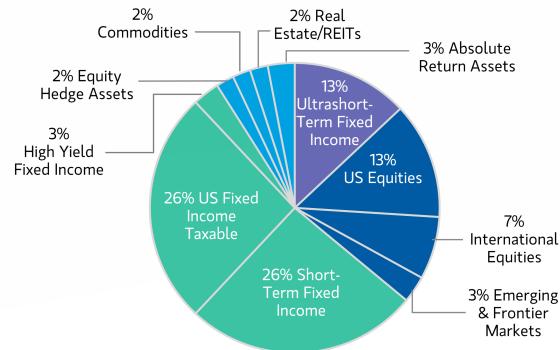
Markets and investors have very clearly signaled to oil and gas companies that they shouldn't expect to continue business as usual—and they're beginning to listen. We can see how these companies are changing their portfolios. Investors are showing up, and they're making their presence felt. ■

Jessica Zarzycki, Julie Gorte and Jon Quigley are not employees of Morgan Stanley Wealth Management or its affiliates. Opinions expressed by them are their own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.

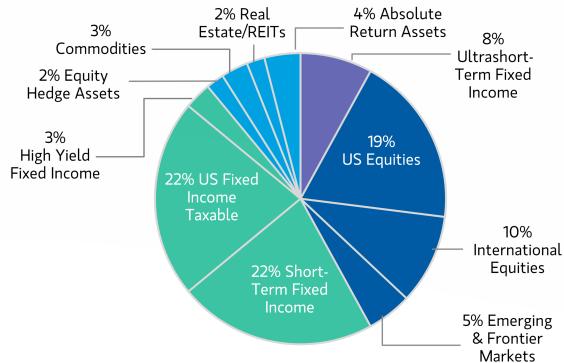
Global Investment Committee Tactical Asset Allocation

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

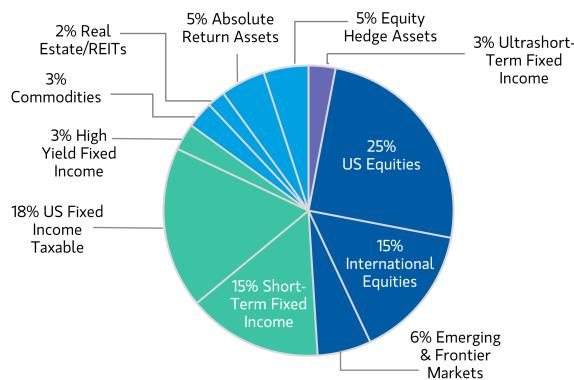
Wealth Conservation



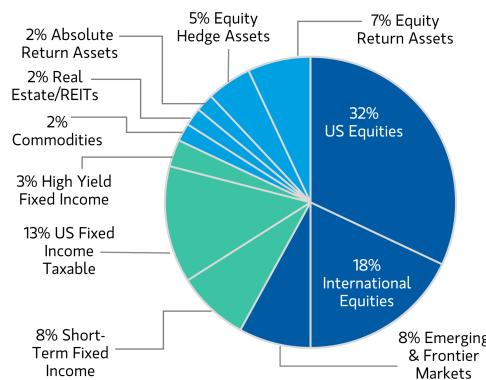
Income



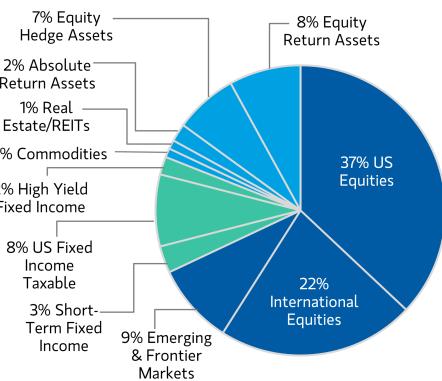
Balanced Growth



Market Growth



Opportunistic Growth



Key

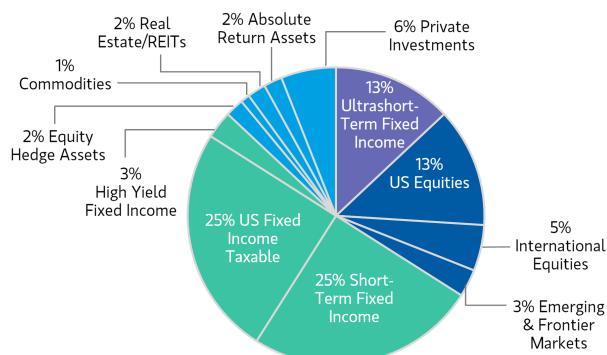
- █ Ultrashort-Term Fixed Income
- █ Fixed Income & Preferreds
- █ Equities
- █ Alternatives

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

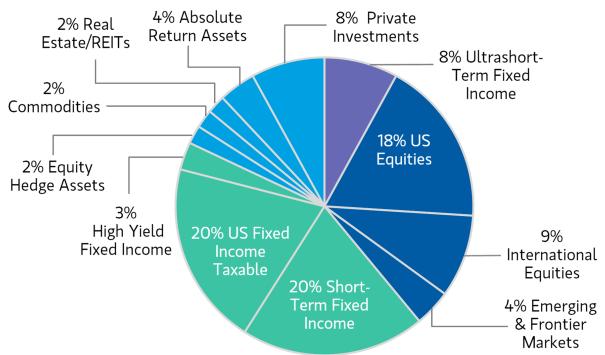
ON THE MARKETS

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

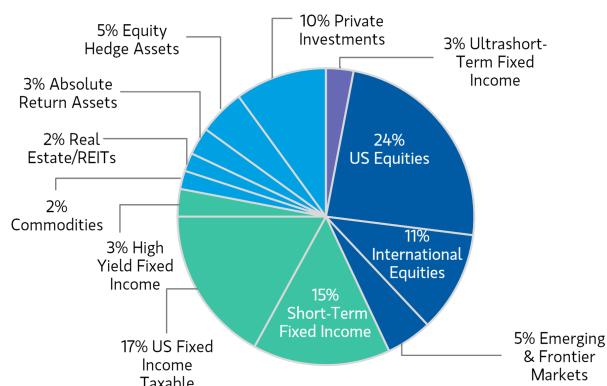
Wealth Conservation



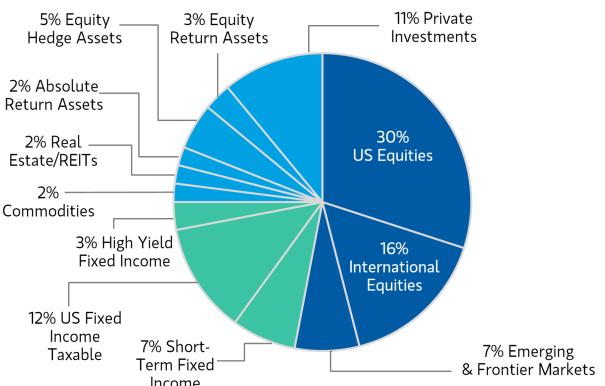
Income



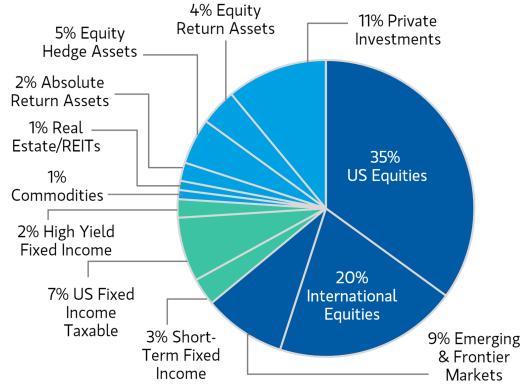
Balanced Growth



Market Growth



Opportunistic Growth



Key

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

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

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Market Weight	As the S&P 500 has continued to hit all-time highs, pricing the fastest recovery from recession in the last five business cycles, we recently reduced exposure to expensive US growth stocks, especially those that dominate the major indexes. From here we enter the midcycle adjustment, where gains moderate as expectations get recalibrated and policy normalizes. Odds of a 10%-15% correction are increasing as the outlook for inflation and higher rates crystalizes.
International Equities (Developed Markets)	Overweight	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's regulatory crackdown on top of a zero-tolerance policy for Delta variant cases has exacerbated the economic slowing that we began to see in early summer. With valuations now extreme, odds rising for China stimulus and global growth rebounding in 2022, we are opportunistically adding to positions.
Global Fixed Income	Relative Weight Within Fixed Income	
US Investment Grade	Market Weight	Risks between stocks and bonds are balanced, with both asset classes reflecting stretched valuations and high policy dependency. Given our belief that the Fed will announce tapering in December, complete it in 2022 and begin rate hikes by mid-2023, we prefer short-duration exposures and recently added to them. However, with inflation continuing to run high, risks remain for negative real returns even if nominal rates do not rerate.
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 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	Market Weight	We recently halved our exposure to the equity-like asset class, wanting to reduce equity beta of portfolios. High yield bonds have rallied aggressively with the unprecedented provision of liquidity from the Fed and fiscal stimulus from Washington. Surging commodity prices have also repaired balance sheets of oil-levered companies. With spreads near all-time tights, the upside is limited.
Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Overweight	With the debate between growth and rising rates moving to center stage, we recently added modestly to the asset class, believing it is a diversifying source of income that is also leveraged to reflation. With real interest rates still negative and inflation expectations rising, we expect to be selective opportunistic investors in the sector this year, with a focus on residential.
Commodities	Market Weight	Sooner-than-expected economic and COVID-19 recoveries in both China and the US have shocked supply chains drained from last year's closures. Now most major commodities are rallying in a chase to keep up with improving demand. The impact is broad-based, affecting areas as diverse as industrial metals, soft agricultural, lumber and semiconductors. Longer term, increased global capital spending, a strong US housing market, a weaker US dollar and rising overall inflation suggest the asset class will likely remain opportunistically bid.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	With broad market valuations rich, a majority of returns from here will be based on company earnings growth and managements' ability to navigate rising costs, surging demand and disruptive competition. These factors create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management to amplify returns. We prefer very active and fundamental strategies, especially low beta, low volatility and absolute return hedge funds.

*For more about the risks to Duration, please see the Risk Considerations section beginning on page 16 of this report.
Source: Morgan Stanley Wealth Management GLC as of Oct. 31, 2021

Disclosure Section

Important Information

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.

Stephen Byrd, Vijay Chandar, Michelle Chyr, John Duggan, Daryl Helsing, Gray Perkins, Jonah Silverman, Michael Suchanick and Lily Trager 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

BLOOMBERG EMERGING MARKETS HARD CURRENCY AGGREGATE INDEX This index is a flagship hard currency emerging markets debt benchmark that includes USD-, EUR- and GBP-denominated debt from sovereign, quasi-sovereign and corporate EM issuers.

ICE BROAD FIXED & ADJUSTABLE RATE PREFERRED SECURITIES INDEX This index tracks the performance of fixed and floating-rate US dollar-denominated preferred securities issued in the US domestic market.

For other 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

ON THE MARKETS

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.

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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

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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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