

On the Markets

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Don't Bet on a Melt-Up Now

We are now a few weeks into the first quarter earnings season, and we keep hearing from analysts and commentators how strong the results have been. However, I think a little context is important here. First, consensus S&P 500 earnings estimates for the first quarter have been coming down hard since last September. Back then, forecasts were for 10% year-over-year growth. Between September and March, forecasts for earnings growth fell 14% to a 4% decline. With the earnings season about half way over, it looks like actual results will come in between 0% and -2%. Better than expected? Yes. Strong? Hardly.

More importantly, our top-down earnings growth model, which foreshadowed the earnings slowdown in the first place, is still indicating consensus S&P 500 forward 12-month earnings estimates are too high by approximately 8%. Meanwhile, the S&P 500 is at an all-time high. Either our model is dead wrong or stocks are once again ahead of reality, as they were last September and in January 2018. We think it's more of the latter and, just as they overshot to the downside in December, equity markets may be overshooting to the upside now. The other thing we hear getting bantered around to justify even higher market prices is that we might enter a "melt-up" phase.

That's funny, because more than 100% of the entire move in the global stock market this year is due to higher valuations. Earnings-per-share forecasts for 2019 have actually *declined* by 5% even with the better-than-expected first quarter reports (see table). If you

Year-to-Date Results Across Global Markets

Index	Total Return	Year-to-Date Change (%)		
		Price	2019 P/E	2019 EPS
MSCI All Country World*	15.5	14.5	20.8	-5.2
MSCI EMU	17.0	16.1	21.6	-4.5
MSCI Europe	16.0	14.4	19.6	-4.4
MSCI Emerging Markets*	12.0	11.5	20.2	-7.3
MSCI Japan	10.0	8.8	19.5	-9.0
MSCI USA	17.7	17.0	22.0	-4.1
MSCI China	20.0	20.0	24.0	-3.2
Shanghai A-Shares	25.3	25.3	28.3	-2.3

*US dollars

Source: Morgan Stanley & Co. European Equity Research as of April 29, 2019

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ask me, it looks like we just had the melt-up. More importantly, whenever you start to hear phrases like this, it pays to be a bit more cautious. This is one reason why we reduced our equity exposures in our asset allocation models last month. Let me be clear, betting on a melt-up is not a sound “investment” strategy.

In our 2019 outlook (“Staying One Step Ahead,” On the Markets, January 2019) we suggested this year would be much better than 2018, so we remained very overweight global equities until recently. While the rebound has been much faster than we expected, higher prices are not a reason to get incrementally bullish, as

some seem to believe. Remember, markets top on good news. I can’t help but think the worst-kept secret of a US-China trade deal announcement in the next few weeks might be the “event” that provides us with a 10%-plus correction—the one you should prepare for rather than trying to play a melt-up. ■

ON THE MARKETS / STRATEGY

Emerging Markets Are an Impressionist Painting

ANDREW SHEETS

Chief Cross-Asset Strategist
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Beautiful from a distance, a bit messy up close,” could be a fitting description of an Impressionist masterpiece. It also works for emerging market (EM) assets at the moment, when the rosy top-down story is less simple when you examine its challenging country-level issues. Those issues shouldn’t disrupt the asset class overall,

but they should encourage a divergence in flows between the haves and have-nots. We think this applies to both EM equities and fixed income.

Let’s start with the more attractive, top-down picture.

AN IDEAL SCENARIO. If one wanted to create an ideal scenario for the emerging markets, it might sound something like this: Growth picks up, both outright and relative to developed market (DM)

economies. Major policy easing from China proves effective. Inflation remains modest despite improvement in growth. Real rates that are already higher reduce the need to tighten further. The Federal Reserve strikes a dovish tone. The US dollar is set to decline on the back of overvaluation, slowing US growth and that dovish Fed and, given this backdrop, EM valuations are reasonable.

That paragraph, broadly, is the 2019 Morgan Stanley forecast. Our economists see EM growth rising to an annual 5.0% rate by the end of the year from the first quarter’s 4.3%. We see EM inflation remaining low. We see the Fed on hold for the rest of the year—market pricing suggests even longer—and forecast the dollar to weaken significantly. EM valuations, while varied, look reasonable, and equities, priced at about 12-times 12-month forward earnings, are a little above their 10-year average. Credit spreads are modestly cheap to the 10-year average. (see chart, page 3). EM currency valuations remain well below average.

TIME TO SHINE. We are not alone in seeing these dynamics. Speaking to asset allocators during the past six months, there’s quite a bit of focus on the idea that, after a long period of underperformance, it is the emerging markets’ time to shine. Inflows into the asset class have picked up, and in meetings I’ve heard EM equities repeatedly mentioned as a sector investors feel comfortable allocating toward.

That popularity poses a risk, especially as valuations normalize. Our EM strategists currently have 6.6% total return upside to their year-end target—less than



I THINK YOU'RE TOO
CLOSE TO IT...

Andrew Sheets, April 14, 2019

we see for equities in Japan, but still more than in the US and Europe. However, we see another, more serious risk. While the macro EM backdrop borders on ideal, the up-close country stories are anything but straightforward. Mexico and Brazil both have new administrations, with Brazil's yet to address pension reform. South Africa is dealing with serious infrastructure issues. India and Argentina are heading into elections. Russia faces geopolitical risk. Korea has been hit hard by weakness in technology hardware. China growth has been weak, while trade issues remain unresolved—and that's only a partial list of challenges.

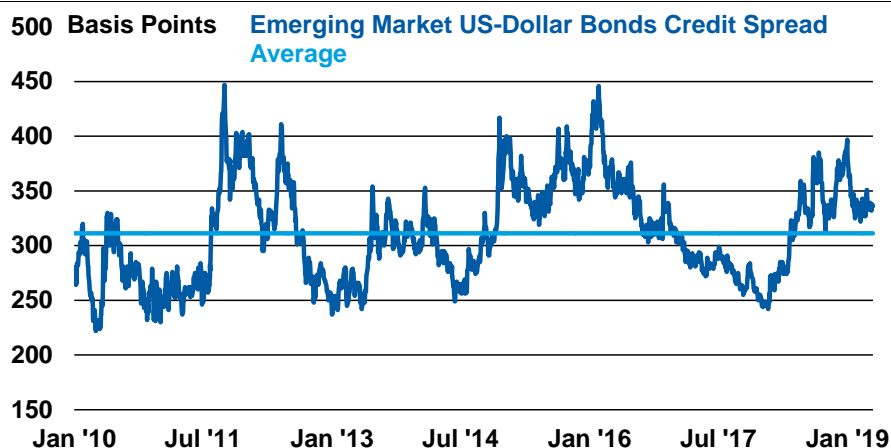
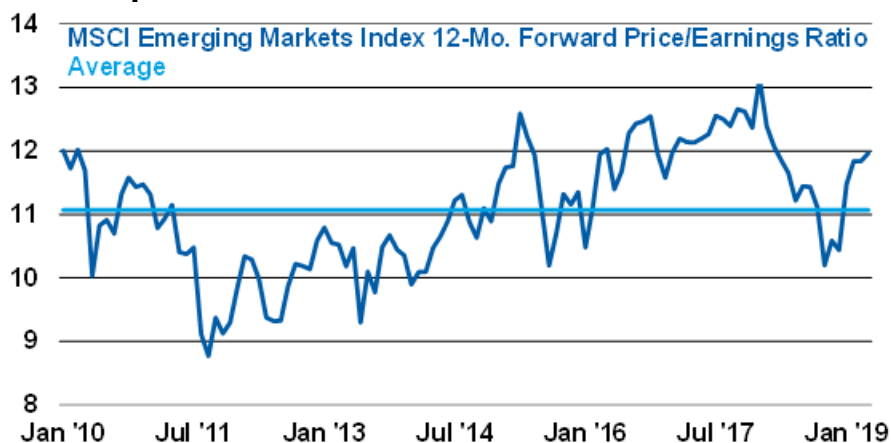
EXPECTED UNCERTAINTY. In some sense, the fact that EM countries are experiencing political or economic uncertainty is par for the course—especially as those same issues are at play in the developed markets. Still, at a practical level, we see the following dynamic: Asset allocators will likely continue to push money toward EM equities and EM fixed income based on that top-down picture. The managers who receive those funds will then have to find ways to allocate them, given the country-level stories. The outcome: A larger “winner's premium” for any cleaner EM story.

What qualifies?

China equities. Jonathan Garner, our head of EM and Asia equity strategy, remains overweight China stocks, looking for a 10% total return upside by the end of the year based on his target for the MSCI China Index. China stocks offer reasonable valuations, improving earnings revisions, incoming stimulus and a possible catalyst in greater clarity regarding trade talks. We think that this remains an appealing combination relative to other regions.

Local rates in Mexico and Indonesia. Both countries offer high real rates and both should see a moderating inflation profile, allowing their central banks to ease policy more than the market expects.

Valuations for Emerging Market Equities and Credit Spreads Are Not Excessive



Source: Bloomberg as of April 23, 2019

Indonesia offers higher real yields with a more fairly valued currency, while Mexico offers lower real yields with a cheaper currency. James Lord, our head of EM fixed income strategy, sees opportunity in both.

EM hard-currency debt. This was one of the top trades of our 2019 outlook, and continues to screen well on a cross-asset basis. It is an asset class with a 5.9% yield and trailing 12-month volatility of 4.8%. Since 2010, rolling 12-month volatility has rarely exceeded 5.5%. That's a compelling risk/reward profile, and one reason why we continue to like it from an asset

allocation perspective, even if our EM strategists are more tactically balanced.

On a cross-asset basis, we think that both EM local- and hard-currency debt are better sources of income than US high yield. Between EM fixed income and equities, we think that fixed income offers better risk/reward—and we think that record-low levels of developed market rate and currency volatility are good hedges against EM exposure in one's portfolio.

Emerging market assets are attractive from afar and messy up close. As with an Impressionist painting, we think that the broader view will ultimately win out. ■

ON THE MARKETS / EQUITIES & ECONOMICS

Labor Costs Rise as Top-Line Growth Slows

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Labor costs have been rising throughout this cycle, but now the pace of growth is picking up just as top-line growth slows materially—a tough combination for US corporate profits. Pressures becoming more apparent in the current and coming earnings seasons pose risks for both equities and the economic cycle.

To measure the impact of labor costs, we leverage average hourly earnings data in over 150 economic industries to get a near real-time look at where wage growth is highest and combine this data with measures of labor intensity, sales growth and margin expectations to better understand which industries and companies have the greatest risks to forecasts. Multiline retail and service-heavy industries like diversified consumer services, commercial services,

professional services, specialty retail and hotels/restaurants/leisure all screen with higher risk. Among those with the least relative wage risk are biotechnology, pharmaceuticals and real estate.

TIGHTENING LABOR MARKET. The US job market has more openings than it has people to fill the jobs, and that dynamic is pushing wages higher. Our preferred measure of labor market slack, the vacancy/unemployment ratio, has historically demonstrated a significant leading relationship with wage momentum. Today, that ratio is telling us to expect rising labor costs ahead (see chart). We can already see that a tight labor market is pushing wages higher at an increasing rate. Historically, as the unemployment gap—the difference between the actual unemployment rate and the long-run natural rate of unemployment—moves below zero, growth in average hourly earnings accelerates (see chart, page 5). This cycle is no different.

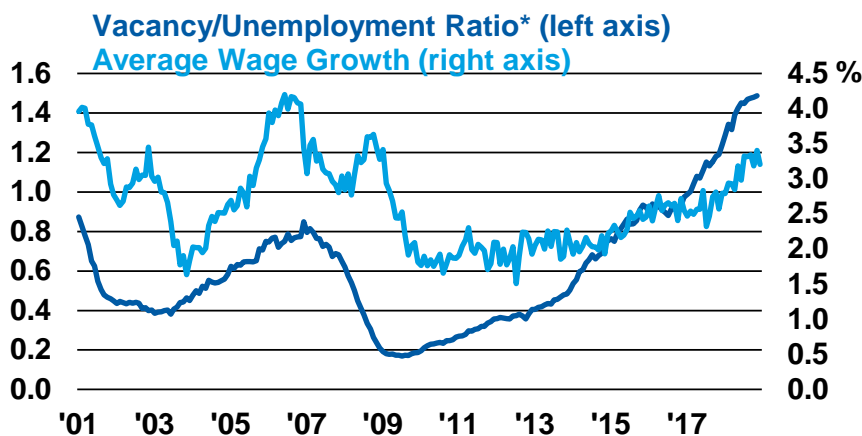
Wage growth is diffusing across the economy and broadening out among industries. Morgan Stanley & Co.'s US Economics team has expanded its Wage Growth Diffusion Index, which measures the breadth of wage growth in the US economy, to include data on almost 200 industries. The results are quite clear—more industries are seeing wages grow. As of February, 53.6% of industries were experiencing above-trend wage growth. That compares with 46.9% in February a year ago, and an average level of 42% that has prevailed throughout the expansion to date. This broadening of wage growth means we should expect to see average hourly earnings growth move higher.

WAGE GROWTH ACCELERATION.

Broadening and accelerating wage growth helped raise the average growth rate across industries to 3.2% from 2.8% in the last year, with some industries seeing growth over 10%. We expect these aggregate wage gains to continue as industries that were seeing among the slowest wage growth are now undergoing the greatest acceleration. Job vacancy and unemployment trends suggest labor cost tightening is likely to strengthen. The number of unemployed people per job opening is less than one in high-, middle- and low-wage industries, and the total number of job openings is nearly the highest it has been since 2001 across wage cohorts. Low-paying industries have the highest number of jobs available.

Management teams and business owners are sending a clear message on rising wages—they are becoming a concern for profitability. As long as rising costs can be offset by top-line growth, the impact on margins can be managed. However, as sales growth slows, rising costs matter more (see chart, page 5). We know rising labor costs are becoming a concern for US companies, as large public firms and small businesses alike are discussing labor costs as a headwind to profitability. Management teams may be optimistic on their ability to take price,

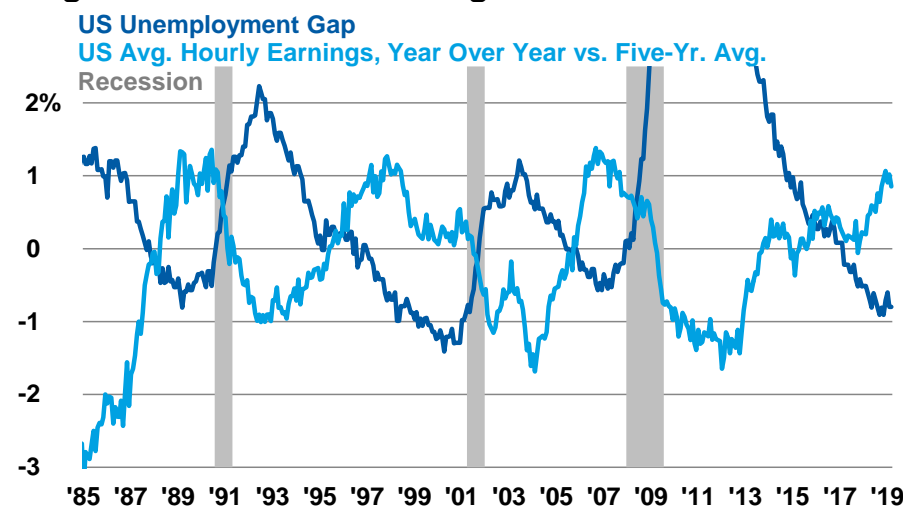
Tight Job Market Implies Further Wage Growth Ahead



*Total private sector, one-year lead

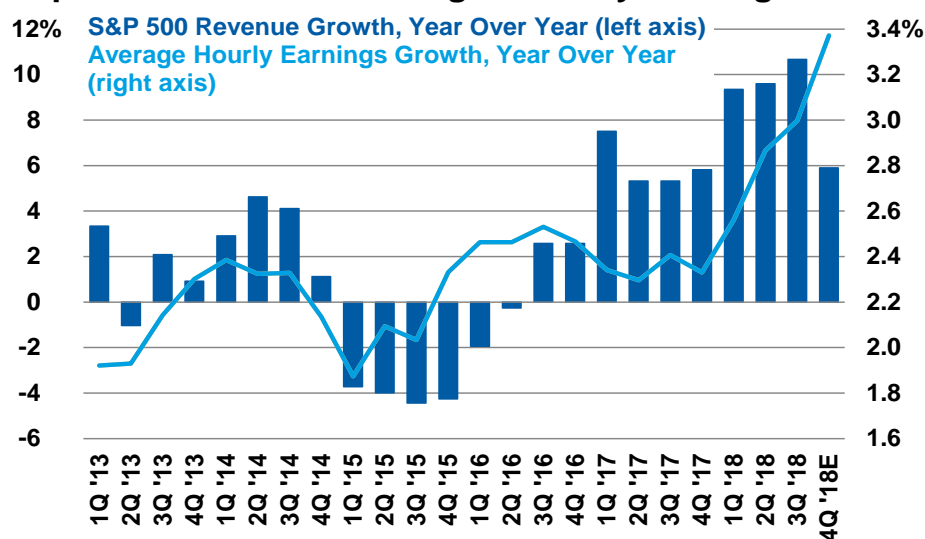
Source: Bureau of Labor Statistics, Morgan Stanley & Co. Research as of March 2019

The Unemployment Gap Is Negative, Wage Growth Is Accelerating



Note: Y-axis is truncated at 2.5%. The unemployment gap peaked at 5.02% in October 2009.
Source: Haver Analytics, Bureau of Labor Statistics, MS & Co. Research as of March 29, 2019

Top-Line Growth Is Slowing as Hourly Earnings Rise



Note: Average hourly earnings are for production and nonsupervisory workers.
Source: FactSet, Haver Analytics, MS & Co. Research as of Dec. 31, 2018

but the decline in operating margin growth at the end of last year leaves us less so. We think sustained wage pressures ultimately add to the likelihood of an earnings

recession as higher costs and slowing top-line growth weigh on margins.

BEAR CASE. While it is still too early to make this call, our bear case for the US

equity market is based on companies seeing more margin pressure than they can absorb, and laying off workers to protect profits. Slowing top-line growth and rising costs are in place, but perhaps not yet to the right degree. The momentum in wage growth peaks when the unemployment rate is low—the labor market heats up until it becomes too hot for companies to touch, leading to a turn in the cycle. We do not mean to suggest that an *economic* recession is around the corner; our US economists estimate a 15% recession probability for 2019 and a 20% probability for 2020. However, as equity strategists, our interpretation of these trends is that elevated wage pressure adds to the likelihood of an *earnings* recession which, in turn, raises the risk of an economic one as companies cut spending in hopes of improving their bottom line.

In the coming quarters, the dynamic between rising wages and corporate margins may also be a canary in the coal mine for inflation expectations. We think that rising wages have supported rising inflation expectations as markets have assumed companies would try to pass along costs through price increases. If companies begin to see margin pressure as conditions make it hard to raise prices, then this assumption could be challenged, lowering the outlook for future inflation. ■

Also contributing to this report were Andrew B. Pauker, Michelle M. Weaver, Guneet Dhingra, CFA, Michael J. Wilson and Ellen Zentner of Morgan Stanley & Co.

For the complete report, “Wage Pressures: Risks from Labor Costs Rising as Top Line Slows,” contact your Financial Advisor.

ON THE MARKETS / EQUITIES

In Search of Cheap Secular Growth

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One of the best investment ideas over the past five years has been software stocks. With a backdrop of low rates and uninspiring global growth, investors bid up these largely asset-light subscription business models, rewarding them for having premium growth profiles that were less correlated to the broader economy. The performance has been staggering: The S&P 500 Software & Services Index gained 181% in the five years ending March 31, more than tripling the S&P 500 Index and even far outpacing the 96% return of the technology-heavy NASDAQ Composite Index. While software companies continue to benefit from the secular growth drivers that brought them this far, some of the upside has already been priced. Software stocks trade at a lofty 27-times next 12 months' consensus

earnings per share (EPS), 28% above the five-year average.

Software has already begun to play out, but are there other areas in which valuation multiples do not yet incorporate the bullish long-term outlook? Typically these opportunities result from some vigorous investor debate around the sustainability of growth or the competitive landscape. We widened our search to find sectors with secular growth characteristics that have not been fully embraced by the market. To do this, we compare the price/earnings (P/E) multiple to the earnings growth rate, the "PEG ratio," to adjust valuations to reward industries with higher profit growth (see chart). Additionally, we looked for industries in which there is a major debate dampening investor sentiment but where we have a positive view on the outcome. Finally, we required the industry to have noncyclical growth drivers that are supported by long-term secular trends.

Through this process, we identified

managed care, video games, 5G components hardware and food delivery stocks as having defensible secular growth opportunities that investors have not fully priced. Note, we are not calling for these companies to necessarily achieve software-like level valuations. Rather, we are highlighting that they appear to benefit from secular—not cyclical—drivers that are less correlated to the economy, have above-average earnings growth and show valuations that appear discounted. Together, that creates a compelling setup for long-term investors.

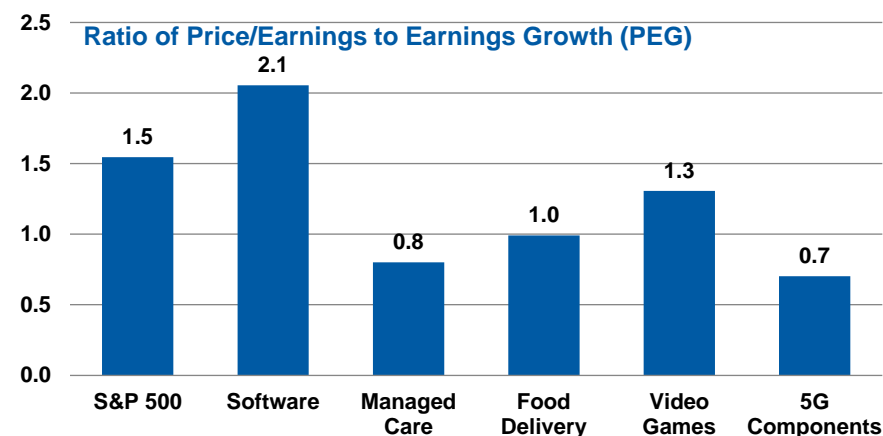
Managed Care

Debate: Will changing regulation impair managed care's earnings power and long-term outlook?

Our View: Calls for health care reform by 2020 presidential hopefuls have dragged down managed care companies. The industry is down 4% so far this year, and the valuation multiple has fallen 32% in the past six months to 13.4-times consensus fiscal year 2020 EPS. While headline risk may persist, we believe that company fundamentals should be largely unaffected by this political rhetoric given a strong secular backdrop.

To start with, an aging US population is likely to drive increased demand for health care services. The US Census Bureau estimates that 21% of the US population will be 65-plus by 2035, up from 15% in 2015 (see chart, page 7). The Centers for Medicare & Medicaid Services estimate that this rise in the senior cohort could drive \$1.25 trillion in incremental spending. As Medicare enrollment and related spending accelerates, we believe that managed care companies will become even more important in managing costs. Given the complex legislative process required to achieve far-reaching "Medicare for All" proposals, we see the most likely path to be that companies partner with regulators to address key areas of waste in the health care system while largely preserving the current business model.

Look for Industries With a Below-Market PEG Ratio



Source: Bloomberg as April 26, 2019

Given valuations and durable earnings growth, we view this driving a mutually beneficial outcome of strong returns for shareholders and lower health care costs for consumers.

Video Games

Debate: Are video games a secular growth industry, or is it just “hit-driven”?

Our View: Video game stocks have had a volatile six months as investors digested disruption driven by free-to-play “battle royale” games. In addition, delays in releases and slowing engagement trends drove downgrades in consensus earnings estimates. This led the industry valuation to fall to 21-times fiscal year 2020 EPS, down 22% from its a peak 26 P/E last September. However, we think the markdown ignores the long-term opportunity video game stocks have to monetize a highly engaged fan base.

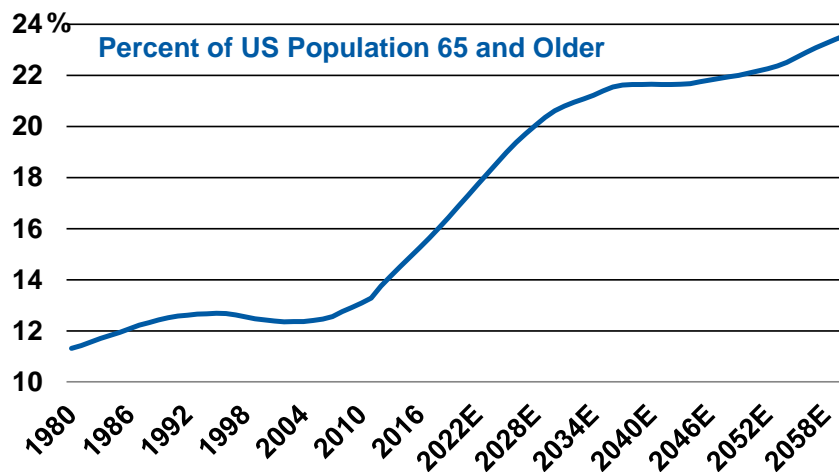
The secular case for video game stocks is underpinned by consumers’ changing leisure-time choices. MS & Co. Research notes that time spent playing video games has increased 70% in the past 14 years, resulting in \$180 billion of annual industry spending across all platforms. A Nielsen study considers 64% of US adults are gamers; of them, 70% have watched other people play video games on streaming video. High player engagement has allowed companies to expand into adjacent areas like e-sports, which diversify revenues and build franchise popularity. According to Riot Games, the 2018 League of Legends Finals, the most popular e-sports event, drew 99.6 million viewers. This is comparable to the 2018 Super Bowl, which drew 103.4 million, according to Nielsen. Given engagement trends and changing leisure-time behavior, the earnings opportunity for video game companies still appears to be in early days.

5G Components

Debate: How much investment is needed to roll out 5G networks, and how long will the investment cycle last?

Our View: Investors have largely come to a consensus on several beneficiaries of the 5G investment cycle, including certain

Expected Increase in the 65-and-Older Cohort Could Be A Tailwind for Managed Care Companies



Source: US Census Bureau as of April 26, 2019

semiconductors, towers and data centers. However, many of the component providers that are enabling 5G hardware and networks have not seen the same level of enthusiasm, given concerns around the length of the investment cycle and the degree of pricing power.

However, as MS & Co. Research estimates, global 5G capital spending should outpace prior cellular communications cycles, driving an estimated \$872 billion globally, or 1.7 times what was spent on 4G. As additional use cases are proved out (from fixed wireless today to the internet of things, machine learning and other smart applications), we see the investment cycle lasting through 2030. This should support robust volumes for 5G component providers, offsetting concerns on competition eroding pricing power. Given the scale of investment, we think these companies should see sustainable growth. However, with the group trading at an average 12-times fiscal year 2020 EPS, it doesn’t appear the market has priced this, creating opportunities for long-term investors.

Food Delivery

Debate: Will increased competition make the economics of food delivery companies less attractive?

Our View: Many companies are pursuing the food delivery market by building networks of customers that use technology to order food, networks of restaurants to prepare the food and networks of drivers to deliver food. While pizza delivery is well established, home delivery in general is growing much faster than traditional food consumption as consumers look for convenience and technology to provide a one-stop solution.

Recently, multiples have contracted for some of the early winners as investors worry about new entrants, the potential for price wars and the economics of the business. While these concerns make sense in aggregate, many competitive online industries such as search, travel agencies and social networks have seen the market-share leaders generate outstanding returns. Due to economies of scale in technology investment and advertising, and the network effects that encourage customers to use the largest network, the incumbents with leading share (or leading share in a niche), should be well-positioned to benefit from the shift to ordering in from dining out. In our view, the secular trends outweigh the competitive concerns that are currently dragging down on industry valuations, presenting investors with the opportunity to order up a winner at attractive prices. ■

Alternatives Find a Wider Audience

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Morgan Stanley Wealth Management

Alternative investments aim to deliver returns uncorrelated with traditional equity or bond markets. They have historically been accessible mainly to institutional and ultra-high net worth clients who could meet the steep investment minimums and other eligibility requirements.

In the past several years, barriers have been lowered through registered alternative investments. These offerings, which are typically registered under the Investment Company Act of 1940, can provide clients with net worth of \$1 million access to alternative investment strategies at minimums as low as \$25,000.

Although these offerings are registered under the same law that governs mutual funds, the structures and underlying strategies can be quite different, particularly as it pertains to liquidity (see table). For example, registered alternatives often have exposure to less-liquid, lower-rated or more complex asset classes, and generally do not offer daily redemptions. This can allow investors to capture a return premium while protecting the fund from forced selling in down markets. Here are some examples:

Interval funds typically use income-oriented strategies, investing in less-liquid credit sectors that may generate higher yields and returns over the longer term. Investors can redeem at set intervals, usually quarterly and only up to 5% of the fund's assets on an aggregate basis.

Funds of hedge funds are actively managed portfolios of hedge funds that are

diversified across strategies. They offer access to high-quality managers at lower investment minimums, with clients able to redeem on a periodic basis.

Private equity funds of funds raise capital from investors to make commitments to multiple private equity funds, benefitting from sector, strategy and vintage-year diversification.

Private business development companies provide direct financing to middle-market companies through privately negotiated loans. They do not trade on an exchange and thus are not subject to the daily volatility associated with their public counterparts.

Nontraded real estate investment trusts (REITs) allow investors to earn a share of the income produced by a portfolio of commercial real estate assets. They invest in stable, well-maintained and income-generating properties. Nontraded REITs have improved over the years in

terms of greater liquidity, transparency and lower fees for investors.

Registered alternatives have a number of common traits. Many invest in illiquid securities, creating the potential for long-term investors to earn a greater return for holding less-liquid assets. They also generally exhibit low correlation to stocks and bonds given the idiosyncrasies of the underlying asset classes. Finally, many of these vehicles offer higher income than traditional stock or bond portfolios due to the underlying liquidity, complexity, credit and/or leverage risks. In a low interest rate environment, a higher yield may be an attractive feature for income-oriented investors.

Global Investment Manager Analysis believes registered alternative investments can provide clients with diversified, and potentially enhanced, sources of return. High net worth clients with a tolerance for illiquidity should consider these offerings as part of a broader asset allocation mix. ■

This article was excerpted from "Democratization of Alternatives for High Net Worth Investors," March 29, 2019. For the full report, ask your Financial Advisor. ■

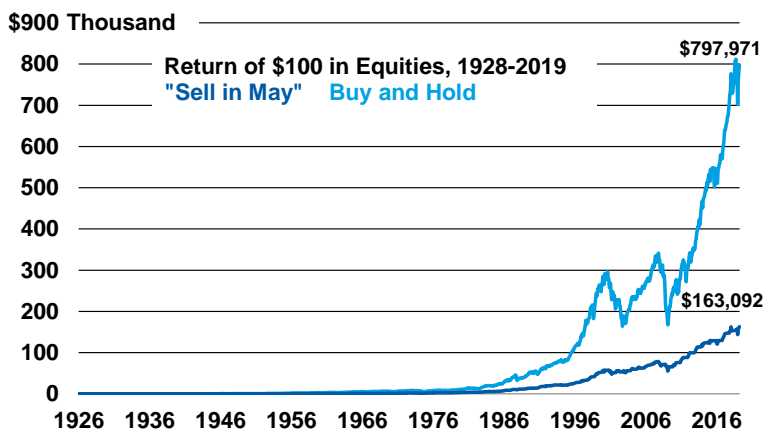
Alternatives by Their Relative Liquidity

Daily Liquidity	Periodic Liquidity	Illiquid
ETFs	Interval Funds	
Traditional Mutual Funds	Nontraded REITs	
Alternative Mutual Funds	Registered FOF (Hedge)	
Public REITs	Hedge Funds	
Public BDCs	Registered Fund of Funds (Private Equity)	
		Private Real Estate
		Private BDCs
		Private Equity
		Private Credit
		Private FOF (PE)

Source: Global Investment Management Analysis

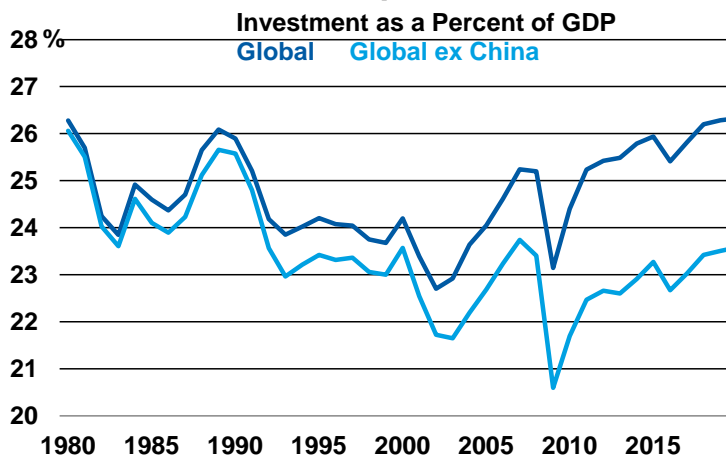
“Sell in May and Go Away?” Not!

The old Wall Street adage “sell in May and go away” is based on the belief that the period between November through April has historically delivered stronger returns than May through October. True, summer months have tended to underperform winter months: The average monthly S&P 500 price return in May through October is 0.4%, compared with 0.8% November to April. Still, long-term historical performance suggests that a “sell in May” strategy should be avoided. Starting with \$100 in capital in 1926, owning equities from November through April, selling them to invest in one-month T-bills between May and October and then reversing the trade, the initial \$100 would only be around \$163,000 today (see chart). A buy-and-hold strategy in the same period would now be worth close to \$800,000. Staying invested and realizing the value of compounding growth rewards investors greatly when compared with trying to time the market.—*Matthew Brookman*



Note: Equities are represented by the SBBI US Large Cap Stock Index. Source: Ibbotson, Morgan Stanley Wealth Management as of March 31, 2019

China Drives Global Capital Investment

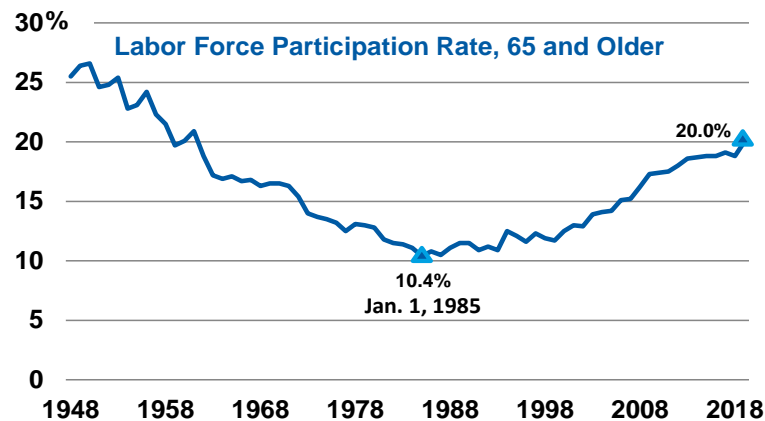


Source: International Monetary Fund as of April 17, 2019

One of the conundrums for the developed world during the past decade has been the lack of capital spending, which is necessary to drive gains in productivity, which in turn helps to drive profits. In the 1970s, investment as a percentage of global GDP was more than 27% and fell below 23% in the early '00s before rebounding to about 25% now (see chart). However, China accounts for most of the global rebound. Excluding China, global investment is less than 22% of GDP. While some have suggested that this dynamic has merely produced a misallocation of capital and created deflationary pressures, our take is somewhat different. We think China's capital investment suggests that the potential for profit gains in China may be underestimated.—*Lisa Shalett*

Seniors' Participation in the Labor Force Has Nearly Doubled Since the '80s

The number of Americans working into what traditionally are considered retirement years—beyond age 65—has nearly doubled from the 1985 low of 10.4% (see chart). According to the Social Security Administration, Social Security benefits cover just an estimated 40% of an individual's preretirement standard of living. With 56-to-61-year-olds having median savings of \$17,000 and far fewer defined benefit pension plans than their parents, older Americans have increasingly chosen to remain in the workforce. Even as the demand for workers persists amid the decade-long economic expansion, the ongoing participation of older Americans has mitigated, to a degree, the upside pressure on wages.—*Nicholas Lentini*



Source: Bureau of Labor Statistics as of March 13, 2019

ON THE MARKETS / POLICY

On Trade 2.0— The Impact of Tariffs

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Trade tensions between the US and China have weighed on each country's economic data but, in our view, not to the extent that has been suggested by the media and financial press. A weakening of the renminbi, Chinese fiscal and monetary stimulus and the timing of US tax cuts have prevented a major change in the economic status quo, as rising US costs were offset by cheaper Chinese goods and lower domestic tax rates. That is to say, so far, the trade war has been more bluster than bombs.

Currency has played a critical role in softening the impact of trade policy, buoying Chinese exports by the renminbi's depreciation. From mid-April to mid-

October 2018, China's currency fell roughly 11% versus the dollar, largely offsetting the American 10% tariff rate on \$250 billion of goods. This means an item that cost \$1 at the outset of the trade war cost 98 cents even after imposition of the tariffs. The value of Chinese exports tracked this depreciation, which fell through the end of year (see chart). More recently the renminbi has strengthened almost 4% as US trade negotiators complained of deliberate devaluation during trade discussions. The increase in the currency suggests that Chinese export values should trough soon and US companies will be forced to absorb some of the tariff costs for the first time.

UNINTENDED CONSEQUENCE. Trade policy aimed at reducing the US trade deficit has at least, for now, had the opposite effect. On the whole, Chinese exports have actually risen by 2% since trade hostilities began in earnest in April 2018. Despite the expressed intent of balancing the US-China trade deficit,

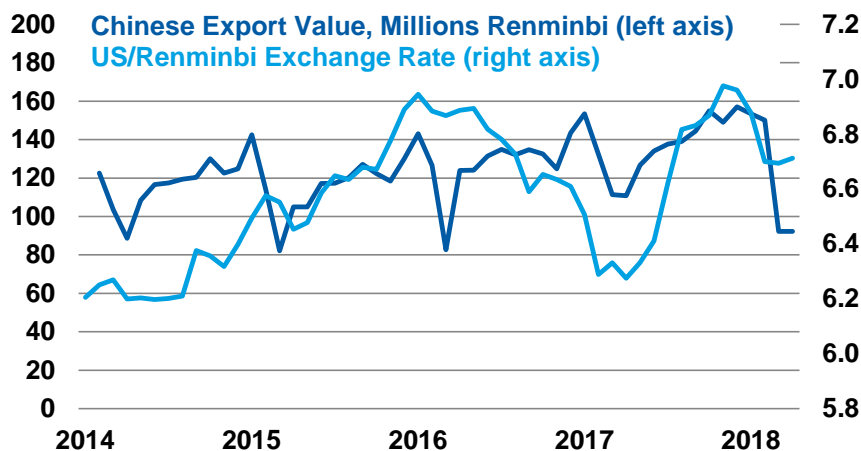
numbers show an expansion to the largest gap in history in 2018's third quarter. In addition, Chinese exports to the US as a percentage of total exports continued their upward trend. Since 2013, America has gone from receiving 16.7% of all Chinese exports to 19.2% at the end of last year.

China does not emerge entirely unscathed though. Manufacturing's purchasing managers index (PMI) dropped in every reading from May 2018 through February 2019, and sat just above its lowest level since 2016. The services PMI has also been volatile. Despite these softer readings, fiscal and monetary stimulus from the Chinese government has so far kept the economy on track and masked potential trade fallout. In fact, domestic Chinese retail sales hit their highest-ever level at the end of the year, shrugging off the slowdown.

PROFITABILITY PICTURE. The trade conflict has not yet been a significant factor in US corporate profitability. One fear of trade escalation has been the potential impact on US company profit margins, especially when combined with the effects of a tightening labor market and the increased federal funds rate that characterized most of 2018. Grouping the S&P 500 by exposure to foreign revenue and cost, we found that this effect has been relatively benign thus far. When grouped in quintiles from the most to least exposed, fourth quarter profit margins expanded across all baskets. That said, for companies with the highest levels of foreign revenues, margin growth has lagged. However, the difference between the most- and least-exposed quintiles was not significant. This was likely due to currency devaluation.

Looking beyond the S&P 500, the overall impact on the US economy has also been modest. In a recent paper, the Centre for Economic Policy Research in London found that tariffs cost \$4.4 billion per month in taxes and were associated with a 1% increase in the cost of manufacturing. These figures suggest

Chinese Exports Track the Renminbi's Value



Source: Haver Analytics as of March 29, 2019

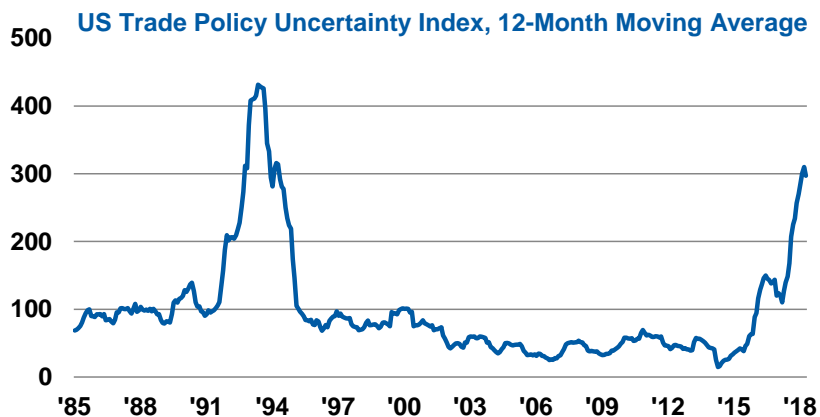
tariffs and trade barriers produce a measurable drain on the economy as economic theory would suggest, but the scale of the losses is dwarfed when compared to the \$691 billion of goods and services exchanged between the US and China.

MUTED IMPACT. We outlined two significant concerns in our previous report (“On Trade,” *Geo-Markets*, Sept. 6, 2018). First was the risk to sentiment, particularly corporate investment. The second was a risk of asymmetric escalation should the US impose additional tariffs. Both have come to fruition, though the impact has been more muted than we expected.

Corporate investment has held up in recent quarters, but the deviation between trade and capital spending is reaching an unsustainable level given historical correlations. Expectations for capital spending in the next 12 months are closely linked to merchandise trade volume. Global investment growth is also highly correlated with trade growth. Continued slowdown in trade should ultimately drag on investment critical to US and global growth. In the US, imports of iron and steel also track investment growth. In a globalized economy, firms invest as they see opportunities to expand abroad. Opportunity is a necessary but arguably insufficient condition for investment. Confidence or certainty about policy is also important. Low tariffs and market access help a firm earn greater returns than the cost of capital on its investment. Uncertainty seems likely to persist in the near term.

UNCERTAINTY HIGH. Surveys of CEO economic and manufacturing confidence each recently hit multiyear lows, beginning to reflect this concern. An index established by Baker, Bloom and Davis for the National Bureau of Economic Research attempts to measure US trade policy uncertainty going back to the 1980s (see chart). The index recently rose to its

Uncertainty About Trade Approaching Historic Levels



Source: Bloomberg, Baker, Bloom and Davis as of Feb. 28, 2019

highest level since the mid 1990s, perhaps explaining the notable drop in CEO expectations.

The movement of equity markets seems to defy these recent surveys. Since the beginning of 2019, US and Chinese markets have rallied sharply. Fundamental outlooks actually declined over this period, as weakening earnings expectations triggered downward revisions and raised questions about future growth. Dovish announcements by the Fed have been partially responsible for the market advance, but our analysis found that only 32% of the variation in the S&P 500 between the market's bottom on Dec. 24 and March 28 can be explained by movement in the expectations for the federal funds rate. While the remaining 68% is likely attributed to factors outside of trade, positive news would indicate trade optimism has played at least some role.

The second risk we identified was the risk of asymmetric actions such as limiting market access for US firms, stepped-up cyberattacks and even the possibility of military escalation. All of that has played out in recent months. China's decision to exclude soybeans and other legumes from

their market translated to a drastic decrease in demand for US producers—and affected farmers are struggling. China's needs were filled by Brazil and Russia, which will be loath to give up that business. Investors should not presume that tariffs and trade flows can be turned on and off like a faucet.

With increased Chinese state-sponsored cyber activity, there is also evidence that the US-China cyber-truce following high-level discussions in 2016 has ended. Most concerning were disputes over freedom of navigation exercises the US Navy undertook in late September 2018, in which Chinese and US destroyers came within 45 yards of one another.

We see mounting risks should the world's two largest economies fail to strike a deal. Trade policy has become a greater downside risk as the market fails to accurately discount the duration and impact of drawn-out trade tensions with China. ■

This article was excerpted from “On Trade 2.0” in the April 3, 2019 issue of Geo-Markets. For the complete report, please contact your Financial Advisor.

By Most Metrics, Credit Is Fully Valued

DARYL HELSING

*Fixed Income Strategist
Morgan Stanley Wealth Management*

The US equity market just hit a record high, while corporate credit markets have regained all of the underperformance relative to US Treasuries that was experienced in the fourth quarter (see chart). Both seem to be fully or near fully valued. While we can value equities by such metrics as price/earnings and price/cash flow, just how do we gauge the relative value of credit investments?

RISK PREMIUMS. Given the strong performance of both asset classes, it is important to assess how attractive they are based on their current valuations and inherent risk. One way to do so is by comparing the current risk premium offered with historical levels. For equities, consider the forward price/earnings (P/E) ratio or the equity risk premium, which is the forward earnings yield minus the 10-year US Treasury yield. Despite record

highs, equity valuations do not look expensive by either of these measures: At 17, the forward P/E ratio is roughly the long-run average and, by historical standards, the equity risk premium is high, which makes equities attractive.

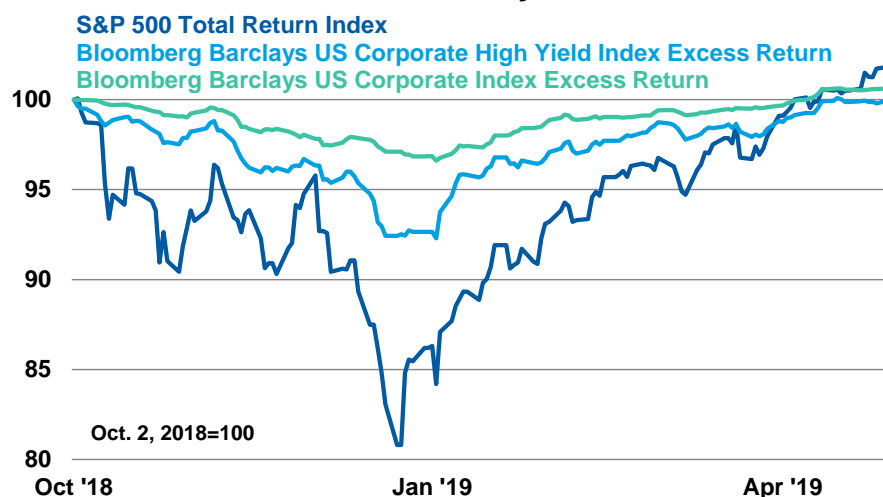
In looking at the risk premium embedded in credit spreads, we see a different story. Current investment grade and high yield index spreads—the difference between the yield on a bond and a comparable-maturity US Treasury yield—are 110 and 356 basis points, respectively, and are in the 40th and 31th percentile ranks of their historical range. Still, spreads don't tell the whole story as valuations appear less compelling when fundamentals are considered. Leverage ratios, which measure cash flows relative to debt, are one of the most important fundamental measures for credit quality, and they are currently elevated compared with historical levels. That means their credit quality is weaker than normal.

QUALITATIVE FACTORS. Away from these risk premium measures and fundamental metrics, there are qualitative factors that explain the differences between fully valued stocks and fully valued credit. Due to the nature of market-cap weighted indexes, the S&P 500 has increasingly gained exposure to high-growth sectors such as technology because the earnings prospects for such companies have driven valuations upward. Tech represents nearly one-quarter of the S&P 500's market capitalization and accounts for about one-third of the S&P 500's year-to-date return. On the other hand, health care, the third-largest sector, has trailed the broader index and been a drag.

In credit indexes, the largest weightings are the companies that have issued the most debt irrespective of financial performance. Thus in high yield, communications companies account for about 19% and energy about 14%. Relative to the S&P 500, credit is less exposed to consumer staples, which are considered relatively more defensive, and more so to energy and materials, which engender greater cyclical and commodity risk. In addition, high yield skews toward small- and mid-cap companies.

PROCEED WITH CAUTION. While a backdrop of decelerating global growth and corporate earnings should always be a cause of concern for equity and credit investors, it may be more so the case now given the valuations that have been reached as a result of the strong performances for the year to date. Altogether, these are reasons why investors should be cautious in their credit exposure, as the asset class appears vulnerable to late-cycle risks. In the context of high valuations, weak fundamentals and qualitative issues, investors who are overweight in credit should take advantage of current strength to trim exposure in portfolios. There is also a strong case to be made that active management of credit exposure is currently preferable to passive. ■

Credit Had a Dramatic Recovery in Excess Return



Source: Bloomberg as of April 18, 2019

Building Tax Management Into Your Investments

Though “tax drag” is a concept investors were likely aware of as they wrote their checks to Uncle Sam last month, it would be wise to instead focus year-round on “tax alpha,” say Goldman Sachs’ Monali Vora, head of the Tax-Advantaged Core Strategies (TACS) team, and Aron Kershner, senior portfolio manager within the TACS team. “It’s not only about what investors earn, it’s also about what investors keep,” says Vora. She and Kershner recently spoke with Morgan Stanley Wealth Management’s Tara Kalwarski. The following is an edited version of their conversation.

TARA KALWARSKI (TK): What’s the case for tax-managed investment strategies?

MONALI VORA (MV): Most measurements of investment performance show what return is earned; there’s less about what investors are keeping. The goal should be to maximize what investors are keeping because that’s what’s going to help them accumulate wealth.

Capital gains are taxed in two forms. You have a short-term capital gain if you sell something you have held for less than a year. Short-term gains are taxed at the investor’s ordinary income rate. Long-term capital gains—if you hold for more than a year before selling—are taxed at a lower rate. In addition, if you have dividends, they can be taxed as ordinary income, which gets taxed at the investor’s income rate, or as a qualified dividend, which gets taxed at the long-term rate.

That’s the backdrop of why taxes are so important when it comes to investing. They can have a significant impact on what investors are able to keep.

The US has been in a tax regime where typically short-term rates have ranged from 35% to close to 44% and long-term rates have been between 15% and 24%—and that’s only federal rates. When you add state and local taxes rates, it can get into the low-50% range in California and New York. In some cases, investors are giving up close to half of their returns if they’re not thoughtful about taxes.

We’re not accountants, but we believe that in all areas of a portfolio, investors should think about how taxes affect their returns—and should check with their accountants about their tax rates.

TK: What are the different ways investors can integrate tax management into their investment strategies?

MV: One, you can be thoughtful about the recognition of short-term versus long-term capital gains. Holding stocks longer than a year will generally lower your tax bill. The other way is by deferring capital gains, or by not recognizing capital gains (by selling) and, instead, holding equities for the long term. The government encourages investors to hold equities for the long term because, upon death, investors get a “step-up” basis.

For example, if an investor buys a stock at \$100 and when he/she passes away it is worth \$1,000, no one has to pay taxes on that unrealized gain; the cost basis gets “stepped up.” The same is true when an investor donates assets to a charity. The investor receives the deduction on the market value, and no one pays taxes on the appreciation. In this example, whether an investor passes away or gifts the assets, no one pays taxes on the \$900.

Finally, we view tax-loss harvesting as an opportunity for investors to increase

their portfolio return.

TK: How do you harvest tax losses?

ARON KERSHNER (AK): An investor would sell a stock at a loss and then use the capital loss to offset capital gains to reduce the overall tax bill.

Selling stock at a loss can result in a credit that investors can use to offset capital gains. We would suggest taking the proceeds from selling those stocks at a loss and buying replacement stock. That’s critical so investors can maintain their market exposure. Ideally, the replacement stock would behave similarly to the one that was sold—so the client’s risk and returns are similar, but they have locked in the benefit of having banked that tax loss. The investor can use that tax loss to offset capital gains from other investment sources. In order to be able to use that tax loss, the goal is to not violate the “wash sale” rule, which precludes investors from taking a loss if they buy back the same stock within 30 days of having sold it.

MV: A good example of the tax benefit would be something that a lot of investors took advantage of in 2018. The market was up for most of the year, and then it experienced a lot of volatility and ended with a negative return. If an investor sold stocks at a loss at the end of the year, and immediately replaced them with similar equities, they remained invested in the market and experienced the strong market return we have seen so far in 2019.

The idea is that investors should want to keep exposure to the market, but be opportunistic and sell stocks when they’re down. They can utilize capital losses to offset with capital gains at some point, whether it’s this year or next year, or carry them forward. The losses do not expire.

AK: That’s a really important point. If you think about the example in the fourth quarter, had an investor bought stock earlier in 2018 and sold it the day before Christmas, they likely would have realized a big loss. If that investor sat in cash over the next two months and didn’t replace

their equity exposure, they would have missed out on the market rebound that we saw in the first quarter. We believe that tax-loss harvesting is very important, but executing it in a risk-aware manner is also very important.

TK: How much of a tax advantage can a “loss” incur?

MV: There’s no limit in terms of how many losses you can utilize to offset gains in one year. You can offset your entire capital gain with your capital losses.

AK: Generally short-term losses offset short-term gains, and long-term losses offset long-term gains, after which short-term gains can offset long-term gains and vice versa. If there are excess capital losses after all of that, those losses are deductible against earned income up to \$3,000. Any remaining losses can be carried forward indefinitely.

TK: Does an investor’s domicile make for a more or less compelling case for this tax strategy?

MV: In all states, utilizing capital losses is a compelling thing to do to help with your portfolio returns. In high-tax states such as New York and California, it is even more important.

TK: Is a tax-loss harvesting strategy more beneficial when using certain investment vehicles, asset classes or in certain areas of one’s overall portfolio?

MV: For anything that the client wouldn’t have to pay taxes on—retirement accounts like IRAs, 401(k)s, etc.—we wouldn’t recommend tax-loss harvesting. Where the strategy works meaningfully is in personal, taxable accounts.

Tax-loss harvesting works efficiently with equities, and there are a couple reasons why. One, everything is capital in nature in terms of the realized gains and losses that occur with equities. The other one is that there’s a wide variety of equities that an investor can purchase.

Imagine an investor holds a stock or an exchange-traded fund (ETF) that’s experienced a negative return—it’s easy to sell it and buy other equities to maintain exposure. Investors can find something that’s similar, whether it’s a similar company in the same sector or an ETF that

tracks a specific sector or index. There are many stocks an investor can buy to maintain market exposure while still taking advantage of tax-loss harvesting. The same thing is not true of other markets—particularly illiquid markets like private equity or hedge funds.

TK: Should investors use this type of strategy year-round, and also in environments that are not volatile?

MV: Investors should definitely use this strategy all year, as opposed to selecting a quarter or month. Negative markets aren’t seasonal. If we look at the S&P 500 Index back to 2001, there are only four calendar years that ended with a negative return. In the other 14, the market ended positively, so waiting until the last quarter or December wouldn’t have created a large loss-harvesting opportunity. In nearly every calendar year since 2001, more than 90% of S&P 500 stocks had a negative return at one point, and the majority of them experienced a loss of greater than 5% at some point in each year.

TK: Do you think tax-loss harvesting can help combat behavioral finance forces like buying high and selling low?

MV: Investors just don’t like taking losses; it makes them feel like they’re losing something from which they’ll never recover. If you’re married, it can make it even harder to take a loss because then you have to show your spouse that you lost money. While it might not feel good for an investor to take a loss, that loss can help reduce their tax bill. Having to make loss-harvesting decisions can be challenging, but using a quantitative manager with a rules-based, systematic approach can help.

TK: What are the potential investor benefits of this type of strategy?

MV: Just to take a step back, when we think of investors and their asset allocation, they typically are investing in various asset classes. They have some allocation to fixed income, public equities, real estate and maybe even private equity and hedge funds. They tend to have diversified portfolios. When you look across the board at one’s entire asset allocation, they’re going to source liquidity from various pools. From fixed

income they may source liquidity, and from private equity and hedge funds as they wind down over time.

That means that investors may hold public equities for a very long time. We believe the way to maximize equity return is to invest in, or to have a strategy that employs, tax-loss harvesting. These strategies can generate market returns and capital losses to offset capital gains from other investments such as private equity or emerging markets. As we discussed earlier, that means more money stays invested in the market over the long term, and that’s one way to maximize the potential return of their entire portfolio.

TK: Would future tax code changes impact this strategy’s benefits?

MV: As capital gain tax rates go up, the benefit increases. If rates go down, then the benefit will be less, but the value that we’ve quantified is still quite substantial.

AK: I think the other factor in addition to tax rates is market return. Last year, the S&P 500 was down 4.4%, but since the March 2009 market bottom, the index is up more than 300%. Even if tax rates do come down modestly, investors for the most part are still sitting on highly appreciated positions with deep gains. Being able to harvest losses gives investors opportunities to diversify out of their appreciated gains. ■

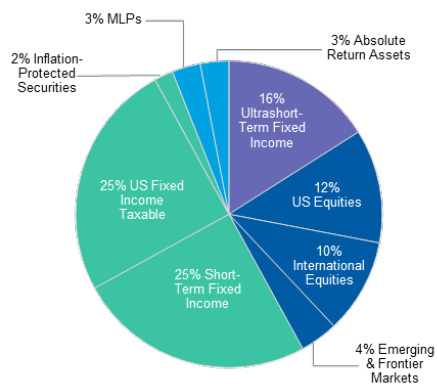
Monali Vora and Aron Kershner are not employees of Morgan Stanley Wealth Management. Opinions expressed by them are solely their own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.

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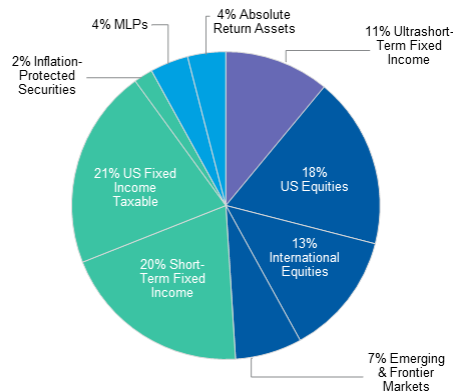
Global Investment Committee Tactical Asset Allocation

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.

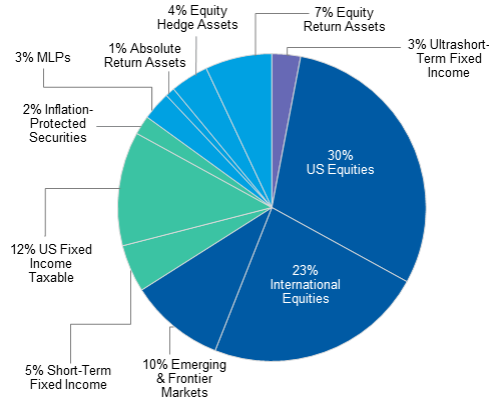
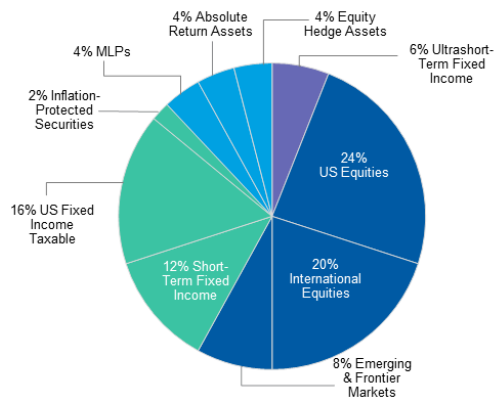
Wealth Conservation Income



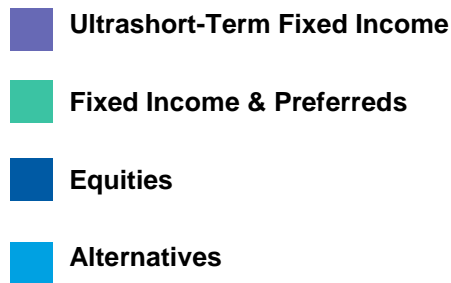
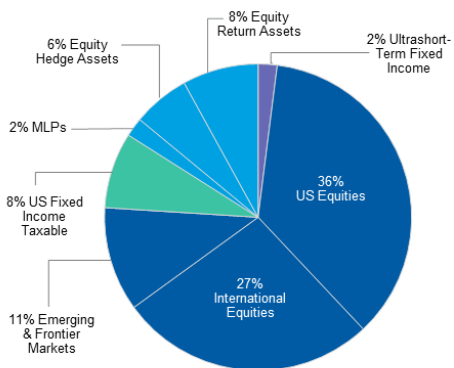
Income



Balanced Growth Market Growth



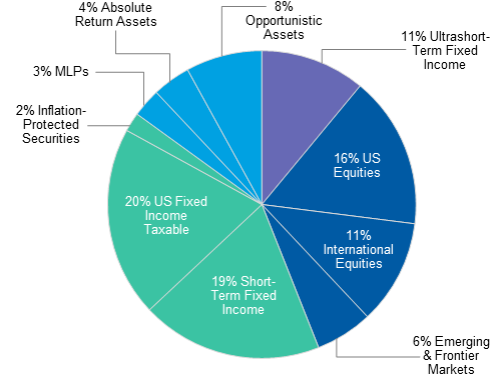
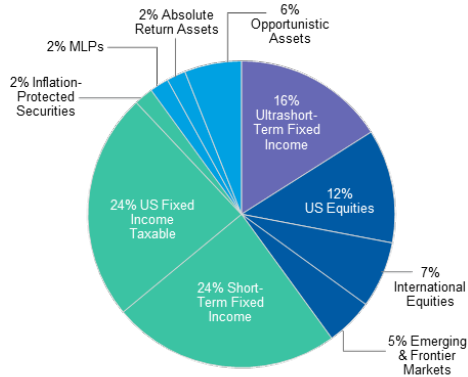
Opportunistic Growth Key



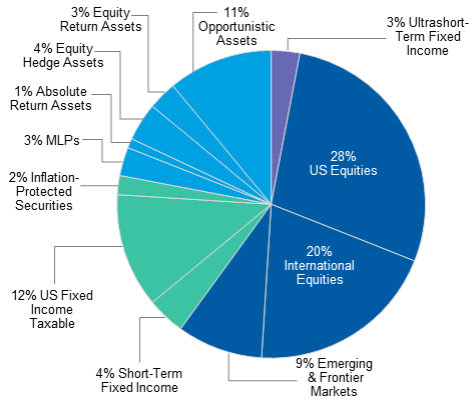
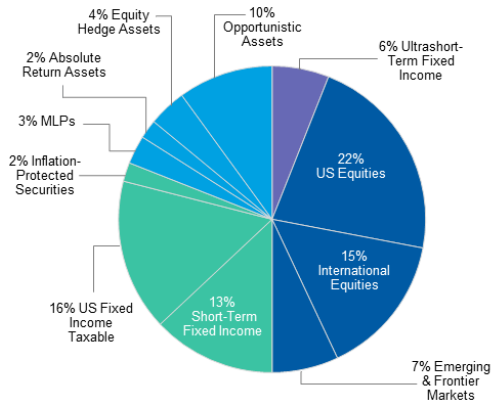
Source: Morgan Stanley Wealth Management GIC as of April 30, 2019

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

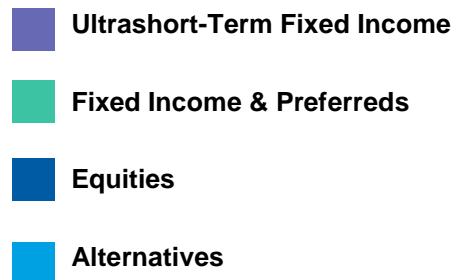
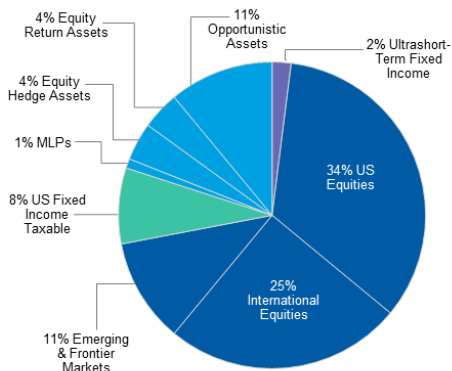
Wealth Conservation **Income**



Balanced Growth **Market Growth**



Opportunistic Growth **Key**



Source: Morgan Stanley Wealth Management GIC as of April 30, 2019

Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Underweight	After the worst fourth quarter since 2008, the S&P 500 had its best first quarter since 1998. This kind of volatility is unusual and was precipitated by a Federal Reserve that appeared too hawkish in December, only to reverse course on its policy perhaps faster than we've ever witnessed. Meanwhile, economic and earnings fundamentals continue to deteriorate, leaving us with an unexciting target of just 2,750 for the S&P 500 this year. As a result, we remain underweight the US.
International Equities (Developed Markets)	Overweight	We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are likely to drive more fiscal policy action in both regions, especially in Europe, which will allow the central banks to exit their extraordinary monetary policies and help valuations to rise.
Emerging Markets	Overweight	After a difficult first 10 months of 2018, emerging market (EM) equities have performed relatively well, a positive sign for future leadership. With our view for the US dollar to make a secular top this year, global nominal GDP growth should accelerate faster than the US GDP, particularly as China's fiscal stimulus takes hold. This should disproportionately benefit international equities, led by EM equities.
Global Fixed Income		Relative Weight Within Fixed Income
US Investment Grade	Underweight	We have recommended shorter-duration* (maturities) since March 2013 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels. We are also increasingly concerned that credit spreads do not reflect the current earnings recession in the US nor the significant leverage now present on corporate balance sheet. Therefore, we are underweight US investment grade.
International Investment Grade	Underweight	Yields are even lower outside the US, leaving very little value in international fixed income, particularly as the global economy begins to recover more broadly. While interest rates are likely to stay low, the offsetting diversification benefits do not warrant much, if any, position, in our view.
Inflation-Protected Securities	Overweight	With the recent collapse in real yields from the Fed's pivot, these securities offer little relative value in the context of our expectations for global growth to eventually accelerate, oil prices to trough and the US dollar to top. In short, inflation risk is underpriced.
High Yield	Underweight	High yield bonds have rebounded with equity markets this year as the Fed pivoted to a more dovish policy. Since February, high yield has underperformed investment grade as it starts to reflect earnings recession risk in the US. With a zero weighting in high yield since January 2018, we will revisit our allocation to high yield bonds during 2019 if spreads widen appropriately.
Alternative Investments		Relative Weight Within Alternative Investments
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded this year. With oil prices recovering and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. Global supply shortages from Iranian sanctions should also be supportive for fracking activity and pipeline construction, both of which should lead to an acceleration in dividend growth.
Hedged Strategies (Hedge Funds and Managed Futures)	Equal Weight	This asset category can provide uncorrelated exposure to traditional risk-asset markets. It tends to outperform when traditional asset categories are challenged by growth scares and/or interest rate volatility spikes. With the recent surge in volatility, these strategies could perform better on a relative basis.

Source: Morgan Stanley Wealth Management GIC as of April 30, 2019

***For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 18 of this report.**

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.

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Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following:

<https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

Risk Considerations

Alternative Investments

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Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

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Hypothetical Performance

General: Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Hypothetical performance results have inherent limitations. The performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation.

Despite the limitations of hypothetical performance, these hypothetical performance results may allow clients and Financial Advisors to obtain a sense of the risk / return trade-off of different asset allocation constructs.

Investing in the market entails the risk of market volatility. The value of all types of securities may increase or decrease over varying time periods.

This analysis does not purport to recommend or implement an investment strategy. Financial forecasts, rates of return, risk, inflation, and other assumptions may be used as the basis for illustrations in this analysis. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. No analysis has the ability to accurately predict the future, eliminate risk or guarantee investment results. As investment returns, inflation, taxes, and other economic conditions vary from the assumptions used in this analysis, your actual results will vary (perhaps significantly) from those presented in this analysis.

ON THE MARKETS

The assumed return rates in this analysis are not reflective of any specific investment and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific investment may be more or less than the returns used in this analysis. The return assumptions are based on hypothetical rates of return of securities indices, which serve as proxies for the asset classes. Moreover, different forecasts may choose different indices as a proxy for the same asset class, thus influencing the return of the asset class.

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

ETF Investing

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

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

MLPs

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Duration

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with **emerging markets** and **frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

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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 suitable only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

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

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

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

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

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

Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred

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securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Companies paying **dividends** can reduce or cut payouts at any time.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

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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