GLOBAL INVESTMENT COMMITTEE / COMMENTARY

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On the Markets

MICHAEL WILSON

Chief Investment Officer Morgan Stanley Wealth Management Morgan Stanley & Co.

Chief US Equity Strategist Morgan Stanley & Co.

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Playing Offense With Energy

higher oil prices will stick.

Equity investors appear skeptical that

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Remaining Unemotional

Emotion is a powerful influence and can affect our behavior in ways that are illogical or even harmful. However, emotions are what make us human. While emotional experiences cover a broad spectrum, fear is often thought to be the most powerful and primal. Perhaps this is why people have loss aversion when thinking about investing—that is, the pain of losing outweighs the joy of winning.

No doubt, fear is powerful, but so is joy. As investors we have to understand these emotions and try to keep them at bay. A year ago, we asked our readers, "Are you ready for euphoria?" We asked it because, since 2009, we had experienced one of the best bull markets in history, yet it was still widely disliked and distrusted—an aftereffect of the financial crisis. Investors often looked for or even manufactured reasons why they remained underinvested and were holding so much cash. Fast forward to today, and we are finally starting to see some of that distrust and fear subside.

Measuring emotion may be even more difficult than controlling it. However, we do have many ways of at least gauging the overall sentiment and positioning of investors, both individuals and institutions. On those measures, we can definitely say we have entered the zone where emotions have swung toward the euphoric end. This euphoria is also now evident in the press and media, where negativity had dominated the conversation for years. However, there are fundamental reasons to be more positive. Economic conditions have rarely been better and now we have corporate tax cuts driving earnings estimates much higher than even we expected.

Nevertheless, when markets experience strong moves such as the S&P 500's rise of 36% in the past 14 months, it's our job to take stock of where the value is and shift our recommended allocations where necessary. Fortunately our portfolios were well positioned to benefit from the strong equity rally during the past few years. So the decision last month to reduce our US equity exposure and increase positions in Europe and Japan was an easy one as we saw much cheaper valuations and better growth prospects going forward in those regions. At the same time, we exited our position in high yield bonds, which was showing signs of late-cycle fatigue, in favour of two-year US Treasuries. Even if such moves are sometimes unpopular, "zig when others zag" often works best in asset allocation—and it allows you to remain unemotional.

ON THE MARKETS / POLICY

Rising Protectionism, Cautious Optimism

SCOTT HELFSTEIN, PhD

Senior Investment Strategist Morgan Stanley Wealth Management

On Jan. 22, the US slapped tariffs on solar panels and washing machines. China quickly rebuked the action, threatening a response through the World Trade Organization (WTO). In our view, these specific tariffs will have little economic impact, but they may signal that trade protectionism is a market risk.

Major shifts in trade policy could slow markets or even trigger a stumble. Protectionist measures would also be felt differently across sectors. While the news raises warning flags, there is some evidence that revisions to trade policy will be modest, rather than the wholesale overhaul that would frighten markets.

NOT UNEXPECTED. The recently announced measures place tariffs of 30% on solar panels and 50% on washing machines. Neither move is unexpected, having gone through an extensive review process at the US International Trade Commission. Whirlpool had appealed for assistance on washing machines in 2013 and 2015, and two US solar panel makers filed for bankruptcy in 2017. George W. Bush used the same rule to put a tariff on Chinese steel in 2003, and Barack Obama hit Chinese tires with a 35% levy in 2009.

Also on the table is the North American Free Trade Agreement (NAFTA). The 23-year-old agreement may be in need of an overhaul, but the renegotiation framework initially called for successive rounds over weeks rather than an elongated process. At the core of the debate: The US wants to reduce its trade deficit while Mexico desires greater access to US markets.

While it seems like the US is at the forefront of the global trade revisionist

movement, the WTO annual report has shown that protectionist measures are rising globally. Economists and free traders worry that increased protectionism produces deadweight loss and inefficiency.

contracting trade. Global trade has in fact contracted of late relative to global economic growth. In recent years, the growth of economic interdependence has stagnated and even started to contract (see chart). The US trade deficit with China and Mexico has grown consistently during those years, but the deficit amounts to only 0.7% of GDP.

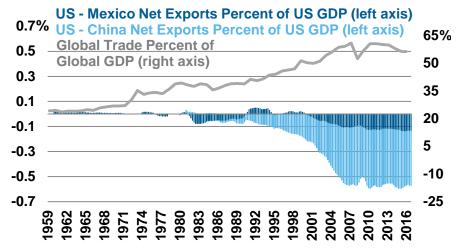
Should trade disputes escalate and global trade take a sharp protectionist turn, some US sectors are more likely to face headwinds. Those with a greater reliance on foreign revenue—like tech at 36.7%, materials at 31.2% and health care at 29.6%—are most at risk. More domesticoriented sectors could offer investors defensive positioning; for example, telecom with only 2.0% reliance on

foreign revenue, utilities at 4.9% and financials at 12.9%. Morgan Stanley & Co. notes that withdrawal from NAFTA, specifically, would adversely impact industrials, materials and tech, while favoring health care, real estate investment trusts, telecom and utilities.

OPPORTUNITY IN MEXICO. Trade uncertainty also offers an opportunity. The MSCI Mexico Index has underperformed the MSCI Emerging Markets (EM) Index by nearly 20% in US dollar terms in the past 12 months. Should Mexico successfully navigate the NAFTA talks and an election, equities could revert closer to the EM index. Unfavorable outcomes could harm Mexican assets.

A global move toward protectionist trade policy would likely be a drag on the global economy, but there are reasons to maintain optimism. First, US sanctions against solar panels and washing machines could be a signal to Chinese and other foreign competitors. If this does not escalate further, the economic effects will be minimal. Second, the once breakneck pace of NAFTA negotiations has slowed to something more appropriate for a massive and complex trade renegotiation. This reduces the likelihood of rash decisions and opens the possibility that sound policy will win out over rhetoric.

Trade's Share of GDP Has Begun to Contract



Note: Net exports and global trade are four-quarter simple moving averages. Source: World Bank, Bloomberg, Morgan Stanley Wealth Management as of Sept. 30, 2017 ON THE MARKETS / REGIONS

Europe Has Several Ways to Win

ANDREW SHEETS

Chief Cross-Asset Strategist Morgan Stanley & Co.

Europe 2018 doesn't have the policy catalyst of the US, the momentum of the emerging markets or the investor enthusiasm of Japan. Yet we think the region will shine this year. We expect European equities to outperform other regions, with Europe's currencies rising versus many developed market (DM) peers and Eastern Europe doing well relative to its emerging market (EM) peers. We also think European credit looks preferable to that of the US or Asia. Importantly, we think the positive story relies less on late-cycle exuberance and more on fundamentals and valuation.

a sustained postcrisis drought, measures of the Euro Zone economy are strong and broad-based. Corporate confidence and investment have rebounded, consumer spending is up and unemployment is back to 2005 levels. The government sector has broadly completed fiscal consolidation and replaced it with modest fiscal easing. The Euro Zone's current account surplus has surged to 3.1% of GDP.

This improvement appears to be built on a strong foundation. Consumer borrowing and corporate loan growth are rising, but off a low base. Fiscal policy is easing, but modestly. We see a strong case that the Euro Zone crisis—and later EM weakness—deferred a material amount of consumption and investment. There is still room for catch-up.

No regional story is uniform, and there are places like the UK that look weaker on measures of current account or consumer borrowing—but even here you have other interesting offsets.

BETTER EARNINGS. This better macro story should be aided by a better micro (corporate) one as well. European earnings held the ignominious distinction of falling between 2011 and 2016. A big reason: Euro Zone companies have outsized exposure to commodities, financials and the emerging markets.

All three have faced large, interlocking headwinds, and a lack of technology sector exposure didn't help. Still, these headwinds are shifting. Commodity earnings, led by energy, are improving. European banks have raised necessary capital and their earnings are up, and EM growth is reaccelerating, which is a boon to the 30% of European revenues that come from the region. As investors fret about companies "overearning" in a late-cycle environment, European earnings remain below the longterm trend, and generally haven't been flattered by buybacks or leveraging. After a record run for technology stocks, maybe less exposure isn't the worst thing.

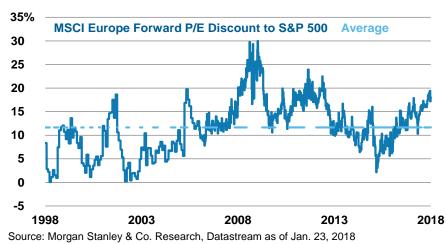
ATTRACTIVE VALUATION. The MSCI Europe Index trades at a 19% discount to

the US' forward price/earnings (P/E) (see chart) and 10% below the 30-year average of the region's relative multiples. The UK's FTSE 100 Index is cheaper relative to global stocks versus 20-year norms than any of 30 most-liquid global equity indexes we track.

This isn't just an equity story. The euro is 8% below our currency strategists' estimate of fair value despite good growth and the current account. The pound, the Swedish krone, the Norwegian krone and the ruble screen as historically cheap based on the real effective exchange rate, and European credit trades at similar spreads as US or Asian counterparts despite generally better fundamentals.

Finally, we think Europe has advantages in politics and policy. On politics, we think the trickiest votes for the region happened last year (France, Germany and the Netherlands), and while Italy faces fresh elections in March, a new electoral law reduces the risk of extreme outcomes. Contrast this with the US, where tax cuts—the legislation most able to unite the party in power—are now behind us and critical midterm elections lie ahead. On policy, 2018 could see new leadership at the Bank of Japan and we already have new leadership at the Federal Reserve. In contrast, European Central Bank President Mario Draghi's term runs into 2019. ■

European Stocks Sell at a Discount to US Equities



ON THE MARKETS / FIXED INCOME

Consider Cash

LISA SHALETT

Head of Wealth Management Investment Resources

Head of Investment & Portfolio Strategies Morgan Stanley Wealth Management

While stocks have been on a tear, our market indicators are warning of a correction. At the same time, after a prolonged period of near-frozen interest rates, it appears that yields may have become unmoored. The 10-year US Treasury yield is at 2.72%, the highest in nearly a year.

We note other data that could mean greater risks as well: higher-than-expected US core Consumer Price Index; a hawkish surprise from the Bank of Japan; European Central Bank pointing to a formal end to its Quantitative Easing; concerns that China, the world's largest investor in US Treasuries, is reassessing its allocations in light of growing US twin deficits and aggressive trade rhetoric; and the first glimpse of the new Federal Reserve leadership's thinking. Against this backdrop of an increasingly pricey US equity market and extremely rich credit market and rising global rates, the Global Investment Committee is focusing more on cash as a critical asset class for 2018.

advantage of cash is its instant liquidity and an ability to take advantage of correction. Cash can also provide portfolio ballast against rising volatility.

Importantly, after a long and frustrating decade, cash yields are more attractive in an absolute sense. Specifically, the federal funds rate and three-month US Treasury bill rate are now safely above zero, running at 1.37% and 1.44%, respectively. For the first time in seven years, yields on money market funds are above 1% (see

page 5). The two-year Treasury rate, which is the most sensitive to forward-looking policy, is hovering at around 2%, marking the first time since 2009 that the real yield—the nominal yield adjusted for inflation—is positive.

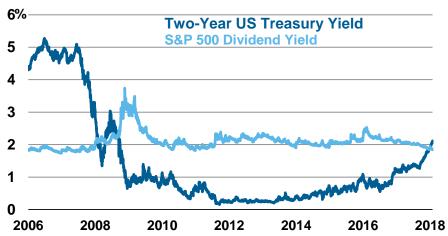
What's more, strong economic data suggest the rise in short rates is not over. The Fed continues to forecast three rate hikes in 2018 and, with GDP estimates moving higher, the neutral rate may also be advancing. Owing to policy normalization in Europe, the 10-year German Bund yield, long an anchor on US rates, has moved 55 basis points from its recent lows. All of this had led to a steepening at the very short end of the yield curve, which makes building ladders of staggering maturities between three months and three years a good strategy because annualized returns of nearly 2% can be locked in with minimal volatility.

ATTRACTIVE SHORT YIELDS. Short-term yields are now more attractive in a relative sense, too. For the first time in more than a decade, the two-year nominal

yield, at 2.11%, is meaningfully above the dividend yield on the S&P 500, currently 1.89% based on a 12-month Bloomberg estimate (see chart). Income-generating sectors like utilities and real estate investment trusts have begun to underperform. Telecom and media companies may see renewed interest from investors given their outsized benefits from tax reform. However, poor pricing dynamics—the result of intensifying cordcutting and over-the-top content consumption—may limit the attractiveness of these stocks. That means investors have to pursue dividend growers in their equity portfolios, which is a choice that brings with it the risks of stock-related volatility.

As is always the case, the biggest risk for investors going to cash is not simply opportunity cost but the possibility that nominal returns do not keep up with inflation. Granted, recent inflation expectation readings have been moving up as global unemployment falls, commodity prices rebound and supply-chain inventories remain in balance. A weaker dollar is also inflationary, given that the US depends on imports for two-thirds of its consumption. Should the advance in nominal rates fall behind increased inflation, causing real rates to go negative, the value proposition for cash could once again become tough.

At Long Last, Short Treasury Yield Tops S&P 500 Yield



Source: Bloomberg as of Jan. 29, 2018

ON THE MARKETS / FIXED INCOME

Remember Money Market Funds?

OLGA PUJARA

Fixed Income Analyst Morgan Stanley Wealth Management

SUSAN K. MCDOWELL

Fixed Income Analyst Morgan Stanley Wealth Management

Can you recall the last time you thought about money market mutual funds? Maybe 10 years ago? That's because, in the interim, the yields on these extremely short-term vehicles just about disappeared as Quantitative Easing and other aggressive monetary policy measures drove returns down to a handful of basis points (see chart). Between 2009 and 2015, the average annual return was less than five basis points, or 0.05%, according to Morningstar, Inc. In 2014, the average yield was one basis point. That's a \$10 annual return on a \$100,000 account.

HIGHER YIELDS AHEAD? However, in the past year, as the Federal Reserve raised interest rates three times, money market yields have begun to inch up. With the Federal Reserve pointing toward three more interest rate hikes this year, money market fund yields are likely to go higher. Though money market funds can invest in securities up to a one-year maximum maturity, the average maturity is far shorter. Taxable money market funds now have about a 30-day average maturity. For tax-exempt funds, it's under 20 days.

What is also new since you last considered money market funds is the US Securities & Exchange Commission's new rules, which notably distinguish funds marketed to individual, or retail, investors and those for institutional investors. Retail-only funds continue to maintain a constant net asset value (NAV) of \$1—a long-standing practice of the industry—as do funds that invest in government securities.

prime and tax-free funds, however, the NAV can float. This floating NAV has not been tested in a meaningful way since the new rules went into effect 15 months ago, because the money market has not suffered any interest rate or credit shocks. As

interest rates rise, the NAV of institutional funds could fall below \$1, introducing an element of uncertainty regarding the market reaction to this newer concept. In addition, money market funds may have the ability to enforce fees and exit gates as long as they give shareholders prior prospectus disclosures.

Importantly, what hasn't changed is that money market funds, whether retail or institutional, are investments—not bank accounts. As such they are not insured by the Federal Deposit Insurance Corp. or any other government agency.

Under the new rules, there are currently three types of money market funds: prime, tax-exempt and government.

- Prime funds and tax-exempt funds can be classified as institutional or retail. Prime funds invest in a wide range of short-term securities from bank certificates of deposit to highly rated commercial paper and asset-backed paper. They are generally taxable and offer the highest yields but also have higher credit risk.
- Tax-exempt funds, including federal tax-exempt and state-specific tax-exempt funds, invest in short-term municipal securities. As its name implies, federal tax-exempt funds are free of federal taxes but may be subject to state and local taxes. State tax-exempt funds, which invest primarily in municipal issues of a single state, are double or even triple tax-free. Double tax-free applies if free from federal and state taxes, and triple tax-free applies if exempt from federal, state and local taxes.
- Government funds, including
 Treasury-only funds, generally have lower
 yields than prime funds because they hold
 securities that have the backing of the
 federal government and, therefore, are
 deemed to have the lowest credit risk.
 Government funds are also least changed
 by the new rules. ■





Source: Morningstar as of Dec. 29, 2017

ON THE MARKETS / EQUITIES

Who Will Retain the Tax Cut's Benefits?

DENNY GALINDO, CFA

Equity Strategist

Morgan Stanley Wealth Management

KEVIN DEMERS, CFA

Equity Strategist

Morgan Stanley Wealth Management

ven before the corporate tax rate was cut to 21% from 35% late last year, the stock market anticipated it. In the fourth quarter, the top 25% of companies with the highest tax rate outperformed the bottom 25% of companies with the lowest tax rate by 5% (see chart). While lower taxes should be positive for corporate competitiveness, we believe that, for some industries, the earnings bump from lower tax rates is unsustainable. Thus, investors should consider the durability of this tax benefit, rather than its size.

SEEKING QUALITY. In our view, lowerquality companies are more likely to lose the benefits of the tax cut due to competitive forces that drive them to make price, wage or investment choices that

may prevent much of the tax savings from hitting the bottom line. This may cause the earnings growth of many presumed "tax winners" to disappoint this year, while high-quality companies that can preserve with more tax-related gains may beat expectations.

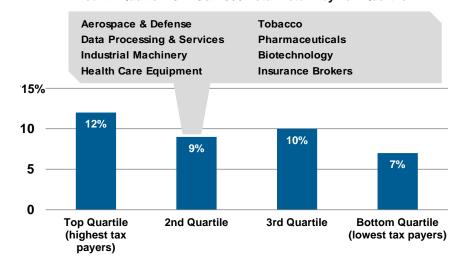
Therefore, we look to quality metrics to identify companies that are likely to retain the tax-related earnings improvement. We believe high-quality companies that not only have a higher relative corporate tax rate but also have the competitive moat to preserve these benefits may outperform going forward. Mike Wilson, chief US equity strategist for Morgan Stanley & Co., argues that overall earnings quality is apt to deteriorate this year and investors are overly optimistic about the impact of tax benefits today.

INDUSTRY DYNAMICS MATTER. To

identify the companies that have the potential to retain the tax cut, we look to Tax Reform's Long-Term Winners May Not Be Those

Fourth-Quarter 2017 S&P 500 Total Return by Tax Quartile

Who Performed Best in the Initial Round



Source: Morgan Stanley Wealth Management as of Dec. 29, 2017

operating margins and return on capital. Both of these metrics typically result from a company having competitive advantages like high barriers to entry, driven by leading market share, economies of scale or another differentiating factor. Typically, companies that have a unique product or offering have greater pricing power, which boosts operating margins or more efficient operations, which drives return on capital. While the manner in which these advantages are achieved differ by industry, we believe they are widely reflective of quality. When taxes are cut for companies with competitive advantages, there will be less pressure on margins and returns than for more normal companies. In other words, these companies will keep most of their tax-cut-related earnings benefits.

WHO IS THE MARKET MISSING? As the tax bill neared completion, analysts noted banks and retailers as big beneficiaries. Indeed, in 2017's fourth quarter, as the broad market gained 7%, retailers were up 14% and banks, 10%. However, we believe that it is less likely that they retain the entire tax benefit due to their inherently competitive business models.

In contrast, we believe pharma/biotech companies, payment networks and aerospace/defense companies may find more lasting benefits. Pharma/biotech companies tend to have drug patents to drive pricing power, revenues from which may be taxed at a favorable 13% rate if held in the US under the new plan. Payment networks draw the majority of their value from networks that are unable to be replicated due to their sheer size and reach, allowing for greater returns on capital and higher margins. Finally, aerospace/defense companies typically have large barriers to entry given their capital-intensive business and long-term contracts. While these industries may not have participated in the initial "tax trade," as the market realizes the durability of their tax benefits, they may be set to outperform a basket of purely high-taxpaying (but lower-quality) companies.

ON THE MARKETS / EQUITIES

The Big Debates Of 2018

Livery year, research analysts at Morgan Stanley & Co. compare their own views on the companies and industries they cover to consensus opinions. Those that differ from today's market views and may offer an investment opportunity have been collected in the report, *Big Debates 2018*. Below is a sampling of this year's questions. For more, ask your Financial Advisor for a copy of the full report.

Will Carve-Outs Drive a New View of Auto Stocks?

A collision of unprecedented secular, technological and regulatory forces has grabbed the attention of investors and senior leadership teams across the auto industry. The window of opportunity to reassess and restructure the business portfolio appears open and under serious consideration, with a number of important precedent transactions and other precursors having taken place in 2017. We expect this theme to amplify materially in

2018. The theme of "carve-outs," or doing an initial public offering of an existing business unit of a larger company, has become one of the single-most discussed topics among investors today. There is room to be excited, but there is also room to be skeptical.

Still, the market views past carve-outs as one-offs, and mostly in the US. However, we see it as a potentially global phenomenon, especially in Asia. We also see it as a way to reshape the auto industry, which is ripe for redefinition as an electro-driving, mobile supercomputing ecosystem. If the mammoth global automakers are Auto 1.0, we're talking about Auto 2.0.

Auto 1.0 firms have the opportunity to steal the thunder before potentially important tech firm entries/IPOs focus on their turf. Original equipment manufacturers and suppliers have a window into the venture capital community and, in many cases, have been investing directly or partnering with a

variety of Auto 2.0 start-ups. Through these interactions and partnerships, many of which are quite well developed, we believe auto leadership teams have developed a high awareness of the differences in skill sets, access to human talent and access to financial capital.—

Adam Jonas

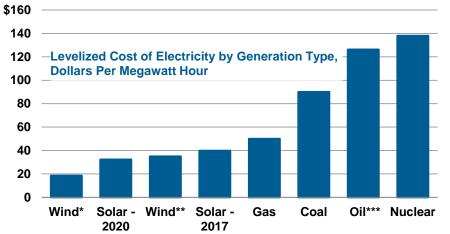
Will Utility Growth in Wind Power Slow?

The US power sector recently reached an inflection point with renewables taking over as the cheapest form of new generation across much of the country. The trend facilitates a structural shift in the demand profile for renewables: a move away from changeable policy drivers over to stable growth driven by increasingly attractive economics. Still, the market view is that tax reform's impact on financing mechanisms and challenging regulatory hurdles for approval of wind projects will prohibit or slow utilities' rates of deployment in the US.

In our view, increasingly favorable economics outweigh policy dynamics. The length of wind blades have increased much more rapidly than we, and the market, expected. In the middle third of the US, wind farms have an all-in cost that is less than a third that of a new natural gas-fired plant. Wind power is also well below the cost of power from large-scale solar farms (see chart).

As a result, we believe many utilities will pursue a "virtuous cycle"—spending more on wind farms, while in turn increasing earnings-per-share growth and lowering customers' bills—given how cheap wind power has become. The economics are simply too great to ignore. Additionally, states without formal environment goals tend to have the best wind conditions, alleviating the regulatory hurdle.—Stephen Byrd & Devin McDermott

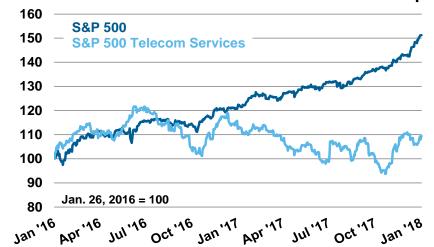




*With production tax credit **Without production tax credit ***Assumes \$50-per-barrel oil price Source: MS & Co. Research as of Dec. 15, 2017

Morgan Stanley

Telecom Stocks Left Behind in 2017 Market Run-Up



Source: Company data, MS & Co. Research, Thomson Reuters, Bloomberg as of Jan. 26, 2018

Is Bottom-Fishing Telecom a Good Idea?

Major telecom companies have underperformed the stock market by a wide margin since the beginning of 2017 (see chart), though they did get a relative-performance boost from the tax bill. Still, the sector's high dividend yields could suggest that investors fear dividend cuts. The common narrative: Wireline companies are "melting ice cubes" as cable competition, technology risk and high leverage combine to threaten cash flows and valuation.

Overall, we are cautious on telecom and believe selectivity is critical in evaluating the laggards. We are focused on merger synergies, tax reform and refinancings, as these should help support dividends for some companies despite ongoing competitive and secular challenges.

History also favors a bounce back, as we have seen an interesting pattern of mean reversion looking at historical performance. The Bell legacy companies have had eight years of double-digit underperformance versus the market since 1991—and 2017's performance is the worst since 2003. In the year directly following, the Bells then outperformed the market seven out of eight times, with a mean outperformance of 7.7%, and a mean absolute return of 8.9%.—Simon Flannery

US Oil & Gas Producers: Major Consolidation Ahead?

The market does not expect major consolidation, as indicated by compressed valuations and underperformance of exploration and production companies (E&Ps) relative to oil and the broad markets. However, in our view, conditions are ripe for industry consolidation, which we expect to commence this year.

Multiple reasons support consolidation. Significant capital efficiencies could be gained through scale for shale-focused E&Ps, which is becoming more relevant as the industry matures. Many companies could make accretive transactions without putting their balance sheets at risk. Today shale assets can be a source of free cash flow as opposed to their previous reputation as a large draw on cash flow. Finally, valuations of public producers have compressed, while oil prices and oil fundamentals have markedly improved.—

Evan Calio & Drew Venker

Can Offshore Oil Projects Work at \$60?

The market views offshore economics as inferior relative to shale. Brent prices north of \$60 per barrel will drive short-cycle shale investment higher until production exceeds demand and brings prices down, making any supply deficit short-lived. Since shale production can be

ramped up in months while offshore production could take years, the consensus is that shale will always win.

Or will it? In our view, the breakeven cost of offshore projects has fallen dramatically to below \$50 per barrel today from about \$90 in 2014, making offshore oil competitive with shale. While shale's shorter cycle gives it an advantage, we believe it is not enough to deter a resurgence in offshore drilling activity. We see evidence of that in oil company commentary, a pickup in final investment decision, an increase in offshore rigtendering activity in the past six months and the emergence of technology that can further reduce development costs. What's more, offshore drillers have been able to reduce the time for a project to deliver its first oil to less than 12 months from more than two years.—Igor Levi

Do Catastrophic Losses Mean Higher Insurance Premiums?

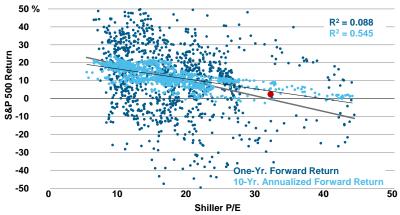
Despite record losses of more than \$130 billion from 2017 natural catastrophes including Hurricanes Harvey, Irma and Maria, the market view is that property and casualty (P&C) insurance companies won't be able to raise premiums. Indeed, rates did not rise after catastrophic losses in 2011, and the belief is that abundant alternative capital will enter the market to limit any upside to pricing. In addition, price/book valuations have changed little since Hurricane Harvey hit Texas in September, reflecting the muted pricing outlook.

In contrast, we expect to see higher pricing this year. We have seen 5%-plus increases in property reinsurance on the Jan. 1 renewals, and there also are signs of higher prices in the primary insurance market. Ultimately, we think the higher premiums will support growth in earnings per share and expansion of return on equity this year. Specifically, we estimate a 1%-to-5% rate increase could, on average, result in 6%-to-29% higher earnings. Even so, the improving fundamentals are yet to be reflected in P&C valuations, in our view.—*Kai Pan*

ON THE MARKETS / SHORT TAKES

High Shiller P/E Suggests Lower Long-Term Returns for Equities

The Shiller price/earnings (P/E) ratio is a valuation technique that aims to gauge whether stocks are cheap or expensive by comparing the current price of the S&P 500 to the S&P's average inflation-adjusted earnings of the past 10 years. Given that US equities are at all-time highs, what does this metric tell us now? Not much about the short term. In the chart, each plot point represents a year's return and the Shiller P/E. The widely scatted dark blue plots show there is a very low correlation (0.088) between the Shiller P/E and the one-year forward return. However, the correlation gets stronger in longer time periods as you can see in the light blue dots, which show 10-year forward annualized returns and a 0.545 correlation. With the Shiller P/E now at 32.25 (red dot), the regression suggests a 10-year forward annualized return of only 1.7%. At the least, it points toward a period of lower-than-normal returns.—*Rob Birns*



Source: Haver Analytics as of Dec. 29, 2017

Earnings Growth Was Strong, but Data Say It Could Have Been Stronger



Source: BofAML Global Investment Strategy, Bloomberg, Datastream as of Jan. 17. 2018

The global economy surprised to the upside in the second half of

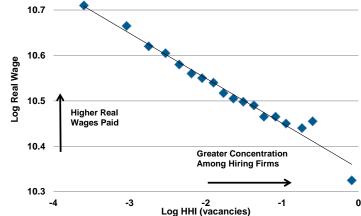
65 2017, bolstered by accommodative financial conditions. In keeping with the historical pattern, this economic momentum has translated

60 into stronger earnings growth. However, the 12-month growth in S&P 500 forward earnings has fallen short of what we might expect based on its long-term relationship with the US ISM survey, but those 50 earnings could still materialize in the next three to six months.

- 45 Looking further ahead, positive economic surprises cannot, by
 definition, continue indefinitely. Natural headwinds and gravity may
 40
- emerge later in 2018, which may slow future earnings growth. We 35 believe that the transition from this virtuous cycle of accommodative
- financial conditions and positive economic momentum to a less virtuous cycle may introduce some volatility into financial markets.
 - -Steve Edwards and Chris Baxter

Geographic Industry Concentration Tends to Reduce Workers' Wages

When only a few firms are hiring in a given geographic area, how does that impact wages? "Labor Market Concentration," a recent NBER Working Paper by José Azar, Ioana Marinescu and Marshall Steinbaum, applies an innovative analysis to provide an intuitive answer: When fewer firms are hiring for a given skill set in a given "commuting zone," wages paid for that job have tended to be lower. Just as higher industry concentration is known to decrease consumers' bargaining power, concentration may also reduce workers' bargaining power. As we highlighted in "The Capex Conundrum and Productivity Paradox" (November 2017), rising inequality, regulation and skewed investment incentives have posed significant headwinds for economic growth. While tight labor markets and a maturing economy are finally beginning to translate into higher wage growth, the longer-term picture may require additional policy action to fully address these trends.-Joe Pickhardt



Source: José Azar, Ioana Marinescu and Marshall Steinbaum, "Labor Market Concentration," NBER Working Paper No. 24147, December 2017

ON THE MARKETS / IMPACT INVESTING

Moving Into The Mainstream

LILY S. TRAGER

Director of Investing With Impact Morgan Stanley Wealth Management

I started my career in sustainable and impact investing in 2007. At the time, it was an uncommon approach to investing. I often felt like I was toiling on the fringes of finance. I was proud to be making a difference, but impact investing advocates like me found it tough to convince investors to pay attention.

The work has paid off. These days, sustainable and impact investing is increasingly integrated into mainstream conversations, with exploding interest among institutional and individual investors. In 2017, 75% of the individual investors polled said they're interested in using their investments to affect social and environmental change, according to a study by the Morgan Stanley Institute of Sustainable Investing. It's been rewarding to watch this field come into its own, and I fully expect the momentum to continue.

To look ahead, let's start with a look back at 2017. In the US, unemployment fell to a 17-year low, consumer confidence hit a new record high and the stock market climbed to new highs, too. Also in 2017: The average global land and ocean surface temperature between March and May was the second-highest such period since global temperature records began in 1880, according to the National Oceanic and Atmospheric Administration; CO₂ emissions rose for the first time in four years, according to the World Economic Forum; Hurricanes Harvey, Irma and Maria caused loss of life and widespread destruction; wildfires wreaked havoc in rain-starved California, destroying the homes of thousands; and cybersecurity risks increased, including ransomware attacks, which accounted for 64% of malicious emails in 2017, also according to the World Economic Forum.

Against this backdrop, we saw both individual and institutional investors redefine value as more than just short-term financial performance but also as creating positive environmental and social impact. We not only expect this trend of "sustainable investing" or "impact

investing" to grow significantly in the US, but also globally. In fact, according to the Global Sustainable Investment Alliance, Europe continues to be the dominant region for sustainable investing, with 53% of total global assets under management (AUM). In the US, funds managed with restriction screening, sustainability and thematic exposure are closer to 22% of assets under management (see chart).

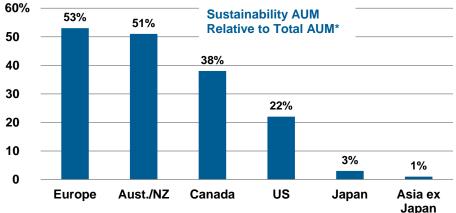
In Asia Pacific, the results are mixed. While Australia and New Zealand have 51% of global AUM, Japan is closer to 3%. Still, we expect Japan's share to grow significantly given that the Japanese Government Pension Investment Fund has made strong statements in support of integrating environmental, social and governance (ESG) criteria into their investment process.

In addition to acceleration in the growth of assets, here are a few growth areas across sustainable and impact investing we expect to see gain momentum in 2018:

Righting the inequality balance.

Growing disparities in income, well-being and living standards are among the greatest socioeconomic challenges that the world faces. A 2017 report by the Morgan Stanley Institute for Sustainable Investing, "Inclusive Growth Drivers: The Anatomy of a Corporation," examined the ways in which corporations influence economic opportunity and prosperity through the decisions they make about their employees, products, services, operations and governance. For example, a product's design-including how it is marketed and priced—all influence inclusive growth. Studies show that developing affordable products for price-sensitive consumers, such as the 4.5 billion low-income people around the world who collectively spend about \$5 trillion a year, can help firms improve their financial performance. Operationally, companies can also promote suppliers in an emergency—for example, implementing cybersecurity measures to safeguard customers' personal information.





*AUM = assets under management

Source: Global Sustainable Investment Alliance, MS & Co. Research as of December 2016

While the public sector has long been relied upon to reduce economic and social disparities, this report spotlights the private sector's role in driving inclusive growth. As both retail and institutional investors press companies to live up to their environmental, social and governance responsibilities—including employee wellbeing, supply-chain conditions and product affordability—the companies that positively influence inclusive growth can generate enhanced investor interest alongside other benefits, such as new market opportunities and reduced costs.

This year, we expect to see opportunities that seek to invest in companies that are driving broad-based economic prosperity through their own operations as well as their products and services. One example underscoring this opportunity was a recent letter to corporate CEOs from Laurence D. Fink, chairman and CEO of BlackRock, a major investment management firm. Fink called on CEOs to articulate not only their company's strategic goals to achieve financial performance but also to understand the societal impacts of their business, as well as ways that broad structural trends such as slow wage growth, rising automation and climate change affect economic growth.

Investing in gender diversity. The social, cultural and political dialogue about gender diversity was heightened in 2017.

In addition to the simple fairness and equity arguments, a case for diversity and equality within the ranks of corporate employees can also be anchored to the bottom line. To this end, MS & Co. Research has found that more women working and leading in the workplace is simply good business. For example, the research has demonstrated that over time, highly gender-diverse companies have better return on equity and lower stockprice volatility than those lower ranked.

Around the world, systemic gender biases and barriers are under increased scrutiny. Some 70% of the world's poor are women, according to Global Citizen, a social-action platform. What's more, 66% of global working hours are completed by women, for which they earn 10% of the world's income. In the US, according to Catalyst, a nonprofit that promotes an inclusive workforce, women are 51% of the population, earn 60% of all masters degrees and control or influence more than 70% of consumer spending, yet only 5% of CEOs in corporate America are women. Furthermore, women hold only about 26% of executive positions and 21% of board seats at S&P 500 companies.

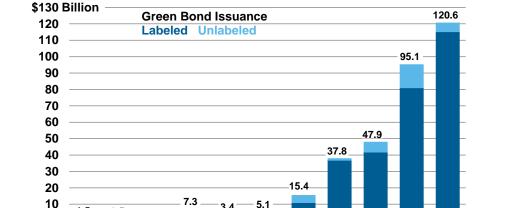
The good news is that improving gender equality can reverberate through the whole global economy. According to the Morgan Stanley Gender Diversity Investor Guide, reducing the gender gap in workforce participation by half could lead

to a GDP gain of about 6% by 2030—not to mention another 6% gain in GDP if we can close the gap within the next 15 years.

To be sure, there is momentum behind gender diversity, inclusiveness and parity issues across companies worldwide. As investors, we can play a role in advancing gender diversity, not only for global progress and prosperity, but also for the potential for long-term financial outperformance. Although still relatively small, the market for investment strategies integrating gender diversity into the investment selection process is growing in both size and sophistication. We expect 2018 will bring continued innovation around new gender-diversity strategies.

Mitigating climate change. In 2017, Morgan Stanley launched the Climate Change Mitigation Index, which highlights the potential for innovations that mitigate climate change and provide potential market-rate returns. This tool estimates that investments in renewable energy will reach \$5.1 trillion globally by 2030. Furthermore, the share of companies in the "green" construction market is expected to grow to 36% from 18% in 2018. For investors, the opportunities are twofold: energy conservation within existing infrastructure in developed economies, and integration of resource efficiency in new commercial construction in emerging markets. Investors could benefit from investing in companies that are positioning themselves for mitigating climate change.

Despite the US withdrawal from the Paris climate accord this past summer, countries and companies are funding carbon-reduction projects in part through issuance of green bonds (see chart). Estimates suggest that the opportunity in green bonds is vast: Approximately \$90 trillion will be required in infrastructure investment in the next 15 years in order to transition to low-carbon economies. In its analysis of 121 green bond issues, MS & Co. Research found that green bonds perform like regular bonds of similar maturities from the same issuer across most sectors. For issuers, green bonds can signal climate change mitigation as a part of their growth strategy.



Green Bond Issuance Has Taken Off in Recent Years

Source: Climate Bonds Initiative, Bloomberg New Energy Finance, MS & Co. Research as of

Dec. 29, 2017

1.5

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

ON THE MARKETS / COMMODITIES

Playing Late-Cycle Offense in Energy

LISA SHALETT

Head of Wealth Management Investment Resources

Head of Investment & Portfolio Strategies Morgan Stanley Wealth Management

Between 2014 and 2016, oil prices were in a bear market—the product of explosive growth in US shale-oil fracking and a failed OPEC strategy to sideline the frackers. Then, as prices started to recover in the past year, investor skepticism held back energy stocks. The sector had a slightly negative return in 2017 even as the S&P 500 ran up a nearly 22% total return (see chart). With master limited partnerships (MLPs), oil's advance was discounted as the performance rout dragged on for a third year, weighed down by concerns about capital intensity, cost of capital and access to the capital markets.

should investors read the latest 20% move in oil prices? We see it as the product of good global growth, a weak US dollar and severe winter weather in the US. Also important is the apparent efficacy of "OPEC 2.0," the cartel's latest attempt to

boost prices through production cuts. As a result, the Global Investment Committee has turned more sanguine, adopting Morgan Stanley & Co.'s new forecast for a range of \$60 to \$70 a barrel for West Texas Intermediate (WTI) oil, up from the prior \$50 to \$55. Under this framework, this year's target for Brent oil is about \$75 per barrel. In turn, we also raise our confidence in energy stocks and MLPs.

To be sure, producers are in charge. This year, global inventories are expected to fall below 2.8 billion barrels, the trailing five-year average, according to the US Energy Information Administration (EIA). The oil market ended 2017 with a deficit of 500,000 barrels per day, which has not been filled. Global growth appears to be accelerating, with positive economic surprises persisting through January in nearly 75% of countries monitored by the IMF. Global GDP estimates, a key input for oil-demand forecasts, are now inching closer to 4% for 2018.

SUPPLY CONSTRAINTS. As for supply, compliance with OPEC's cuts remains

Venezuela also raises concerns about its production, while US shale companies will ultimately restart the pumps in response to higher prices; for now they have been focusing on cash flow and profits. The Baker Hughes Rig Count of oil rigs is 759, down from a 768 peak this past August. All told, demand looks set to outstrip supply by about 200,000 barrels a day for a second consecutive year. That the US dollar is at a three-year low further supports prices.

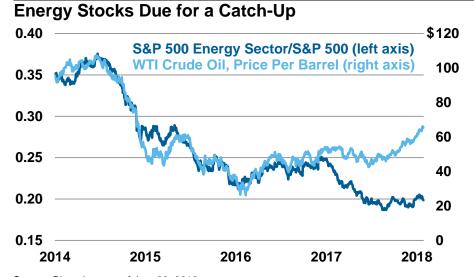
Technical factors also support prices.

better than expected. Political instability in

Technical factors also support prices. Typically, the market operates in "contango"—prices in the future are assumed to be higher than they are today. This creates incentives for making investments, disciplining supply and building inventories. However, when inventories fall rapidly, the spot prices are higher than the expected future prices, which is "backwardation." In late December, the oil markets were in backwardation. When supply/demand is tight and inventories are falling, the markets put a price premium on immediate delivery, which in turn accelerates inventory drawdown.

STRENGTHENED CASE FOR ENERGY.

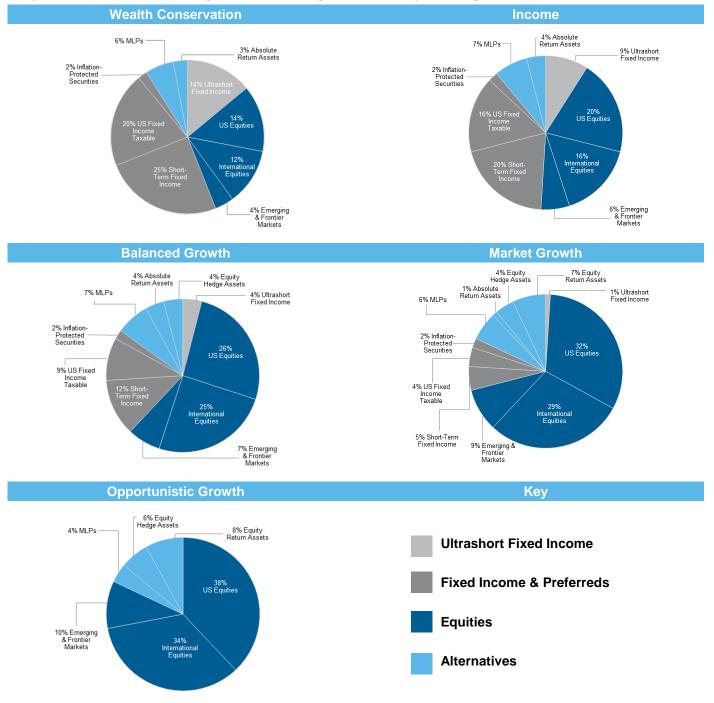
Higher prices strengthen the case for both energy stocks and MLPs. Energy stocks are now seeing better earnings-revision momentum and breadth. What's more, they sell near 50-year lows on price/book value relative to the S&P 500. Furthermore, Martijn Rats, MS & Co.'s global oil strategist, notes that energy equities tend to outperform the S&P 500 by more than 6% when futures are in backwardation. In contrast, he sees 4% relative underperformance during periods of contango. MLPs, which also have underperformed, remain good for investors who want income and/or real assets. During the next two years, we expect MLP growth in cash flow per share of about 7%. With the pass-through benefits of the new tax law, some estimate annual growth could be more than 10%.



Source: Bloomberg as of Jan. 29, 2018

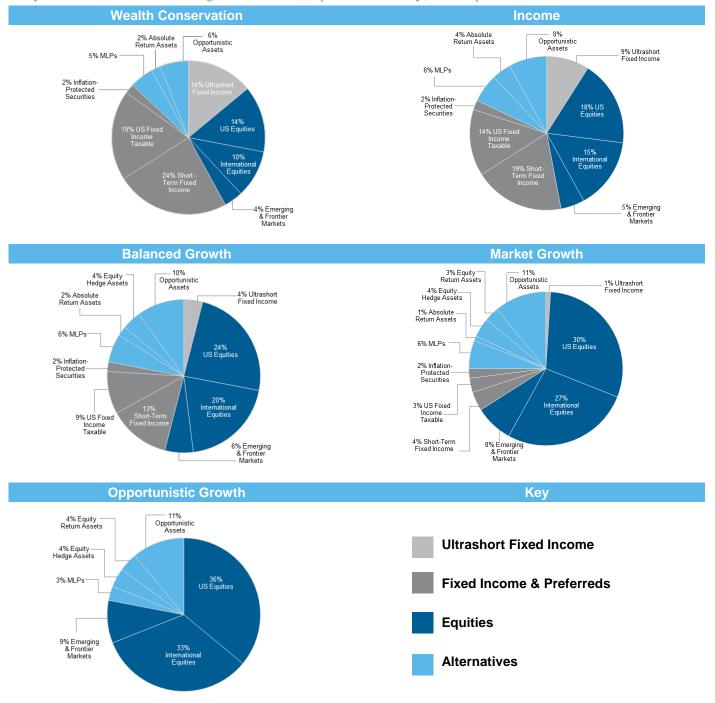
Global Investment Committee Tactical Asset Allocation

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



Source: Morgan Stanley Wealth Management GIC as of Jan. 31, 2018

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



Source: Morgan Stanley Wealth Management GIC as of Jan. 31, 2018

Morgan Stanley

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Equal Weight	US equities have done exceptionally well since the global financial crisis, but they are now in the latter stages of a cyclical bull market. While the acceleration of the Trump/Republican progrowth agenda has helped us achieve our 2,700 price target for the S&P 500 earlier than expected, it ironically brings the end of the cycle closer. In addition, sentiment is much more bullish than it was a year ago, leaving much less upside to our 2018 year-end target of 2,750.
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, which is necessary for the central banks to exit their extraordinary monetary policies.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 24 months and for the year to date. With the US dollar appearing to have made a cyclical top, global growth and earnings accelerating, and financial conditions remaining loose, we think EM equities will continue to keep up with global equity markets but are unlikely to lead as strongly.
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. While interest rates have remained exceptionally low, recent US economic data have been very strong recently and the Fed is now raising rates at an accelerating pace. Combined with our expectation for the European Central Bank to taper its bond purchases later in 2018 and the Bank of Japan likely to raise its yield target, higher interest rates are likely this year.
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 deflationary fears having become extreme in 2015 and early 2016, these securities still offer relative value in the context of our forecasted acceleration in global growth and our expectations for oil prices and the US dollar's year-over-year rate of change to revert back toward 0%. That view played out in 2016 and 2017 but has not yet run its course.
High Yield	Underweight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently took our remaining high yield positions to zero as we prepare for deterioration in lower-quality earnings in the US led by lower operating margins. Credit spreads have likely bottomed for this cycle.
Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Underweight	Real estate investment trusts (REITs) have underperformed global equities since mid 2016 when interest rates bottomed. We think it is still too early to reconsider our underweight zero allocation given the further rise in rates we expect and deteriorating fundamentals for the industry. Non-US REITs should be favored relative to domestic REITs.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded sharply from a devastating 2015 but, with oil's slide, performed poorly in 2017. With oil prices recovering again and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. The Trump presidency 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. As volatility becomes more persistent in 2018, these strategies should do better than in recent years.

Source: Morgan Stanley Wealth Management GIC as of Jan. 31, 2018

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

Index Definitions

For other index, indicator and survey definitions referenced in this report please visit the following: http://www.morganstanleyfa.com/public/projectfiles/id.pdf

Risk Considerations

Alternative Investments

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be suitable for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

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

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

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

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

Hypothetical Performance

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

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

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

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

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

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.

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

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually suitable only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related 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.

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

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

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

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

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

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.

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.

Investing in foreign and emerging markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. These risks are magnified in **frontier markets**.

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.

Besides the general risk of holding securities that may decline in value, **closed-end funds** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

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.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

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.

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