

On the Markets

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Manage the Extremes

I tell my teenage sons all the time, “You need to learn how to manage the peaks and valleys in your life because, if you don’t, it will lead to some real disappointments.” I’ve noticed that most self-help books and experts on the subject tend to focus on getting people through the bad times—on how to pick oneself up after a fall. Part of the problem is that few people appreciate when they’re on a high, or why, and that can be just as damaging as failing to bounce back from a low.

In the investment world, there is probably no better example of such a dilemma than the performance of the US and international equity markets. Rarely, if ever, have we witnessed a divergence in performance like that we have experienced during the past 10 years. US equity investors are on top of the world at the moment, while international investors are likely going through heavy bouts of doubt.

I appreciate that these trends often go on for longer than one can imagine. In fact, I remember saying this same thing back in early 2016, right before a great two-year run for international equities both in absolute terms and relative to the US. That run came to an abrupt end six months ago, just as trade tensions began to build.

Investors have retracted from international stocks since then on the belief that tariffs will hit these regions much harder than the US. While it’s easy to see why investors might think that, the reality is, in a full-blown trade conflict, every region will feel its effects. We think the US market is playing its typical “safe haven” role for investors who become concerned about the outcome of uncertain global events or risk. The US also has better earnings visibility right now thanks to the corporate tax cuts—but we think this may be creating a false sense of confidence for investors as we peer ahead.

The bottom line is that international stocks have now priced in considerably more risk for escalating trade tensions, which actually makes them less-risky investments, in our view. So, while it can be painful to fight these moves when they get into these seemingly unstoppable trends, we remind ourselves how much more painful it is to be trapped in them when they reverse. The good news is both emerging markets and international developed markets have outperformed the S&P 500 by 3% since Sept. 11—a sign that the trend may finally be turning. ■

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ON THE MARKETS / EQUITIES

The Market Today vs. the Dot-Com Era

With the current economic expansion and bull market now among the longest on record, it's natural to consider how this cycle could end. Given many of the headlines dominating markets this year—tech leadership and crowding, emerging markets currency crises, outperformance of US versus international—parallels to the '90s

seem clear. While there are many differences, there are also notable similarities. We review how equity market performance this cycle has compared to the '90s, and what the post-dot-com experience suggests about how today's cycle may play out.—*Vijay Chandar, Spencer Cavallo and Matthew Brookman*

Market Leadership Now Looks Similar to That in the Late 1990s

Index	1995-2000 Bull Market	2013-2018 Bull Market	2000-2002 Peak to Trough	2000-2007 Peak to Peak
NASDAQ*	41.0%	18.5%	-42.0%	-6.8%
Russell 1000 Growth	32.3	18.1	-31.5	-3.9
Russell 1000	27.6	15.6	-20.7	2.2
S&P 500	27.5	15.6	-20.6	1.9
Russell 1000 Value	22.0	13.0	-9.6	8.0
MSCI ACWI	18.4	10.7	-22.0	4.5
Russell 2000	17.3	14.5	-13.5	6.8
MSCI EAFE	12.5	7.3	-22.0	6.3
MSCI ACWI ex US	11.9	5.9	-21.7	7.7
MSCI Emerging Markets	2.4	2.6	-20.4	15.5

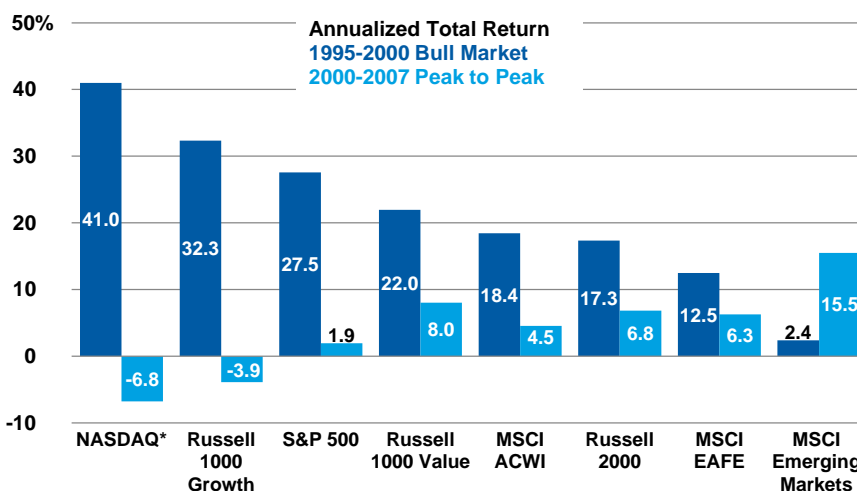
Leadership during the bull market that started in 2013 looks remarkably similar to that of the dot-com years, 1995 through 2000. In both periods, the tech-heavy NASDAQ Composite significantly outperformed the broader market, growth dramatically outperformed value and US equities dramatically outperformed international ones (see chart). In fact, the ranking of total returns across select major market indexes is almost identical in the two periods. The notable difference this cycle is that small caps have broadly performed in line with the S&P 500, while in the '90s they dramatically underperformed large caps. Despite these similarities, the current bull market does not appear as extreme as the dot-com bubble. In 1995 to 2000, the S&P 500 gained 28% and the NASDAQ gained 41% on an annualized basis; those numbers are "only" 16% and 19%, respectively, in this cycle.

*Price returns only

Source: FactSet, Bloomberg as of Sept. 25, 2018

Leaders in the Dot-Com Era Became the Laggards in the Subsequent Cycle

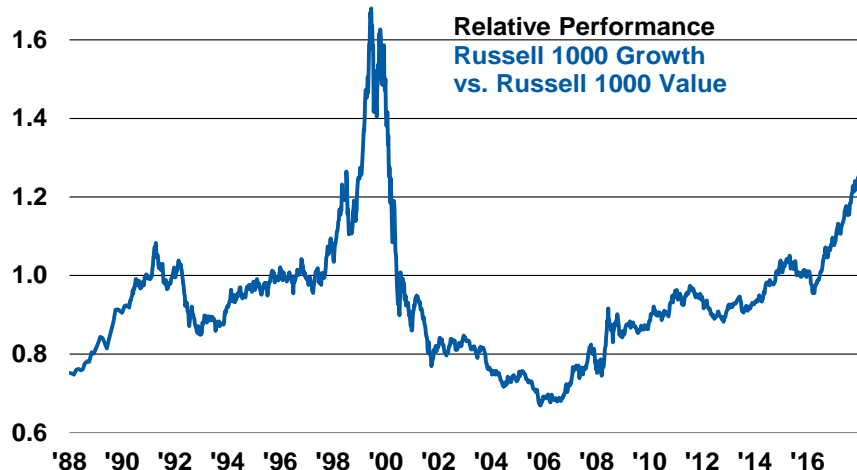
While tech, growth and US equities dramatically outperformed the rest of the market in the 1990s, the 2000s saw a sharp reversal of these trends. The chart to the right shows the annualized total returns of certain equity indexes during the dot-com rally and subsequent bust period. Interestingly, the indexes that performed best during the run-up also tended to fare worst during the following drawdown. Convincingly, this relationship also tended to hold if you instead looked at the subsequent peak-to-peak performance in the 2000-to-2007 cycle. Looking ahead, we think the relative picture might follow a similar pattern, with those areas of the market that have been out of favor reversing in the coming year and outperforming the prior market leaders.



*Price returns only

Source: FactSet as of Sept. 25, 2018

As in the Dot-Com Run-Up, Growth Stocks Have Far Outperformed Value

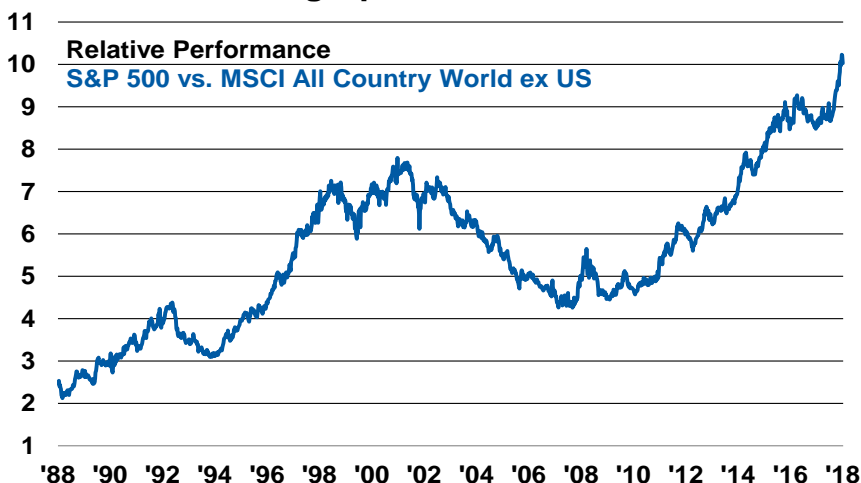


Source: FactSet as of Sept. 25, 2018

Growth stocks dramatically outperformed the market during the dot-com bubble, and this level of performance has been mirrored in the current bull market. In fact, on a relative basis versus value stocks, growth is the highest it has ever been except for the late 1990s (see chart). In valuation terms, on a forward price/earnings basis, growth is more expensive than it has been in 17 years. The Global Investment Committee believes this trend is due for a reversal, and as a result lowered their allocation to growth while raising exposure to value in a rebalancing of its tactical models in July. History suggests chasing these overheated sectors of the market is unwise for investors with intermediate- or long-term horizons. As a result, we would advocate allocating to value over growth instead of piling into an extended, expensive segment of the market.

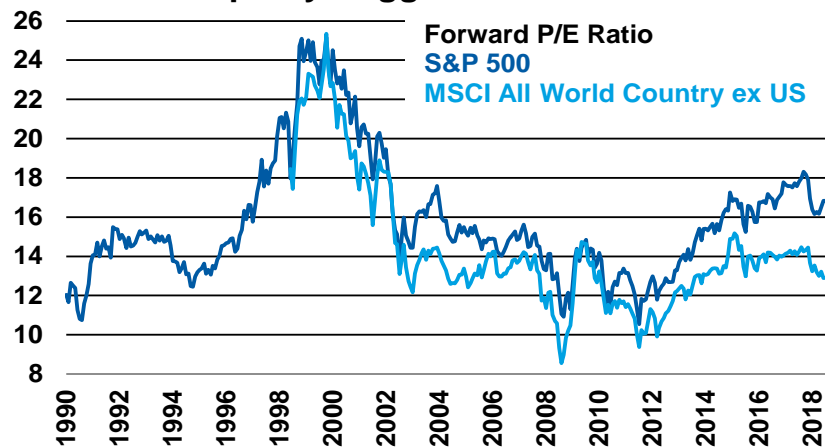
US Stocks Have Far Outrun Non-US Stocks, Setting Up a Potential Reversal

In the same vein, the relative performance of US stocks versus the MSCI All Country World ex US Index is at its highest level in history (see chart). A confluence of factors has driven this move: among them, trade fears, a strengthening dollar and currency crises in certain emerging market nations. In addition, US earnings growth this cycle has also far outpaced the rest of the world, which justifies some of the US' relative performance. However, as with growth versus value, we believe international equities are poised for a performance reversal versus US equities. From a valuation standpoint international equities collectively are compelling. The forward P/E ratio versus US stocks sits at an all-time low. For long-term investors, this looks to be an attractive entry point to diversify globally.



Source: FactSet as of Sept. 25, 2018

Valuation Disparity Suggests a Potential Greater Opportunity Outside the US



Source: FactSet, Bloomberg as of Sept. 25, 2018

Today's bull market has been driven by earnings growth to a much larger extent than the dot-com era when the rally was largely sentiment-driven multiple expansion. In the dot-com era, the forward P/E on the S&P went to 25 in 2000 from 12.5 in 1995, a far more extreme move than this cycle's expansion move to 17 today from 13 in 2012 (see chart). International equities have experienced minimal multiple expansion during this cycle: The forward P/E on the MSCI ACWI ex US increased to 12.9 today from 11.7 in 2012. Therefore, while US stocks aren't as extended as they were at the peak of the dot-com rally, the disparity in valuations today is a reason why we see potentially greater opportunity in international equities relative to the US.

Japan's Journey From Laggard to Leader

JONATHAN GARNER

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Morgan Stanley's macro and micro analyst teams agree that Japan is the most interesting and underappreciated turnaround story in global equity markets. We have been observing Japan's journey to improved productivity and return on equity (ROE) for several years now. In our view, Japan has already passed many important milestones:

- Deflation has ended.
- We are seeing sustained gains in private sector capital spending for the first time in three decades.
- Japan's total factor productivity (TFP) and labor productivity growth are now among the highest in the G7.
- Return on equity for the MSCI Japan Index has more than doubled in the past

six years, to 9.8% from 4.4% in 2012. This also narrows the gap with other developed markets to 2.5 percentage points from 7.6 percentage points, as measured by the MSCI World Index.

- In the past five years, 15 of 24 listed equity sectors in Japan have improved their ROE versus global peers.

By 2025, Japan's journey should be near completion and the success of the turnaround will become embedded in market prices, which it is not today. At the macro level, we expect a further acceleration in nominal GDP growth, driven by rising investment, further gains in labor-force participation and skilled immigration. Drawing on our AlphaWise survey, we see that Japan is uniquely positioned to take advantage of its ageing population by substantially raising the share of investment devoted to artificial

intelligence (AI), robotics and automation.

At the micro level, we think the ROE of Japan's listed equities can reach 12% in this cycle, converging with that of the MSCI World Index and leading to a price/book ratio of 2.15 versus the current 1.35. Our views put us strongly against the consensus opinion that Japan should remain underweight in global equity portfolios due to perceived intractable challenges of poor demographics, high public debt, historically weak corporate governance and sluggish ROE.

GDP GROWTH. Further gains in productivity and investment should boost growth. We think Japan's nominal GDP in 2025 will be around ¥640 trillion, or 17% higher than in 2017. Contrary to the consensus, which emphasizes demographic challenges, based on 2013 to 2017, Japan's productivity growth trend has already risen to among the highest in the G7. Improvements have been made in average labor productivity growth on a per-hour basis and TFP growth. We think labor productivity growth is more important in assessing growth potential than the level of labor productivity, as

Morgan Stanley Economic and Market Outlook for Japan Through 2025

Nominal GDP Nominal GDP is expected to be ¥640 trillion by 2025, up 17% from 2017

Productivity Growth Labor productivity growth is expected to average 1.7% in 2021-2025, compared with 1.0% in 2013-2017

Currency Outlook Higher productivity will gradually drive negative real rates higher, which will increase the opportunity cost of holding foreign assets, leading to yen strength in real effective exchange rate terms

Interest Rates Gradual increase in inflation, with tight supply/demand dynamics, should keep the term premium low enough to maintain nominal long-term rates in the 0% to 1% range

Capital Spending Our AlphaWise survey suggests large firms' capital spending growth will rise to a 7% compound annual growth rate in the next three years from 5% in fiscal 2017

Automation Our AlphaWise survey suggests large firms will double their share of capital spending on automation, robotics, artificial intelligence and the Internet of Things by 2020

Listed Equities' Return on Equity Base-case ROE for the MSCI Japan Index is expected to reach 12.0% by 2025 from the current 9.8%

Return on Equity by Industry Group Among the large sectors, we expect capital goods, tech hardware, banks, materials and pharma to improve ROE the most between now and 2025, while ROE for autos and telecom is likely to fall

Equity Valuation MSCI Japan's price/book value ratio, which is 1.35 now, could increase to 2.15 by 2025, the highest since the late 1990s

Source: Morgan Stanley & Co. Research as of Sept. 11, 2018

international comparisons have measurement issues.

Our base-case forecast suggests that labor productivity growth can rise further to average 1.7% in the 2021-to-2025 period, up from an average of 1.0% between 2013 and 2017. Total hours worked will be on a moderately declining trend, with adverse domestic workforce trends offset by rising participation and inflows of foreign workers.

Meanwhile, we think rising investment can lead to increased capital intensity and overall TFP growth, which we believe can be sustained at 1.0% in 2021 to 2025. With the economy maintaining an exit from deflation, this opens the door to Japan achieving an average sustained nominal GDP growth rate in this period of 2.2%, versus the 2.0% compound annual growth rate (CAGR) of 2013 to 2017 and negative growth from 2008 to 2012.

CAPITAL SPENDING. One of the critical drivers of recent productivity growth has been private sector capital expenditures, and we expect this to continue. Real private capex has now increased for seven consecutive quarters through 2018's second quarter—at a pace well above the previous trend. This is the first such sustained growth since the “bubble economy” of the late 1980s. While Japan's net capital stock had been depleting through 2013, it has now switched to an upward trend. Our proprietary AlphaWise survey suggests large-cap firms will further accelerate capital spending at a 7% CAGR through 2020, with a focus on international market development and productivity-enhancing investments.

This spending lifts service sector productivity, too. So far, Japan's productivity improvement has mainly been driven by manufacturing sectors. In service sectors, deflation-era business models built on cheap, nonregular labor are being challenged. With the rising cost of labor relative to capital, many service-sector companies are finding it necessary to step up spending, streamline excessive service offerings and adjust their business models. Moreover, we expect the average productivity growth of nonmanufacturing

sectors to rise over the medium term as companies that fail to adapt to the new environment exit the market.

CASHLESS. To improve productivity, Japan wants to go cashless. Reducing the cost of processing cash is an important part of productivity reforms. The government aims to raise the cashless settlement rate to 40% by 2025 from 21% currently. We think the government's target will be tough to hit, but 30% is possible. However, there is upside to our forecast if we include payment methods such as direct links to bank accounts and mobile wallet prepaid charges. Megabanks are responding to the cashless era by developing digital currencies.

The enhanced interaction between labor and machines is important for productivity growth. Advances in AI, robotics and related automation techniques are likely to change the nature of economic activity not only in Japan but globally. Japan has long been a leader in factory automation, particularly in autos and capital goods. Moreover, many companies, including those in services, are accelerating their labor-saving efforts because of manpower shortages—unemployment is at a 30-year low—and rising wages.

AI, ROBOTS AND AUTOMATION. Our AlphaWise survey suggests that large firms expect to more than double the share of their capital allocation going to automation, robotics, AI and the Internet of Things in the next three years to 22.8% of the total, up from 10.6% now. The survey also shows that both large firms and small/mid-sized firms place a heavy emphasis on capital spending for productivity improvement. Japan has many companies with strong competitiveness in robotics, mainly in hardware.

In mobile network technology, 5G networks are expected to launch by 2020, and commercial applications that leverage the performance of these networks are under development. Highly advanced frequency technology will be crucial as networks transition to 5G.

We think productivity growth will gradually drive negative real rates higher, which will increase the opportunity cost of

holding foreign assets, leading to repatriation flows and a stronger yen. As is typical for a deflationary, capital-exporting economy, Japan has seen its real effective exchange rate depreciate during the past two decades. The yen has developed safe-haven characteristics due to Japan's sizeable foreign asset holdings, which require hedging when international asset volatility is rising. In addition, the scale of its external asset holdings is likely to support its income balance for many years to come through dividend and coupon payments, thus creating demand for yen.

SAVERS TO CONSUMERS. Japan's ageing population suggests we may have seen the peak in savings contributions from the working population. The pace of withdrawals from pension fund assets should increase, outpacing new money coming in. Pension funds have increased their foreign holdings progressively, and they are now at record levels. The older population also suggests it will now convert from being a saver to a consumer, requiring the liquidation of assets. To the extent that these assets are held abroad, this will lead to repatriation demand pushing the yen upward.

SLOWLY RISING RATES. We expect gradual inflation but tight supply/demand to keep the term premium low enough to prevent nominal long-term interest rates from rising dramatically, even if higher productivity growth does exert some upward pressure on our expectation for real short-term rates. Our expectation of a gradual increase in inflation to 1.4% by 2025 still leaves it well below the Bank of Japan's current 2% target. This suggests that balance sheet normalization will be slow. Moreover, we expect domestic investors to resume their accumulation of Japanese government bonds as yields rise gradually. Together, these elements suggest that the 10-year yield will remain anchored within a tight range of 0% to 1.0% through 2025. ■

This article was excerpted from a Morgan Stanley & Co. Blueprint, “Japan's Journey From Laggard to Leader,” Sept. 11, 2018.

ON THE MARKETS / EQUITIES

Select Emerging Market Plays May Be Enticing

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For global equity markets, 2018 has been a year of divergence. The US has vastly outperformed international stock markets, with emerging markets being the worst performer (see chart). Even though there are macroeconomic and political risks facing many countries, the Global Investment Committee believes that the US/non-US performance gap is unsustainable and will narrow. Even so, investors need to be selective, especially in emerging markets.

We have witnessed several severe casualties in the emerging markets this year, particularly in Turkey, down 42.9%, and Argentina, down 47.5%. While we don't see contagion risks, we avoid regions with weak fundamentals. We favor Asian economies, which make up 75% of the MSCI Emerging Markets Index. Within Asia, we seek to invest in quality growth companies at reasonable prices:

Asia Pacific banks. High-quality banks in Asia Pacific appear particularly attractive because the region's rising income and wealth, deepening capital markets, financial sector reform and advancing technology platforms are positive for the banking sector. In our view, the price declines due to trade tensions, rising US interest rates and a stronger US dollar have created opportunities in some of these banks. Importantly, valuations no longer discount wider net interest margins, driven by rising rates, or fee growth from wealth and capital market businesses. We are seeking quality banks with growth at a reasonable price, and thus favor select institutions in India, Hong Kong and Singapore.

Chinese consumer and internet stocks. On a contrarian note, we believe that China's consumer and internet stocks offer a strong opportunity. While Morgan Stanley & Co. strategists remain cautious on China's equity market, we believe the correction in China consumer and internet

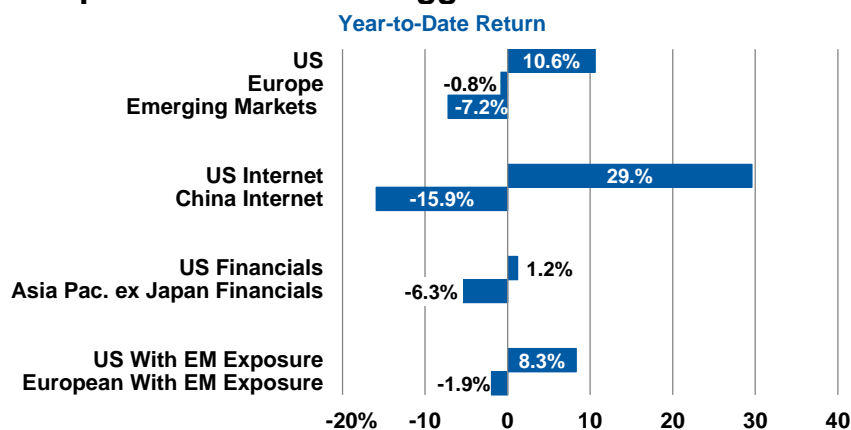
stocks creates a better risk/reward proposition. From a long-term perspective, growth prospects for China remain significant, supported by rising income levels and online penetration. Indeed, these secular tailwinds create a long runway of growth for the sector.

Despite this, concerns about US-China trade confrontation, regulatory issues and valuations have led to a 17.2% decline in these stocks for the year to date. The performance spread between similar US and Chinese companies has widened to a five-year low. In our view, a number of these concerns are either temporary or currently priced into the valuations. While it is impossible to know the bottom, we believe the fundamentals of these businesses are still strong and risk/reward looks attractive at current levels.

European multinationals. Many European multinationals have significant business in the emerging markets, and prices for some of them are depressed due to macro exposures or negative currency impacts. While these companies aren't domiciled in the emerging markets, they may still benefit from the fundamental themes of favorable demographics, urbanization and improving productivity; this should lead to greater long-term growth, particularly as developed markets face unfavorable demographic headwinds. The recent decline in the stock prices of some of these high-quality companies may be a chance to add them at an attractive valuation from a longer-term perspective.

Admittedly, these companies are exposed to negative currency impact on near-term earnings; however, many of these companies hedge currency exposure, dampening this risk. Additionally, over the long term they can adjust the prices of their products and manufacturing costs to mitigate this impact, thus maintaining or even increasing profit margins. Secular tailwinds remain intact, and we view recent weakness in European consumer and financial companies as providing attractive entry points. ■

EM Equities Have Been Laggards This Year



Source: Bloomberg as of Sept. 27, 2018

ON THE MARKETS / EQUITIES

BDCs Open Doors to the Middle Market

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In recent years, investors have often focused on attractive yield, total-return upside or differentiated credit exposure. One investment that has benefited from a desire for all three is the publicly traded business development company (BDC). There are now 49 BDCs managing more than \$60 billion in assets. They could be appropriate for risk-tolerant, well-diversified income-oriented investors.

Following mixed results in 2017, BDCs have performed well this year—7.6% for the Wells Fargo BDC Total Return Index (see chart). This compares with high yield bonds' 2.8%, large-cap US financial stocks' 1.2% and US small caps' 11.1%. In addition to easier leverage parameters, which could improve coverage, fundamentals for many of the larger BDCs have been stabilizing. Meanwhile, valuations are mixed but far from challenging, in our

view. The sector has an 8.6% average yield and a 10.2% average discount to net asset value (NAV).

MIDDLE MARKET EXPOSURE. Publicly traded BDCs are exchange-listed portfolios that invest primarily in the noninvestment grade debt or equity of private "middle market" companies. BDCs seek to finance these businesses while in turn generating pass-through income and returns derived mostly from the interest on underlying loans. Congress created the BDC structure in 1980 and, in so doing, allowed individual investors to make liquid investments in private businesses.

The middle market is the middle third of the private domestic economy and typically companies with earnings before interest, taxes, depreciation and amortization between \$10 million and \$100 million per year. This diverse universe, spread across industries and geographic regions, offers opportunities that may be better insulated from macro headwinds than large global corporations. Loans to middle market borrowers, from first liens to

subordinated debt, are priced to compensate lenders for greater liquidity risk, and yields can be compelling.

DISTINCTIVE FEATURES. Differences between BDCs and other actively managed investment companies include the "70/30" rule, which generally results in approximately 70% of investments being allocated to private US firms or public companies with market caps below \$250 million; a 1:1 debt-to-equity regulatory leverage limit, which is set to expand to 2:1; and the option to employ either internal or external management, with fluctuating incentive fees built in for external managers. Portfolios of public BDCs launched via initial public offerings trade at market prices rather than NAV. However, they get a fair-value review every quarter. Recently, 37 BDCs were at discounts to last reported NAV. Untaxed at the corporate level, BDCs must pay out at least 90% of realized gains and income to maintain their status as regulated investment companies and at least 98% to avoid excise taxes.

Looking ahead, we see a favorable mismatch between fixed-rate leverage costs and floating-rate holdings. Although each portfolio is different, we estimate that nearly 85% of BDC debt holdings are floating rate but that around half of their borrowing is fixed rate. As such, rising short-term rates may benefit this group. Longer term, the industry could also be ripe for ongoing consolidation, as experienced private equity and credit advisors have begun buying or assuming management of other BDC portfolios.

AMPLE RISKS. Potential catalysts notwithstanding, it is important that investors remain cognizant of ample risks. As with virtually all other leveraged credit sectors, BDCs remain vulnerable to excessive debt, heightened volatility, intermittent illiquidity and unfavorable lending terms, among other factors that can come to the fore late in the business cycle. Consider exploring this type of investment, but do so with caution. ■

BDCs Have Been Having a Solid Year



Source: Bloomberg, Morgan Stanley Wealth Management CEF Research as of Sept. 27, 2018

What Will the Next Crisis Look Like?

ANDREW SHEETS

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Anniversaries provide an opportunity to reflect on how things were in the past and how they will be in the future. The 10 years since the Lehman Brothers bankruptcy is no exception, but given the volume of retrospectives on Lehman itself and the causes and implications of its collapse, we are taking a slightly different approach. Lehman was a reminder that conditions can change quickly and that cycles ebb and flow. So, what will be different when the next downturn hits?

DEBT. The first difference ties to an old saying in credit markets: The same sector usually isn't the problem twice. High bank and consumer leverage defined the run-up to the last downturn, but both segments look quite different today. US households' debt/income level sits near a 40-year low versus the 40-year high in 2006, in part because mortgage lending standards have tightened materially. The core Tier 1 ratio for US and European banks, which

measures equity capital relative to risk-weighted assets, has more than doubled in the same period.

Taking advantage of low interest rates and strong demand, US companies have issued record debt. For issuers, the ratio of debt to earnings before interest, taxes, depreciation and amortization is near a 30-year high, as is corporate debt relative to GDP (see chart). Not surprisingly, average credit quality has declined; BBB-rated bonds now make up their largest share on record of the investment grade market. Taken together, we think this means sharp outperformance in mortgage credit and underperformance in corporate credit in the next economic decline.

LIQUIDITY. The growth in sovereign, corporate and emerging market (EM) debt has left these markets significantly larger than they were a decade ago. The combined US-dollar market for Treasuries, mortgage-backed securities and corporate and EM debt has risen to \$42.9 trillion from \$29.8 trillion in 2007. This much

larger market is going through a smaller pipe. Aggregate dealer balance sheets remain smaller than a decade ago, with fewer market makers. This state of affairs has yet to be fully tested but, with central banks' balance sheet expansion giving way to contraction, it likely will be soon.

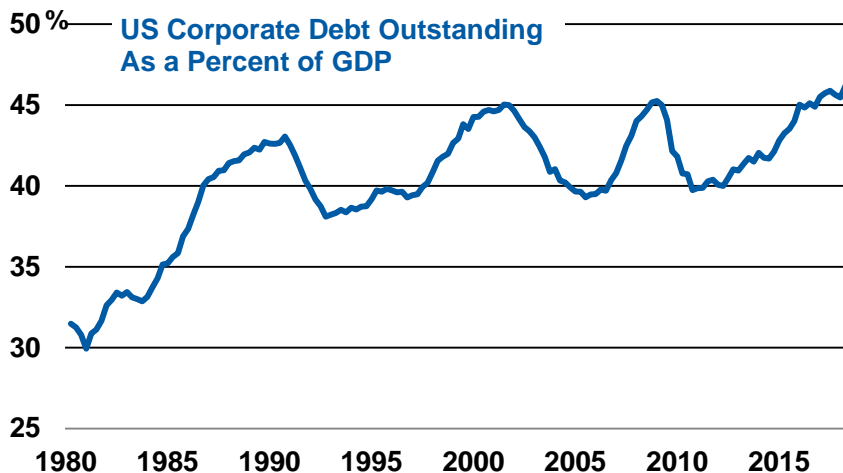
REGULATION. Postcrisis regulations mean that global banks, insurance companies and asset managers will likely enter the next downturn in a much stronger position. Capital buffers are higher. Funding is more stable. Oversight is more rigorous, including regular stress-testing of banks in the US and Europe.

That's good news, because the authorities will have a far more limited toolkit. In the US, the Federal Reserve will have room to cut rates if needed, but expansion of the balance sheet, which still sits at \$4.2 trillion, may be harder. Thanks to recent tax cuts, the federal budget is unusually stretched, limiting the Fed's ability to ease further in a crisis. Europe, interestingly, is in the opposite situation. Assuming a downturn begins in the next two years, current pricing implies that European Central Bank rates would be no higher than 0.10%, with a still-large balance sheet—but the fiscal picture is significantly different; sovereign debt/GDP in the Euro Zone has been declining gradually for a couple of years.

RESPONSES. Those different starting points could mean disparate responses to the next crisis. The US' most powerful tool will be rate cuts. Europe wouldn't have that option, but could ease fiscal policy aggressively. We think Europe also has the political will to do this, not just the ability. If we're right, Fed cutting and Europe easing fiscally would be rocket fuel for the euro versus the US dollar.

Even if the next crisis is less severe, the limited policy options could mean a slower and more protracted recovery. That's why we think credit would face real fundamental risk in the next downturn, even if the initial impact is nothing like what we saw a decade ago. ■

Corporate Debt Relative to GDP Highest Since 1980



Source: Bloomberg as of June 30, 2018

What the Midterms Mean for Investors

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We believe the ultimate market impact of the upcoming US midterm elections will be muted. Should Republicans maintain control of the House and Senate, investors could reasonably expect much of the same out of Washington, such as continued effort at deregulation and little effort to restrain White House initiatives like the trade disputes. The most extreme switch, in which the Democrats wrestle control of both chambers, would likely leave them short of a veto-proof majority, meaning the Republican White House can block Democratic initiatives in areas like immigration and health care.

Some sectors may be affected, but we do not see any obvious political configuration that pushes US equities significantly in one direction or the other. Emerging markets and international equities may get a boost from a political outcome that offers a softening response on trade disputes. We believe fixed income pricing could be vulnerable to either a second tax bill or an infrastructure bill, but both would be relatively small compared to the \$1 trillion stimulus from the 2017 legislation. Tax reduction will most likely continue if the Republicans retain control, and this may be modestly bearish for US Treasuries. An infrastructure bill could ensue under a split Democratic House and Republican Senate. This could be viewed as supporting growth or increasing the deficit, and is thereby neutral.

Historically, the stock market has done best when control of Congress is split—an average 11.9% return for midterm congressional sessions since 1970, according to Bloomberg. When one party controlled both houses, the return was 11.0% under Republicans and 5.7% under Democrats. No matter who is in control, the 12 months following the midterm elections have been good for stocks—an average 12.9% gain for the 22 midterms since 1930. Only after the 1930 and 1938 elections were the results negative.

Scenario 1: Republicans Hold Congress

Should the Republicans maintain control over both houses of Congress, a follow-on tax bill may take first priority. Some party members want to make the personal tax changes permanent—as it is now written, they expire in seven years—to balance the pro-business perception of the bill. In addition, there are some technical fixes around issues like corporate interest deductibility initially put in place for budgeting purposes that would likely be changed. While further tax cuts may look like a government stimulus, they would actually codify the system in place to ensure there is no reversion to the prior brackets in 2025. Markets are unlikely to put significant value on a modest stimulus aimed at maintaining the new status quo seven years out.

IMMIGRATION BILL POSSIBLE. The executive and legislative branches may try to come together on a stringent immigration bill as well as a third attempt at repealing the Affordable Care Act (ACA). An immigration bill looks feasible under this scenario, but a repeal of ACA is

likely to end much as prior attempts did. The administration will likely push for further deregulation and maintain the current trajectory on trade policy with little challenge from Congress.

This mix of policies, we believe, is neutral for equities. The follow-on tax bill will not have the impact of the first. Sectors that could benefit from the Republican Congress include health care, energy and financials as the administration's deregulation agenda pushes forward. Emerging markets may also struggle if Congress does not present at least modest opposition to White House trade policies.

Scenario 2: Democrats Take the House

A possible scenario based on recent polling is split control of Congress in which the Democrats take a majority in the House of Representatives and the Republicans maintain their control of the Senate. A follow-on tax bill may not be likely in this configuration, but probability of a modest infrastructure bill is better than in either of the other scenarios. Both the Democrats and the White House have identified infrastructure as a priority. Democrats may be hesitant to give the White House a win before the next presidential election, but there could be a compromise package should the president decide against pursuing a second term. If the Republicans continue to control the Senate, the White House would have some leverage and allies in the negotiations—less so if the Democrats take both chambers. We think any infrastructure negotiated under these conditions is modest in size.

DEAL ON DACA? Two priorities that Democrats are likely to advance should they wrestle control of the House is a health care stabilization bill and some type of immigration deal around the Deferred Action for Childhood Arrivals (DACA) program. While the White House has

pressed for an ACA repeal, there could be room for agreement on drug pricing. Both an ACA stabilization effort and renewed discussions on drug prices could put the health care sector under pressure. A push on immigration reform will likely come out of the controversial policy of separating families at the border, which drew global attention earlier this year. Split control means the Democrats will not achieve their full range of objectives, but there could be sufficient interest in immigration to get a compromise.

That the Democrats would like to find an immigration fix that leaves the White House with less discretionary control is indicative of a larger push for more legislative oversight of the executive branch. Democrats are likely to push for more oversight on issues ranging from trade to the Mueller investigation. Split control reduces the likelihood of any formal bills curtailing executive power and increases the chances of policy deadlock on many issues. Markets have traditionally been comfortable with split control.

TRADE RISK. While this scenario is also neutral for equities, policy deadlock could lower some of the exogenous political risk that companies now face. Trade, the biggest risk, may persist since Democratic control of the House is probably insufficient to force major changes to the administration's positioning. To the extent that the White House moderates its current position, capital goods and industrials may be beneficiaries. Both may also benefit from a modest infrastructure package. Emerging markets could find some relief with a softer position on trade.

Ordinarily, a majority Democratic House would be bearish for bonds, as

markets expect the party to increase taxes and possibly deficits in pursuit of a social agenda. We believe that expectation may be offset with concerns about policy deadlock, and therefore the split-chamber scenario would be neutral for fixed income.

With the exception of infrastructure, we think the White House and Democratic House will find working together difficult. The neutral view on fixed income goes hand-in-hand with a range-bound view of the dollar in this case. A softer trade stance would reduce macro risks and a safe-haven bid for the dollar, suggesting that a major move in this scenario could weaken the greenback.

Scenario 3: Democrats Take House and Senate

The third outcome is what some call the "blue wave"—a Democratic majority in both the House and Senate. While we do not think this scenario is highly likely given the configuration of Senate seats up for reelection, recent Democratic momentum prevents us from ruling it out. Should the Democrats take the Senate, they would probably do so without a veto-proof majority, meaning any legislative action would still need presidential approval. Though Democratic majority in both chambers would have a strong signaling effect, the most likely outcome is policy deadlock between the legislative and executive branches. This arrangement could make passing legislation harder than under the split scenario, given an emboldened Democratic party and an isolated White House.

Democrats will likely bring a number of party priorities to a vote and force White House vetoes on issues such as

comprehensive immigration reform, ACA stabilization and perhaps even modest steps toward a single-payer health care system. Also likely are net neutrality legislation and actions aimed at limiting White House authority on trade policy and deregulation.

DEADLOCKED. We believe this scenario would produce the most difficult deadlock of the three. Democratic majorities in both chambers would give Democrats little incentive to negotiate rather than wait out two years with policies aimed at hampering the White House. For this reason, we believe this outcome is neutral for equities. There is little room for compromise on major budget or fiscal issues other than infrastructure. Health care risks would likely remain elevated in this scenario, which could have the highest likelihood of drug price legislation. Increased scrutiny of trade and economic policies also supports capital goods and industrials.

A wholesale shift from Republican to Democratic leadership in the legislative branch signals more emphasis on social welfare. Democrats are unlikely to get major concessions from this White House, but fixed income markets may look through the next two years toward the possibility of a Democratic president and Congress. If the markets look that far out, fixed income could face pressure on the risk that higher taxes reduce future growth and more support for social welfare further increases the deficit and need for borrowed funds. We do not believe that a Democratic victory in November would trigger a major repricing given the policy deadlock, but there is some risk for investors. ■

ON THE MARKETS / FIXED INCOME

Large Short Interest Could Spark Bond Rally

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Several economic indicators, such as the nonfarm payroll report, initial jobless claims and the Consumer Price Index, transcend the investment community; the respective weekly or monthly releases often create headlines in both the financial and the general news media. On occasion, especially when they diverge from expectations, these reports can move markets.

There is also more obscure and nuanced data which can shed light on the potential direction of markets. One example is the Commitments of Traders (COT) report, published weekly by the US Commodity Futures Trading Commission. This release, based on positioning data self-reported by various large, active market participants, summarizes the number of contracts outstanding in futures and options on a particular currency, index or security.

10-YEAR BOND FUTURES. Currently, the COT report shows large short interest with respect to 10-year US Treasury bond futures by speculative accounts—some 700,000 contracts, with each contract covering \$100,000 in bonds. These market participants include hedge funds and other leveraged traders who have sold futures contracts short in expectation of buying them back at lower prices. This is in contrast to strategic, or longer-term, asset managers who hold substantial long positions in these instruments and stand to gain when Treasury prices rise and yields decline. The divergence between these strategic and tactical positions has increased throughout the year and currently stands near record levels (see chart).

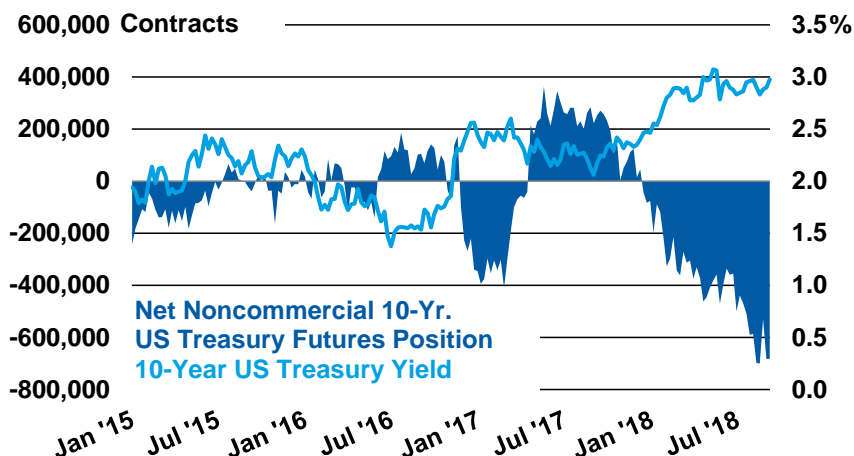
The rationale for these competing views becomes clear when examining the nature of each investor. Asset managers typically have a longer-term investment horizon; with US Treasury yields at multiyear highs and yields on comparable assets globally depressed by continued central-bank

intervention, a long position in this “risk free” asset becomes attractive. In addition, investors such as pension funds and insurance companies purchase long-dated assets to hedge the long-term nature of their liabilities. On the other hand, speculative money has a more tactical horizon. These investors are taking a view that strong US growth, modest inflationary pressures and increasing Treasury supply to fund growing deficits will push yields higher.

INCOMPLETE INFORMATION. We caution that this data point may not represent a trader’s complete position. Some may be employing these short positions to hedge other allocations, such as receiving fixed-rate interest rate swaps, which is a long-duration exposure. However, increasing short speculative positions in Treasury futures have historically corresponded with rising bond yields. Ultimately, we believe this dynamic will be short-lived as higher yields start to attract further inflows from long investors and covering of short positions creates additional demand on the long side of the trade. Furthermore, to the extent that a risk-off scenario creates a flight-to-quality bid for Treasuries, short investors may be squeezed and incentivized to cover positions to prevent further losses, further increasing the downward pressure on yields.

The large short positioning of speculative traders may ultimately give way to a rally in Treasuries. With 10-year yields breaching the 3% level and within reach of May’s cycle peak of 3.11%, yields may struggle to set new highs. Investors who have been short duration versus the benchmark throughout the Federal Reserve’s tightening cycle may consider adding some duration to their portfolios at these levels. ■

Traders Speculate Against the 10-Year Treasury



Source: CFTC, Bloomberg as of Sept. 18, 2018

Can Commodities Kick A 10-Year Curse?

Hard assets have had a hard go of it for the past decade. The Bloomberg Commodity Index saw an average decline of 7.9% per year in the 10 years ending Aug. 31. Still, the fortunes of major commodity categories—including oil, gold, agriculture and metals—are cyclical, notes Darwei Kung, portfolio manager at DWS. Kung, who manages commodity funds, believes the tide is turning: “Commodities benefit late in the economic cycle, when we see growing demand and relatively limited incremental supply.” He spoke with Morgan Stanley Wealth Management’s Tara Kalwarski about the risk versus reward for this asset class, as well as how commodities can enhance a broadly diversified portfolio. The following is an edited version of their conversation.

TARA KALWARSKI (TK): Why have commodities performed so poorly since the financial crisis?

DARWEI KUNG (DK): After 2008, some countries—China in particular—spent quite a bit of money on infrastructure investment, and that sharply drove up demand for commodities across the board. At that point, the commodity market was not really prepared and, in fact, was relatively short on supply. For a very short period, prices spiked; in the last quarter of 2010 through the first quarter of 2011, the Bloomberg Commodity Index gained more than 30%, reflecting broad, across-the-board increases. Since then, we have seen quite a bit of decline.

That happened because the sharp demand in 2008 really drove a lot of overinvestment in capacity and, unfortunately, there was a mismatch in

timing. By the time the capacity became available, the sharp infrastructure spending was curtailed—which resulted in quite a bit of surplus of supply for the remaining decade and drove down prices.

We clearly have seen a lot of negative headwinds, but commodities are cyclical and the mismatch between supply and demand is persistent and structural. So if there is more supply than demand, it takes a while for the supply to be used up. If there is more demand than supply, it takes a while for supply to catch up.

Going forward, we anticipate a turnaround for commodity prices because, for one, we haven’t seen a lot of capital investment across the board since 2015. From a valuation perspective, as well as just fundamental supply and demand, signs really point to commodities presenting an opportunity for investors.

TK: What else is driving your positive view on commodity prices?

DK: When inflation rises, the Federal Reserve typically raises rates, which we are seeing now. We are in the camp that believes higher inflation is coming. Historically, commodities as an asset class tend to do very well amid a rising rate environment and, while commodities tend to outperform late in the economic cycle, other asset classes tend to underperform during this period of time. So from a complementary investment perspective, we see a lot of importance in commodities exposure.

In addition, commodities are benefiting from emerging markets. For one, more emerging market countries are now on the goods-producing side and benefiting by selling to developed countries. In this scenario, their commodity densities tend to

increase, because they need to consume more commodities to produce for the rest of the world. At the same time, as they produce more and supply more, more income gets generated in these countries and the living standard for the people improves. That tends to feed on itself. As per capita income increases, people move from rural areas into cities. They change their jobs and see higher wages. They use more electricity. We see them driving more. City folks tend to eat better, with higher protein content. All those things drive more per capita commodity consumption.

As we see higher living standards for the emerging market countries, we anticipate even greater consumption levels, which should be a positive part of the commodity market as well.

TK: What risks or challenges does the current environment present for this asset class?

DK: Commodity prices continue to be a volatile asset class, and investors should keep that in mind, as some strategies provide better management of volatility than others.

Right now, there are a lot of geopolitical events that could be either positive or negative for commodity prices, and these tend to be unpredictable. For example, earlier this year the US placed sanctions on a Russian oligarch who effectively controls an aluminum company that produces about 10% of the global supply. Aluminum was tight to begin with in terms of supply. The sanctions went into place, and it was like 10% was immediately taken off the marketplace. That sent a real serious shock and the price of aluminum jumped right away.

We will likely see an impact as a result of the more recent trade conflict with China. The first and the most direct question that has people concerned is, do these tariffs, which are effectively a tax on goods which causes prices to go up, deter consumption?

If these tariff regimes become a more permanent feature in global trade, we anticipate higher prices will reduce demand over time, but in the short term I don't think we are going to see a lot of the direct impact on commodities. It currently affects a small part of overall economy. It would take a while for that to really work its way through.

It's hard to actually get the timing exactly right. We do anticipate volatility in commodity prices going up in the near term, but high volatility in the marketplace potentially presents an opportunity for active managers to manage the risk and help improve return potential of the investment. As long as we continue to see these types of events occurring, we expect active to outshine passive strategies.

TK: Beyond considering active management, what factors help determine how much and what type of commodities exposure?

DK: Many investors just have a core allocation to commodities and then choose to overweight or underweight it over time from a strategic point of view. We also see some people try to time it tactically, but timing in this asset class has been challenging, and we don't see a lot of success because people miss the ups and the downs or hit them just the wrong way.

What we suggest is to consider strategic allocation based on long-term performance—not the last five years, or even the last 10, but over multiple cycles—as a way to optimize diversification. Commodities have served well as a portfolio diversifier over long time periods because they tend to have a low correlation with equities and a negative correlation with fixed income assets.

In terms of exposure, we have a more supportive view right now toward direct exposure to a broad basket because the current fundamental supply and demand story is tied to physical commodities. For people who are more interested in that direct exposure and economic benefit from commodity price values, we believe it's the better way to go.

Also, the stock prices of “commodity” companies—including producers, mining companies, natural resource companies and oil companies—tend to be correlated to broad equity markets, which can take away from diversification benefits.

TK: What are the major commodity categories and how do you allocate across them?

DK: There are three types of commodities that we think are an important part of the overall asset class. The most popular that people are familiar with tends to be oil, or energy-based commodities. The second is precious metals in general, but gold, in particular. The third is agriculture and industrial metals. Together, these categories tend to follow different cycles, have different supply/demand dynamics and be good complements to one another.

For example, gold prices tend to vary over time, depending on which part of the cycle we are in. Gold tends to perform better in a more distressed or recessionary cycle—whereas base metals tend to be procyclical. As the economy does better, more base metals are consumed and the prices tend to follow the longer cycle.

I think one of the common misconceptions, when we talk about commodities, is that people naturally jump to oil and gold as the representatives. What we find is they are not. They are actually just components of a more diverse universe. When we combine all investments, they tend to work better because there are natural hedges in a broader basket.

TK: That said, can you describe the drivers behind the two most popular—gold and oil/energy—and share your outlook?

DK: Right now, we're seeing fairly positive drivers behind both.

Energy is tied to the macro. We see strong underlying economic growth, which tends to be a good bottom-up type of driver for this sector. Gasoline consumption in the US hit record consumption in the past several years and we anticipate this year we'll see another record. Globally, we are seeing strong numbers for crude-oil products. The US

exports a lot of diesel outside of the country, and the flow there supports our view as well.

We see oil prices stabilizing, and we expect supply/demand dynamics to keep the price in a reasonable range of about \$65 to \$70 for West Texas Intermediate and about \$5 more per barrel for Brent. So we think that actually shows healthy demand and, with all of the producers showing signs of restraint, we do think that even at the current price level there is more upside potential in oil as well.

As for gold, there are three drivers. One is gold as a hedge against negative geopolitical events. Gold tends to hold its value better when people are concerned about risky assets, or about any kind of market risk. It's a safe haven type of instrument that people tend to gravitate toward. So we see spikes in gold prices during those events.

A second is really with the relationship between gold and the value of dollar. The US dollar is a denominator for gold, so when the denominator goes down, the value of gold goes up. When the denominator goes up relative to all the other currencies, we tend to see gold's value go down. That really has been the case recently, when we saw the value of gold track really well with the value of dollar versus other G10 currencies.

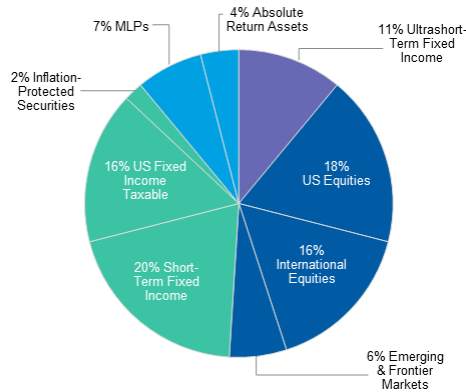
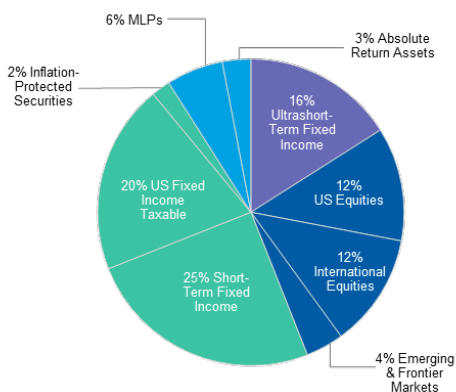
Finally, people see gold as a holder of value over time, and there is an inflationary component to that as well. So during times when inflation goes up and interest rates go up, gold prices tend to go up as well. ■

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

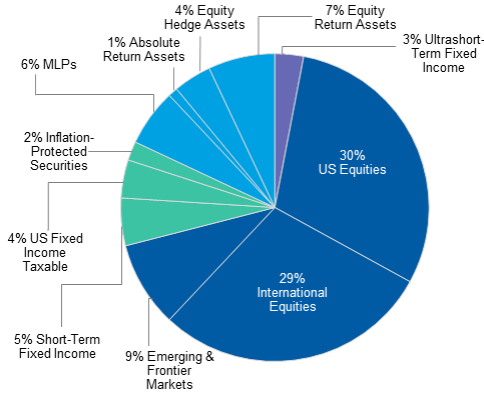
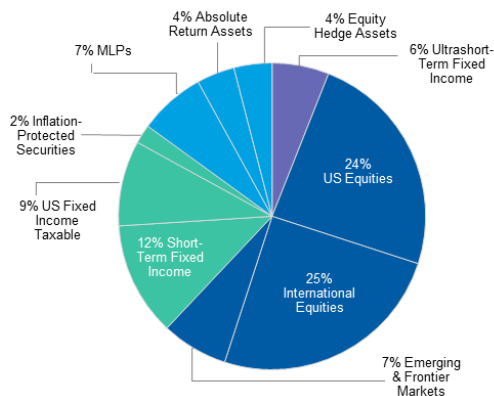
Global Investment Committee Tactical Asset Allocation

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

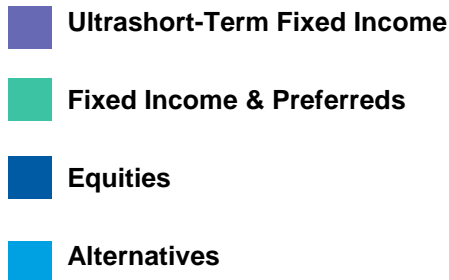
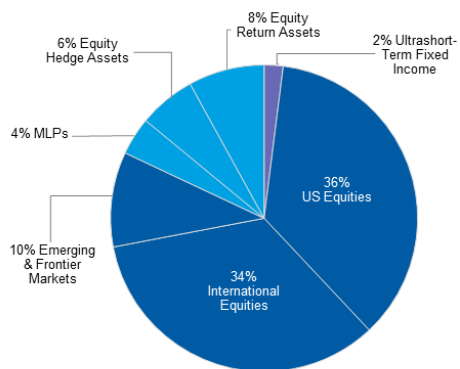
Wealth Conservation Income



Balanced Growth Market Growth



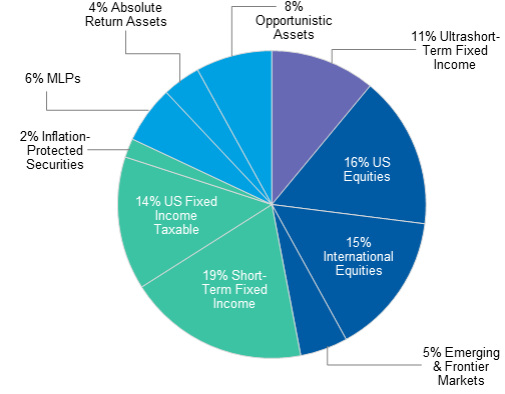
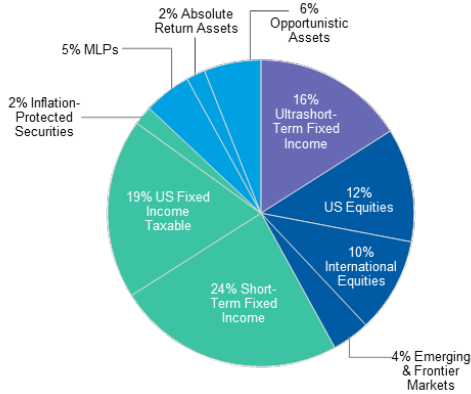
Opportunistic Growth Key



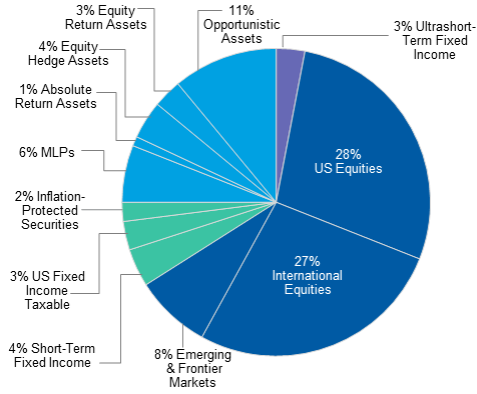
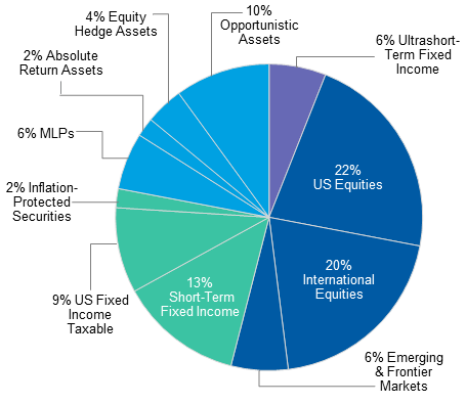
Source: Morgan Stanley Wealth Management GIC as of Sept. 28, 2018

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.

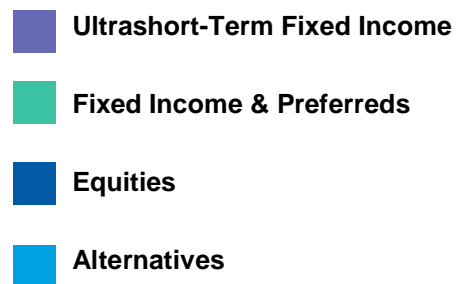
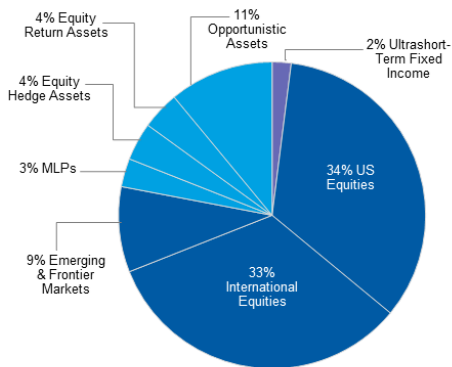
Wealth Conservation **Income**



Balanced Growth **Market Growth**



Opportunistic Growth **Key**



Source: Morgan Stanley Wealth Management GIC as of Sept. 28, 2018

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 created a booming economy and earnings outlook, it may also be sowing the seeds for the end of the cycle as the Fed is forced to raise rates and tighten policy in a more deliberate manner. With the exceptional run in growth and small-cap stocks, we recently reduced positions in both and favor large-cap value stocks.
International Equities (Developed Markets)	Overweight	We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are now spreading to Italy, which may spur further fiscal support from Germany and France. This would be a potential positive catalyst but not likely to develop until September.
Emerging Markets	Overweight	Emerging market (EM) equities have been the strongest-performing region over the past 24 months but are underperforming so far in 2018. Some of this is simply the result of a market that needs to consolidate strong gains the past few years. However, it is also directly related to the Fed's tightening campaign. We expect EM to find support not far from current levels and have a strong finish to the year.
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, US economic data have been very strong recently and the Fed is now raising rates at an accelerating pace. Adding some longer duration when 10-year US Treasury yields are above 3% makes sense.
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 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 quality of earnings in the US led by lower operating margins. Credit spreads have likely reached a low for this cycle.
Alternative Investments		Relative Weight Within Alternative Investments
Real Estate/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) have traded better since their capitulation in March around the FERC regulatory announcement. With oil prices much more stable and on an upward path, MLPs have garnered more interest given their 8% to 10% yields.
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 Sept. 28, 2018

***For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 17 of this report.**

Index Definitions

For 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

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 of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

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.

ETFs and Mutual Funds

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.

While **mutual funds and ETFs** may at times utilize nontraditional investment options and strategies, they should not be equated with unregistered privately offered alternative investments. Because of regulatory limitations, mutual funds and ETFs that seek alternative-like investment exposure must utilize a more limited investment universe. As a result, investment returns and portfolio characteristics of alternative mutual funds and ETFs may vary from traditional hedge funds pursuing similar investment objectives. Moreover, traditional hedge funds have limited liquidity with long "lock-up" periods allowing them to pursue investment strategies without having to factor in the need to meet client redemptions and ETFs trade on an exchange. On the other hand, mutual funds typically must meet daily client redemptions. This differing liquidity profile can have a material impact on the investment returns generated by a mutual or ETF pursuing an alternative investing strategy compared with a traditional hedge fund pursuing the same strategy. Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund's investment objective and to help offset market risks. However, these features may be complex, making it more difficult to understand the fund's essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and/or accompanied by the use of borrowing or "leverage."

Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund and 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.

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.

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 of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

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.

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.

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.

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

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.

Hedge funds may involve a high degree of risk, often engage in leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

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.

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.

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.

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.

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**.

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

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Stocks of medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

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.

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.

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.

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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