

On the Markets

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Groundhog Day?

I was at a conference recently and a group was talking about the best movies of all time. The usual ones came up that most would recognize as good choices, even if it wasn't their particular favorite. However, several people mentioned "Groundhog Day," which struck me as an odd choice. No offense to Bill Murray, the star, or Harold Ramis, the director, but that is a B-movie at best.

For those who haven't seen it, the general premise is that the same day, Feb. 2, keeps replaying itself over and over for Murray, a grumpy TV weatherman assigned to cover the Groundhog Day celebration, until he figures out how to use it to his advantage. Some might argue this is what has been going on with financial markets ever since global politics heated up with the UK's vote to leave the European Union—the Brexit—two years ago.

Since then, we've had episodes of uncertainty around high-profile elections and/or political events, all of which turned out to be buying opportunities. Now, we have a new political crisis in Italy. In mid-May, a populist coalition was formed between the two largest anti-establishment parties—the Five Star Movement and the League. However, Italy's president vetoed their nominee for finance minister on concerns he would move toward aggressive tax cuts and spending increases—something financial markets didn't like. But the veto backfired because a new election is now being threatened by the anti-establishment coalition if they don't get their way, raising the risk that this new bloc may reach a parliamentary majority and move forward with an aggressive populist agenda. Sound familiar?

So is this just another Groundhog Day event and buying opportunity? A year ago I would have said yes, because the markets were still flush with sizeable and accelerating Quantitative Easing programs from global central banks. Today, those programs are in reverse in the US and expected to be halted in Europe by the year's end. This means events like this can have more of a lasting impact on financial markets and may take longer to sort out. In fact, front-end funding markets, interest rates, credit, emerging markets and cryptocurrencies have all traded poorly since the Federal Reserve embarked on Quantitative Tightening and more deliberate rate hikes back in December. In short, our call for a rolling correction with flattish overall returns and much higher volatility is playing out. It appears Europe is now taking its turn in that rolling correction and may remain under pressure until this latest political situation is resolved which could take several months.



The End Of Easy

ANDREW SHEETS

Chief Cross-Asset Strategist
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During the past nine years, investing has felt uncertain, unpredictable and, at times, downright scary. Yet, the investors of the future, looking back on this period, probably won't see it that way. Despite our protests, they will likely see it as having been quite easy.

Why? Easy because returns were strong despite subpar growth. Easy because these returns came with low volatility and few drawdowns. Easy because central banks went out of their way to provide accommodation and telegraph their moves in advance, because bonds were excellent portfolio diversifiers. Easy because holding almost anything from any region outperformed cash.

POWERFUL CONFLUENCE. The past 18 months were an even more acute example of this trend. Growth surprised to the upside. Inflation surprised to the downside. Financial conditions continued to ease, and US political risk surprised

“positively” from an equity perspective, as tax changes went from “unlikely” to “signed.” One doesn't usually get all those things together, and their confluence powered risk assets higher.

All this now appears to be changing, and all at once. A variety of previously helpful factors are either currently in transition, or are likely to be between now and the year's end. This is what we call the “tricky handoff,” and it suggests not just a harder environment, but a fundamental shift in how we approach the market.

CYCLICAL/STRUCTURAL MIX. There is a mix of the cyclical and structural here. Cyclically, we expect Purchasing Managers Indexes to decline and inflation to rise in the coming months—the opposite of last year's dynamic and a pattern historically associated with weaker returns. The skew of political risk also seems worse, with the positive tax catalyst now behind us, greater noise on trade policy and the approach of US midterm elections.

Waiting behind these are also larger,

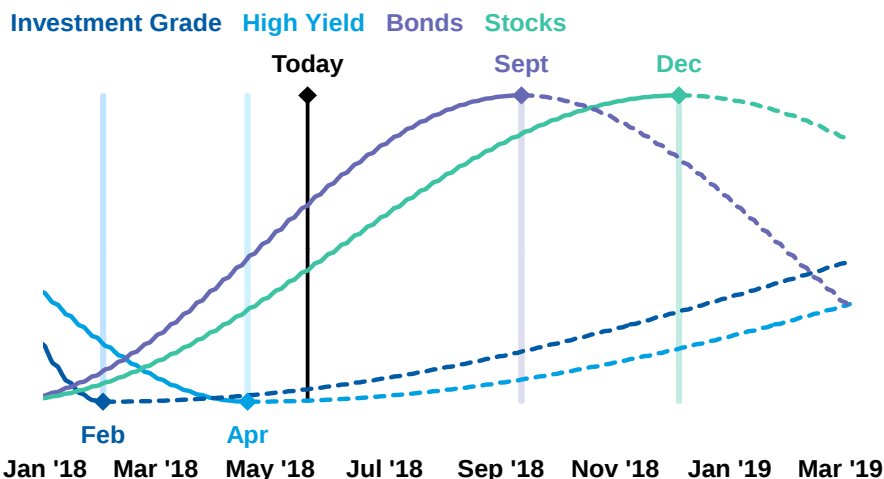
structural shifts. Global central bank balance sheets, which have been rising for nine years, are likely to peak in the third quarter of 2018. The correlation between stocks and bonds continues to rise, similar to the pattern in prior late-cycle environments, making diversification harder to find. The fed funds rate now moves above “neutral” on our forecast horizon, and our longer-frequency cycle indicators are highly extended, raising the risk of a turn that would suggest strategically depressed returns. These cyclical and structural headwinds are quite the one-two punch.

LIMITED RUNWAY. In summary, we think that this bull market has limited runway, which has not been extended by tax changes, technology or other factors. We think it is in the midst of a topping process, following a normal historical pattern in which credit peaks first, yields peak next and equities peak last. This year's first quarter was not an aberration, but rather a sign of the changing regime.

What could a topping process look like? Our US equity strategists believe that stocks can mount one last rally into the third quarter as earnings estimates continue to rise, and our top-down cycle markets are still giving positive signals. We're mindful that this last phase is a risky one. A bit more equity strength, however, would be consistent with history.

TOPPING OUT. Equities have tended to top nine to 12 months after a trough in credit spreads (see chart). In the US, we think that trough was in late-January/early-February 2018, so normal timing would put an equity peak in the third or fourth quarter. Ten-year yields, in turn, tend to peak around three months ahead of stocks, which would place that peak in the second or third quarter. The actual sequencing may differ, as no two cycles are exactly alike. Our point is simply that we think our forecasts are consistent with the usual late-cycle pattern in which topping is a process, not a point in time. ■

A Stylized Look at US Market Sequencing



Source: Morgan Stanley & Co. Research as of May 21, 2018

Cycle Maturing, Not Ending

CHETAN AHYA

Chief Economist and Global Head of Economics
Morgan Stanley & Co.

Investors are concerned about the strength and duration of the global economic expansion. They point to rising protectionism, softening data in the developed markets (DM) economies, a seemingly more intense tightening in China and, most recently, the adverse impact that rising US interest rates and an appreciating dollar could have on emerging market (EM) economies.

ROOM TO RUN. Despite these concerns, our base case is that the global economic expansion has room to run. However, as the cycle matures, we expect a slight moderation in growth to a still above-trend pace. On an annual average basis, we expect global real GDP to grow at 3.9% in 2018 and 3.8% in 2019 (see chart).

People often argue that this expansion has been rather long and would enter its 10th year in 2019. However, time alone is not the best way to predict when a cycle ends. This recovery, which was subpar until 2016, was preceded by a deep recession and has been interrupted by a

number of temporary crises.

While growth moved above trend in 2017 and the cycle is now maturing, there are few signs that it will end in the next 18 months. Our constructive view is informed by the following observations:

The capex cycle is not stretched, and productivity improvements are sustainable. We believe that the global economy is gaining strength from capital spending and improved productivity, both of which went through a period of prolonged weakness. The capex cycle is not stretched as yet, given that the recovery in global investment is in its sixth quarter and investment/GDP ratios are below previous cycle peaks. We expect global investment growth to improve further to 4.2% in 2018 and 4.3% in 2019. This should sustain the improvement in productivity growth. Moreover, there are signs of a structural pickup in productivity, as digitalization and adoption of new technology have the potential to increase efficiency.

There are no major signs of misallocation yet, except in some

segments of the US private sector. In the developed markets, there has not been a significant uptick in private sector debt/GDP trends. Core inflation, while rising, is not yet worrisome. However, within the developed markets, there is some concern about financial-stability risk in the US, given that there has been a meaningful pickup in leverage in parts of the private sector. For EM economies, misallocation typically tends to be reflected in higher inflation and significant widening of current account deficits. However, these have remained relatively contained in the emerging markets as a whole, though they are more stretched in select countries than others.

DM GROWTH. Given the maturing economic cycle in developed markets, we expect growth to moderate somewhat to 2.2% in 2018 and 2.0% in 2019 from 2.3% in 2017. However, this forecast is still stronger than the 2012-through-2016 average annual growth of 1.6%. Receding headwinds from deleveraging, higher inflation expectations and normalizing private sector risk attitudes are supporting a recovery in aggregate demand. Stronger nominal GDP growth and improved profitability have lifted business return expectations for the corporate sector, leading to a recovery in capital spending. The resulting pickup in productivity growth should help to sustain the DM cycle and allow for a gradual removal of monetary policy accommodation.

EM OUTLOOK. We expect EM growth to be 5.0% in both 2018 and 2019. In China, policymakers have been on a tightening path, which has raised concerns about its impact on EM growth. However, we believe the bulk of the tightening is behind us, and thus still believe China will achieve 6.6% growth this year and account for one-third of global growth. Ex China, we see EM fundamentals and policy mix favorable in aggregate, while inflation and current account trend broadly in line with real GDP growth. ■

Morgan Stanley & Co. Real GDP Forecasts

	2017	2018E			2019E			2020-2022E
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
Global	3.7%	3.1%	3.9%	4.3%	2.4%	3.8%	4.5%	3.4%
G10	2.3	1.6	2.2	2.6	0.4	2.0	2.7	1.3
US	2.3	2.0	2.7	3.1	0.4	2.2	2.8	1.2
Euro Zone	2.5	1.8	2.1	2.3	0.5	1.9	3.1	1.2
Japan	1.7	0.5	1.3	1.6	0.3	1.5	2.0	1.1
UK	1.8	0.6	1.2	1.7	-0.1	1.0	1.8	1.4
Emerging Markets	4.8	4.2	5.0	5.6	3.7	5.0	5.8	4.8
China	6.9	6.2	6.6	6.8	5.6	6.4	6.7	5.6
India	6.4	6.5	7.5	8.2	6.5	7.7	8.5	7.3
Brazil	1.0	2.1	2.7	3.1	1.8	3.4	4.0	2.3
Russia	1.5	-0.5	1.8	3.0	-1.0	1.7	3.1	1.8

Note: The above aggregates are weighted by purchasing power parity.

Source: Morgan Stanley & Co. Research as of May 13, 2018

The US—When Tailwinds Subside

ELLEN ZENTNER

Chief US Economist
Morgan Stanley & Co.

The US economic expansion will soon become the second-longest on record. Though we are watching rising gas prices, ongoing global trade tensions and market volatility closely, we see risks to the outlook as balanced, and the tailwinds from fiscal stimulus and additional authorized government spending making recession unlikely in the near term.

Following a softer start to the year, a second-quarter rebound is apparent, and it is enough to keep our full-year forecast intact. We have even bumped up 2018 GDP growth to 2.7% for the year—up from 2.5% in our 2018 estimate published late last year—and 2019 growth to 2.2% on a stronger assumption about direct government investment from higher spending caps. However, growth is slower in 2019 compared with 2018, as the effects from fiscal stimulus fade.

HOUSEHOLD STRENGTH. The US consumer is in relatively good financial

shape, and household balance sheets in the aggregate remain healthy. The Federal Reserve's debt-service ratio—the proportion of disposable income used to service monthly debt payments—is hovering near a 37-year low. Higher disposable income should allow household consumption to hold up well through early 2019. On the downside, the savings rate remains elevated as wealthy households have slowed spending amid financial market and tax uncertainty. Energy prices have risen and higher gasoline prices, if sustained, stand to shave off roughly one-third of the “paycheck benefit” that households got from tax reform. We expect that will contain consumer spending to around a 2.0% to 2.5% average annual growth rate.

LABOR AND PRODUCTIVITY.

Investment in equipment continues to be a source of strength as rising labor costs and tax benefits incentivize businesses to substitute capital expenditures for labor (see chart). Productivity increased by 1.2% in 2017, and we expect similar growth in

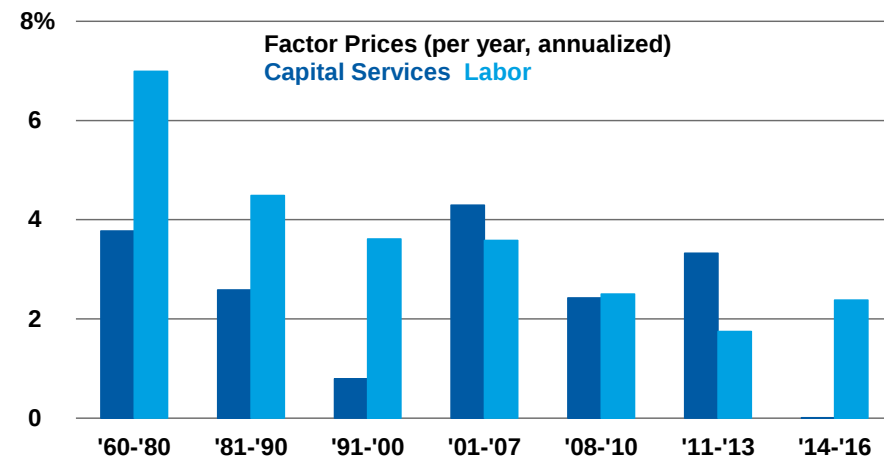
our forecast horizon. The MS Capex Plans Index and the MS Business Conditions Index remain optimistic on business investment. Coupled with further labor market tightness—we reduced our 2019 unemployment rate forecast by two-tenths to 3.6%—we see average hourly earnings up by an annualized 3.1% in the fourth quarter of this year and 3.3% next year, approaching historically normal growth.

INFLATION HITS GOAL. As wages are increasing, core inflation is rising. Temporary factors that had been cooling core inflation have abated and it is around the Fed's 2% goal. Still, longer-term structural forces, such as those from technological change and adoption, continue to exert downward pressure on prices. After averaging 1.5% in 2017, we see core the Personal Consumption Expenditures (PCE) Index rising to 1.9% in 2018 and to 2.0% next year.

TIGHTER POLICY. This year the pace of tightening accelerates. The first of three hikes took place in March, and we expect one this month and another in September. Following the third hike in September, real rates will likely be a touch into positive territory. With rates generally in line with current “r*”—the neutral rate that neither stimulates nor restricts the economy—the Fed will likely pause in December. However, it will continue to tighten passively via balance sheet run-off. We then expect the Fed to hike three more times in 2019, beginning in March, prompted by continued strengthening in the labor market, growth in average hourly earnings approaching historical norms and annual core inflation around 2%—all key elements in our forecast.

We see the risks to the outlook as balanced, and place a 15% probability of a recession commencing in the US within the next 12 months. The probability of a recession starting in 2019 is 20%. Still, we remain on guard, watching rising gas prices, ongoing global trade tensions and heightened market volatility for any sign of spillovers to the outlook. ■

Relative Pricing of Capital vs. Labor Favors Capital



Source: Bureau of Labor Statistics, Morgan Stanley & Co. Research as of May 13, 2018

Acting Rational

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After a robust start to the year, during which many investors and commentators were competing to have the highest price targets, global equity markets quickly came back to earth. A more volatile environment with limited upside has been our call for this year. Going forward, we see more of the same, giving us little reason to make material changes to our bull, base and bear price targets and earnings and multiple forecasts (see table).

Earnings have been strong enough to offset the valuation declines, leaving all four major equity regions roughly flat for the year to date. It's remarkable how uniform this derating has been, with every region seeing forward earnings per share

(EPS) move higher but offset by an equal percentage move lower in price/earnings ratios (P/Es). The largest increases in earnings and biggest decrease in P/Es can be found in the US and Japan, while in Europe and the emerging markets the changes are about half as large. This was basically our key call for 2018—better earnings but lower multiples—and it's playing out. In short, after an irrational start to the year, markets are acting very rationally, in our view.

PEAKING INDICATORS. We think that this derating makes sense for reasons we highlighted in our year-ahead outlook: The rate of change in EPS growth and leading economic indicators are likely to peak this year; operating margins are also likely to peak in the US since the tax cuts are below the line and operating costs are rising; the cost of capital will continue to rise, particularly for short-term borrowings; and financial conditions will be tightening thanks to the Federal Reserve's rate-hike cycle and higher market volatility. We also expected volatility to pick up, breadth to narrow and credit to underperform

equities. In the first four months of the year, there has been significant progress on our 2018 checklist (see table, page 6).

While many of our key concerns for 2018 are coming to fruition, we must also acknowledge that valuations have corrected significantly, and price matters. Forward 12-month P/Es have fallen in every region of the world by 5% to 12% since the January 26 global market peak. The US has fallen the most. This seems rational, too, given that the one-time, low-quality boost to earnings from tax cuts was a US-specific event; therefore, its valuation compression is the greatest.

The US equity market is trading the furthest below its two-year average P/E. Japan is on its average, while Europe and the emerging markets are modestly below. This hierarchy makes sense, and it's hard to argue that any region is egregiously mispriced. It also syncs quite nicely with our view that equity volatility will rise in 2018, and that if volatility remains higher, as we expect, P/Es should remain lower as well. We think that using the past two years' price history makes sense in the context of the global deflation narrative that began in February 2016 with the resynchronization of the global economy and bottom for commodity prices.

CYCLICAL TOP. We believe that 2018 will mark an important cyclical top for global equity markets, but in the context

MS & Co.'s 12-Month Forward Price Targets for Major Equity Regions

Index	Current Price	MS Base Case June '19	MS Target Fwd. P/E June '19	Current Fwd. P/E	MS Top-Down Base Case EPS/Growth			Consensus Forecast EPS/Growth		
					Dec. '18	Dec. '19	June '20	Dec. '18	Dec. '19	June '20
S&P 500	2,724	2,750 1%	16.5	16.5	156.0 17%	164.0 5%	168.0 5%	159.9 20%	175.6 10%	184.2 10%
MSCI Europe	1,593	1,700 7%	14.5	14.5	109.4 9%	113.8 4%	117.2 5%	108.2 8%	117.0 8%	121.8 8%
TOPIX	1,736	1,720 -1%	14.0	14.0	120.9 4%	118.7 -2%	122.8 3%	125.2 8%	134.6 8%	138.7 8%
MSCI EM	1,113	1,160 4%	12.0	11.9	88.7 10%	92.7 5%	96.6 7%	94.1 16%	104.2 11%	110.5 11%

Note: MSCI Europe and TOPIX are local-currency equity indexes. S&P 500 and MSCI EM are US dollar indexes.

Source: MSCI, RIMES, Bloomberg, FactSet, Morgan Stanley & Co. Research as of May 30, 2018

Our 2018 Checklist Continues to Make Progress

• Contracting Price/Earnings Multiples	✓
• Higher Interest Rate and Foreign Exchange Volatility Lead to Increased Volatility in Equities	✓
• Narrowing Breadth	✓
• Credit Spreads Widening	✓
• Peak Sentiment and Positioning	✓
• Peaking Earnings Revisions and Year-Over-Year Earnings Growth	✓
• Financial Conditions Tightening	✓
• Peaking/Falling Leading Economic Indicators and Economic Surprise Indexes	✓
• Falling Incremental Operating Margins	
• Higher Earnings Estimate Dispersion	
• More Defensive Leadership	

Source: Morgan Stanley & Co. Research as of May 14, 2018

of a secular bull market (see chart, page 7). Since the financial crisis ended, the MSCI All Country World Index has already experienced two cyclical bear markets, defined as a drawdown of at least 20%. The first, in 2011, was caused by a double-dip recession in Europe and Japan. The second, in 2015, was caused by a global recession, led by emerging markets and the commodity-price collapse. We believe that there is a good chance we will experience our third cyclical bear market in the MSCI All Country World Index between 2018 and 2020; it may have already begun, or it will begin from marginal new highs later this year. The 20%-plus drawdown should be led by the US market this time, in contrast to the past two cyclical bear markets that were led by other regions.

Fundamental and market signals are supportive of a cyclical top this year. Several of the items on our 2018 outlook checklist are required for an important equity market top, including peaking earnings growth and margins. However, such peaks can also happen in the absence of a more important cyclical top in equity markets and create merely a pause or consolidation in the bull market. The other items on the list are market signals that

warn us of a more important pending top. These include higher volatility, wider credit spreads and narrower breadth, all of which have happened this year, too.

WATCHING THE DEFENSE. The last item on our list, defensive leadership, is perhaps the most important due to its presence in nearly every important cyclical top. So far, it hasn't happened. In fact, the traditional defensive sectors of consumer staples, utilities, telecom, real estate investment trusts and health care have been under pressure this year and have underperformed the broader market in most regions. However, this does appear to be changing at the margin in the US, and Japan has exhibited some defensive leadership this year.

The good news is that defensive stocks on a global basis have never started their big relative outperformance periods when the two-year/10-year US Treasury yield curve is falling and above zero. With the 10-year yield still well above the two-year, and our rates strategy team not forecasting an inversion until 2019's first quarter, we think there is still time before we need to worry about this signal. Nevertheless, while we are not yet convinced that the market is ready to move into full defensive mode, this does bear close watching. We

will be monitoring this and are likely to make a significant defensive rotation call in the next three to six months.

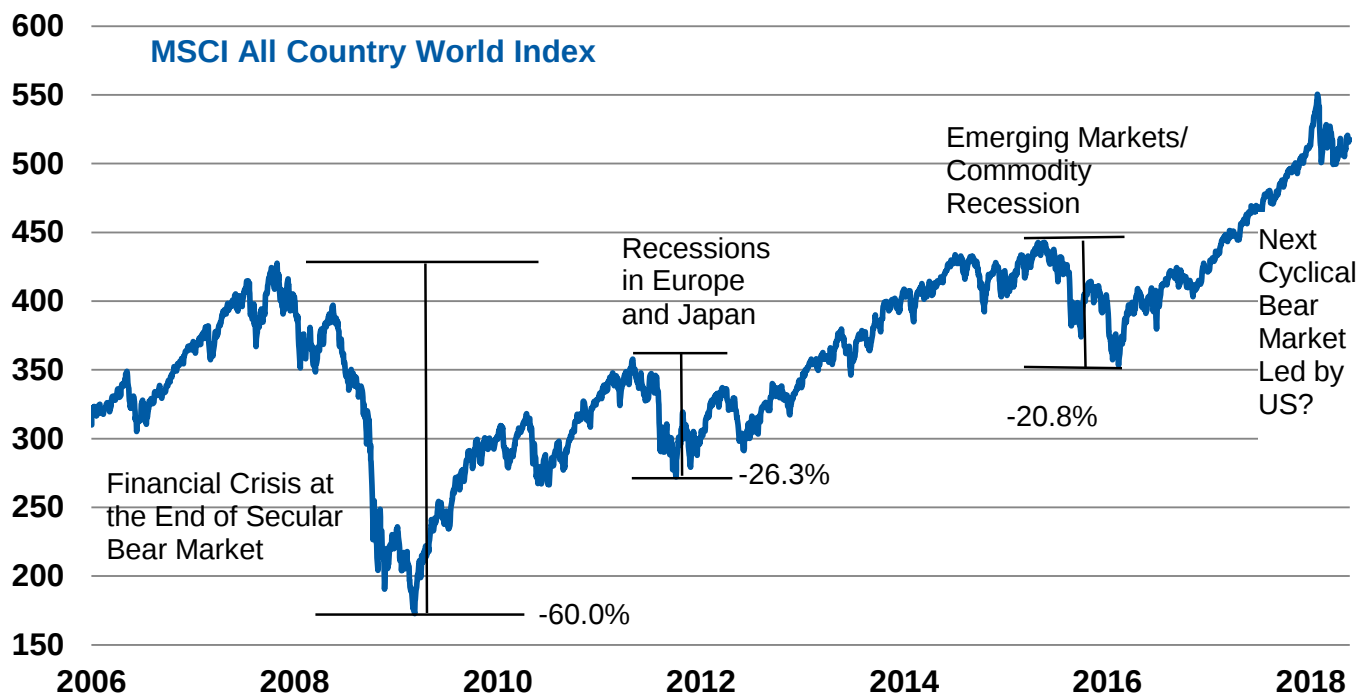
EARNINGS MATTER. What takes us to new highs for the year? Very simply, it's earnings. As noted above, we think that the markets have already derated equities significantly. Meanwhile, we have high confidence that forward 12-month EPS estimates are likely to rise further over the next two quarters as companies simply match the current estimates for June and September, which appear quite achievable, in our view. Using the US as a proxy for global markets, forward 12-month EPS for the S&P 500 is likely to rise to \$170 by October from today's \$166. Using our target P/E range of 16.5-to-17.5-times forward earnings per share gets us to the 2,800-to-2,975 range. Similar exercises can be used for Europe, the emerging markets and Japan, although we are less optimistic on achievability of the current consensus earnings estimate for Japan.

Europe

Europe remains our top regional market. We upgraded European equities in our year-ahead outlook in late November on the back of what had been extreme relative underperformance. Since then, Europe has gained against other regions but still has room to run based on the historical ranges of relative performance.

In addition, we believe that the economic outlook is still attractive. Our economists maintain a constructive view for global growth and the Euro Zone specifically, with 2018 as a second year of 2%-plus growth followed by 1.9% next year. We also believe the worst of the drag on European equities from a stronger euro should now be behind us. Furthermore, Europe is not as far into the cycle as other regions, and the European Central Bank appears willing and able keep rates lower for longer. Solid global growth along with modestly rising inflation should be helpful for European equities' cyclical value characteristics. Also, with regulatory concerns and the cost of capital rising, this lack of tech is no longer a headwind to Europe's relative performance.

We Expect the Next Cyclical Bear Market to Begin This Year



Source: Bloomberg, Morgan Stanley & Co. as of May 22, 2018

US

We leave our base-case 12-month S&P 500 target at 2,750. Since entering the year, the US equity market has already experienced two 10% corrections after avoiding one for nearly two years. This is despite the fact that earnings revisions have rarely been stronger, along with business and consumer confidence suggesting that optimism still reigns about the future. So what gives? After a 60% rally in the S&P 500 from February 2016 to January 2018, we think it's been pretty obvious that the market have discounted the news on tax cuts, global growth and still-supportive financial conditions. So, in many ways a correction or consolidation was overdue and makes perfect sense. The question is whether or not this turns into something more sinister.

We are not looking for an economic

recession in the next 12 months but we could experience the fear of one if financial conditions deteriorate further and investors begin to worry about an earnings deceleration turning into an outright decline next year. We think that it's too early to worry about it today, especially in light of the markdown in valuations that has already occurred. We think that the risk of that scenario increases as we move beyond the third quarter, when growth in earnings and margins will be rolling over more broadly. In the meantime, the S&P 500 has strong support at 16 times forward earnings per share in the absence of 10-year Treasury yields climbing above 3.25% and/or a growth scare like the one we experienced in late 2015 and early 2016. We expect a move in the S&P 500 to new highs by October before ending the year closer to 2,750.

Emerging Markets and Japan

By rolling over our targets to June 2019 we are saying that it will likely be at least 18 months before Asia and the emerging markets get back to where they were at the end of January 2018. For the emerging markets we have a new year-end-2020 EPS forecast of \$101, which is 14% below consensus, and ¥127 for the TOPIX, or 10% below the consensus forecast. We are also making slight reductions to valuation assumptions: a 14 P/E for the TOPIX and 12 for the MSCI Emerging Markets Index. We also assume that the recent period of elevated volatility will be sustained, driven by policy tightening in the US and China and ongoing trade-protectionism issues. ■

Will Higher Oil Prices Harm Global Growth?

CHETAN AHYA

Chief Economist and Global Head of Economics
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The pace of the recent rise in oil prices—about 70% in a little less than a year—has sparked a debate on whether this poses downside risks to global growth. Also, what does it mean for the equity and credit markets? The answers depend on the extent to which the rise is driven by a significant shift in demand or supply.

This rise in oil prices is taking place at a time when global growth has been above trend for five quarters. Martijn Rats, Morgan Stanley & Co.'s global oil strategist, says the uptick in demand centers on “middle distillates”—jet fuel/kerosene, fuel oil/diesel and heating oil. These distillates power heavy machinery and typically fuel industrial growth in the emerging markets (EM) and international trade. Against this backdrop he projects that oil prices, now at \$75 per barrel for Brent crude, will rise gradually to \$85 by the fourth quarter of 2019.

OIL BURDEN TREND. Is that going to hurt the global economy? Combining the projected rise in oil demand and prices, we calculate that the global oil burden will rise to 3.1% of GDP in 2018 from 2.4% in 2017 (see chart). While above long-term averages, the oil burden is halfway between the 2004 level of 2.7% and the 2005 level of 3.5%. Coincidentally, the real oil price—as deflated by US CPI—also sits at mid-2005 levels.

The global economy is well positioned to absorb this moderate rise in the oil burden, as it was back then. A recovery in investment growth has been followed by higher global productivity growth. On the whole, the buffer of these productivity gains should help the economy withstand the rise in input costs. Similarly, between 2003 and 2007, strong growth in China resulted in an increase in oil demand and prices. However, as this growth was driven by productivity gains, inflation and current account surpluses did remain in check,

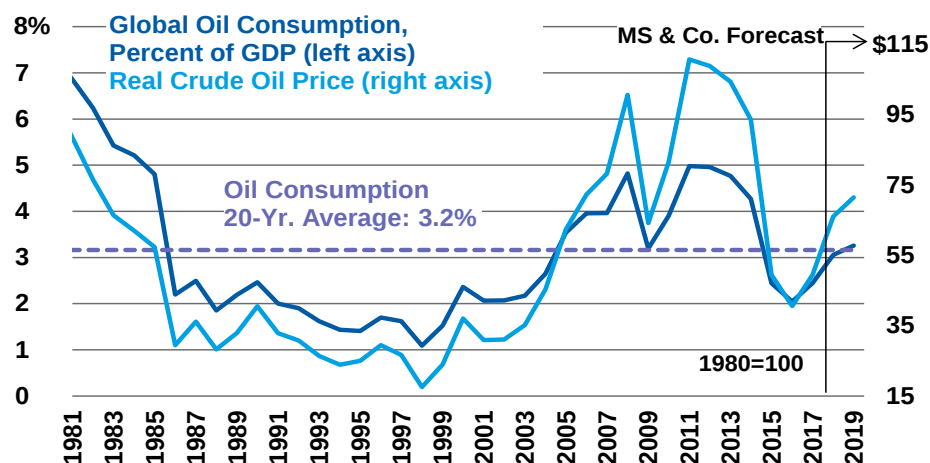
while growth continued on an upward trajectory unperturbed by higher oil prices.

A FINE BALANCE. Still, there is a fine balance. When oil prices declined significantly from mid-2014 to early-2016, rather than being a boon to global growth, they had an adverse impact. Capital expenditures were already weak, and the fall in oil and commodity prices caused another downturn in commodity companies and in commodity-exporting countries. In the US, one reason why corporate credit spreads widened between late 2014 and 2016 was the decline in energy prices, which was especially hard on high yield credit. In contrast, the rise in oil and commodity prices now is leading to a recovery in pricing power for commodity companies and an improvement in terms of trade for commodity-exporting nations, thus providing support to capital spending in these segments.

Given the rise in oil prices is a response to strong global growth, and that the oil burden is not at onerous levels, at this juncture we are inclined to think that rising oil prices do not pose a major threat to aggregate global growth.

WINNERS AND LOSERS. However, a rise in oil prices does result in relative winners and losers: Commodity producers and exporters should benefit, at the expense of consumers and commodity importers. In this context, our equity strategists across all three regions are positive on the energy sector. In fixed income, our strategists are bearish on credit markets overall, particularly on high yield. Within EM credit, they are more cautious on the low-quality oil-importing issuers. ■

Global Oil Burden Rising, but Not at Burdensome Levels Yet



Source: BP, Haver Analytics, Morgan Stanley & Co. Research forecasts as of May 27, 2018

ON THE MARKETS / SHORT TAKES

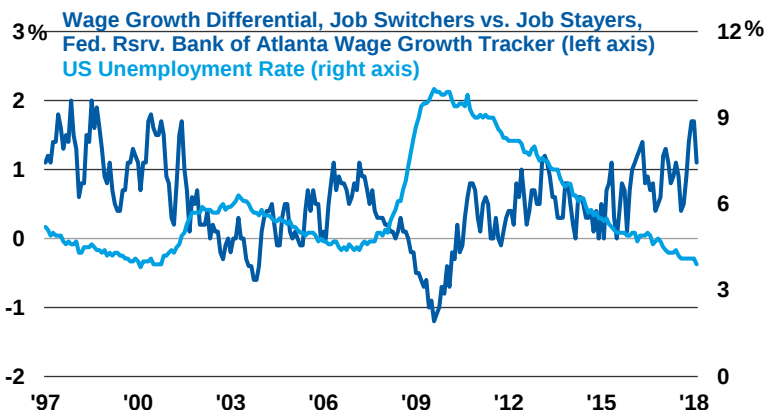
Job Switchers Experience Better Wage Growth Than Job Stayers

Wage growth has remained subdued since the financial crisis even as the US economy has rebounded, leading the unemployment rate to reach 3.9%, the lowest since 2000.

Despite the strong labor market conditions, the growth in US average hourly earnings for all private employees has averaged just 2.2% for the nine years ending April 2018 (see chart).

Although wages have crept higher for the typical worker, those who have switched jobs have benefited from compensation boosts that significantly outpace the broader economy.

According to the Federal Reserve Bank of Atlanta's Wage Growth Tracker, full-time workers who switched jobs saw 4.0% year-over-year gains in April, while job stayers experienced growth of 2.9% in the same period. That doesn't mean you have to job-hop to get a raise. As competition for highly skilled labor accelerates, employers will likely be forced to raise wages to retain as well as attract desirable employees. —Steve Edwards and Chris Baxter



Source: Federal Reserve Bank of Atlanta as of May 14, 2018

Rising Mortgage Rates Take a Toll on Homebuilders' Stocks and Bonds

30-Yr. Fixed-Rate Mortgage (left axis)
4.9 Relative Excess Return High Yield Homebuilder Index vs. High Yield Index (right axis)
4.8 Relative Total Return S&P Homebuilding Index vs. S&P 1500 Composite Index (right axis)

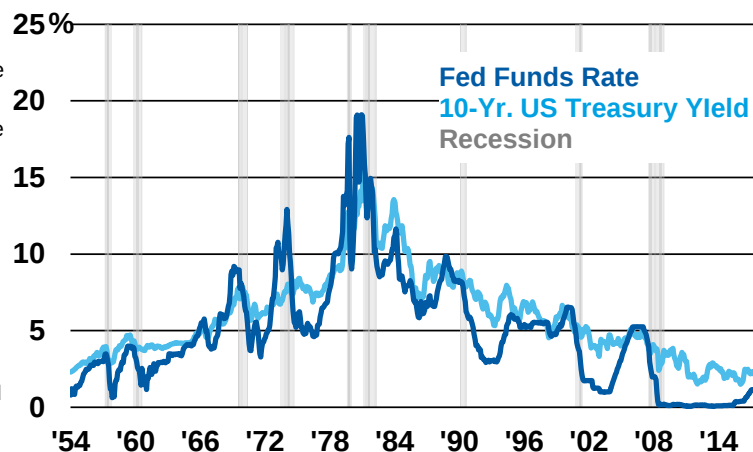


Source: Bloomberg as of May 30, 2018

The sharp ascent in interest rates since autumn of 2017 has significantly reduced the affordability of purchasing a new home. This has been a cause for concern for both equity and fixed income investors in the homebuilding industry. As mortgage rates have climbed roughly 60 basis points for the year to date, the homebuilding stocks have underperformed the S&P 1500 Index by 14.4% and bonds issued by those companies underperformed the ICE BofAML US High Yield Index by 1.70% (see chart). Looking forward, while interest rates may continue to be a headwind, supply and demand dynamics may support the industry. On the demand side, demographic forces should drive household formation above historical averages for years to come. From the perspective of supply, single-family inventory as a percent of households is near all-time lows.—Daryl Helsing

Yield Curve's Usual Recession Signals May Not Work in Today's Environment

Many point to recent flattening of the yield curve—narrowing of the difference between the federal funds rate and the 10-year US Treasury yield—as a sign of a maturing economic cycle. The yield curve has typically inverted, a situation in which short-term rates are higher than long-term rates, 18 to 24 months before the stock market tops and the economy goes into recession. Is the curve giving investors an all-clear signal? We think not, as the playbook for interpreting the yield curve may be changing. As the chart shows, while the curve has inverted prior to the past seven recessions, the yield curve did not invert prior to two recessions in the 1950s. What's similar about the 1950s and today? Rates were below 4% and rising. So perhaps in a low and rising rate environment, the yield curve does not need to invert prior to recession, and flattening alone may tell us the end of the cycle is near.—Vijay Chandar



Source: Federal Reserve Bank of St. Louis as of May 29, 2018

A New Investing Approach For the Emerging Markets

SCOTT HELFSTEIN, PhD

Senior Investment Strategist
Morgan Stanley Wealth Management

Favorable demographics have been a cornerstone of emerging markets (EM) investing, advancing the proposition of demographic destiny. The conventional wisdom has said that developing countries should pursue manufacturing and exports. For years, the EM story was cheap labor manufacturing goods for export, and the markets rewarded companies and countries that could execute it.

COMPETITION FROM AUTOMATION.

Now, this long-successful model is under challenge. The cost of automation is decreasing at a rapid rate due to increased processing and sensor capabilities. Advances in artificial intelligence are opening a new front in industrial automation. The ramifications will be felt across the globe, but the greatest impact may be in the emerging markets.

This means instead of being an asset or engine of growth, in the future, high population growth may become an engine

of social unrest, according to a large body of academic research. New workers coming at an ever-faster pace as many lower-skilled jobs vanish could sow civil conflict. The relationship between labor, demographics and growth will be upended.

LOCAL POLICY MATTERS. This does not imply that countries with higher population growth and a younger workforce are destined for ruin. Local factors and policies help determine those likely to excel. Countries that have the resources to prepare their workforces for the future—or are already doing so—will be better positioned in the global knowledge-based economy. Those with high consumption are less sensitive to manufacturing and export, and will be able to shift workers to domestic needs.

Since technological and industrial changes will disrupt demographic destiny, investors should shift emerging and frontier market allocations toward those resources best leveraged for success. Our framework for identifying the countries

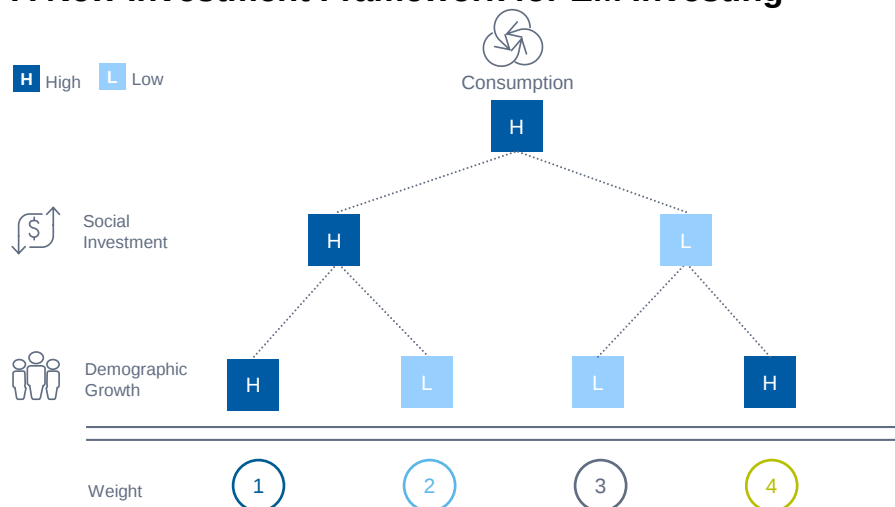
best suited for these changes is based on three factors: demographics, consumption and social investment. Demographics, or population growth, is difficult to change as long-term trends are usually persistent. Consumption is hard to change, but not as difficult given appropriate economic incentives. While increased allocations to education and health care take time to vest, this is the factor over which policymakers have the most control.

AN INVESTMENT FRAMEWORK. To screen for countries worth considering, start with those that have high consumption (see chart). Then ask, what is the social investment? Again, higher is better, along with high demographic growth. In such countries, the government is investing in its population, giving them the education and health care they need to compete in the changing global economy. At the other end are countries with low social investment and high population growth. From an investment perspective, they are the least desirable.

In our view, this framework is inherently forward-looking, shedding conventional wisdom and focusing on global change. Economies with the means and conviction to adapt will outperform those that simply believe industrialization or demographics will deliver results. We prefer consumption, social investment and political stability derived from manageable population growth in an increasingly automated world. We also believe that this is a multiyear if not decades-long transformation, meaning that leaders in the global knowledge economy will take time to emerge and countries will have the opportunity to adapt and change strategies over time. This is a strategic rather than a tactical approach to EM allocation. ■

Our full report, “*Disrupting Demographic Destiny: A New Paradigm for Investing in the Emerging Markets*,” is in the April 25 issue of *AlphaCurrents*, a new publication on thematic investing.

A New Investment Framework for EM Investing



Source: Morgan Stanley Wealth Management

Shelter From the Late-Cycle Storm

MICHAEL D. ZEAS, CFA

Strategist
Morgan Stanley & Co.

Although total returns have been negative for the year to date because of rising US Treasury rates, municipal bonds have delivered admirable excess returns versus both Treasuries and corporates (see chart). We attribute this to the features of the asset class that suit it well for late-cycle market and economic periods. As such, we expect munis to continue to outperform for the remainder of the year.

What is the case for munis as a late-cycle haven? Two key reasons. First, most muni bonds have a call feature, and when interest rates rise it is less likely the bond will be called in by the issuer. This causes extension risk as the market prices the bond for its maturity date instead of the call date, which is of shorter duration. However, our interest rate strategists' view of a flattening yield curve and falling long-term rates decrease this extension risk and dampen the price volatility that comes with call uncertainty. In

our view, this is one reason why munis have not experienced outflows or underperformance despite seeing negative returns. Conversely, if long-term rates go up faster than short rates, it could open up the kind of volatility that investors have historically eschewed, creating fund outflows.

CREDIT PLATEAU. The other reason has to do with credit. We view muni credit quality as having plateaued for this cycle. Furthermore, if we were late in the economic cycle, investors would be correct to start preparing for muni credit deterioration. However, we think that deterioration would occur with a lag to corporate credit both in appearance and in reality.

Consider, for example, the behavior of the rating agencies leading up to the past two recessions. In each case, the ratio of muni upgrades to downgrades accelerated into the economic downturn. This is understandable, given the lag between economic conditions and municipal financial reporting. Our expectation is that markets, in lieu of better

information or an obvious sign that a recession has begun—recessions rarely have an obvious signal—will continue to see muni fundamentals as sounder than corporate credit, until a recession is obvious.

NAGGING RISKS. In our view, these factors are more powerful than some other nagging risks facing the market. In particular, we think that tax reform has had a more limited impact on the supply/demand dynamic than many appreciate. Undoubtedly, the demand flow from banks and insurance companies has weakened. Yet we don't see their stock of munis changing meaningfully unless prompted by other forces, such as steeper yield curves, increased loan demand or capital constraints. On the supply side, while advanced refundings have reduced supply relative to where it would have been, we still expect gross supply north of \$300 billion this year. This is well within the normal ranges of recent history.

Still, we would position our muni allocation with an eye toward these risks and others that may be even more meaningful. A neutral duration bias is warranted in the near term on the risk that bear steepening is possible, as inflation readings edge higher and the Fed initially elects to signal tighter policy. However, we do expect that a long-duration position will be our home for most of the year. On the credit sector side, we continue to hedge against the notion that we're later in the cycle than we think by underweighting sectors with elevated economic sensitivity. Hence, we remain underweight states and locals, given leverage in underfunded retiree and capital liabilities that we think will make their credit quality more sensitive to the cycle than enterprise sectors like transportation and higher education. ■

Also contributing to this article are Mark Schmidt, CFA, and Alexander Ventriglia.

So Far This Year, Muni Bonds Show Excess Returns Compared With Treasuries and Corporates

Muni vs. US Treasury Returns*

S&P Muni Index	Total Return	Excess Return
Investment Grade	-1.1%	0.8%
Short	0.3	0.6
Intermediate	-1.1	1.3
20 Year +	-1.2	2.7

Muni vs. Corporate Returns*

S&P Muni Index	Total Return	Excess Return
Investment Grade	-1.1%	1.0%
High Yield	2.5	4.7

*Dec. 29, 2017 through May 22, 2018

Source: Morgan Stanley & Co. Research as of May 22, 2018

Putting Investing With Impact in Focus

In an open letter to CEOs earlier this year, BlackRock CEO Larry Fink made the case for “social purpose” as an essential element of a company’s mission. For Brian Deese, global head of sustainable investing at BlackRock and former senior advisor for climate and energy policy to President Obama, that means corraling the latest insights into an investment framework that both drives sustainable returns and works toward solving an urgent challenge. Deese recently spoke with Lily Trager, director of Investing with Impact for Morgan Stanley Wealth Management, about integrating environmental, social and governance (ESG) criteria into the investment processes and building sustainable solutions. The following is an edited version of their conversation.

LILY TRAGER (LT): What is the biggest adjustment moving from the public sector to the private sector?

BRIAN DEESE (BD): The biggest difference has been having the clarity of focus around the commercial goals you have when you are operating in a private-sector entity. However, a lot of the big and important issues we think about are precisely the same: How are clients/citizens/people going to adapt to the changes being driven by our climate? What are the big fundamental drivers of change, social movements, and social norms and expectations, and how are they affecting people and communities?

Then, in terms of thinking about how to make an impact, it’s putting a commercial perspective to that and saying: How can we find scalable solutions that actually deliver positive financial outcomes while

making progress toward solving those big problems?

LT: I’ve heard you quoted as saying, “Climate change will be the defining issue of our time, of our generation.” Do you think it’s still true?

BD: It’s still true. My generation is the first to fully feel the impacts of climate change, and it is also the last that’s going to be able to do something about it.

Climate change is a very macro issue, and a lot of the impacts are slow moving. When you are thinking with a short time horizon, whether that’s an investment time horizon or otherwise, it’s easy to downplay the significance that climate change is going to have. When you think about every issue you may be interested in advancing in the world—whether it’s improving education, improving economic circumstances for families in the US and then around the world, improving skills, addressing challenges associated with automation, technology and globalization—every one of those issues is going to be made more difficult and, ultimately, impossible if we can’t get our arms around a solution to the physical changes that are a result of climate change.

A prominent scientist we worked with in the White House used to say if you put all the issues that you’re trying to solve to improve life for people on the planet into a bucket, climate change is like a hole in the bottom of the bucket.

LT: How are corporate C-suites reacting to the letter published by BlackRock’s CEO earlier this year? Do they want to engage on sustainability topics?

BD: The response has been overwhelming and, in the majority of cases, overwhelmingly positive.

I think there is resonance among the corporate community with this basic idea that whether you use the words “social purpose” or others to define and then defend what a company’s purpose is to all its stakeholders—its customers, the communities in which it operates, its employees—this is ultimately an essential element of how a company will succeed over the long term. If a company loses its ability to do that, it’s at risk of underperforming and, ultimately, being eclipsed.

I think most CEOs of most companies vigorously agree that the way a company manages ESG issues is an important indication of how it is positioned both to address the accompanying risks and take advantage of the accompanying opportunities. The questions are largely in the realm of the “how” of measurement, data, time frame and materiality, and which issues matter most—depending on the type of company you run and the type of business sector you operate in.

LT: What’s motivating investors to allocate capital toward investments that incorporate ESG factors?

BD: The first category is clients who want to exclude certain exposures from a portfolio or investment strategy because of personal values, or institutions with regulatory constraints or stakeholder issues that seek to avoid certain exposures. Generally, these clients are looking for negative and exclusionary screens that run the gamut from tobacco to religion to fossil fuels.

The second category is clients looking to align their capital with positive outcomes, either higher ESG scores or particular issues within the ESG bucket like climate change, or human capital and diversity.

Thinking about product construction and how we try to address it, most of the ESG assets under management are in that “avoid” bucket and characterized by negative and exclusionary screening approaches. Increasingly, we’re focused

on the positive characteristics—how we can build investment strategies that effectively advance, and are in, the second category. We’re seeing an evolution in our clients’ interests along those lines. Large institutional investors who may have, for example, initially come to ESG from the perspective of having regulatory constraints or stakeholder issues that seek to avoid certain exposures, are now more interested in putting a risk lens on and trying to understand whether there are ways to take advantage of the risks and/or the opportunities.

When we think about building products, particularly comingled products where we can’t tailor exclusions to every individual asset owner’s interest, we are looking at scaled solutions by focusing on those positive attributes and where we can tilt toward higher ESG scores with conviction that we can deliver a positive investment outcome for our clients.

LT: How is BlackRock thinking about sustainable investment products, innovation, and evolving the platform and the initiatives of the sustainable investing group?

BD: We’re currently focused on four areas: (1) developing insights; (2) integrating ESG across investment processes; (3) building sustainable solutions; and (4) engaging with companies to promote sustainable business practices.

Part of the reason we start with insights is, as the data improve and as our conviction around our investment hypothesis improves, we believe that we’re going to be able to more concretely point to the positive performance aspects of ESG considerations.

Much of that comes back to hypothesis-driven investment strategies that tie back to our CEO’s belief that companies with good governance over time have the potential to generate greater long-term shareholder value. We have to prove that in the data and the research.

Many investments we’ve launched have focused on broad ESG considerations, but now we’re also seeing interest in thematic and impact investing strategies. So we’re looking to expand in that area. We’ve launched a low-carbon exchange-traded fund (ETF). We’ve launched an ETF focused on trying to align capital with the sustainable development goals, and we have a systematic active strategy that is leveraging big data to try to generate unique ESG and impact insights.

There are still some gaps we would look to fill so that we can offer a sustainable platform and solutions across all asset classes. We’re going to fill out fixed income classes, including green bonds. We’re already building an active emerging-market-debt set of strategies in Europe and would think about bringing that strategy to the US if we see demand. Once we have these core exposures in place, we’ll also look to innovate around thematic offerings.

LT: What gets you most excited about the future of sustainable investing?

BD: To me, one of the most exciting things is the pace at which we are learning.

There’s always an argument in sustainable investing circles about whether the data is imperfect. What’s exciting is seeing the advances in real-time data moving quickly, as well as new types of approaches to looking at the data—traditional systematic approaches and also

new machine-enabled, technology-enabled approaches, as just an additional lens to improve the investment process and make us better investors by being better informed.

I think that is happening at a fast pace; a lot of the same transitions driving changes in other industries around artificial intelligence, automation and machine learning are also happening in the financial industry. When it comes to sustainable investing, this will open up additional opportunities for us to create higher-conviction strategies for our clients.

Second is the accelerating degree to which, even over the last year, clients of different types in different geographies are coming to this issue, asking questions and saying, “How can I get involved?”

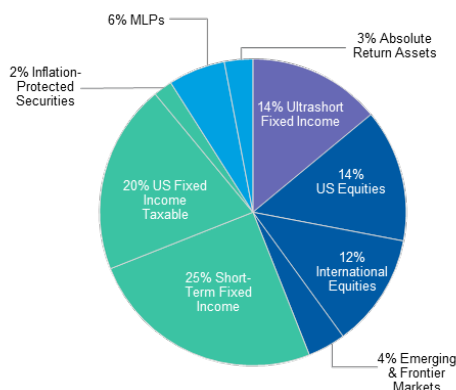
Third, we have to meet the challenge that, increasingly and for a variety of reasons and motivations, more asset owners are coming to sustainable investing. I’m energized that, on paper at least, we could actually create investment solutions that deliver better outcomes for our clients and also accelerate progress toward solving the world’s greatest challenges. I think as the data improve and as more clients come to this issue, those goals are within sight. ■

Brian Deese 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.

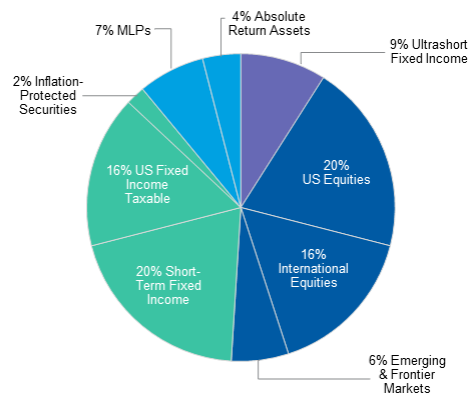
Global Investment Committee Tactical Asset Allocation

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.

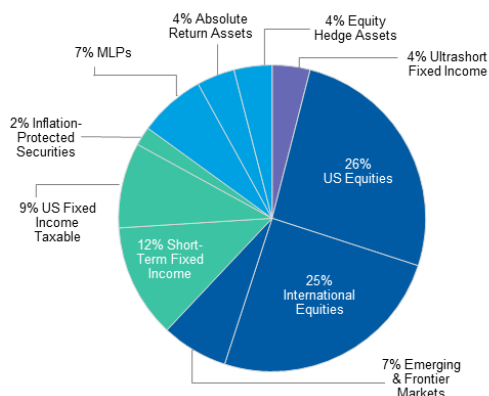
Wealth Conservation



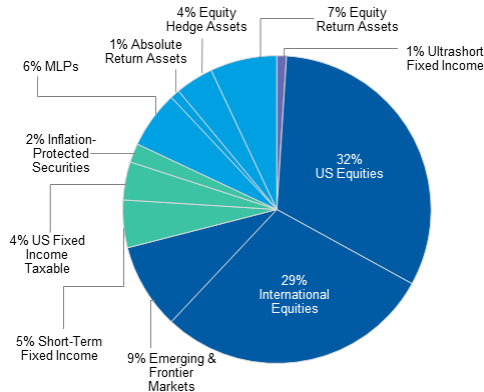
Income



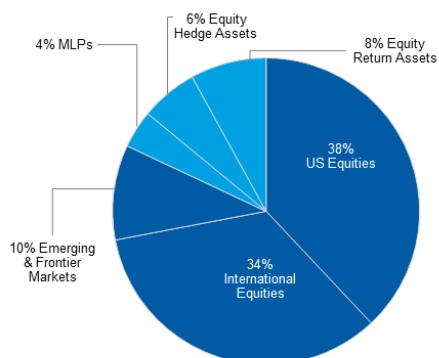
Balanced Growth



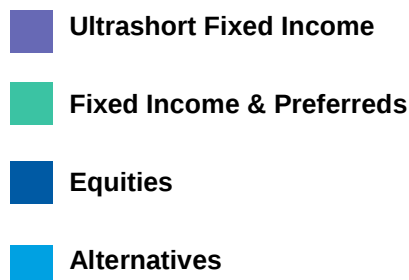
Market Growth



Opportunistic Growth

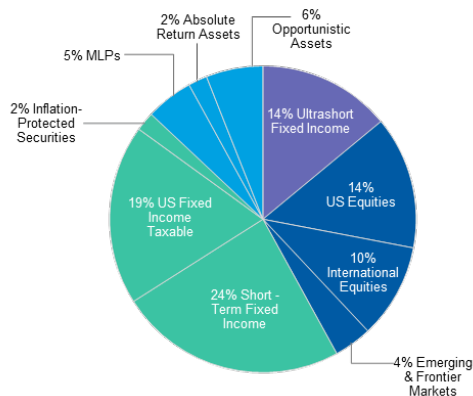
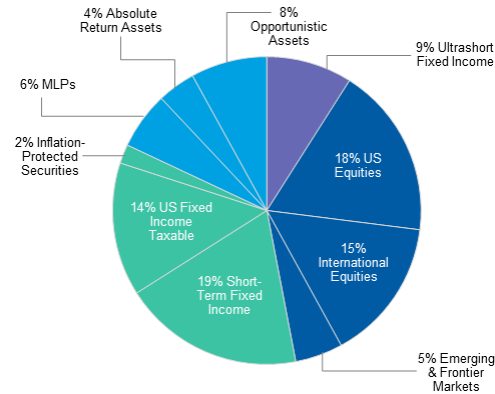
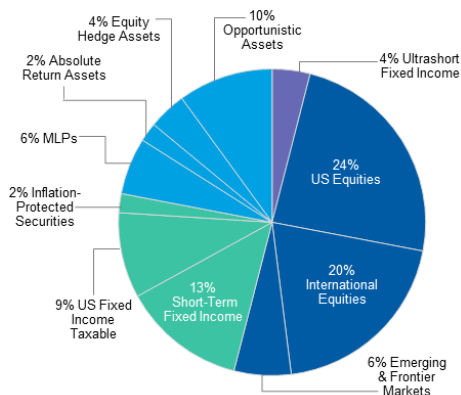
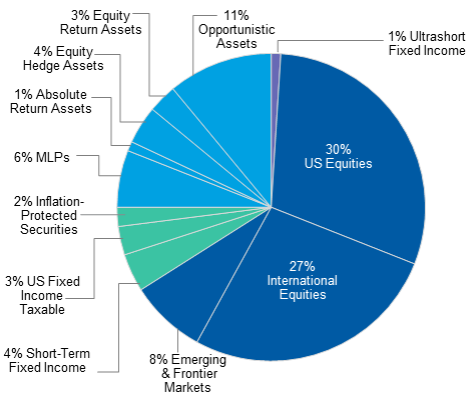
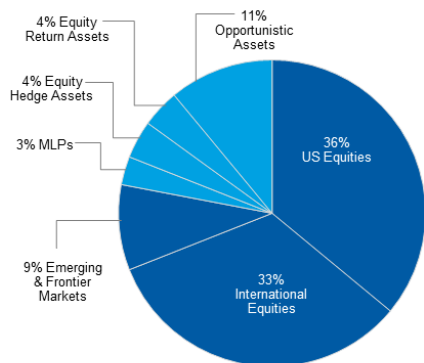
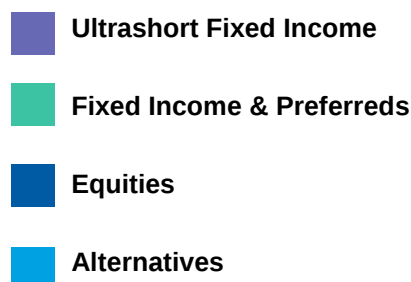


Key



Source: Morgan Stanley Wealth Management GIC as of May 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.

Wealth Conservation**Income****Balanced Growth****Market Growth****Opportunistic Growth****Key**

Source: Morgan Stanley Wealth Management GIC as of May 31, 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 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.
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, 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 with 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 May 31, 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

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.

CEFs

Credit quality is a measure of a bond issuer's creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on each fund's security rating as provided by Standard & Poor's, Moody's and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch's classification (the equivalent of Aaa and C, respectively, by Moody's). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody's) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as "NR."

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.

Credit ratings are subject to change.

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