On the Markets

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TABLE OF CONTENTS

Be Thankful

Many Americans would agree that Thanksgiving is the best holiday of the year. Some like it because it happens when the weather is still decent, we have the full holiday season to look forward to—and *before* we've put on the inevitable 10 pounds. Most like it, though, because of its primary message: Be thankful for all the good things in your life. No matter how bad it may seem at times, there is always much to be thankful for, and Thanksgiving provides us the opportunity to recognize that and share our gratitude with family or friends. This year, investors have much to be thankful for as 2017 turns out to be one of the best years ever. Through November, the S&P 500 is up more than 20%, which is great. International equity market returns have been even better.

While it didn't always feel so smooth given the often overwrought headlines, 2017 was one of the least volatile on record. Combined with the historic absolute returns, this year was about as good as it gets from an investment standpoint. No doubt, the fundamentals supported the results, and we remain convinced that global equities are not in a bubble, as many commentators were suggesting earlier this year and as recently as a few months ago.

However, many of our long-held views about synchronous economic growth, accelerating earnings, extremely supportive financial conditions—such as low interest rates and tight credit spreads—are no longer out of consensus. Formerly bearish investors and commentators have come around to embrace our contention that the trend toward populist policies around the world would lead to *better* growth via increased fiscal spending. Of course, this is what happens when a continuing bull market helps people to see the light.

We believe we are still firmly entrenched in a classic late-cycle economy and bull market, but it's getting later and the high returns we experienced this year are likely to be significantly lower and less broad next year. This doesn't mean the bull market is over. It just means the risk/reward isn't nearly as attractive as it was a year ago. Perhaps the largest missing ingredient is individual investors putting more money into equities. We think that could start with the passage of tax reform. If it's enacted, it could begin a final surge toward our 2018 targets. ■

The Global Economy: Stronger for Longer

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The global recovery is likely to gain momentum and breadth in 2018, supported by still accommodative monetary policy and more fiscal stimulus. With major economies at different stages of the business cycle, the risk of the global economy running too hot is limited. In short, we believe that the global economy will be stronger for longer.

In our forecasts, the global economy will gain a little more momentum in 2018, reflecting strong and steady developed market (DM) growth and a pickup in emerging market (EM) growth despite a moderate slowdown in China (see table). We expect global GDP growth to be above average next year, hitting 3.8%—the best showing since 2011. The acceleration is driven by a pickup in EM growth to 5%, even with a modest slowdown in China. DM growth momentum of around 2% also supports the solid global outlook.

NOT RUNNING HOT. While the global recovery remains a synchronous one, it is important to remember that major economies are at very different stages of the business cycle. This unusual amount of cyclical dispersion is key to preventing global growth—which has only recently been running above potential again—from overheating. While unemployment continues to fall and output gaps keep closing, capacity utilization metrics should remain way below their typical cyclical peaks, even in the US. As a result, we only see a very limited risk of a global recession starting in 2018. In our view, the global economy is simply not yet running hot enough to require cooling down.

While DM headline inflation is likely to broadly move sideways, DM core inflation should pick up in the course of 2018. Both the US and the Euro Zone should see higher inflation between February and August but, with the exception of the UK, DM inflation is unlikely to move above central bank targets on a sustained basis. Despite a steep rise in core inflation, the Bank of Japan, and possibly also the European Central Bank (ECB) and the Federal Reserve, will struggle to hit the 2% target. Meanwhile, EM inflation is set to rise visibly next year, led by Asia ex Japan, as both China and India are likely to experience material increases in their inflation rates. Inflation pressures in Latin America, by contrast, are likely to moderate, led by Mexico, notwithstanding a rise in Brazil.

EXPANSIONARY POLICY. Monetary policy should still continue to support easy financial conditions in 2018. On our forecasts, the Fed will only inch beyond neutral in 2019, while the ECB and BOJ continue their Quantitative Easing, albeit at a slower pace. As a result, DM real interest rates should stay deeply negative and well below their natural equilibrium levels. However, shadow short-rate estimates might show a more material increase as unconventional policies are reduced and forward guidance gets adjusted. Our fiscal policy projections—which are subject to considerable uncertainty given the ongoing budget deliberations in many countries—show that DM fiscal policy is likely to only become a bit more expansionary in 2018. All in all, the risk of a material late-cycle fiscal stimulus causing an early end to the current cycle seems remote.

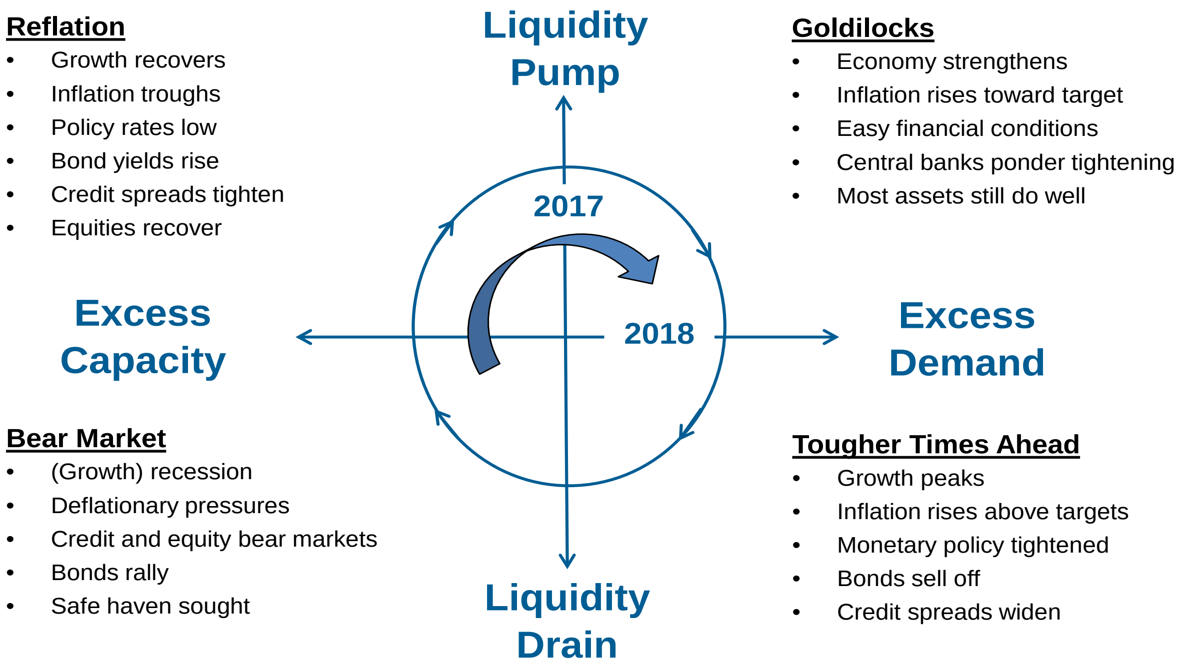
In our view, the macro debate in 2018 will likely focus on the remaining runway for the current recovery, especially in the US. Looking beyond subjective or model-derived recession probabilities, we think that this issue is best discussed in the context of the global financial cycle (defined via either excess liquidity dynamics or global central bank policy rates) and its interaction with the global business cycle. While the global liquidity cycle indicates how much support the global economy receives from central banks via either liquidity provision or policy rates, the global growth cycle determines whether there is still excess capacity available in the economy. Subdued inflation pressures in the face of continued strong growth, considerable underemployment and an only recent

Morgan Stanley & Co. Real GDP Forecasts

	2017E	2018E			2019E			2020-2022E
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
Global	**3.6%**	**2.8%**	**3.8%**	**4.6%**	**2.4%**	**3.7%**	**4.7%**	**3.4%**
G10	**2.2**	**1.1**	**2.1**	**2.8**	**0.3**	**1.8**	**2.7**	**1.3**
US	2.3	1.3	2.5	2.9	0.1	1.9	2.5	1.2
Euro Zone	2.3	1.3	2.1	2.9	0.6	1.9	3.3	1.2
Japan	1.5	0.4	1.3	2.0	0.4	1.5	2.4	1.1
UK	1.5	0.3	1.1	1.9	-0.5	0.8	1.6	1.4
Emerging Markets	**4.7**	**3.9**	**5.0**	**5.9**	**3.8**	**5.0**	**6.1**	**4.8**
China	6.8	6.0	6.5	6.9	5.7	6.3	6.8	5.6
India	6.4	6.3	7.5	8.8	6.1	7.7	8.8	7.3
Brazil	0.7	2.0	3.1	3.9	2.0	3.4	4.3	2.3
Russia	1.8	0.0	2.3	4.3	-1.0	1.8	4.2	1.8

Note: The above aggregates are weighted by purchasing power parity.
Source: Morgan Stanley Research as of Nov. 26, 2017

Framework for Interaction Between Financial and Business Cycles



Source: Morgan Stanley Research as of Nov. 26, 2017

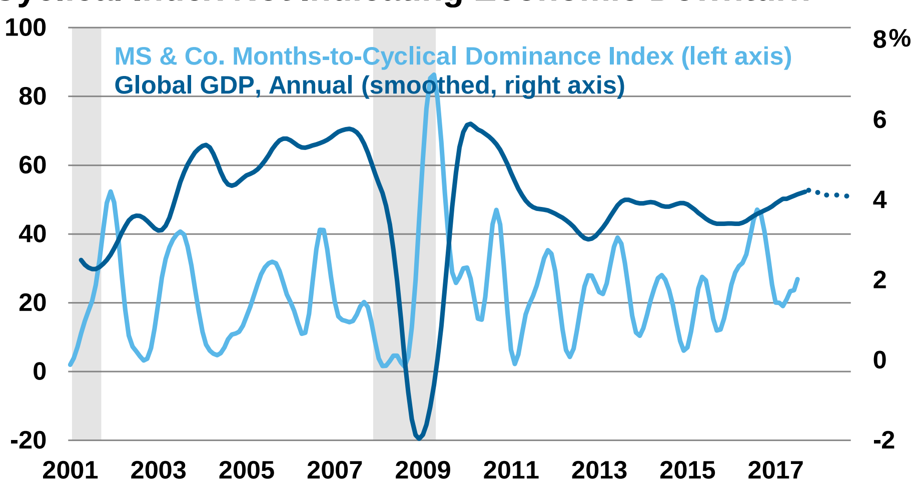
revival in capital spending and productivity suggest that the danger of excess demand is still far off.

STILL GOLDILOCKS. Over the past two years, the global economy has moved from the reflation phase into the "Goldilocks phase"—an economy that's neither too hot nor too cold (see chart, above). Of course, higher inflation and stronger activity will eventually absorb a rising share of the excess liquidity that thus far has mostly been sloshing around the financial system. In addition, central banks look set to slow creation of excess liquidity if they are not, like the Fed, already starting to drain it gradually. Once tighter monetary policy and capacity pressures materialize, tougher times will likely lie ahead—maybe even a full-blown bear market. This may not be an issue until late 2019, if not 2020.

Notwithstanding the positive fundamentals, financial markets will likely doubt the continuation of the recovery at some point over the forecast horizon. Once the growth momentum starts to moderate, risk asset markets could get increasingly nervous. Apart from potential exogenous shocks—such as geopolitical tensions, financial accidents or political turbulence—we do not see an ending to the current recovery materializing in 2018. In fact, our Months-to-Cyclical Dominance Index is not indicating a downturn. In fact, it points to even faster growth next year (see chart, left).

Our benign outlook could be challenged by an abrupt tightening in financial conditions, say, because market volatility starts to normalize from its current unusually low levels. At this juncture, easy financial conditions across developed markets bode well for economic growth and risk assets. Still, bear in mind that the start of a global recession typically coincides with that of a US recession. Thus, all eyes are on the US in 2018. ■

Cyclical Index Not Indicating Economic Downturn



Months to cyclical dominance (MCD) refers to when the cyclical trend historically has dominated the statistical noise. The chart shows the share of the key global indicators for which this criterion is met in terms of showing an acceleration in inflation.
Source: National data, Morgan Stanley Research as of Nov. 26, 2017

Ringing in Year 10 of the US Economic Expansion

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Midway through 2018, the US will ring in its 10th year of economic expansion. Though signs such as ultralow unemployment, a positive output gap and rising interest rates suggest the US is late cycle, a general lack of overheating in critical sectors, such as housing, and rising productivity suggest this late-cycle phase has room to run. Moreover, persistently low inflation throughout our forecast horizon helps stretch the cycle as it does not pressure the Federal Reserve to more quickly raise interest rates. We are revising growth in 2018 upward to 2.5% on a year-over-year basis, or 2.1% fourth quarter over fourth quarter (4Q/4Q) on a stronger domestic backdrop and additional deficit spending (see chart).

With this expected strength, we forecast the unemployment rate drops to 3.8%, the lowest since 2000. Moreover, rising labor costs associated with a tightening labor market are now pressuring corporate profits, creating an incentive for capital spending over labor. On the back of a lengthy period of higher investment in equipment, productivity is now on the rise (see page 10).

In line with the view of our policy strategists, in the first half of next year we expect a mildly expansionary tax package worth about $1 trillion over 10 years. This amounts to a moderate deficit expansion over the first four quarters of enactment, and about a 0.1 percentage point boost to GDP growth. Given that the economy is in the late-cycle phase, tax stimulus is likely to have less impact than it would have in an economy with more slack.

Looking further ahead, we initiate our 2019 GDP growth at 1.9% year over year, or 1.7% on a 4Q/4Q basis. While this appears to be fairly stable, the devil is in the quarterly details; the second half loses momentum and fourth-quarter-2019 growth slips to just 1.5%, well below the Fed's estimate of the economy's potential.

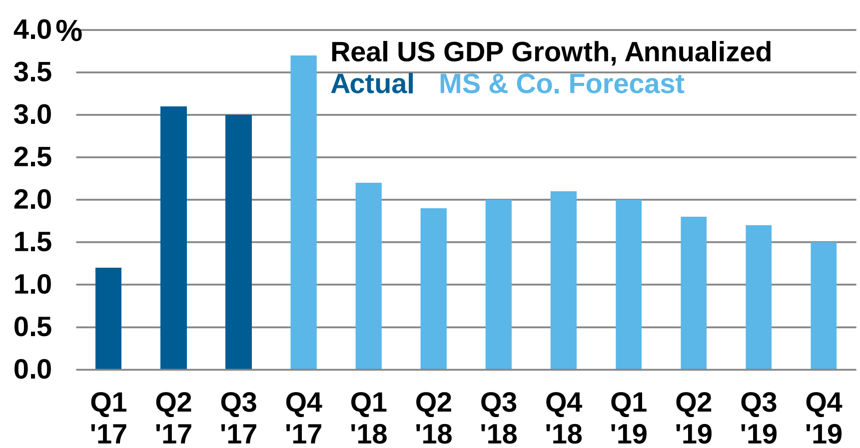
INFLATION TICKS UP. A combination of temporary factors depressing core inflation now—such as the lagged impact of previous US-dollar appreciation, slowing rents and other transitory factors such as price resets in telecom contracts—will abate during the forecast horizon. Moreover, with the unemployment rate moving down below 4%, some components of domestic service inflation should respond, while personal income tax cuts lead to a more price-tolerant consumer in early 2019. Still, longer-term structural forces, such as those from technological change and adoption, continue to exert downward pressure. After ending 2017 at 1.5% 4Q/4Q, we see core Personal Consumption Expenditures (PCE) inflation at 1.7% by the second quarter, and then remaining roughly flat.

GRADUAL TIGHTENING. We expect the Federal Reserve to resume tightening this month, followed by hikes in March, June and September. This view is supported by the little remaining slack in the economy. Expecting to find the federal funds rate in the range of neutral at 2.125% by September, we think the Fed will then pause to take stock. Seeing the bulk of fiscal stimulus pushing the economy to new heights in early 2019, we expect two more hikes—in March and June—to push the target range past neutral and further into positive real rate territory. With a restrictive stance on policy, we look for second-half-2019 GDP growth to slow sharply, putting upward pressure on the unemployment rate. This is likely where the hiking cycle ends in this expansion.

We expect no change to the Fed's explicit guidance on balance sheet policy. With no "material deterioration" in the outlook that results in a "sizable reduction" in the target federal funds rate, balance sheet runoff continues on schedule through the forecast horizon.

RISKS TO THE OUTLOOK. The risks to the outlook are to the downside. We are not on recession watch now, and peg the 12-month probability of recession at 25%. However, by 2020, that probability grows to a near certainty. ■

MS & Co.'s Quarterly US GDP Growth Forecast



Source: Bureau of Economic Analysis, Morgan Stanley Research as of Nov. 26, 2017

Global Equities Move Into Thin Air

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In many respects, the macro backdrop forecast by our economists for 2018 appears constructive for global equities, with a continuation of good growth and easy monetary policy. However, having outperformed the real economy significantly for a number of years, we think that stocks will struggle to repeat this feat as we move through next year.

Thus, our new 12-month price targets imply modest single-digit upside from here (see table). We stay positive on equities for now as the global macro backdrop is likely to remain supportive over the coming months; however, as 2018 progresses, a number of factors that have provided oxygen for the markets in recent years will likely reverse. At that point, we expect market volatility to pick up and lead to bigger drawdowns at some point.

In our view, the pace of earnings-per-share (EPS) growth will slow. For more than a decade, there has been a close relationship between the performance of equities and the trend in consensus next-12-months EPS estimates (see first chart, page 6). Having accelerated sharply in the past year, our new forecasts for 2018 and 2019 imply a material slowdown in forward EPS growth in the coming 12 months, notwithstanding our economists' above-consensus GDP forecasts. In particular, our own EPS growth forecasts for 2019 are materially below consensus.

Furthermore, there is little scope for increasing the price/earnings (P/E) ratio. In addition to a rising EPS trend, equity returns in recent years have been boosted by higher valuations, with the MSCI World P/E ratio having risen in about two-thirds of the last 60 months—the most sustained period of multiple expansion since the early 1970s. At this stage we do not consider global equity valuations to be particularly expensive; they are only slightly above their long-term average, and still cheap relative to bonds.

However, as we move through 2018, it is likely that some factors that have supported valuations in recent years will reverse (see bottom chart, page 6). To wit, we are facing a quicker pace of monetary tightening, a widening in credit spreads and an uptick in volatility. These factors will likely provide strong headwinds for stocks.

US. We move our base-case S&P target to 2,750 from 2,700. The increase is a result of higher earnings (our estimate is $145 in 2018 and $150 in 2019) and a roll forward to 2019 earnings, but at a lower multiple (18.3) than we previously thought as the market will not reward this later-cycle growth with multiple expansion as in 2017. Tax reform remains a wild card, with implications for earnings, risk-taking, investment personal income and the Federal Reserve. We think that tax cuts are necessary for forecast earnings growth, but we could see too much of a good thing as tax reform may unleash “animal spirits”, leading to an overshoot of our target. We expect any such blow-off could well be greeted by a more hawkish Fed, which is a risk, given the buildup in corporate leverage. We remain positive on equities and prefer late-cycle, investment-geared sectors like energy, financials, industrials and technology, but note that the risk/reward is not what it was this time last year.

Europe. We have nudged up our 2018 EPS growth forecast to 9% from 7% to reflect our GDP upgrades, a lower path for the euro and high oil-price assumptions. We introduce a 2019 EPS growth forecast of 4%, which reflects slowing GDP growth, a higher euro and the consequences of lower global bond yields on financials. We assume an unchanged next-12-months’ P/E profile over the next year (consistent with the range-bound valuation seen for the past few years), which gives us a MSCI Europe target of 1,700, which is 4% below the current level.

MS & Co.’s 2018 Equity Market Price Targets

Index	Current Price	New Price Target/ Change From Current Price		
		Bull	Base	Bear
S&P 500	2,648	3,000	2,750	2,300
		13%	4%	-13%
MSCI Europe	1,602	1,960	1,700	1,180
		22%	6%	-26%
Topix	1,792	2,240	1,820	1,190
		25%	2%	-34%
MSCI Emerging Markets	1,120	1,420	1,185	740
		27%	6%	-34%

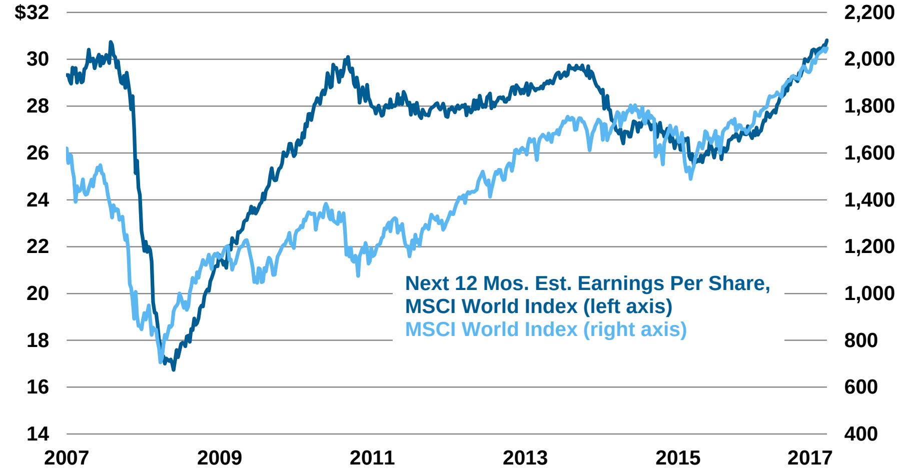
Source: Morgan Stanley & Co. Research as of Nov. 30, 2017

Japan. Our new Topix base-case target price is 1,820, up 2% for December 2018 versus 1,790 previously for June 2018. We are still bullish on the micro story of improving corporate governance and shareholder rewards policy, but from a top-down perspective we believe that Japanese equities will be negatively affected by yen appreciation and the potential risk of the Bank of Japan's tapering of exchange-traded funds at some point. We expect Topix base-case EPS growth to slow significantly to 6% in calendar-year 2018 and turn 1% in the negative in 2019. This is after 40% EPS growth in 2017. Our earnings forecasts go from being 1% above consensus at year-end 2018 to 7% below consensus by year-end 2019. Our forward P/E multiple assumption is 15.0 for December 2018 based on December 2019 estimated earnings.

Emerging Markets. Similarly, our new MSCI Emerging Markets base-case target is up 6%, to 1,185 for December 2018 versus 1,110 for our previous June 2018 target. We expect the emerging markets to deliver base-case EPS growth of 11% next year, falling to 7% in 2019. This is after 24% EPS growth in 2017. Our earnings forecasts are below consensus by 4% in 2018, and the magnitude by which we are below consensus will increase to 7% in 2019. Our forward P/E multiple assumption is 12.7 for December 2018, based on December 2019 estimated earnings.

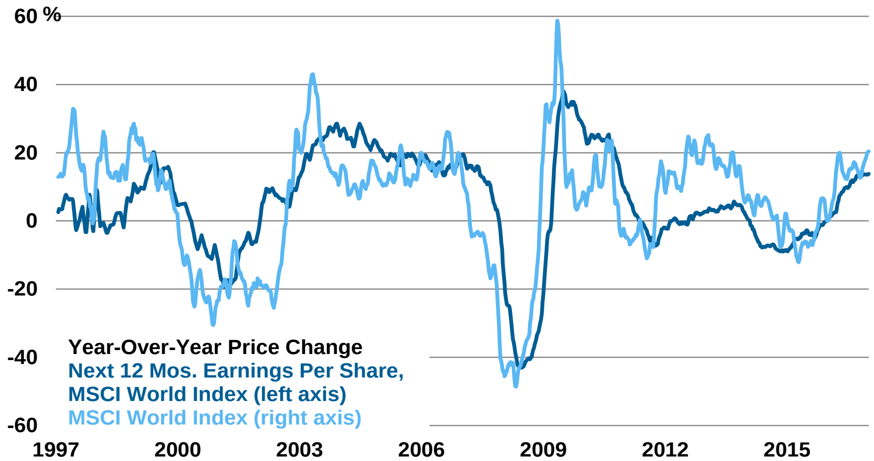
Investing in the emerging markets is still about picking the right spots. We think that China will continue to lead EM performance, making it our largest overweight, followed by Brazil and India. We cut Korea to underweight as our tech team expects the memory-chip cycle to roll over in the first half of 2018. We also upgrade South Africa to equal weight after two years as an underweight. ■

Rising Optimism on Earnings Has Been Critical in Driving Equity Prices Higher



Source: MSCI, IBES, Morgan Stanley & Co. Research as of Nov. 26, 2017

Equities Will Likely Be Sensitive to a Slowing in the Earnings-Growth Rate Next Year



Source: MSCI, IBES, Morgan Stanley & Co. Research as of Nov. 26, 2017

Why We Are Still Bullish On China

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Throughout year, one of the key debates about the global economy has been and continues to be the outlook for China. The debates typically revolve around the sustainability of debt levels—or the risk of a financial shock—and the pace of slowdown in the economy as policymakers continue to tighten.

Our view has been that China will be able to avoid a financial shock and that the worst of the debt/disinflation cycle is behind us, which is a thesis we laid out in February in our *Blue Paper* on China. Today, as we revisit and take stock of our original thesis, we find that China has made better-than-expected progress in these areas this year. Equity investors have already taken notice. In US-dollar terms, the MSCI China Index is up 51.4% for the year to date versus 32.9% for the broader MSCI Emerging Markets Index and 20.6% for the MSCI USA Index (see chart).

EXCEEDING EXPECTATIONS. Notably, growth and inflation have exceeded even our initial expectations, despite the ongoing policy-tightening efforts. Indeed, notwithstanding the softer October data, we expect real GDP growth to have held up at an annualized 6.8% for 2017, while producer prices have decisively exited deflation. The noncommodity Producer Price Index is averaging 2.5% annualized this year, compared with the annualized average of -0.8% from the second half of 2012 through the first half of 2016. Nominal GDP growth is tracking at 11.3% annualized for the year to date—five percentage points higher than the trough of 6.4% in December 2015.

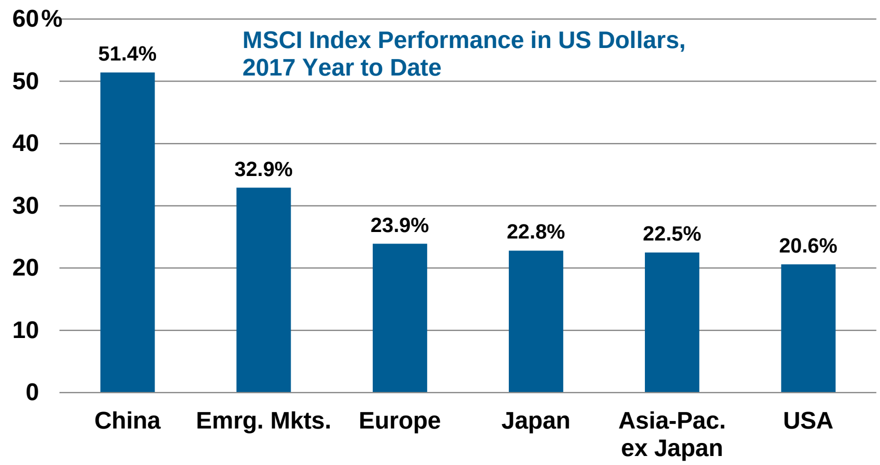
The improvement in macro outcomes could be attributed to both demand- and supply-side factors. On the demand side, better exports on the back of strong global growth have supported aggregate demand, which, coupled with further rebalancing toward consumption, has helped to partly offset the impact from policy-induced slower credit growth. In the property sector, purchase restrictions have started to weigh on sales growth, but the significant decline in inventory has meant that a deep adjustment in housing starts is unlikely, limiting the risks of a spillover impact to other sectors of the economy. Meanwhile, from a supply perspective, substantial progress in capacity cuts in the materials sector has lifted capacity utilization and restored pricing power, thereby eliminating the deflationary pressures, leading to an improvement in return on equity.

DEBT DYNAMIC. As a result, the debt/disinflation dynamic has improved significantly. For the first three quarters of 2017, debt/GDP rose by only four percentage points, and we estimate that the annual change will be only five percentage points. This is a significant improvement compared with the cumulative change of 42 percentage points in China's debt/GDP ratio in 2015 to 2016, and our initial expectations of a gain of 12 percentage points for 2017 back in February. Put differently, China now only needs 3.2 new units of incremental debt to generate 1.0 unit of nominal GDP growth, which is down sharply from the peak of 5.5 in 2015 (see chart, page 7).

Notwithstanding this improvement, investors have raised several new points of debate:

Investors contend that China has managed only to slow the pace of increase, as debt/GDP is still rising. Our view is that, from an overall debt-management perspective, the tail risks from the troubled corporate balance sheet have been removed. Debt becomes a problem when a troubled balance sheet overleverages; therefore, the first step toward stabilizing overall debt (in a deleveraging cycle) is to stabilize debt/GDP in the troubled balance sheet. This is because the spiral of uncontrolled defaults in combination with forced and

Chinese Stocks Have Been Star Performers in a Year of Strong Returns for Global Equities



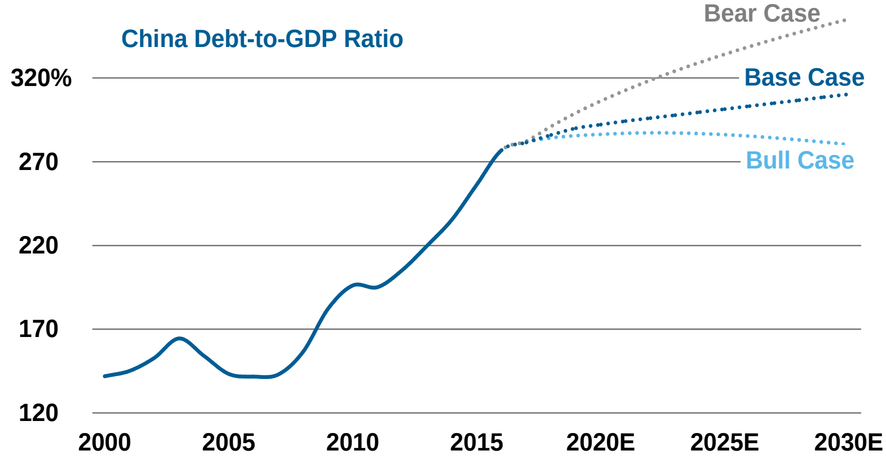
Source: MSCI as of Nov. 30, 2017

rapid deleveraging can drag aggregate demand and lead to the emergence of persistent deflationary pressures. China's corporate sector had just started to delever in the second quarter of this year. We expect corporate sector deleveraging to continue, removing the tail risk of big defaults.

As policymakers tighten to slow housing sales and address the rapid rise in household debt, this could cause a sharp adjustment, with an attendant impact on growth. We agree that the significant decline in inventory has been achieved by lifting annual sales to much higher than longer-run sustainable levels. The other side of this development is also reflected in the sharp rise in household debt. To address these concerns, the government has been tightening property-purchase norms since the first half of 2016. However, we do not expect a sharp adjustment in housing starts (which would be the key variable impacting growth), considering that the pace of uptick in starts has lagged that of sales.

Policymakers could slow the momentum on supply-side reforms. Supply-side reforms have been taken up with the twin objectives of improving the financial health of the leveraged industrial sector and reducing environmental pollution. Considering that these objectives have not been fully met, we expect continued policy momentum in these areas. With regard to the financial health of the industrial sector, profitability has been restored and return on equity lifted, but the steel industry has only started to pay down debt in the past quarter. Moreover, the policy efforts to improve air quality (in the form of increased environmental inspections and enforcement of production shutdowns in the winter) recently have intensified. With the enforced shutdown of production, mills with high operating costs are being pushed out of business, thereby keeping a lid on supply.

MS & Co. Base-Case Forecast Shows China's Debt-to-GDP Ratio Set to Stabilize



Source: CEIC, Morgan Stanley & Co. Research as of Nov. 3, 2017

SUSTAINABLE OUTLOOK. Taken together, we believe that China will be able to navigate these challenges, and the improvement in the overall macro outlook can be sustained, notwithstanding a moderate slowdown in growth. More important, we are increasingly seeing signs that policymakers are reaffirming the focus on sustainability of the growth path, a stance that was emphasized by the recent 19th Party Congress. This involves ensuring economic stability and environmental protection and reducing inequality, which gives us greater confidence in our thesis.

Taking into account recent improvement and continued policy momentum, we expect China's debt/GDP to reach near stabilization in the second half of 2019. This implies an increase in debt/GDP of three percentage points annually between 2017 and 2022—a significant improvement from the 16-percentage-point annual average increase between 2012 and 2016.

In sum, we remain constructive on the macro outlook for China. To be sure, real GDP growth will continue to moderate over the forecast horizon, but with the debt/disinflation dynamic remaining favorable, we believe that the prospects of a shock have reduced significantly. We also expect China to be able to cross the high-income threshold of $13,700 by 2025, which is two years ahead of our initial expectation laid out in February.

In light of the positive structural and cyclical growth dynamic, our equity strategists remain confident that the MSCI China will continue to outperform emerging markets over the cycle. They continue to overweight information technology, financials and selected materials and industrials, particularly those that have benefitted from the supply-side-reform capital-spending discipline. ■

China's "A" Shares To Become More Available

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Investors in the US wanting to buy Chinese stocks have been largely limited to Chinese companies trading in the US as American Depositary Receipts, Chinese companies listed in Hong Kong shares or domestic Hong Kong-based companies. That covers only about half of China's market capitalization. The remainder is "A-shares," and they've been generally off-limits to foreigners as direct investments, even though they comprise nearly half of China's market capitalization (see chart).

China's $9.2 trillion A-share market is the world's second-largest equity market, and now the Chinese government is pursuing market liberalization and reform measures, making more of the stocks available to foreign investors. In fact, because of their availability, index manager MSCI, Inc. recently announced its plan to include 222 China A-share stocks in the MSCI Emerging Markets Index, bringing China's weighting to 46% from the current 29%.

BROADER LIST. The A-share market provides a broader and deeper universe of companies diversified across the full spectrum of sectors and market caps. For example, of the more than 3,400 listed A-share companies, more than 200 are health care companies with a market cap of $100 million or more, only 80 of which are listed in offshore markets. Consider also that the leading Chinese producer of distilled liquor, which has some $115 billion in annual sales, trades only as an A-share.

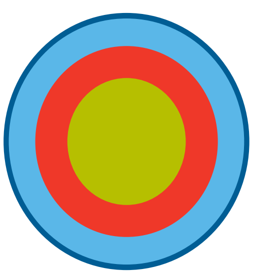
B-shares, H-shares and "red chips" are already available to foreign investors. Like A-shares, B-shares trade on the Shanghai or Shenzen Stock Exchanges but, unlike A-shares, B shares are priced trade in foreign currencies. H-shares, which trade in Hong Kong, are Chinese companies that tend to be more mature large-cap to megacap "global" companies, or they're trying to access offshore sources of funding through the Hong Kong's capital markets. H-share companies are mostly well researched and covered by most sell-side equity research firms. Red chips are Chinese companies with direct or substantial indirect state ownership.

SHARE PURCHASES. Currently, there are two ways to invest in China A-shares. The first is through a trading link that connects a short list of A-share stocks from the mainland Shanghai and Shenzhen Exchanges to the Hong Kong Stock Exchange. Most exchange-traded funds (ETFs) and global equity funds get China exposure through this method. The second way to access A-shares is through a Qualified Foreign Institutional Investor (QFII). After a stringent screening and registration process by the Chinese regulators, large institutional investors are named as a QFII, and can invest in A-shares by quota.

Successfully investing in the China A-share market requires stringent manager due-diligence skills and local knowledge. The newly evolved market is heavily dominated by state-owned enterprises, many of which are known to be poor capital allocators and often prioritize government directives over shareholder interests. Further, because individual Chinese investors dominate trading in A-shares, this market often experiences high levels of volatility. Corporate governance and reporting standards are in need of improvement.

ACTIVE MANAGEMENT. That said, considering the opportunities and unique risks in A-shares, Global Investment Manager Analysis recommends that US investors use active managers. China ETFs may also be an effective way to gain exposure; however, the passive approach does not shelter investors from risks in this unique emerging market, and the expense savings on foreign market ETFs may not be as compelling compared with actively managed mutual funds. ■

A-Shares Account for Nearly 60% of the Companies And Almost Half the Market Cap of Chinese Equities



	Number of Companies	Market Cap (billions)
China Companies Listed in the US	171	$1,753
Domestic Hong Kong Stocks	1,702	4,269
H and B Shares, "Red Chips"	508	4,189
A Shares	3,444	9,224

Source: Matthews Asia as of Nov. 30, 2017

The Capex Conundrum and The Productivity Paradox

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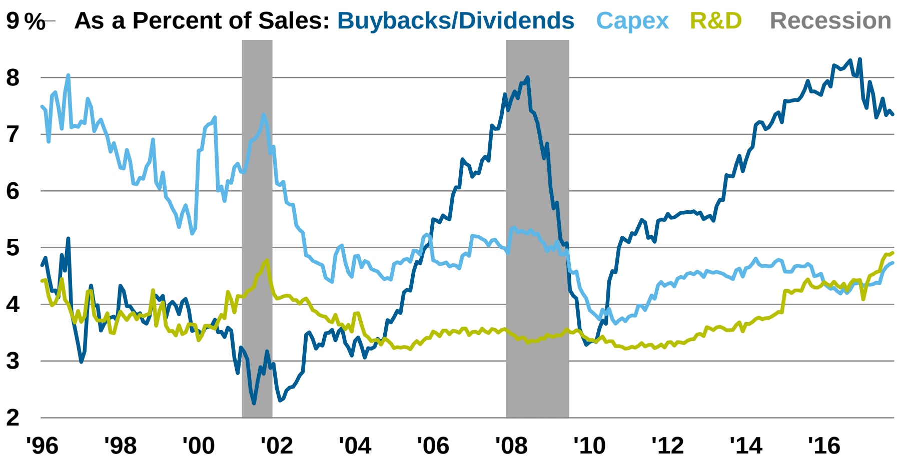
By many counts, the economic recovery of the past nine years has been a disappointment as growth slipped below that of other rebounds. One reason, we believe, was flagging capital expenditures and poor productivity growth, which explains why it has been a joyless recovery for many. Rising productivity, increasing the amount of output for each unit of input, is what powers real wage gains and bolsters living standards. This "capex conundrum and productivity paradox" has confounded investors and economists.

How did this happen? Powerful deflationary forces and the results of manmade policy decisions came together in a perfect storm called "secular stagnation" that stunted economic growth in the years following the financial crisis. In our 2016 *Special Report*, "Beyond Secular Stagnation," we examined trends—an aging population, globalization, automation, income inequality, excessive debt and the downdraft of a commodity supercycle. We estimated that between 2008 and 2015 this stagnation shaved $2.5 trillion from US trend GDP. We also thought that stagnation would be ending and, indeed, in large part, it has. In the first three quarters of 2017, US GDP grew nominally by 3.2% and global GDP by 6.2%, the strongest since 2011.

CAPITAL SPENDING PICKUP. Some of the factors behind secular stagnation were cyclical and policy driven, and thus poised to turn as does the economy. In our view, global capital spending should pick up meaningfully in the next 12 to 18 months. The signs are already there. For instance, real investment in equipment jumped an annualized 10.4% in 2017's third quarter.

Buybacks and Dividends Have Risen At the Cost of Capital Expenditures



Note: Companies are analyzed ex financial and commodity-sensitive sectors.
Source: FactSet, Morgan Stanley Wealth Management GIC as of Sept. 30, 2017

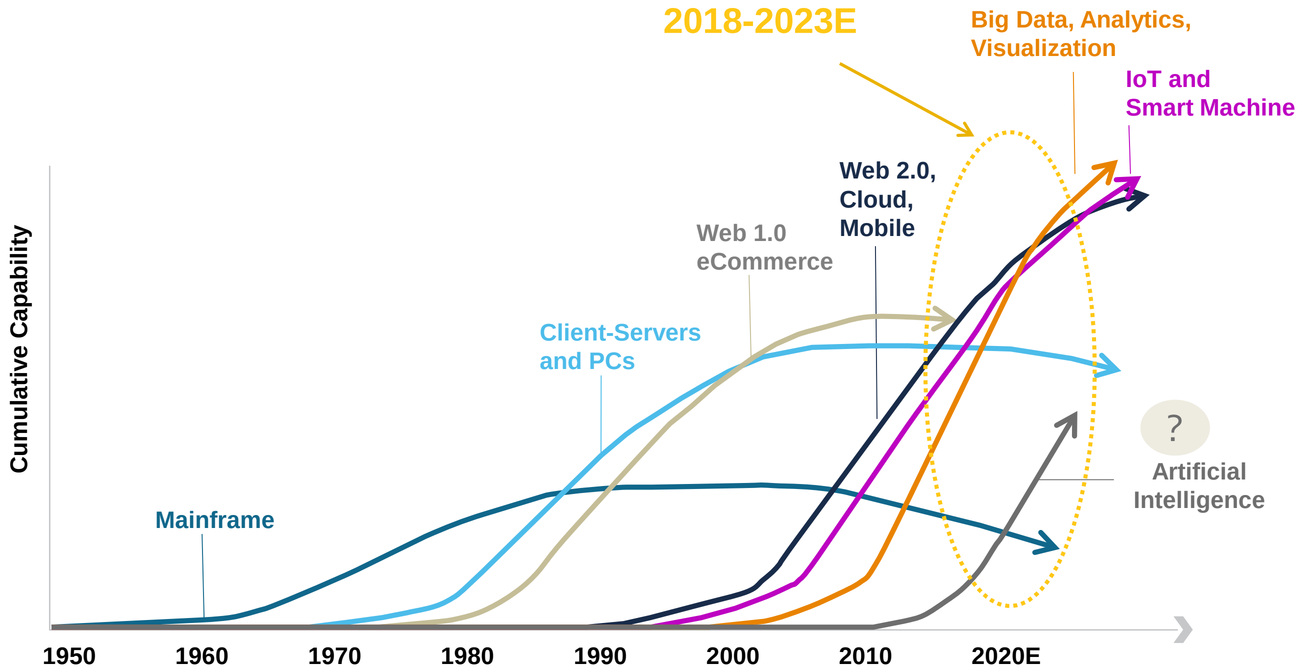
New-plant equipment is state of the art and by definition more productive, and when some companies upgrade and become more productive, competitors must follow suit. The commodity supercycle is turning positive and becoming a tailwind. Higher prices encourage renewed exploration and production; nearly 30% of all capital spending can be attributed to this sector.

We expect normalization of interest rates to help bolster investment spending, too. Aggressive central bank policies drove interest rates to near zero, but with the cheapest cost of capital in decades, companies failed to bolster capital spending. In fact, this financial repression may have had the opposite effect. It depressed spending by allowing "zombie firms"—old, economically unproductive companies—to remain in operation, depressing productivity by discouraging the entrance of risk-taking start-ups.

SHARE BUYBACKS. Of course, many solid companies took advantage of lower interest rates to raise capital, but instead of investing them in updating their plant and equipment many of them just used the money on share buybacks. That rewarded shareholders, but did little for employees or the broad economy. To be sure, capital spending may not ever return to its prior peaks. Some of the decline in capex relative to growth, profits or cash flow is likely structural—a reflection of globalized supply chains, the falling cost of technology and processing power, the spread of "asset lite" business models, and the relative size and growth of service versus manufacturing.

However, we see the outlook for capex and productivity brightening, in part because the economy has strengthened enough to produce wage pressures, now running at a more than 2.5% annual rate. Compensation costs could be near a tipping point at which managements decide to invest in upgrading plant and equipment rather than just more workers.

New Technologies Have the Potential to Drive Exponential Productivity Gains



Source: Morgan Stanley Wealth Management GIC as of Sept. 30, 2017. Inspired by the work of the Digital Transformation Initiative of the World Economic Forum and Accenture: http://reports.weforum.org/digital-transformation/

When companies make that choice, they may be able to utilize new technologies that could supercharge industrial applications. Much of the innovation of the past decade was directed toward consumers but rides on demand and streaming video do not necessarily contribute much to the economy's overall productivity.

COMING INNOVATION. In the next five years, we believe technological innovation will shift toward scalable industrial applications. The confluence of machine-to-machine learning, artificial intelligence, robotics, blockchain, virtual reality and big data will transform service industries and small business (see chart).

The accelerating growth of research and development (R&D) dollars foretells the shift; recently, R&D has nearly doubled its share of business investment to 60%. What's more, these new technologies are likely to create new dominant players that may be able to reap outsized gains, eclipsing the "FAANG" giants—Facebook, Amazon, Apple, Netflix and Google—created in the prior technology cycle.

Other forces are lining up to propel capex and productivity. For example, demographics have been a weight on productivity. However, as older workers retire, they are replaced by more technologically sophisticated workers. The economy's capital stock is in its senescence, at a post-World War II high in terms of its age, and is sorely in need of an upgrade.

CHANGES NEEDED. We find that more economic potential for capital spending and productivity could be realized if policy and corporate governance changes attack income inequality, encourage antitrust enforcement and improve corporate incentives against a backdrop of both passive index investing and activist forces.

The investment implications of our work are threefold: First, we believe the next recession will be shallow and the next business cycle will surprise to the upside for its relative strength, underscoring the likely repricing of the bond market. Second, investment opportunities in the next cycle will require active management in both stocks and credit to fully exploit these trends. Finally, while winner-take-all business models may continue to dominate because of unassailable competitive moats, new dominant players in new industries will be emerging. ■

To obtain a full copy of the Special Report, *"The Capex Conundrum and Productivity Paradox," please contact your Financial Advisor.*

Finding the Next FAANGs

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Even people who barely pay attention to the stock market know the names of these companies: Facebook, Amazon, Apple, Netflix and Google. Together, the “FAANG” stocks have been the trade of the cycle, up 53% for the year to date and more 582% for the past five years (including dividends). The stocks have done well in part because they command strong industry-level economics while also benefitting from powerful macro tailwinds that favor consumer-facing businesses.

While hitching a ride on the FAANG express can help returns, identifying the next FAANG before everybody knows its name would be even better. So, where might you find the future FAANGs? A recent *Special Report,* “The Capex Conundrum and Productivity Paradox,” points to a new wave of industrial-scalable technologies that could possibly foster those sorts of companies (see page 10).

EASY SEARCHING. Importantly, each of the companies benefits by making the search for people, products, media and information more efficient for consumers. The companies all have leading market share and economies of scale and are gaining even more share as they take advantage of powerful network effects.

The last point is likely their “secret sauce” and the difference between a nice steady compounding company and a dominant company. In the past 10 years, each additional user added network effects to the FAANGs. Hence the companies’ value grew according to Metcalfe’s law—an axiom that comes out of the telecom industry and describes the value of adding additional users to a network. The law posits that the value of network grows in proportion to the square of the nodes, or the points at which pathways intersect. Interestingly, the FAANGs as a group have grown roughly in line with Metcalf’s law since 2012 (see chart).

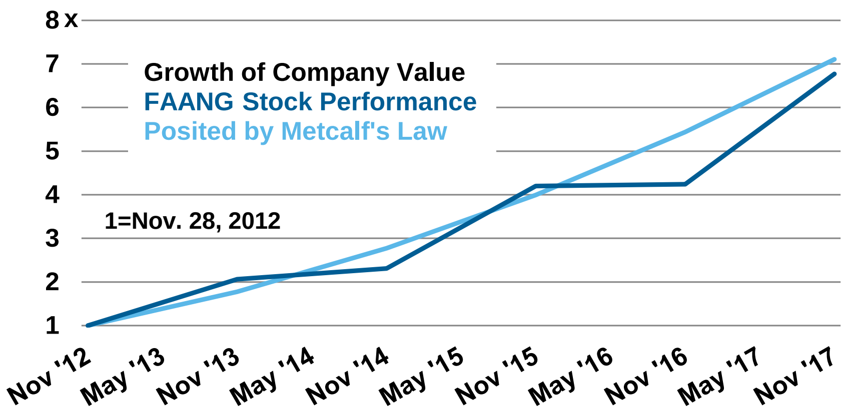
The *Special Report* argues the next FAANGs are likely to come from industry-facing markets rather than consumer-facing markets. Simply put, the new leaders will be those companies that reduce the cost of production rather than the cost of consumption. They may do it through industrial automation, robotics, artificial intelligence or blockchain technology, and identifying the right technology market is only half the battle. Finding companies that can create industrial network effects can be the difference between a nice compounder and a transformational investment.

NETWORK EFFECTS. Consumer-facing network effects are easy to understand: A person joins a social network and then more people want to join because everyone is on that network. Alternatively, a company sells its products through a popular website and other companies sell through the same site to reach the larger user base. Industrial network effects are different. Operating systems often have a steep learning curve, so companies have an incentive to use the most widely used operating systems so that anyone they hire will already know how to use it. We believe an artificial intelligence operating system could be developed that benefits from a learning curve.

Data also experience network effects. A company with a superior data set should be able to pay more to acquire new data (economies of scale) and should be the vendor of choice for companies that need to use that data (network effects).

Finally, transportation networks obviously benefit from network effects. Self-driving trucks could increase economies of scale by making fleets of trucks less expensive to operate and thus more valuable than individual trucks. Shippers would likely then prefer the largest network, whereas today a small truck company can compete with a larger network for a particular job. We see network effects in operating systems, data collection and transportation as being three fertile areas from which the next FAANGs could emerge. ■

FAANGs Tracked Path Posited by Network Theory



Source: Bloomberg, Morgan Stanley Wealth Management as of Nov. 28, 2017

Toward the First Flat Yield Curve

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The year ahead should see the global economic recovery continue as it broadens and strengthens a bit further. Core inflation remains below central bank targets in the US, the Euro Zone and Japan, though it rises gradually on our economists' forecasts. As a result, the respective central banks are likely to remove policy accommodation only gradually in 2018.

While this backdrop is important for global interest rates, so is the macro outlook for 2019. Our economists expect growth in the US and UK to slow materially in 2019, as well as moderate in the Euro Zone and China. The combination of gradual policy tightening in 2018 and a deteriorating forward growth outlook keeps global rate levels low and, in some cases like the US, eventually moving lower.

US. We expect the 10-year US Treasury yield to remain below 2.50% in 2018 and fall below 2.00% toward the end of the year. Our economists expect the Federal Reserve to keep hiking rates by 25 basis points per quarter through the third quarter of 2018 while core inflation creeps higher and real growth remains above potential. Despite the rise in core inflation, our economists expect it to remain unremarkable and still 30-to-60 basis points below the Fed's 2% target.

As the Fed hike rates and pursues balance sheet normalization, we expect the US Treasury yield curve—the difference between long and short rates—to flatten, reaching complete flatness in the third quarter with the Fed's target rate range at 2.00% to 2.25% and long-term yields just above the lower end of the range at 2.05%.

Euro Zone. We forecast yields to rise slowly in the first half before stabilizing in the second half. Despite the strong growth momentum and the improved inflation outlook, our economists expect the European Central Bank (ECB) to adopt a very gradual pace of policy normalization. This allows both term premiums and rate expectations embedded in Bund yields to remain well-anchored.

The ECB forecast has Quantitative Easing ending in September 2018.

However, we expect the market to grapple with the possibility of another QE extension in the fourth quarter of 2018, which could push back the market pricing of the first rate hike further—thereby anchoring yields for longer. On the whole, we believe that any meaningful move higher in yields will be driven by the ECB signaling a more hawkish stance. As a result, we forecast 10-year German Bund yields to end 2018 at 0.5%.

UK. We expect gilt yields to rise in the first half of 2018 as the Monetary Policy Committee (MPC) continues its hiking cycle. Ultimately, the gradual tightening in monetary policy should prevent gilt yields from rising sharply. By the end of 2018, we see two-year gilts at 0.75% and 10-year gilts at 1.55%.

Japan. As core inflation (ex food and energy) recovers gradually toward an annualized 1.0%, we expect the market to price in a rate hike. However, once the Bank of Japan hikes the yield target to 0.25% from 0%, which we expect in the third quarter, yield-starved investors should start buying the dips in bond prices. We believe that 10-year Japanese government bond yields will trade slightly below the Bank of Japan' target level of 0.25%, so we forecast they will yield 0.20% at the end of 2018. ■

MS & Co.'s 10-Year Government Bond Yield Forecast

Country	Q1 '18	Q2 '18	Q3 '18	Q4 '18
US	2.25%	2.15%	2.05%	1.95%
Germany	0.50	0.55	0.60	0.50
UK	1.45	1.50	1.55	1.55
Japan	0.05	0.08	0.20	0.20

Source: Morgan Stanley Research as of Nov. 26, 2017

How Index Composition May Influence Returns

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Recent weakness in credit markets, particularly in high yield, has caused concern among investors who have grown accustomed to unidirectional markets over the past several years. Given the strong performance of credit and currently rich valuations, it is tempting to attribute the recent spread widening to a more fundamental shift in investor appetite by comparing the moves in high yield to those in equities—especially at this late stage of the business cycle.

We view the recent sell-off in high yield as a response to historically tight spread levels, as catalyzed by weak earnings from specific issuers and sectors facing structural risks, with uncertainty among more highly leveraged borrowers around tax reform and interest deductibility also playing a role. We come to this assessment, in part, by combining analysis of recent macro events with an understanding of the varying characteristics of indexes, which can help put performance in perspective whether short term or through a full cycle.

INDEX COMPOSITION. When forming comparisons between two investments, it is important to understand the different characteristics that may influence returns. While high yield credit and equities are often cited together, given a strong long-term correlation of returns—for the past 20 years, the Bloomberg Barclays US Corporate High Yield Index and the S&P 500 have a 0.62 correlation—in the short term, differences in the composition of each index can drive divergence from this relationship.

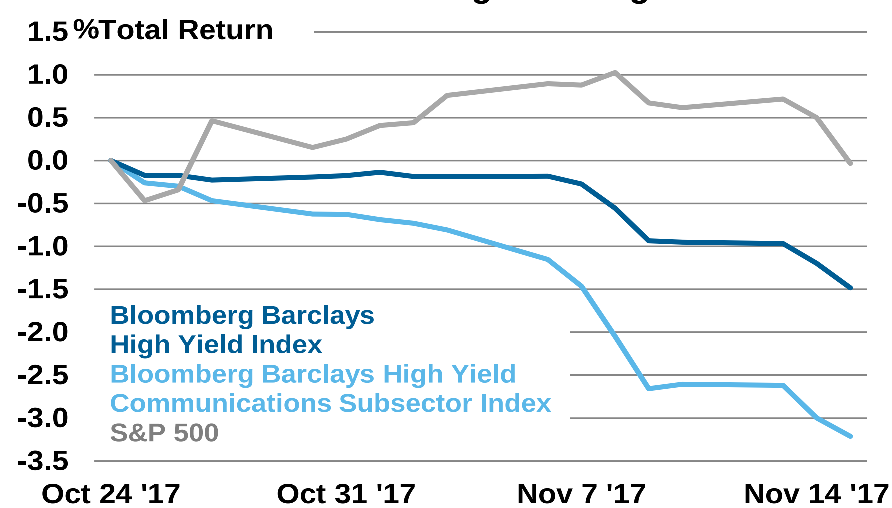
A good example of this effect is the impact on issuers in the communications sector in recent weeks (see chart). The sector traded down following continued weak earnings reports by the wireline companies, which face structural challenges to their business model, as well as the collapse of an anticipated merger within the sector. From the tightest spread on Oct. 24 to the widest on Nov. 15, the communications portion of the high yield index fell 3.21% on a total-return basis, versus a 1.48% decline for the broader high yield index; in the same period, the S&P 500 telecom and media components returned -6.95% and 0.24%, respectively, while the broader equity index was effectively flat. Part of this disparity is the respective weights of communications issuers—20% of the bond index in comparison to only 4.5% of the S&P 500.

FINANCIAL TRAITS. In addition to this different issuer/sector mix, recent research from Morgan Stanley & Co. highlighted the unique characteristics of the companies comprised in each index, which can cause performance to vary over the cycle. High yield companies are generally much smaller in size, with 71% of the index below $10 billion in market cap and 97% under $50 billion; the S&P 500, which is weighted by market capitalization, overweights larger issuers by design. Only 2% of the index is below $10 billion and 31% is less than $50 billion.

Similarly, the S&P 500 is higher in credit quality as measured by agency ratings and by leverage. With respect to the S&P 500, 23% of the index carries an average rating of AA or higher and 57% an average of A or higher; by its nature, the high yield index is capped at BB, with 47% of issuers of this rating and 41% rated B. Similarly, more than 50% of the S&P 500 market cap has leverage of less than 2.0, compared with 3% in high yield, which features 69% in excess of 4.0 leverage and 37% greater than 6.0.

MACRO AND MICRO VIEW. An understanding of the underlying characteristics of investments, whether of broader asset classes or individual portfolios versus benchmarks, can shed light on the drivers of performance, on both a short- and longer-term basis. Viewing the recent high yield widening in this context reveals a more isolated impact on select sectors, rather than a broader-based sell-off. ■

Communications Sector Weighs on High Yield Return

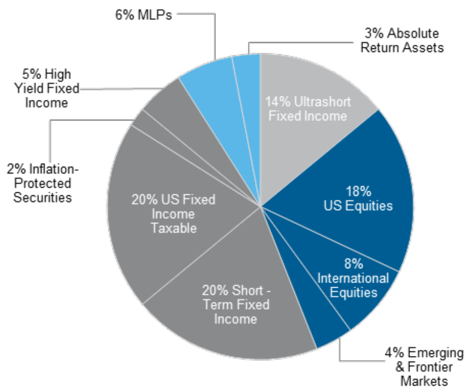


Source: Bloomberg. Morgan Stanley Wealth Management as of Nov. 17, 2017

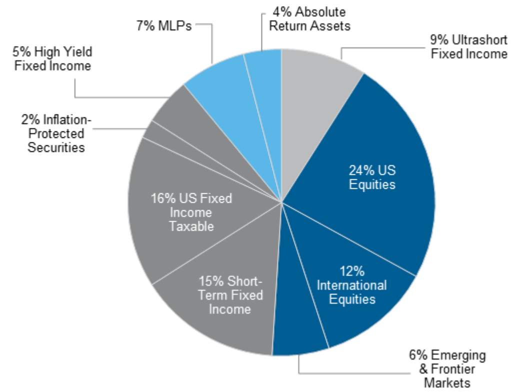
Global Investment Committee Tactical Asset Allocation

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

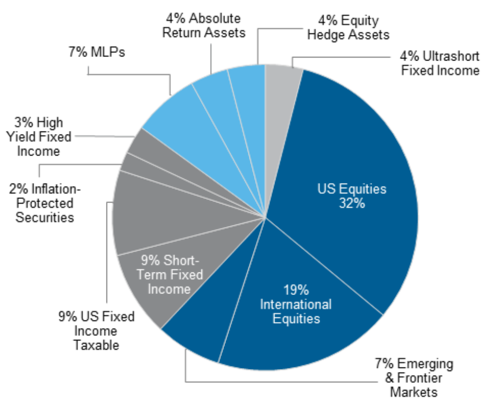
Wealth Conservation



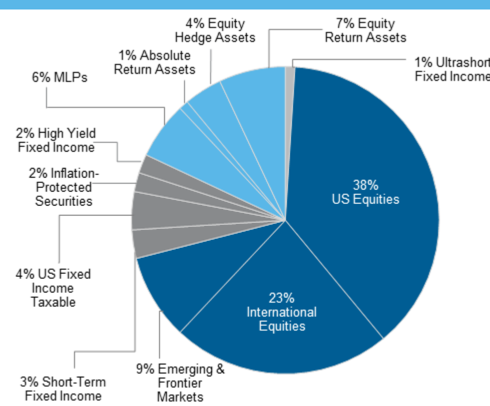
Income



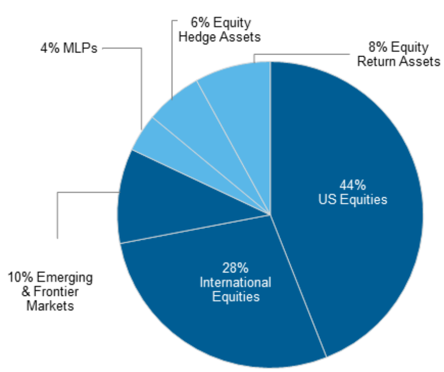
Balanced Growth



Market Growth



Opportunistic Growth



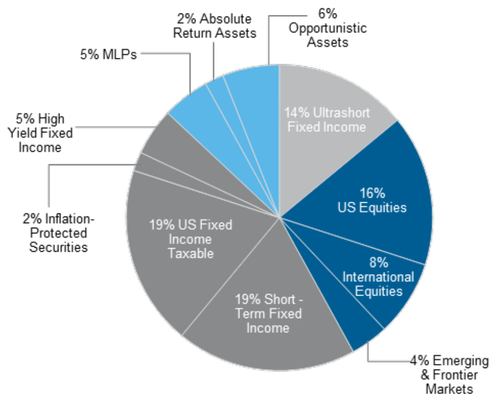
Key

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

Source: Morgan Stanley Wealth Management GIC as of Nov. 30, 2017

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



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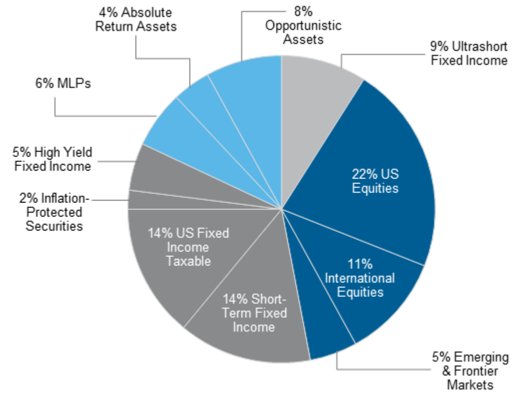

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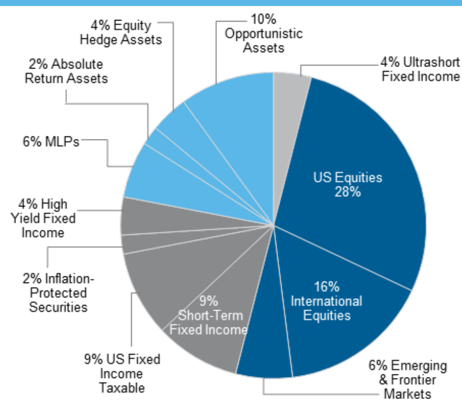

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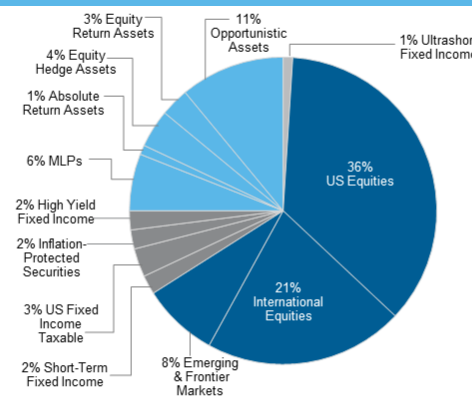

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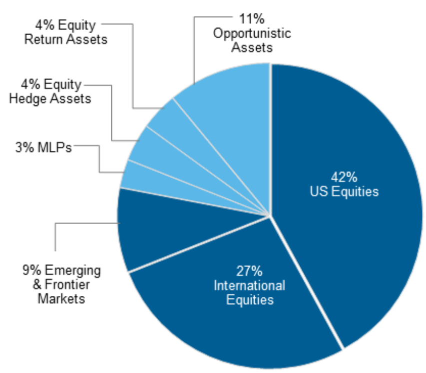

Key

- **Ultrashort Fixed Income**
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Source: Morgan Stanley Wealth Management GIC as of Nov. 30, 2017

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Overweight	While US equities have done exceptionally well since the global financial crisis, they are now in the latter stages of a cyclical bull market. While the Trump/Republican progrowth agenda has been slower to develop than hoped, it has recently picked up, with progress on tax reform driving equity prices higher. Sentiment is now much more bullish than it was a year ago, leaving much less upside to our 2,750 target on the S&P 500 for the first half of 2018.
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 needed to make the extraordinary monetary policy offered more effective. Both are still at record levels of cheapness but we prefer Japan at the moment given the over-exuberance on Europe. We recommend hedging currency risk for 50% of Japanese positions but not Europe.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 12 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, there is more near-term upward pressure on US economic data to reverse and begin surprising to the upside as the European Central Bank tapers its bond purchases. Within investment grade, we prefer BBB-rated corporates and A-rated municipals to US Treasuries.
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 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 but has not yet run its course.
High Yield	Equal weight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently downgraded high yield to equal weight from overweight on the back of this performance, record-low credit spreads and interest rates and early signs of credit deterioration in commercial real estate and auto financing.
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, have performed poorly in 2017. With oil prices recovering again and a more favourable 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 Nov. 30, 2017

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

Index Definitions

MS & Co. Months to Cyclical Dominance (MCD) refers to when the cyclical trend historically has dominated the statistical noise*.* It measures the share of key global indicators for which this criterion is met in terms of showing an acceleration in inflation.

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

Risk Considerations

Alternative Investments

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

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

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

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

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

Hypothetical Performance

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

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

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

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

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

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

MLPs

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

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

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

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

Duration

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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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