On the Markets

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Into Thin Air?

This past month, my wife and I visited Acadia National Park, one of the few national parks remaining on our bucket list. Like all national parks, Acadia, on the coast of Maine, is a magical place that reminds us how insignificant we all are in the grand scheme of the universe. On our drive home, we agreed that Acadia may offer the best hiking in America due to the diversity and majesty of its landscape, at a much lower altitude than its western brethren. This made the climbing much easier on my ageing body.

In my youth, I had thoughts of climbing Mount Everest, but Jon Krakauer's 1997 best seller *Into Thin Air*, a personal account of one the most disastrous weeks in the mountain's history, convinced me to stick to less dangerous adventures. Nevertheless, whenever I hike I think about Krakauer's description of climbing at 30,000 feet—"nosebleed territory"—and how it dramatically affects the body's ability to function normally.

This past week I couldn't help but to compare those descriptions of climbing in high altitude to how people have been describing the current stock market rally. It seems that every time I turn on the radio or television, there is some talking head telling us how dangerous this rally has become, as we have reached nosebleed valuations. The excessively low volatility has become the most recent infatuation, with each person trying to sound smarter than the last one and providing only mumbo jumbo that muddies the landscape.

In our view, global equity market valuations are not in nosebleed territory. In fact, it's quite the opposite. In the context of low interest rates, and accelerating and stable growth, stocks offer the most attractive valuations of any major asset class. This is one of the reasons we decided in late June to sell high yield bonds to buy more equities. As for low volatility, here's our simple view: Realized and implied equity market volatility is low relative to historical levels. However, interest rate and currency volatility are also low, which is something we don't hear much about. Perhaps most important, economic and earnings volatility have also fallen in the past six to 12 months.

Maybe equity volatility is lower for fundamental reasons rather than investor complacency or irrational exuberance—and it's likely to continue as long as the underlying fundamentals remain in place. Pullbacks can happen at any time. However, we think they will remain too small to fear, and will likely just be another dip to ignore or to buy. So, enjoy the low-altitude hike. ■

When the Tide Is Turning

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Amid the eerie calm in financial markets and a renewed fall in volatility, we see a delicate balance between central banks and market participants regarding the macro outlook. This tug of war is due to an unusual situation, in which accelerating, above-trend growth coincides with unusually muted inflation dynamics on both sides of the Atlantic. Eventually, something has got to give.

The key question for investors is: For how long will policymakers tolerate this situation, in light of missing their respective inflation targets, before they are forced to change course? Until mid-July, the market perception broadly was the following: As long as growth remains above potential, central banks will likely be willing to look through below-target inflation reports. As long as central banks remain confident that the amount of slack in the economy continues to erode, and to the extent that they are able to anchor inflation expectations, inflation is expected to eventually return to target.

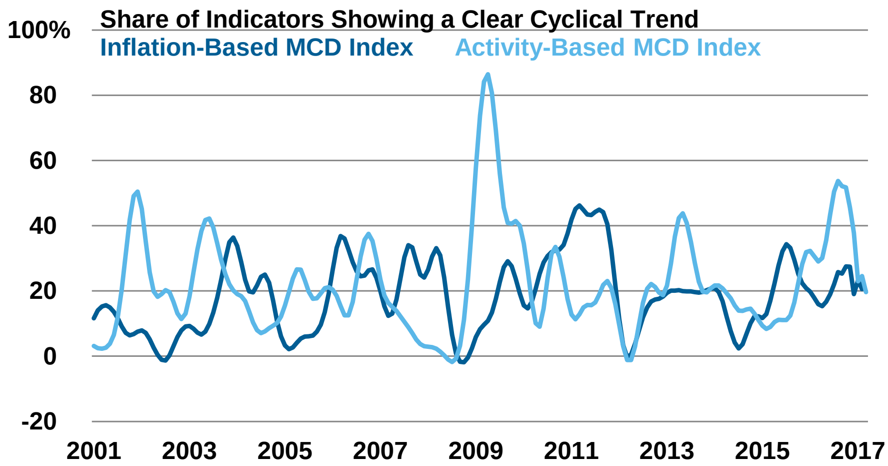
DELICATELY BALANCED. However, this logic, as expressed by European Central Bank President Mario Draghi and Fed Chair Janet Yellen, is delicately balanced. On the one hand, if growth dynamics were to disappoint, central banks would need to act very quickly and decisively, given that inflation is already tracking below target, in order to fend off a renewed lowflation trap. In our view, central banks will therefore be more sensitive than usual to downside surprises in growth dynamics at the current juncture than they usually would be at this stage of the recovery. This greater sensitivity could make for uncomfortable watching for investors, given that much of the acceleration in GDP growth seems to be behind us. As global GDP growth settles into a steady pace near the historical trend, investors find themselves in the no man's land of the business cycle.

On the other hand, if inflation were to surprise to the upside in the coming months, it would probably be the financial markets that would need to scramble. This is because the financial markets doubt that central banks, especially the Fed, will be able to materially raise policy rates. A few weeks ago, bond markets took comfort from the fact that a number of Fed speakers, including Yellen, acknowledged that there could be more to the current lull in inflation and that inflation developments require close monitoring. Incoming Consumer Price Index data, while in line with the forecast by our US economist, Ted Wieseman, again disappointed market expectations. At the time of this writing, markets were only pricing one and, possibly, another Fed rate hike between now and year-end 2018. This compares to the Federal Open Market Committee's projection of four rate hikes and our forecast of five rate hikes during the same period.

READING DATA. In light of this tug of war, much rides on correctly reading incoming data. A key factor in interpreting activity indicators and inflation metrics is their reliability in sending the correct cyclical signal. Unfortunately, most timely high-frequency data are noisy.

To assess the reliability of a set of key global macro indicators systematically, we separate the idiosyncratic one-off factors and other statistical noise from the underlying cyclical dynamics. This allows us to understand how persistent a move needs to be over time to likely manifest a change in cyclical trends rather than just idiosyncratic volatility. By looking at monthly, quarterly or annual changes, we

Macro Indicators Give a Mixed Picture



MCD refers to the months to cyclical dominance, 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 or growth, respectively.
Source: National data, MS & Co. Research as of July 19, 2017

can assess which of the growth rates might be the best on which to focus.

COGNITIVE BIAS. Essentially, we estimate the time period over which a number of indicators will need to move in the same direction before we can be reasonably sure that we have seen a turnaround in the indicator in question. We believe that this is important because behavioral finance warns of cognitive biases, which can influence how we read the incoming data. You are probably more likely to see incoming data peaking when you are calling for a downturn. Similarly, our brains tend to extrapolate past trends in a linear fashion. This tendency can be very misleading at turning points. While you always need the expertise of a data watcher to point out statistical quirks or special factors affecting data releases, in this note we look at the information content of key indicators globally in a more systematic fashion.

THE NOISE AND THE SIGNAL. The noise and the signals vary materially between different types of indicators, and by time periods. Monthly changes need to run in the same direction for much longer than, say, annual changes before the cyclical information content dominates the statistical noise. This reflects the fact that monthly changes tend to be noisier than annual or quarterly changes, which by definition already smooth some data volatility. At the same time, however, the turning points established based on quarterly or annual growth rates by design trail those in the indicator levels and those with a monthly change.

By comparing the noise to the signals, we can calculate a "months to cyclical dominance" (MCD) measure, which refers to how many consecutive months' data need to move into the same direction to manifest a new trend. The concept is also used by central banks. The MCD measure allows us to derive some useful rules of thumb, which say that once an indicator has increased/decreased for a certain number of months, we can be reasonably assured that the underlying cycle dominates random volatility. The MCD measure tells investors over what time frame they need to observe a certain change in an indicator to conclude that the move reflects a new cyclical trend, not just random noise.

MEASURING METRICS. We applied the MCD concept to two sets of global macro data—key indicators of economic activity and inflation metrics (see chart, page 2). We used a combination of variables that are closely watched by financial markets and relevant for the global economy. The activity indicators we considered include survey data, such as PMIs, industrial sentiment and consumer confidence, and hard activity data, such as industrial production, retail sales and car registrations. The inflation metrics we looked at include indicators at the consumer and the producer levels, as well as wage increases across the largest DM countries and China.

At the current juncture, indicators do not send a clear signal for a turning point in growth or inflation (see chart, page 2). About 20% of the activity data and about 20% of the inflation data for the second quarter can be considered reliable for the state of the business cycle on the basis of the MCD.

On the whole, the MCD indicator is reasonably reliable in detecting changes in the underlying cycle—in particular, inflation. However, we note that the MCD, which measures the reliability of a certain data set against its own cyclical pattern in the past, is not a direct quantitative estimate of growth or inflation. In order to track growth, we prefer to use our coincident GDP indicators.

CONSISTENT AND SYNCHRONOUS. Our proprietary Morgan Stanley Coincident Indicators are consistent with a synchronous and strengthening global recovery. The index suggests the global economy expanded by an annualized rate of 3.8% in the second quarter. Our bottom-up country-based estimate yields a global growth rate as high as 4.3% for the same period. If confirmed by official data, this would mark material acceleration as compared with 3.9% in the first quarter, the highest since 2010. The coincident indicators point to very strong developed market growth of 2.8%—an acceleration of about one full percentage point compared with the first quarter. In the emerging markets, the indicators point to solid growth of 5.0%. Again, the bottom-up forecasts of the MS & Co. country economists point to a higher growth rate of 6%. Unfortunately, much of the growth acceleration already lies behind us. Given that we are forecasting global growth to moderate again in the third quarter and global core inflation to increase only marginally in the second half, we hope that indicators of cyclical dominance will help us better distinguish between the underlying cycle and statistical noise.

At the moment, the indicators presented in this note do not hint at an immediate turning point in growth and inflation. Our analysis suggests that the MCD indicator is more reliable in detecting changes in the underlying inflation cycle. We would need to observe a minimum of about three months of consecutive increases in core inflation measures to be reasonably assured that the cycle is turning—but we are not there yet. For growth, where MCD indicators seem to be less useful, the coincident indicators show solid global growth. ■

Welcome to the Circular Economy

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A few weeks ago, my husband and I said goodbye to our family's only car as part of the Volkswagen Diesel buyback resulting from the company's emissions scandal. As we left the dealer's lot in our Uber, sharing the backseat with our daughter, we discussed whether the VW would be the last car we own. Just a few years ago, not owning a car would have seemed impossible. Now, with nearly ubiquitous car-sharing and rental services where we live and travel, it can seem as if the need to own a car is fading. The idea of convenient and relatively inexpensive ride-sharing services, enabled by smart phones, is an example of one disruptive business model that is driving a larger shift: the "circular economy."

At its core, the circular economy seeks to shift the current "take/make/dispose" linear economy toward resource efficiency and waste reduction. It requires a fundamental rethinking of how products are used through their entire life cycle, such as how shared mobility is remaking transportation and addressing the key inefficiency of privately owned automobiles, which are typically used for less than one hour a day, according to Morgan Stanley & Co. In addition to ride-sharing, which has emerged to meet changing consumption behavior—and arguably, helped accelerate the change—there are several other enablers of the circular economy. These include creating value from waste, manufacturing products through their entire lifecycle, more efficient resource extraction, remanufacturing, recycling and innovative design. Also central to the circular economy is "closed loop" manufacturing, or designing and building a product that can be disassembled for reuse at the end of its useful life rather than end up in a landfill.

LINEAR ECONOMY. A growing global population—to nearly 10 billion in 2050 from 7 billion today, according to UN estimates—and the consumption that goes with it calls into question whether we can continue to rely on the traditional linear economy, which is mostly powered by finite resources that have historically been cheap and readily available. The circular economy is less resource-intensive and produces less waste. Further, an economy that uses resources differently naturally requires the creation of new and different jobs and, in many cases, higher-skilled opportunities.

The concept of a circular economy is not new. It was first referenced in a 1989 book, *Economics of Natural Resources and the Environment*, by David W. Pearce and R. Kerry Turner, both British environmental economists. Now, it is garnering greater attention amid a moving macroeconomic climate, as the circular economy also draws on other systems-based thinking and more specific approaches to closed-loop or circular business models such as cradle-to-cradle design, biomimicry and ecological economics. Each of these concepts aims to remove excess waste from the business cycle and build regenerative business models, resulting in bringing materials and components that would otherwise be destined for the landfill back into the economy through reusing, refurbishing and recycling.

ECONOMIC IMPACT. While there are obvious benefits of circular design in terms of reducing the volume of finite resource extraction and the incremental positive impact on the environment, like all ideas related to sustainability and generating impact, it will only have lasting value if it has an economic incentive. In this vein, MS & Co. points to several key economic benefits associated with the circular economy, including a reduction in the dependency on commodity imports for certain countries globally. For example, McKinsey & Co. estimated that, as a result of a circular economy, there could be a 32% reduction in resource spending in Europe by 2030, adding €600 billion in net economic benefit. However, outside Europe there would be a potential negative impact on countries that rely heavily on commodity exports, such as Chile.

Another potential economic development in the circular economy is higher disposable income. After all, if there is a reduction in spending on primary resources used to manufacture products, there is likely to be a reduction in selling prices, thus boosting disposable income. We also see a decline in externality costs, including lower carbon emissions, less pollution and more efficient land use—all of which generate both economic and environmental benefits. Each of these, in particular carbon emissions, poses a threat to public health and the environment, which has significant economic implications. There is also the potential to see a reduction in demand for certain jobs in the circular business model (e.g., raw metal extraction and production, and new product manufacturing) but an increase in need for other types of jobs, such as recycling and remanufacturing. Some of the circular economy's job losses would be lower-paid unskilled jobs or jobs that could be automated. Already, robots are disassembling old mobile phones to recover valuable components within the devices for reuse. That said, other jobs such as closed-loop recycling and bio-refining as a result of the circular economy would require a more-skilled labor force.

As in any large-scale transition in the economy, there will be winners and losers, which is an important consideration for policymakers and investors.

BASIC INPUTS. If we look at the basic inputs of the economy and manufacturing process, the circular economy differentiates between finite and renewable resources. The circular economy seeks to increase usage of renewables, such as sun, wind and water, and maximize utilization rates and efficiency. With finite resources such as metals and fossil fuels, the goal of the circular economy is to minimize the need for extracting new resources through increased utilization, longer asset life, reuse, refurbishment and, finally, recycling. Not only does this present a business opportunity in terms of resource efficiency and waste reduction, but it also generates positive environmental and social impact through themes such as climate-change mitigation and job creation. For example, the decay of organic matter, such as in landfills, produces methane, a greenhouse gas 34 times more powerful than carbon dioxide over a 100-year period, according to the Generation Foundation.

Consumer demand, policy, innovation, technology and material sources are shifting to accommodate more "circular" business models across sectors (see table) Regulation will continue to be important; most recently, the European Commission adopted a Circular Economy Package.

While circular business models are not likely to be fundamental drivers of a company's value in the near term, there could be advantages for first-movers in terms of attracting a new customer base for more affordable products that have been recycled, refurbished or reused, as well as cost savings associated with more efficient use and reuse of raw materials and resources in manufacturing. We expect to see acceleration in development and implementation of circular business models with the net effect of generating positive economic, environmental and social impact. ■

Circular Economy Trends by Sector

Sector	General Trends
Apparel	Recyclable fabrics; minimize and recycle packaging; sharing platforms
Autos	Shared mobility; electric vehicles powered by renewable energy; light-weighting; rental versus ownership model; end-to-end tracking of parts and materials
Capital Goods	Leased products; products designed for ease of remanufacturing or recycling
Chemicals	Bioplastics; advanced recycling technology
Financials	New financing models for circular economy business models
Food & Beverages	Reduce waste during supply chain; minimize and recycle packaging; regenerative agriculture (e.g., organic, permaculture and no-till polyculture); sustainable protein sources; closed nutrient loops
Food Retail	Reduce food waste; minimize and recycle packaging; utilize bioplastics
Health Care	Sharing of medical equipment, rent versus own equipment; reduce pharmaceutical waste
Household & Personal Care	Minimize packaging; utilize bioplastics; take ownership of packaging to increase reuse
Insurance	New models of insurance assets that are rented by the consumer versus owned
Leisure	Shared accommodation; reduce waste
Media & Internet	Data-center management to extend life plus refurbish, recycle and reuse component parts; enable sharing economy
Mining	Recycle post-consumer scrap metal; renewable energy
Oil & Gas	Carbon capture storage; renewable energy
Property	Shared offices; recycling of old building materials; energy efficiency; closed building loops; modular construction; renewable materials
Technology	Enabler of the circular economy; electronic waste recycling
Telecoms	Recycle old mobile phones
Transport	Shared mobility; electric vehicles powered by renewable energy
Utilities	Smart meters; renewable energy; waste-to-energy; recycling

Source: MS & Co. Research

Stay Focused On Earnings

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With equity markets continuing to make all-time highs, many investors are wondering whether recent gains are justified and whether they can continue. This skepticism has been amplified as recent economic data have come in below expectations, causing economic surprise measures to drop to multiyear lows from multiyear highs in just a few months. Fears have centered on falling inflation expectations, which put into question the Federal Reserve's plans for further rate hikes and balance sheet normalization. Accordingly, investors have positioned defensively: The yield curve has flattened off its postelection peak, long-term interest rates have fallen and value stocks have significantly underperformed growth stocks.

However, as investors focus on the earnings that have been the fundamental driver of recent stock market gains, we believe these fears will subside. After nearly two years of flat-to-negative growth, global earnings have rebounded, posting their strongest gains in six years. Furthermore, the prospects for continued growth remain strong.

EARNINGS REVISIONS. The strength of the global earnings outlook can be seen by comparing analyst earnings revisions for 2017 with the typical path of earnings revisions. Historically, analysts have lowered their year-end forecasts as companies release forward guidance and financial challenges become more evident. In the current cycle, US estimates have generally fallen 4.5% in the second quarter of the prior year to mid July. Outside the US, where a postcrisis recovery has proved especially challenging, estimates have fallen by more than 9%.

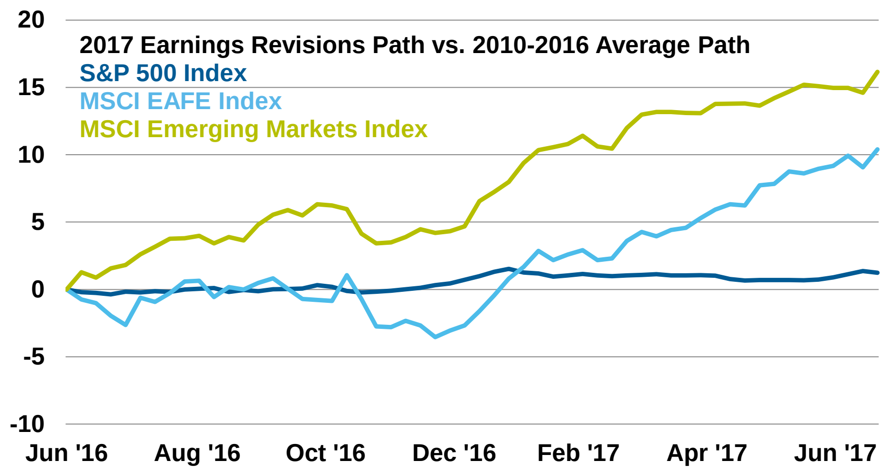
However, earnings expectations for 2017 have proved resilient (see chart). Earnings revisions are running higher than has been typical globally, with international earnings expectations exceeding the recent past by 10% to 15%. We believe these high expectations are achievable. Our analysis suggests that, through the second half of 2017 and into the first quarter of next year, the US earnings expectations implied by consensus forecasts are not aggressive. We are also constructive on profits abroad, as the other developed economies are far earlier in their respective business cycles and continue to benefit from dovish central bank policies.

UNDERLYING STRENGTH. Finally, underlying market trends confirm our view that earnings have been most fundamental to this year's equity strength. Companies with strong earnings, including upward revisions and high long-term growth rates, have outperformed this year across the globe, overshadowing recent negative economic and policy developments. Equity correlations stand near six-year lows, and correlations across asset classes remain below average.

Supported by loose financial conditions, this backdrop has enabled an exceptional breadth of gains across equities: Whether one considers region-specific sectors, global industries or the largest countries, more than 90% of the market has posted positive returns for the year to date. Additionally, the breadth of positive earnings revisions is showing strength not seen in more than a decade, and rising real rates indicate expectations for real growth are holding. Taken together, this is evidence of a strong global growth outlook driving new highs for equity markets.

Overall, what are the implications for investors? We remain overweight global equities to benefit from continued earnings strength. International equities offer lower valuations, but we believe US equities also have the potential for further upside as well. ■

Earnings Revisions Hold Up Better Than in Recent Years, Especially Outside the US



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC as of July 20, 2017

Emerging Markets Rally Should Have a Long Way to Go

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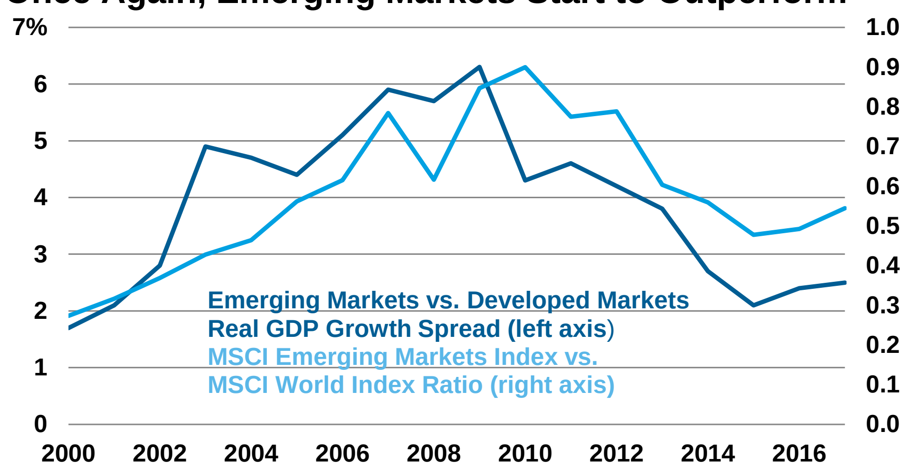
Up 25% YTD, emerging markets have been the best-performing region this year—but this rally has room to run. We remain bullish because of growing global trade, better fundamentals, accommodative financial conditions and a weakening US dollar. In addition, we see lower risk than in the past that the emerging markets would succumb to a taper tantrum caused by the Federal Reserve's tightening.

In fact, we believe that we may be entering a regime of emerging market (EM) outperformance, as these markets have lagged the developed markets equities since the financial crisis 122% to 197%. We believe the time has come for the turn. In fact, the Global Investment Committee's seven-year strategic forecast also expects EM equities to outperform, with 7.5% annualized return versus developed market (DM) equities' 5.5% annualized return.

GROWTH GAP. Furthermore, emerging markets typically do well when economic growth is accelerating and the growth gap between the emerging and developing world widens. The growth gap widened in the 2000s, leading to EM equities' outperformance, followed by the gap narrowing from 2009 to 2015, when the developed markets outperformed (see chart). Since then, the gap has widened, and EM equities outperformed. Lastly, EM equities trade at a 25% discount to DM equities based on the price/earnings ratio, thus offering better value.

With our sanguine view toward the emerging markets, the challenge is how to gain this exposure. Many would choose an exchange-traded fund or mutual fund. However, we view emerging markets as a heterogeneous group and believe that it's best to be selective. Additionally, as central banks move toward normalizing monetary policy, the correlations between EM markets are declining and country and stock selection matter more.

Once Again, Emerging Markets Start to Outperform



Source: IMF, Bloomberg as of July 24, 2017

Region and country selection. MSCI classifies 24 countries as emerging markets. Broadly speaking, we favor EM Asian countries over EM Europe, Middle East and Africa (EMEA) and EM Latin America countries. EM Asia benefits from lower commodity import prices, while the majority of countries within EM EMEA and LATAM are commodity exporters. Furthermore, EM Asia has the highest concentration of high-growth economies, driven by demographics, domestic demand and corporate earnings. As for countries, we favor India, China, South Korea, Taiwan and Mexico. Exposure to these regions and countries can be obtained through specific exchange-traded funds.

EM exposure via DM companies. Another way to gain emerging market exposure is through DM multinationals that generate revenue in emerging markets. Here we prefer European to US companies, as European firms generate more than 30% of revenues from emerging markets vs. less than 15% for US companies. Also, European equities appear to trade at relatively cheaper valuations than US equities and offer a higher dividend yield. Although a weaker dollar/ stronger euro benefits US multinationals and is negative for European multinationals, we believe that the stronger euro is ultimately a plus for European equities. Thus, to gain EM exposure, we prefer the opportunity set through European multinationals. Specifically, European beverage and auto companies stand to benefit most from EM exposure.

High-quality EM companies. The emerging markets contain a number of high-quality, world-class companies that offer compelling investment opportunities with increased portfolio diversification. We prefer those with greater exposure to domestic demand, sustainable competitive advantages, a strong management team and currently reasonable valuations. Within EM companies, we see opportunities in Indian banks, Chinese e-commerce and Mexican retailers. ■

Taking Advantage of Short-Term Market Opportunities

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Research suggests that asset allocation is the most important determinant of long-term investment returns. To that end, the Global Investment Committee (GIC) provides several approaches according to relevant time frames. For clients with long-term investment horizons, the GIC's long-standing "strategic" framework uses clients' goals and risk appetites to determine the asset allocation mix. Allocations in these portfolios are typically rebalanced annually, based on changes in expected asset-class returns and risks over a seven-year horizon.

Some clients, particularly those in wealth-accumulation mode, may seek a more "tactical" approach, using shorter-term recommendations. The GIC's tactical allocation aims to exploit environments in which valuation and other catalysts come together to create a compelling opportunity for those with a 12-to-18-month horizon. To uncover such situations, the GIC regularly updates its systematic, qualitative assessments of macro and market conditions, including economic growth, inflation, interest rates, monetary policy, liquidity, valuations, earnings, fundamentals, technicals and sentiment.

NEW FRAMEWORK. Now, we have introduced a new "Dynamic Allocation Framework," which seeks to identify even shorter-term opportunities. This approach may appeal especially to clients with tax-advantaged accounts that allow for sheltering or deferring capital gains and losses who may desire an even more active investment program. The framework extends and complements the GIC's strategic and tactical recommendations (see chart). It concentrates on a one to three-month horizon and shifts allocations dynamically based on changing economic and market conditions.

This disciplined, quantitative framework begins with individual macro and market factors, looking for signals on the magnitude and direction of forthcoming market moves. From these nuanced conclusions, it forms investment views on the various asset classes. The framework allows us to drill down on each asset class, understand key drivers and their impact, and build diversified, risk-managed multiasset portfolios.

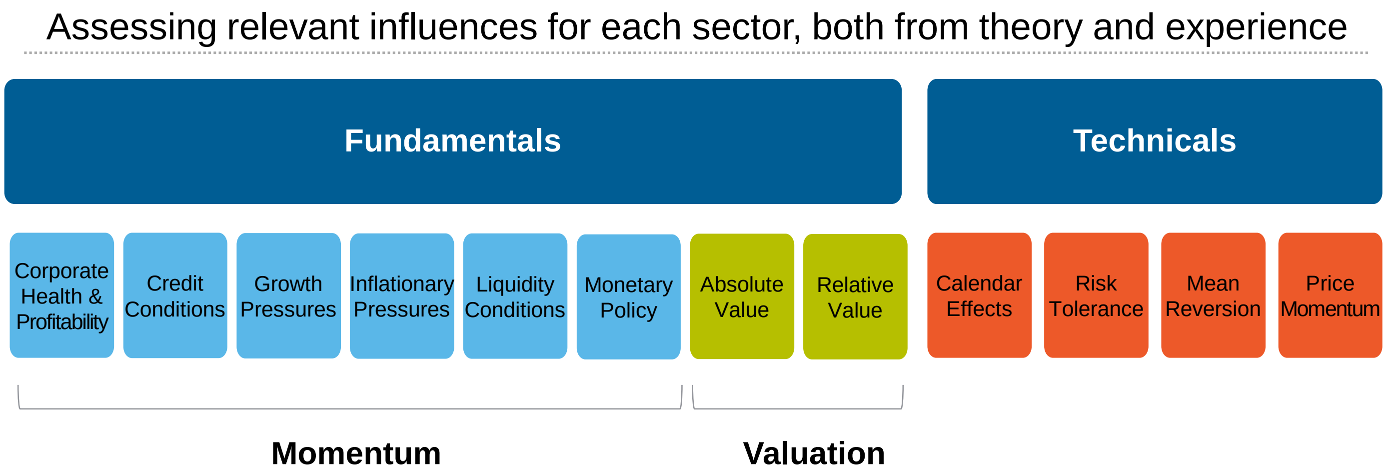
DECISION-MAKING CHALLENGES. We have designed the Dynamic Allocation Framework to address two major challenges in making shorter-term asset allocation decisions: a flood of potentially influential data, and our own behavioral biases. While the right information empowers good decision-making, the flood of incoming data can be overwhelming. The global markets constantly ping us with new messages of shifting importance and urgency. We also understand that these markets respond to multiple influences in varying degrees and according to different timing rhythms that are far beyond our capacity to track and process in real time. At any given point, even useful—and timely—factors may suggest a muddled mix of bullish and bearish conditions for a single asset class. How can we distinguish between the relevant signal and extraneous noise?

Even if we successfully process the flood of data, behavioral biases threaten to undermine our conclusions. With the freedom inherent to decision-making, we may respond too abruptly by second-guessing ourselves, or too passively by waiting for more evidence. We may avoid the uncomfortable reality of evidence that will challenge our convictions. We may also fail to update—or even correct—our convictions, believing that last year's paradigm will hold true in the future. Reflecting on these limitations, we built our framework to process information in a logical, consistent fashion. Weighing the evidence from incoming data, it mitigates the sway of behavioral biases to allow us to move beyond "what" to "So what?" It enables us to concentrate on investigating what we may be missing and provides ongoing transparency about the factors that drove certain conclusions.

How Dynamic Allocation Works With Other Global Investment Committee Models

Source: Morgan Stanley Wealth Management GIC

Potential Market-Moving Influences



Source: Morgan Stanley Wealth Management Market Strategy

GENERATING UNBIASED VIEWS. The Dynamic Allocation Framework starts by studying key market-moving influences. We look at both fundamental and technical factors, further separating fundamentals into momentum and valuation. We identify individual factors by considering economic theory and market experience and reviewing what relationship exists between the factors' levels or changes and the relevant asset class's returns. The most valuable factors can yield insights into market returns over multiple cycles and for multiple related asset classes.

For instance, consider the relationship between US employment growth and US large-cap equities. Both theory and experience suggest that a strengthening labor market coincides with expanding economic activity, typically a bullish environment for equities. A worsening jobs picture often corresponds with declining economic momentum, which is often bearish for equities. In the past, changes in the strength of employment growth have marked the starts and ends of bull and bear markets.

Next, we measure the trend strength of employment growth using statistical analysis. We may then translate these observations into actionable signals, including both direction (bullish, bearish or neutral) and magnitude (how much). The resulting signals therefore shift dynamically based on changes in the underlying influence, which in this case is employment growth.

MEASURING SIGNALS. For each asset class, we gather insights from more than 100 such factors and compute an aggregate signal by taking the weighted average of the individual factors' signals. We dynamically modify each factor's weight by measuring the risk-adjusted returns it has provided on a one-, three- and five-year basis. Therefore, the aggregate signals proactively incorporate changes in market-moving factors, weighted according to their real-time value. We believe that, consequently, these asset-class views maximize the contributions of diverse information sources. We repeat this process to compute aggregate signals for more than 40 asset classes.

The framework provides a window into real-time economic and market conditions for each asset class. We may study the bullish, bearish or neutral conclusions at a factor level, the influence category level or the asset-class level. The framework's transparency enables us to peel back these layers on a snapshot or moving basis. By monitoring these influences, we may track economic and market shifts to glean what's changing and what the prospective impact might be.

BUILDING PORTFOLIOS. We may also construct diversified, risk-managed multiasset portfolios from these views. We start with neutral long-term exposures to a diversified portfolio of global equities, fixed income and alternatives, which we consider as a "policy" portfolio. We then compute dynamic overweights and underweights through a three-step portfolio-construction process. We constrain the resulting portfolio not to exceed minimum and maximum positions and according to a defined risk budget. We believe that the resulting portfolios may reflect dynamic changes in the economy and markets and provide clients with potentially attractive risk-adjusted returns.

Financial Advisors guide our clients in building asset allocations to suit our clients' objectives. These Dynamic Allocation portfolios may serve as a core strategy in clients' portfolios—particularly in tax-advantaged accounts—or as a complementary satellite to longer-term investment strategies. ■

For a copy of the special report, "Dynamic Allocation: Taking Advantage of Short-Term Market Opportunities," please contact your Financial Advisor.

MLPs: The Sky Clears After the Perfect Storm

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Two years ago, midstream master limited partnerships (MLPs) got battered in a perfect storm of falling commodity prices, declining US hydrocarbon production and rising interest rates. Then, in May 2016, we advocated in this publication that investors look to add MLP exposure. At the time, we argued that the storm was clearing: The supply response was becoming apparent and demand growth was healthy, and that would ultimately allow the crude-oil market to balance in late 2016 or early 2017.

Now, 15 months later, commodity prices are stabilizing as markets have begun to come into balance, though at a slower pace than bulls would like. US crude-oil production is growing again and at near-record levels, on track to grow nearly 1 million barrels per day to some 9.5 million barrels a day this year. Furthermore, interest rates remain at near-record lows, which supports current valuations, and the new administration in Washington has brought an industry-friendly regulatory regime. Yet despite this favorable backdrop, the Alerian MLP Index today trades at roughly the same level it did in May 2016, and sits some 40% below its 2014 high. What gives?

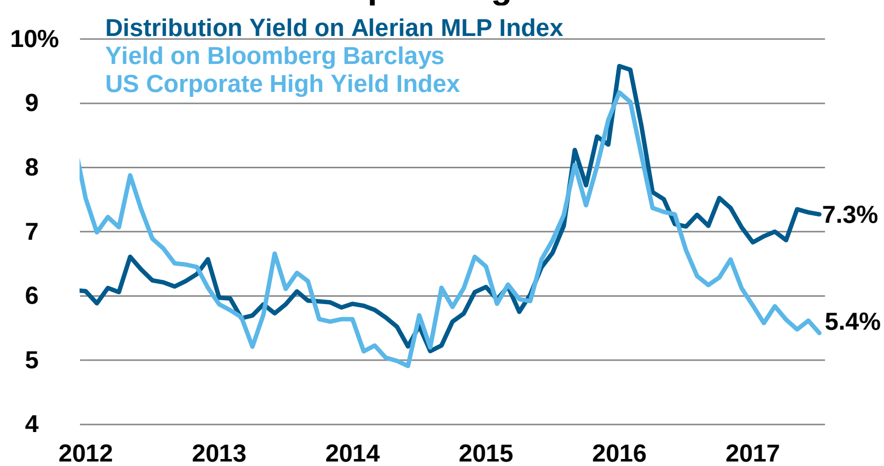
LINKED TO OIL PRICE. Look no further than oil prices. While MLPs did experience some of their own momentum in the second half of 2016, so far this year they have taken their cues from oil prices. The generic front-month crude-oil contract price is trading down about 15% this year, and MLPs have come under renewed pressure. We think the correlation between crude and MLPs is unwarranted in the long term, as ultimately stable—not rising—crude prices are all we believe is necessary to drive growth for MLPs. Still, in the near term, MLPs are likely to remain tethered to oil prices. In this respect, we do see some price stabilization and a rally toward the higher end of their year-to-date range in the coming months as markets gain confidence in oil market balancing and US inventory draws accelerate through the summer and early fall.

In the intermediate term, we expect range-bound crude prices to stabilize MLPs' funding markets, while growth in US production of oil and natural gas should drive strong distribution growth. Given attractive valuations today, particularly in comparison to other income-generating sectors, we see significant opportunity in this asset class. The valuation argument may be strongest when compared with high yield bonds. Historically, MLP distribution yields have tracked closely with yields on high yield bonds, but today's MLP distributions are historically cheap in comparison (see chart).

UPSIDE POTENTIAL. What's the upside for MLPs? We see room for the midstream index to trade 20% to 25% higher in the intermediate term, which would imply sector multiples returning to average levels at today's earnings estimates. Coupled with a 7%-plus distribution yield, this would equate to 30% or so total-return potential. What are the biggest risks? A meaningful decline in crude prices to below $40 per barrel could renew funding concerns, and a slowdown in US oil-and-gas production could make growth scarce.

We are comfortable with these risks today, as we believe the sector has priced in much of these concerns, and ultimately do not believe crude prices are likely to return to sub-$40 levels. Interest rates could move higher, with the 10-year US Treasury yield climbing into the upper 2% range, but we do not see such a move as significant enough to pressure MLP valuations. With the Global Investment Committee adding to its recommended allocation in MLPs (see *GIC Tactical Asset Allocation Changes: A Late-Cycle Rotation,* June 28, 2017), we would encourage investors to consider adding to positions in MLPs, both for the income stream as well as total-return potential. ■

MLP Distributions Outpace High Yield



Source: Bloomberg as of July 25, 2017

The Weaker Dollar—An Unexpected Boon

LISA SHALETT

Head of Wealth Management Investment Resources
Head of Investment & Portfolio Strategies
Morgan Stanley Wealth Management

Entering 2017, few strategists' calls were as unanimous as the view that the US dollar, already at a 14-year high, would strengthen because the Federal Reserve was hiking interest rates while other central banks remained accommodative. In addition, the markets posited that, with Donald Trump's election, US economic growth would surprise on the upside. Now, the folly of the consensus thinking is clear. The US Dollar Index (DXY) is down 9% from its Dec. 28, 2016, peak of 103.3.

So, what happened? For starters, despite the Fed's interest rate hikes, the rate differentials with Japanese government bonds and German Bunds were near extremes, suggesting the markets were already reflecting the worst of policy divergence. Next, relative growth differentials surprised; US growth proved much worse than forecast, barely reaching 1% in the first quarter, while growth in Europe and Japan exceeded expectations. Lastly, inflation disappointed in the US but held steady elsewhere—an indication that real rate differentials were converging. This allowed the European Central Bank to start talking about tapering its Quantitative Easing, and inertia in Washington dashed hopes of progrowth fiscal policy.

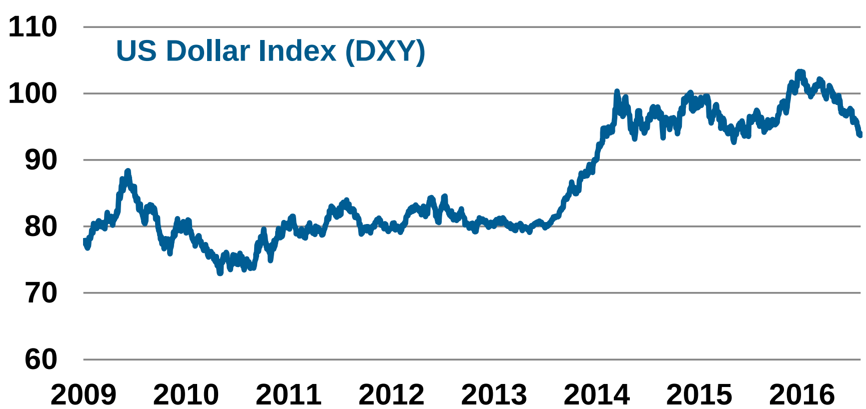
While a weaker dollar was unexpected, it is welcome. In fact, it has become a critical underpinning of the current "Goldilocks" economy, which is neither too hot nor too cold. The weaker dollar supports US export growth, which in turn has helped bolster corporate earnings. S&P 500 profits are pacing at some 11% growth for the second quarter—nearly twice the consensus forecast. Of critical importance is the contribution that a weaker dollar has made to global financial conditions, which remain at their most accommodative since early 2014. Ellen Zentner, Morgan Stanley & Co.'s chief US economist, figures that the looser financial conditions have offset nearly 75 basis points of the Fed's 100 basis points of rate hikes and monetary tightening.

There's more. The weaker US dollar has bolstered the commodities market, with which it has an inverse relationship. For the emerging market economies, which carry significant dollar debt, the lower dollar allows for sustained capital inflows. Additionally, a weak dollar serves to stimulate economic growth through exports. Finally, while inflation readings have disappointed since February, a weaker dollar should ultimately contribute to driving inflation higher, as it has a three-to-six-month lagged correlation with the Consumer Price Index.

THE NEXT MOVE. Will the dollar remain weak or rebound? When the DXY hit 103 in December of last year, an analysis based on purchasing power parity and real effective exchange rates suggested that it was roughly 10% to 15% overvalued. Next, after the US election, euphoria around both future growth and inflation reached extremes, underpinning the dollar surge, but that's done. Third, with other central banks—most importantly, the ECB—signaling an end to extreme monetary accommodation and gradual policy normalization, interest rate differentials continue to collapse. In addition, relative growth around the world is converging as the US recovery matures and non-US regions come back from multiyear recessions. Ultimately, we see the dollar weakening against the euro as real rates in the Euro Zone become more positive and strengthen versus the yen because inflation in Japan is picking up due to accelerating wage growth.

Despite our expectation for dollar weakness, technical and sentiment indicators suggest the potential for a near-term dollar rebound. MS & Co. Global Currency Strategist Hans Redeker notes that bearish positioning in the futures market shows the most extreme negative view of the dollar since April 2009. During the next three to six months, Redeker expects the DXY to retrace toward the 96-to-98 area from today's 94—a perfect level at for maintaining a Goldilocks economy. ■

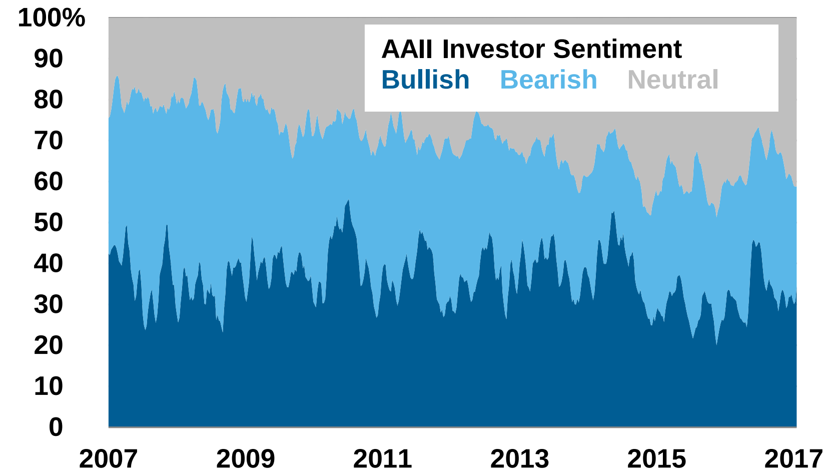
Pronounced Dollar Drop Helps the US Economy



Source: Bloomberg as of July 28, 2017

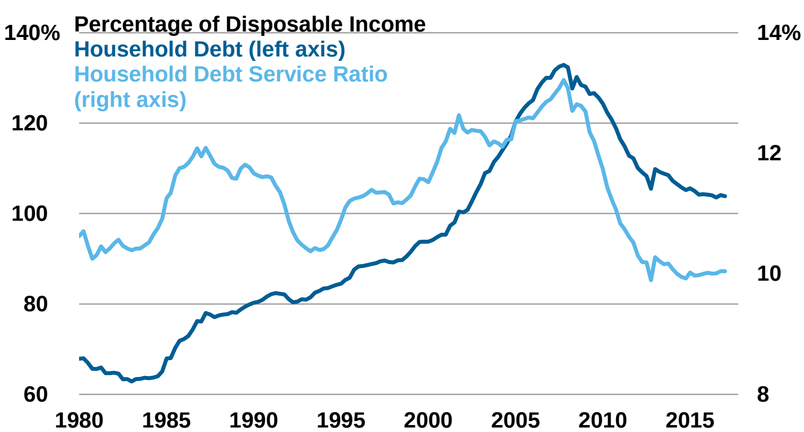
Too Few Bears May Not Be a Problem for the Stock Market

The percentage of bears in the American Association of Individual Investors Sentiment Survey has fallen to 24% versus its10-year average of 34% (see chart). Since this weekly poll is considered to be a contrarian indicator, a dearth of bears could be taken as worrisome, especially with record-high stock prices, but the bears alone don't tell the whole story. The bulls are at 35%, which is really not that bullish because it's in line with the 10-year average. The survey showed 50% bulls following the presidential election, and roughly the same percentage of bears as there are now. The big move has been in the neutral cohort, 41%, which is well above its long-term average. The increase in fence-sitters is likely a result of policy uncertainty out of Washington. Investors may change their minds as we get additional clarity on tax reform and other fiscal measures later in the year.—*Joe Laetsch*



Source: American Association of Individual Investors, Bloomberg, as of July 26, 2017

Lower Interest Rates Helped Bolster Household Balance Sheets

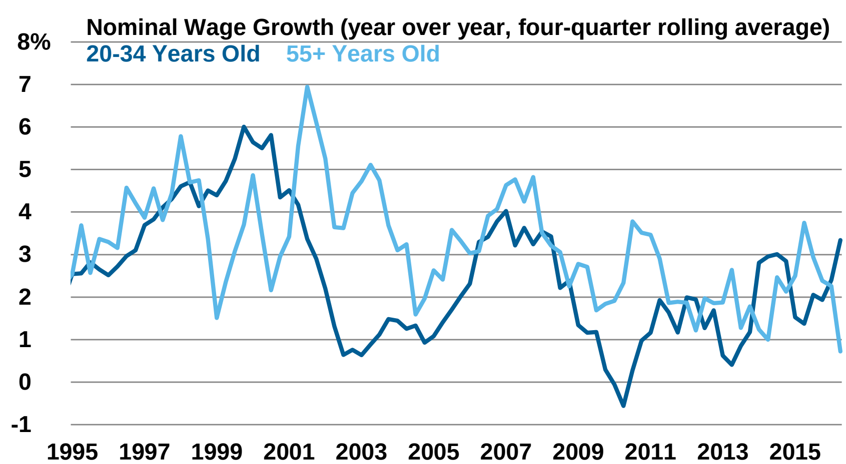


Household balance sheets have become notably healthier since the financial crisis as consumers have made significant efforts to reduce debt. Household debt relative to disposable income is 104% versus the 133% peak in late 2007 (see chart), and the debt service/disposable income ratio is now 10.0% versus 13.2%. Historically low interest rates have helped the consumer immensely. Mortgages make up 75% of consumer debt, and 90% of all mortgages have a fixed rate. Having taken advantage of refinancing opportunities and large-scale government programs, consumers' actual mortgage rates now average 3.8%. With only 10% of consumer debt exposed to variable interest rates, consumer finances may hold up well even with rising interest rates. These robust balance sheets may offer relative shelter should there be a downturn, which is a sharp contrast to what happened during the crisis.—*Steve Edwards*

Source: Bloomberg as of March 31, 2017

Millennials' Wage Gains Outpacing Those of the Baby Boomers

During the past nine months, nominal wage growth has been accelerating for millennials and decelerating for baby boomers (see chart). While millennials are more conservative in their spending than younger generations have been in the past, we think the recent wage gains for this 20-to-34 generation is a net positive for personal consumption since this cohort should still have a higher propensity to spend than the much older baby boomers, who are over 55. After eight years of recovery, the millennials may be reaching full employment, as indicated by their above-average wage growth. All told, we think we are further along in this labor cycle than perhaps the average investor thinks—and that the Federal Reserve will respond appropriately if labor costs accelerate more rapidly than currently expected.—*Mike Wilson*



Source: Haver Analytics, MS & Co. Research of March 31, 2017

Time to Consider Short-Term Bonds

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Global expansion coupled with a surge in corporate earnings has broadly buoyed financial asset returns. During the past 18 months, high yield bonds generated double-digit returns and investment grade bond spreads neared cycle tights, yet short-term US Treasury yields shot up to nine-year highs as the Federal Reserve tightened monetary policy. Now, long-term bond yields have fallen back near all-time lows due to disappointing US economic data and the insatiable global demand for yield. Now, we expect G4 net bond supply to turn positive next year for the first time since 2014. Combined with the pickup in economic momentum we foresee, that trend should reverse.

DIVERSIFICATION AND DURATION. Against this backdrop of low and rising yields and tight credit spreads, the opportunities in fixed income are limited. We believe that a combination of portfolio diversification and duration management can be effective. In the table below, we provide 12-month projected returns for benchmark investment grade bond indexes over several interest rate scenarios. With these projections, we see that shorter-duration bonds provide better protection in rising-rate scenarios, whereas longer-duration bonds offer better yields in the zero-change case and better returns when interest rates fall. In addition, we analyze the impact of "carry"—the income paid by a bond—by including several investment grade credit indexes of varying maturity ranges. In all scenarios, the credit indexes provided better returns. This analysis does not factor in spread widening, which would offset these returns; to mitigate that risk, we focus on high-quality, short-duration sectors.

First, shorter-duration corporate bonds rated A or BBB appear reasonable for the current environment. Next, shorter-duration securitized products, like asset-backed securities (ABS), appear attractive if interest rates rise due to their duration-adjusted spread and rapid amortization structure. Furthermore, ABS are generally rated AAA as consumer balance sheets are strong and will likely become stronger with fiscal stimulus. Finally, we recommend a modest allocation to short-duration high yield and bank loans. Lower default rates, along with improving growth, should bode well for high yield fundamentals. Leveraged bank loans offer carry, particularly given the flatter yield curve, but investors need to examine the loan structure and its covenants.

POSITIONING AND SELECTION. All told, the global hunt for yield has compressed credit spreads to near cycle tights as rates have remained pinned near all-time lows. Against this backdrop, we believe yield-curve positioning and security selection are paramount. We prefer shorter-duration securitized products, like asset-backed securities, and shorter-duration credit rated A and BBB. We maintain a modest exposure to high yield credit and leveraged loans to enhance income, and we believe investors should look for securities with attractive yields and muted downside risk. ■

Projected 12-Month Total Returns for Benchmark Investment Grade Indexes

				Interest Rate Shift (basis points)						
	Citi Index	YTM*	Duration**	-50	-25	0	25	50	75	100
Govt.	1-5 Yr. US Treasury	1.55%	2.71	2.72%	2.27%	1.83%	1.40%	0.96%	0.53%	0.11%
	1-10 Yr. US Treasury	1.71	3.84	3.56	2.82	2.08	1.36	0.64	-0.06	-0.76
	US Treasury	1.89	6.08	4.95	3.57	2.24	0.95	-0.29	-1.48	-2.64
Spread	AAA-Rated Asset-Backed	1.90	2.64	2.99	2.56	2.13	1.71	1.29	0.87	0.46
	A-Rated 1-5 Yr. Credit	2.13	2.80	3.35	2.88	2.42	1.96	1.50	1.04	0.58
	BBB-Rated 1-5 Yr. Credit	2.51	2.87	3.76	3.28	2.79	2.31	1.83	1.35	0.88
	1-10 Yr. Credit	2.68	4.39	4.81	3.92	3.04	2.16	1.30	0.45	-0.39
Broad	Broad Investment Grade	2.53	5.94	5.34	4.06	2.77	1.5	0.23	-1.02	-2.26

*Yield to maturity **Years
Source: Morgan Stanley Wealth Management as of July 26, 2017

A Bull in the China Shop

Market pundits have kept a close eye on China's economy for years, and with good reason. While only about 15% of worldwide GDP, the nation now accounts for one-third of global economic growth—more than the US, Japan and Europe combined. If that engine were to sputter, it could spell trouble for the rest of the world. Andy Rothman, investment strategist for Matthews Asia, doesn't buy the negative hype. "I'm not dismissing the problems, but I'm skeptical of the doom-and-gloom scenarios," he explains. While Rothman concedes "debt and housing are two key risks that are worth paying attention to," he is confident in China's prospects. Rothman recently spoke with Morgan Stanley Wealth Management's Tara Kalwarski. The following is an edited version of their conversation.

TARA KALWARSKI (TK): What are your thoughts on the Chinese economy?

ANDY ROTHMAN (AR): Even if you're skittish about investing in China directly, you have to recognize that China has an impact on all investments, even if you only invest in traditional US companies. General Motors, for example, sells more cars in China than in the US. Boeing sells more aircraft in China than it does here. The list goes on. So understanding China is really important.

In terms of where China's economy is right now, we've just come off quite a good first half. Economic growth was stable at a pretty healthy rate. The consumer story, which I've been calling the world's best consumer story for probably a decade now, has held up really well: Income growth is strong, household savings rates are high, household debt is low and, as a result, consumer spending and consumer sentiment are very good.

That's driving not only investments in consumer-oriented and services-oriented Chinese companies; it's also driving the rebalancing of the Chinese economy. The key concern that lot of China perma-bears have had is that China couldn't rebalance away from dependence on exports and investment and move toward an economy driven by the consumer—but that restructuring is well underway: Last year, two-thirds of economic growth came from consumption. In fact, the consumer-services part of GDP is the biggest part, and has been the biggest part for six years.

Another thing that people have been nervous about is the financial sector, but the Chinese government is taking some steps to deal with risks, and they've been cracking down, using regulation and supervision to deal with that. People have been concerned about over-capacity in sectors like steel, but the government has been going after that, too, reducing some excess capacity. So on the policy side, they've handled things pretty well.

TK: What are other misconceptions?

AR: The first misconception is the role of trade and exports in China. Most people think that China is an export-led economy. That was true a couple of decades ago, but not today. In fact, net exports—the value of exports minus imports—were equal to only just over 2% of Chinese GDP last year. It's really small. The second misconception is that it's an economy based mostly on heavy industry and in investing in factories and roads. That's no longer the case, either, which is why our investment strategies focus on Chinese companies selling goods and services to Chinese people.

Another misconception is about the impact on US families and households. A study by some US economists concluded that almost 2.5 million Americans lost their jobs because of imports from China. That's tragic, but we have to put it in context. Those jobs were lost over a 10-year period. Other studies have found that, in recent years, about 1.5 million jobs per year were created or supported by US exports to China. Studies by other economists have found that imports from China have helped keep prices of manufactured goods lower in the US, which means that the average household is saving money by having access to those China-manufactured goods.

A lot of Americans also have an impression that China is dominated by giant state-owned enterprises. It's kind of like the impression many of us have that America is dominated by giant companies, because we hear and read about the Wal-marts, Boeings and GMs all the time, but in America only about 2% of firms employ more than 100 workers. That's the same in China. When I started working in China in the 1980s, there were no privately owned companies there. Now more than 80% of workers in China work in small, entrepreneurial private companies, and these businesses are driving growth.

TK: Does China's debt concern you?

AR: The overall debt-to-GDP ratio in China is high, but it's in the same ballpark as many other countries, including the US. What is more important is where that debt is concentrated and how it came to be.

It started with the Chinese government's response to the global financial crisis. Back then, exports were a bigger part of the Chinese economy and the US, Europe and Japan stopped buying stuff. Exports collapsed and a lot of Chinese who were producing those goods lost their jobs. The government devalue the currency as some people feared. Instead, they brought forward the construction of many public works projects—roads, bridges, power, water—that were planned for later years, to create jobs to soak up some of the unemployed workers. And they didn't pay for that with municipal bonds or direct government spending like we would have done. Instead, state-controlled banks made loans to state-controlled companies to build state-directed infrastructure.

That's the origin of the dramatic increase in Chinese debt and, because the state directs state banks to lend to state companies, there's no private participation here. There's no equivalent of a Lehman Brothers or a Bear Stearns. Therefore, there's no mark-to-market pressure.

Even so, this is a problem and it will be expensive to clean up, but the Chinese government has the luxury that we didn't have here in the US of being able to control when that problem gets cleaned up. It's not a household-debt problem, and there are no private banks or private companies involved, so the government can say it will clean up 5% of it this year and 10% of it next year. That's what they're starting to do.

Rather than a banking crisis like we had, we'll probably see those bad loans moved to the state's balance sheet, and the fiscal deficit-to-GDP ratio will go up. Over time the government's ability to spend boatloads of money—like they're doing now on education or health care—will be increasingly constrained, but that's a really different story than saying there's going to be a banking crisis next year.

TK: Are fears about the housing market and "ghost" cities overblown?

AR: I just mentioned that the debt issue in China is not a household-debt problem. One of the reasons for that is that China has our old method of financing home purchases. Back in the old days in the US, you took out a home mortgage and you had to put a lot of cash down. It was a plain-vanilla 30-year mortgage and people didn't default. In 2006, however, the median cash down payment for a new home in the US was 2% of the purchase price, and, of course, the lenders were selling off a large share of the loans, meaning they didn't care and didn't do any due diligence because they knew they wouldn't be holding that loan if it went bad. As a result, we had a real problem.

China has pretty much avoided those problems. The minimum cash down payment for a new home is 20%, but most banks want 30% cash down. All the mortgages are kept on the issuing bank's balance sheet, which means they have a strong incentive to do good due diligence. As a result, I think the risks of a US-style housing crisis are really low.

As for ghost cities, I've been visiting them for a decade now. When I was living in China, every time one was mentioned in the newspaper, I'd check it out. I found that if you go back to these places a couple of years after the headlines, they're no longer ghostly. They're all filled.

When most people in China buy residential real estate, they're buying it on what's called presale, which means they are putting a lot of cash down and getting a mortgage at least a year or two before it's finished. So the outsides of new buildings may be done, but the insides aren't. Also, it takes local governments longer to build public infrastructure, including subway links to the central business districts, so many buyers wait to move in.

TK: What issues could creep up?

AR: I try to be realistic and pragmatic. When the facts change on the ground, certainly my expectations and forecasts will change, too—but right now, my expectation is that almost every part of the Chinese economy is going to continue to be pretty healthy, but also to continue to grow a little bit more slowly every year in the foreseeable future. We need to be realistic. We're never going back to 10% or 11% inflation-adjusted retail-sales growth, but 9% is pretty fast. Income growth is now running at about 6%, but it's not going to go back to double digits. And that 6% is on top of a very big base.

I want to always be watching the risks, so I'm watching for steeper slowdowns in income growth. I'm watching for faults in the financial system that the government isn't dealing with. I'm watching the housing market carefully every month to see whether prices are going up too fast or not enough and where inventories are going. If there are signs of impending doom, because I've been pretty bullish, I want to be one of the first people out there to warn people about that, but that's not what I'm seeing right now.

TK: What are the implications of China further opening up its markets to outside investors?

AR: One is that these kinds of steps represent greater acceptance and recognition of China's economy and markets. It helps to reduce some people's nervousness about investing in China. It also means that China's share of the benchmark indexes is going to go up. If you are an index-based investor, you want to be prepared for that.

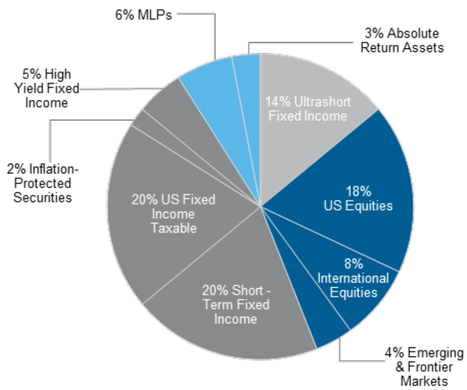
Since this is the world's best consumer story, you want to be focused on finding Chinese companies that are selling goods and services to Chinese people. As an investor, you want a to be sure that you're getting the growth-dynamic parts of the economy. To do that, you have to take an active approach, because the indexes are largely backward looking, focused more on heavy industry and state-owned enterprises, and less on consumer services and entrepreneurial private companies. But, active stock selection requires intensive, on-the-ground due diligence, and that's where we can help. ■

Andy Rothman 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.

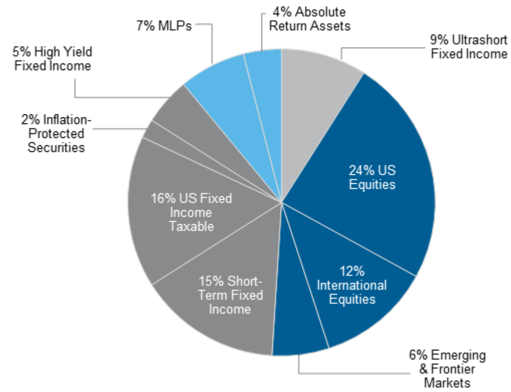
Global Investment Committee Tactical Asset Allocation

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.

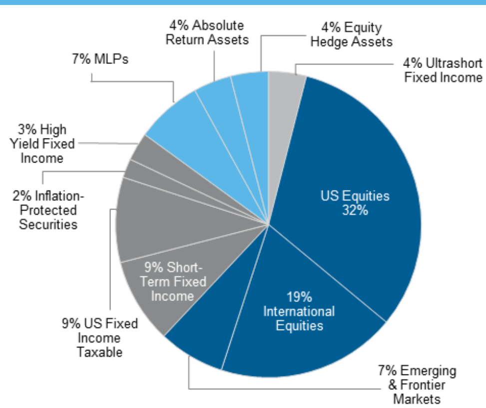
Capital Preservation



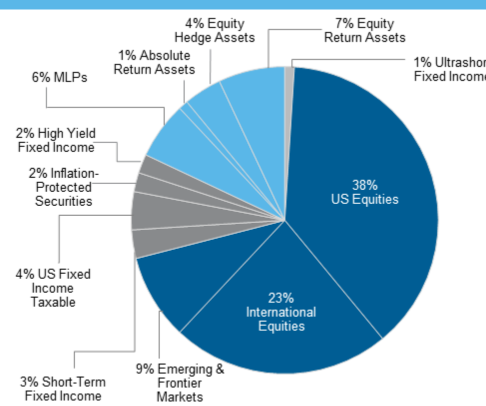
Income



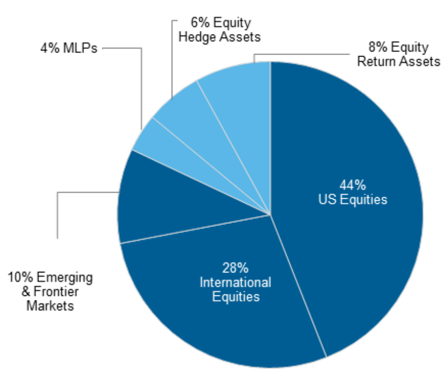
Balanced Growth



Market Growth



Opportunistic Growth



Key

Ultrashort Fixed Income

Fixed Income & Preferreds

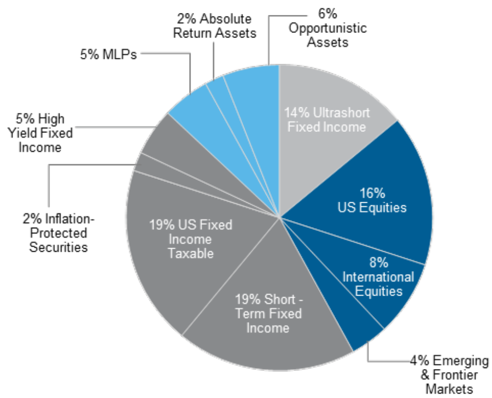
Equities

Alternatives

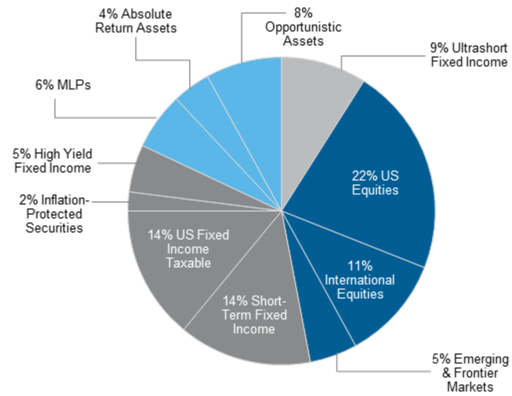
Source: Morgan Stanley Wealth Management GIC as of July 31, 2017

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.

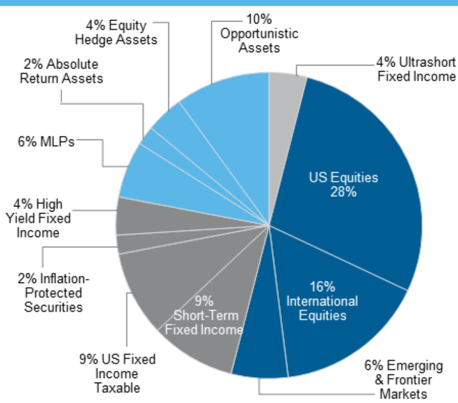
Capital Preservation



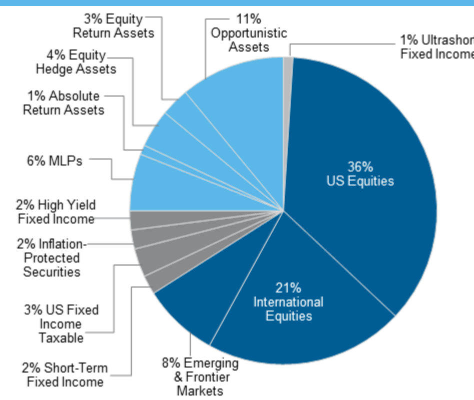
Income



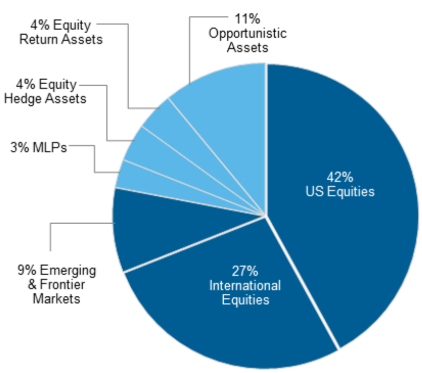
Balanced Growth



Market Growth



Opportunistic Growth



Key

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

Source: Morgan Stanley Wealth Management GIC as of July 31, 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. This bull market was challenged during the past year by fears of political events and instability. While the Trump/Republican progrowth agenda has been slower to develop than hoped, it has also left us in a bit of a Goldilocks environment in which growth and interest rates are neither too hot nor too cold. This is supportive of our call for higher valuations and 2,700 on the S&P 500.
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 in the first half of the year.
Global Fixed Income	**Relative Weight Within Fixed Income**	
US Investment Grade	Underweight	We have recommended shorter-duration* (maturities) since March 2013 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels. While interest rates have remained exceptionally low, there is more near-term upward pressure on US economic data to reverse and begin surprising to the upside as the European Central Banks 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. As long as oil remains above $40 per barrel, they should provide a reliable and attractive yield and they look exceptionally cheap relative to high yield. A 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 2017, these strategies should do better than in recent years.

Source: Morgan Stanley Wealth Management GIC as of July 31, 2017

For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 19 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

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

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

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

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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