

On the Markets

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Get Ready, Here It Comes

Last month, we reiterated our view that slowing economic and earnings growth is more a function of a tiring business cycle than, as many others seem to believe, simply a reaction to rising trade tensions. More specifically, we think the tax cuts in 2017 were poorly timed given the US economy had finally reached escape velocity after a long, anemic recovery from the financial crisis. To recall, at the end of 2017, we had full employment and companies were finally using their cash flow for capital expenditures rather than just share buybacks and acquisitions, a necessary ingredient for higher productivity and real GDP growth.

In a nutshell, the tax cuts led to a boom last year during which the US economy ran well above its potential growth rate. This created excesses in the real economy, most notably in supply chains and labor markets. It also led to exorbitant capital spending that was unsustainable and difficult for the economy to absorb. The tariffs exacerbated these excesses and resulted in an extraordinary inventory glut. For nearly nine months, I have been writing about these excesses and how they would likely lead to corporate margin pressures in 2019. Indeed, corporate margins have been under pressure since the fourth quarter of 2018 and earnings growth has been disappointing. These weaker profits are now weighing on corporate confidence and that's why capital spending has been poor this year and economic leading indicators have rolled over so hard recently.

Most commentators and analysts have been blaming the trade tensions and tariffs for the capital spending slowdown and declining economic data. In their thinking, a trade deal will magically reverse all of these headwinds. We disagree, and while the Federal Reserve is likely to respond to the sluggish economic reports by cutting interest rates later this month, it could well be too late to reverse the inevitable end to the longest economic cycle in history. In other words, the risk of a mild economic recession in the US has greatly increased during the past six months. The good news is that the markets already know this, which is why long-term US Treasury yields are so low and defensive equity sectors like utilities, consumer staples and real estate investment trusts have performed so well in the past year.

We expect the data to deteriorate further over the next few months even in the face of another trade truce between the US and China. If we are right, we will begin to hear more voices in the chorus calling for an economic recession. That may well create the buying opportunity we have been waiting for. Get ready, here it comes. ■

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Bad Isn't Good

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On June 7, the US Labor Department reported the economy produced significantly fewer jobs than expected in May—and the markets cheered. The S&P 500 Index jumped 1.1%, capping its best four-day run all year, credit spreads tightened and bond prices rose.

A distinct line of reasoning drove these moves—the idea that “bad is now good”—and that worse economic data make it more likely that the Federal Reserve will reduce interest rates. How much more likely? Bond markets now expect the Fed to cut rates by about 100 basis points in the next 12 months.

We strongly disagree with this “bad is good” logic. The expectation that easing central bank policy can offset weaker economic data is at odds with both a broad swath of historical data and basic monetary theory. Still, since many in the market disagree, this feels like a good time

to restate our case.

NO COINCIDENCE. The first thing is that markets have faced weakening economic data and lower rates or easier central bank policy on quite a few occasions. That’s no coincidence. Central banks usually cut interest rates when the data softens, attempting to provide an offset. Therefore, the question of how often “bad is good” is testable.

For simplicity, we focused on instances when the central bank had reduced interest rates at some point over the prior three months, and the unemployment rate was either stagnant or worsening. We did this for the past 30 years, in both the US and the UK.

POOR RESULTS. So how did things go? In the US, these “bad data but easier policy” periods saw the S&P 500 Index post above-average returns only 38% of the time. In the UK, the experience was similar, with the FTSE 100 underperforming 58% of the time when the Bank of England was cutting but

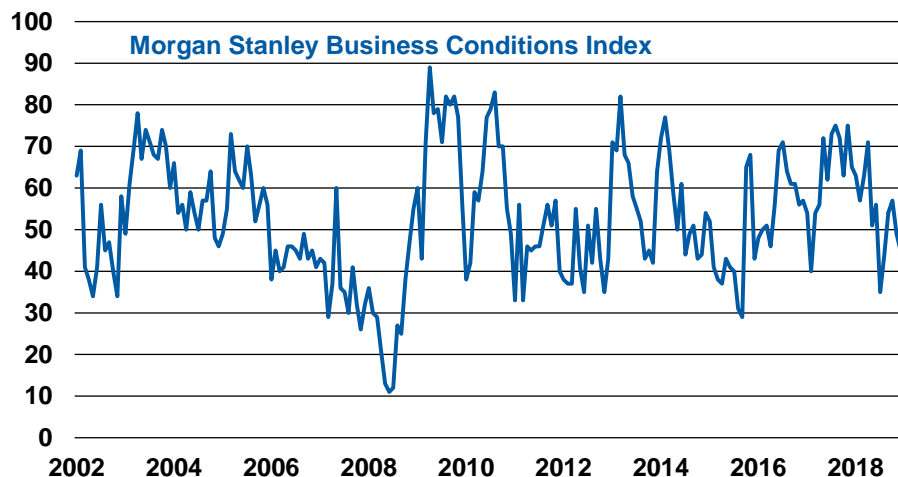
unemployment was sideways or worse. That’s hardly a great track record for the “bad is good” argument.

We also think that there are theoretical reasons to be suspicious of this idea. To start with, most economists agree that monetary policy works with a lag, perhaps as long as 12 months or more. Thus lowering rates today might not have an impact on the economic data until mid-2020. By the same token, the Fed hike in December (seven months ago) may still be working its way through the system—and don’t forget that the Fed’s balance sheet is still set to shrink through September, which is a modest form of tightening.

CONFIDENCE SUFFERS. What’s more, the slide in the economic data has a major impact on confidence, causing further softness as businesses and consumers pull back and making investors less inclined to pay up for promises of future growth. No economist, at least none we’ve met, will tell you that central bank policy is intended to eliminate swings in the business cycle. Rather, it aims to dampen them. To this end, we’d note the sharp decline in the most recent readings of the Morgan Stanley Business Conditions Index, a proprietary diffusion index that our US economists compile based on how Morgan Stanley equity analysts view current and expected conditions for companies they follow (see chart).

What would qualify as good news and make us more positive? Better data. As strongly as we believe it’s dangerous to root for poor economic reports to lower interest rates, we firmly believe that markets will ultimately prefer stronger global data, even if it means that interest rates go up. This remains our view and our operating framework. It also connects the periods where interest rate cuts were most helpful for markets, notably in 1995 and 1998, when the economy held up well as the Fed cut. Now it’s just a question of what the data brings. ■

Business Conditions Index Just Had Its Largest One-Month Decline Since Inception



Source: Morgan Stanley & Co. Research as of June 26, 2019

50 Basis Points in Search of a Rationale

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When Federal Reserve policymakers meet at the end of this month, the odds are heavy that they will cut the federal funds rate by a half a percentage point. The expected cut—twice the normal policy move, except for crisis situations—is all the more dramatic given that six months ago the markets were anticipating further rate hikes this year and next.

The arguments coming out of the rate reduction camp range from the necessity of cuts to preserve financial market stability, to their offsetting trade tension uncertainties, to their reigniting inflation expectations. Additionally, there have been politicized hints from Federal Reserve Chairman Jerome Powell, who has intimated he would cut “to extend the economic cycle,” even though that is not the Fed’s legislated mandate. If trade uncertainty is the issue, do rate cuts insulate the economy from mercurial US

tariff policy—and, with record high stock and ultralow bond yields, what would the Fed be warding against?

FINANCIAL CONDITIONS. First, investors’ comfort with pre-emptive Fed rate cuts may rest on the 1998 episode in which Fed Chairman Alan Greenspan reversed course in response to the emerging market debt crisis, cutting rates by 75 basis points in a nine-month span. That appeared to revive the cycle, which climaxed in the 2000-2001 tech wreck.

In 1998, Asian economies were constrained around monetary accommodation due to high inflation rates, with soaring fiscal and current account deficits restricting other policy actions. Then financial conditions were tightening globally as they did in December 2018, but the current financial environment is no longer constricted: According to Morgan Stanley & Co. economists, conditions are no tighter than they were in September 2018 when the stock market was hitting an all-time high and the 10-year rate was above 3%. Since then, financial conditions

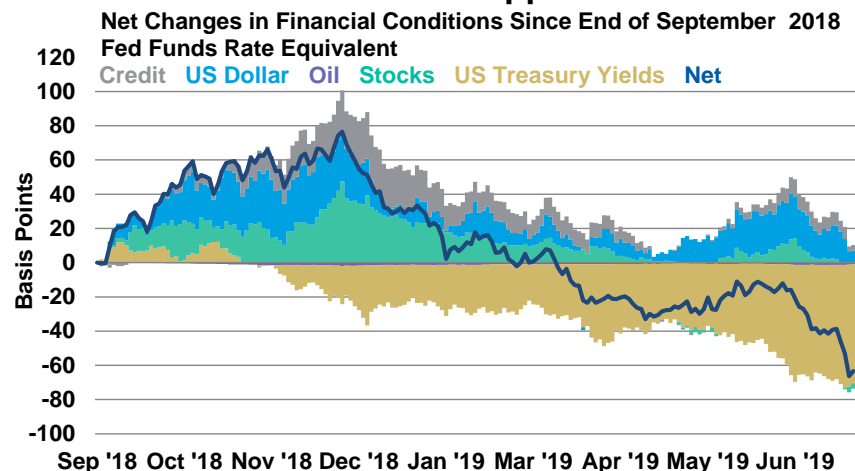
have improved by almost 20 basis points, as collapsing Treasury rates, strong equity markets and falling oil prices have more than offset a stronger dollar and wider credit spreads (see chart).

A second factor in the 1998 rate cuts was financial stability, which in the Greenspan era was considered alongside price stability and full employment, a “third mandate.” At the time global markets were in a correction and market volatility had spiked, and there was fear of systemic contagion. While trade tensions have weighed on global GDP forecasts and contributed to slowing, it is hard to argue that systemic market risks are being discounted. Rather, the rapid deterioration in global bond yields seems to be signaling concerns about central bank policy mistakes around the business cycle.

“INSURANCE” CUTS? That leaves us with a rationale for “insurance” Fed rate cuts that hinge on inflation and a declining jobs market. While we agree that employment has probably peaked—as evidenced by the weak May payroll data, a spike in layoffs and a rollover in surveys of small businesses’ intent to hire—it’s hard to make the argument that the jobs market needs rescuing, given a 3.5% unemployment rate. The inflation picture is more complicated: The Fed’s 2% inflation goal has been elusive, but it is not as if the bottom is falling out. The most recent inflation reading still shows core CPI running at 1.9% and the core personal consumption expenditures (PCE) index at 1.6%. During the 1998 swoon, PCE readings fell to 1%.

Absent a strong economic argument for cutting, we see a rate reduction as leaving the Fed open to the charge that it has lost its independence. History, in general, does not look kindly on the use of liquidity tools in addressing structural problems. The buildup of asset bubbles, though instantly gratifying, is likely to prove problematic, practically guaranteeing a return to negative real interest rates in the next recession. ■

Financial Conditions Don’t Support a Rate Cut



Source: Morgan Stanley & Co. Research as of June 26, 2019

Finding the Next FAANGs

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The term “FANG” was coined in 2013 by MSNBC commentator Jim Cramer to highlight the fastest-growing stocks in the consumer/technology arena. The initials now refer to Facebook, Amazon, Apple, Netflix and Google. From December 2012 through June 2018, the FAANGs collectively grew at a 43% compounded annual rate.

Such dominance doesn't last forever. The NYSE FANG+ Index, which includes the FAANGs plus five more momentum stocks, fell 33% between its June 2018 high and its December low (see chart). While they have outperformed so far this year, it seems unlikely future returns will be anywhere near the scale of the past five years. So, who will be the next FAANGs? How can we identify them ahead of time?

After examining the FAANGs as they were in early 2013, we found nine common characteristics. In general, the original FAANGs had: (1) market

capitalizations no more than \$115 billion; (2) consensus revenue growth estimates greater than 10%; (3) price/earnings-to-growth ratios of less than two; (4) leading market share; (5) a large, addressable market; (6) economies of scale; (7) the benefits of network effects; (8) recurring revenue; and (9) a focus on consumers.

Now, given the need for companies to increase productivity, we believe that the next FAANGs should have the first eight characteristics and a business-to-business focus. After reviewing companies rated “Overweight” or “Equal-Weight” by Morgan Stanley & Co Research, we have identified 25 stocks that meet most of these criteria. The key to the next FAANGs is in network effects—the tendency of an additional user of a good or service to increase the value of that product or service for all other customers.

- Enterprise software companies provide platforms to manage customer relationships, information technology functions and helpdesk operations. They often have leading share in their respective

niches through subscription revenue and benefit from third-party apps.

- Geographic network companies benefit from dense networks that allow for faster delivery times as locations are closer to customers. They also have economies of scale in technology and data collection. Food is a frequently purchased item that leads to recurring revenue, and paint is frequently purchased by contractors, who are the primary customers.

- Cybersecurity platforms need to stay current on the threat environment, so market leaders are able to identify threats to emails or firewalls as they emerge and update defense for all subscribers.

- Two-sided network companies match buyers and sellers in fragmented markets. The companies with the most users are most attractive to the most suppliers, while users want a wide selection. These middlemen charge a fee for connecting the two sides of a transaction.

- Industrial technology transformation applies new technology and network effects to previously low-tech industries. Their leading share and geographic distribution allow them to apply technology early and effectively to gain share in search, autonomous vehicles and portfolio optimization.

- Information hubs sit at the center of powerful information flows. Customers want to find out what other customers know and are doing, and they need to communicate with each other through the network. They apply data and machine learning to old problems to create vertically integrated businesses out of fragmented industries.

- Industry standard companies establish themselves as the only way for enterprises to do business because minimal training is needed for a common application. ■

This article was adapted from the May 21, 2019, Equity Model Portfolio Solutions' Special Report, “Who Will Be the Next FAANGS?” For a copy of the report, contact your Financial Advisor.

FANG+ Index Tried, but Failed to Make New High



Source: Morgan Stanley & Co. Research as of June 27, 2019

Rate Cuts May Not Bolster Corporate Bonds

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Rebounding from a sharp sell-off late last year, both investment grade and high yield credit have generated impressive year-to-date total returns of 9.85% and 9.94%, respectively. While both asset classes have been supported by narrowing credit spreads and falling Treasury yields, high yield's performance is primarily driven by the credit component while investment grade returns have been supported by their greater sensitivity to interest rates.

STRONG INFLOWS. What also drove this year's credit rally were strong inflows into short-duration investment grade issues, largely seen as defensive positioning. At the start of 2019, three-to-five-year investment grade yields were 3.8%; now, they're more than a percentage point lower. Demand for yield, along with muted supply, drove this solid performance, which has eroded much of

the value that was offered back in January.

Now that the Federal Reserve is widely expected to cut rates between now and the end of the year, investors may want to reconsider the view that credit will be insulated, if not benefit, from the policy change. Prior cycles show that reducing credit exposure before rate cuts begin has been the better trade and that shorter-duration corporates can be vulnerable.

CREDIT VULNERABLE. To be sure, the markets are anticipating the Fed's expected policy shift in a bullish manner. Since the June Fed meeting, when rate cuts came more into view, the stock market has made new highs, and credit spreads have tightened. That suggests stock and bond investors are embracing the "soft landing" notion whereby the economy slows but not enough to tip into recession. Even without a recession, the Global Investment Committee maintains a cautious stance on equities based on what they view as overly optimistic consensus earnings expectations. If reported profits fall short

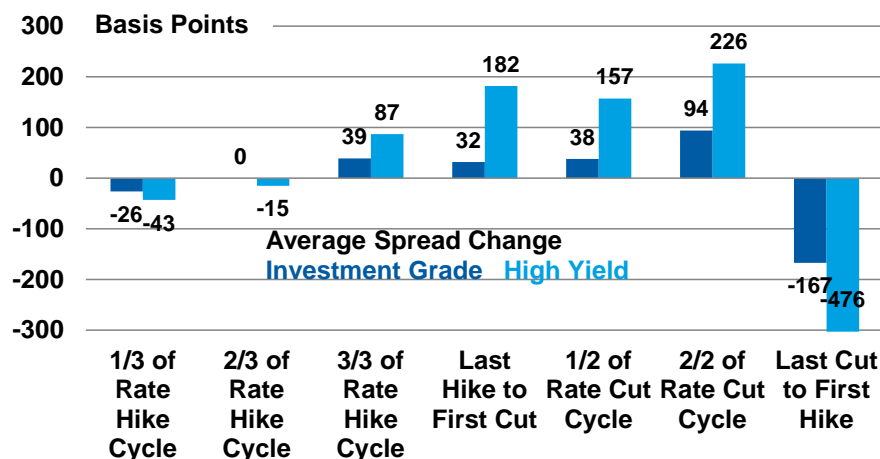
against a background of high valuations, corporate credit will likely be negatively affected, too. While equity markets focus on earnings, credit investors will also be impacted by declining cash flow generation and the inability to deleverage. Second-quarter earnings reports will start in several weeks.

The notion that the onset of a Fed rate-cutting cycle effectively places a floor under corporate valuations is not consistent with past regime shifts. Looking back at the most recent US recessions, around which times the Fed was required to make multiple rate cuts, credit underperformed dramatically prior to the first cut being made. Credit's weak relative performance in the past 18 months, while admittedly much less severe, is consistent with history. However, the view that credit will perform well through an easing cycle is not. In fact, in recent cycles, spreads have continued to widen after the first rate cut, and did not reach their tops until the second half of the rate-cut cycle (see chart).

FOREIGN DEMAND. That headwind could possibly be somewhat offset by foreign demand. While yields are low in the US, they are lower in other developed markets. In fact, the amount of negative yielding debt in the Bloomberg Barclays Global Aggregate Bond Index has more than doubled since last September to more than \$13 trillion. Give deteriorating growth and inflation, those yields are likely to remain under pressure.

The insatiable demand for yield in an increasingly negative yield environment could help justify the view that this time is different, and credit may not perform as poorly as it has in prior rate-cutting cycles. All told, there are many reasons investors may welcome the start of a rate-cutting cycle. Even still, given historically expensive valuations in context of deteriorating fundamentals and a bleak outlook for earnings, it would appear the risks for credit are currently skewed to the downside. ■

Over the Course of a Hiking Cycle, Credit Spreads Have Tended to Widen



Source: Morgan Stanley & Co. Research as of June 26, 2019

Flows and Performance Shake Up Asset Managers

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For most of the past 10 years, Quantitative Easing and other forms of central bank intervention kept a lid on market volatility, reduced stock dispersion and led to higher levels of correlation across stocks. That's a challenging environment for the stock-pickers who run actively managed equity funds. Their task is to beat a benchmark, which for US equity funds is often the S&P 500 Index, and do it after fees. In contrast, passively managed index funds simply track the index—and at a far lower cost to investors. Money flows into passive investments and out of active management reflect this trend.

These dynamics are reshaping mutual funds. Investor preference for passively

managed funds is putting pressure on active managers, leading to consolidation in funds and the firms that manage them. As part of our due diligence process, Morgan Stanley Wealth Management's Global Investment Manager Analysis (GIMA) is following these disruptive trends closely. Our goal is to help clients avoid funds offered by firms that may not be viable long term and to identify the funds that are most likely to thrive in the new environment.

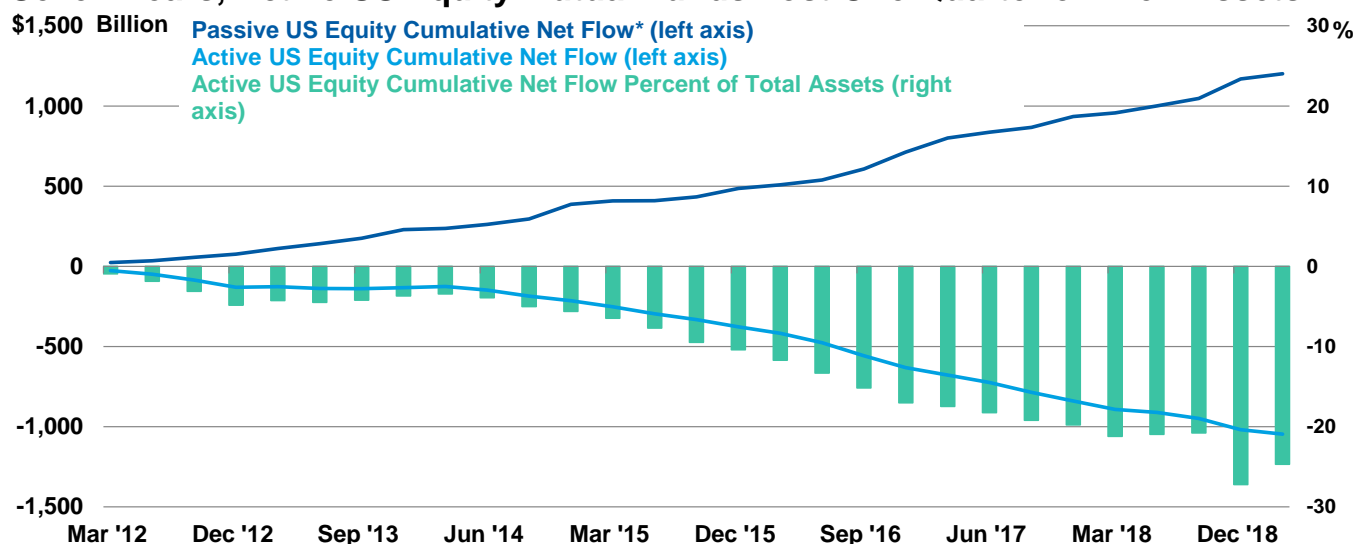
To understand what's happened to active managers, just look at the numbers. Active US equity funds lost about one quarter of their assets the past seven years, or roughly \$1 trillion (see chart). That's a staggering move considering the total return of the S&P 500 Index during that period was 133%. The performance sheds further light on this move. According to Morningstar, the S&P 500 Index ranked in the second percentile of

the Morningstar Large Blend category of actively managed US equity funds for the seven years ending March 31, 2019. This means that 98% of the funds in the category underperformed the index.

Actively managed funds, because they employ managers and analysts to run the funds, typically have higher expenses than passive managers, and these have been a headwind, too. To be sure, there has been pressure on expenses. The average net expense ratio of active US equity mutual funds was 1.12% in 2018, down from 1.25% in 2012 (see table, page 7). In contrast, average net expenses for passive US equity funds, including exchange-traded funds, were 0.51% last year. Some passive funds charge no fees at all, which exemplifies the heightened competition for investors' dollars.

Another headwind for active management is that it is generally less tax efficient than passive funds. A significant level of net outflows coupled with the strong market performance led to higher capital gains distributions from actively managed US equity mutual funds—and investors have to pay taxes on those gains. According to GIMA's analysis of Morningstar data, the average capital gains

In Seven Years, Active US Equity Mutual Funds Lost One Quarter of Their Assets



*Mutual funds and exchange-traded funds

Source: Morningstar, GIMA as of June 26, 2019

distribution was 11% of a fund's net asset value last year, versus 5% for passively managed US equity mutual funds. We also note that passively managed funds rarely distribute capital gains at all.

What's Next for Asset Managers?

As net outflows and fee pressures persist, significant changes are afoot across the asset management industry. It is not surprising that many traditional asset managers are experiencing declines in revenue and profit margins, which may be contributing to cost-cutting measures. So far this year, several large asset managers announced layoffs. Others announced cost-cutting measures that included streamlining noninvestment functions, relocating headquarters and implementing technology to automate back office functions.

GIMA anticipates that asset managers will continue to make moves to improve their profitability and ability to attract and retain assets. We see the following:

- **Firm Consolidation.** While there have been several high-profile merger announcements of traditional asset managers recently, GIMA anticipates more to come. Consolidation of asset managers can help offset the decline in profit margins through improved scale in back office operations and distribution capabilities. Larger asset managers appear to be more proactive around merger activity. GIMA believes that smaller boutique asset managers with undifferentiated and underperforming funds may face the greatest challenges.

- **Fewer Funds.** In addition to firm-level mergers, GIMA believes there will be an increase in consolidation at the product level, particularly for active US equity mutual funds, which have expanded in number despite the net outflows. The total number of active US equity mutual funds, excluding sector funds, increased from 1,587 in 2012 to 1,950 in 2018, or by about 23% (see table). We expect to see more fund liquidations and more mergers of funds within a fund family. While such

Despite Industry Outflows, Number of Active US Equity Funds Continues to Increase

	Active US Equity Mutual Funds**					
	Total Active Mutual Funds*	Annual Change (%)	Number of Funds	Annual Change (%)	Average Net Expense Ratio***	Annual Change (%)
2018	7,090	4.0	1,950	2.4	1.12	-2.3
2017	6,817	4.4	1,904	4.2	1.15	-2.5
2016	6,530	5.9	1,827	3.7	1.18	-0.3
2015	6,167	6.1	1,762	3.3	1.18	-1.4
2014	5,810	7.0	1,705	4.2	1.20	-2.0
2013	5,432	5.8	1,636	3.1	1.22	-2.3
2012	5,136		1,587		1.25	

*Active, US-domiciled funds, US dollar base currency, single share-class count

**Excludes US sector funds

***Includes all share classes within Morningstar US category

Source: Morningstar, Global Investment Manager Analysis

events have historically been rare for funds under GIMA's coverage, there were several in 2018 and so far this year.

- **Lower Fees.** GIMA expects that mutual fund fees, particularly for active US equity funds, have further to fall before net asset outflows stabilize. While the average net expense ratio for passive US equity funds, including ETFs was 0.51%, some passive ETF funds are now zero, which illustrates the competition for assets in the industry.

- **Flexible Fee Structures.** In addition to lower fees, several asset managers have introduced performance-based fees, or "fulcrum" fees, for active US equity funds. These fees are variable management fees that increase or decrease based on a fund's performance, generally relative to its benchmark. While features of fulcrum fees are attractive, they are not always better for investors. GIMA notes that depending on the timing of the fund's purchase and its realized performance over the fee-calculation period, an investor may end up paying a higher fulcrum fee for performance that they did not experience.

- **Lower Cost Approaches.** GIMA believes that traditional asset managers will come up with ways to deliver actively managed portfolios in a more cost-effective manner. We expect firms to offer more separately managed accounts

(SMAs) and collective investment trusts (CITs), for example. SMAs, which have been around since the 1970s, generally have lower costs since there are no marketing and lower administration expenses and they have the potential for greater tax efficiency. CITs are pooled investment vehicles that are not registered with the Securities and Exchange Commission (SEC) and, as a result, are generally cheaper than mutual funds. They are only available in qualified retirement plans, including 401(k) plans and other defined contribution and defined benefit plans.

- **More Actively Managed ETFs.** ETFs do not have certain expenses associated with mutual funds, including sales charges and 12b-1 fees, which are used for marketing and distribution expenses. However, there are several challenges with actively managed ETFs such as daily transparency of portfolio holdings. ETFs have historically disclosed their holdings on a daily basis, which has led to concerns that this disclosure will enable front-running of actively managed ETF portfolios. To get around this concern, several asset managers have sought regulatory approval for ETFs that do not immediately disclose holdings, also known as "nontransparent ETFs." The first nontransparent actively managed ETFs

were approved by the SEC in 2016, although growth in assets so far has been slow.

Guidance through Disruption

With more than 60 investment analysts and investment officers, GIMA has the dedicated resources to proactively help Financial Advisors and their clients navigate through this disruption and address challenges facing the industry. GIMA is expanding coverage of more cost-effective investment products,

including SMAs, CITs and actively managed ETFs.

GIMA has built screens to identify when asset management firms and products that are approved for use on Morgan Stanley Wealth Management's advisory platforms are experiencing meaningful declines in assets under management. When concerns about viability arise, GIMA issues a "Watch" that is communicated through our *Daily News* process. During late 2018 and early 2019, GIMA had the greatest number of products under coverage assigned the

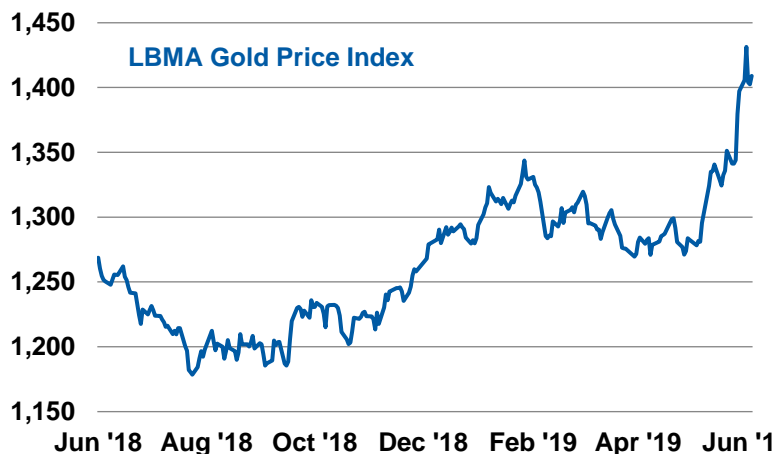
Watch designation in our history, with the majority being among active US equity products.

GIMA has historically been proactive around providing alternatives to funds that have been downgraded to "Not Approved." We recommend clients pursue products available on our high conviction Focus List. The Focus List status indicates GIMA's greater level of confidence in the overall quality of the investment option and its ability to outperform applicable benchmarks over a full market cycle. ■

ON THE MARKETS / SHORT TAKES

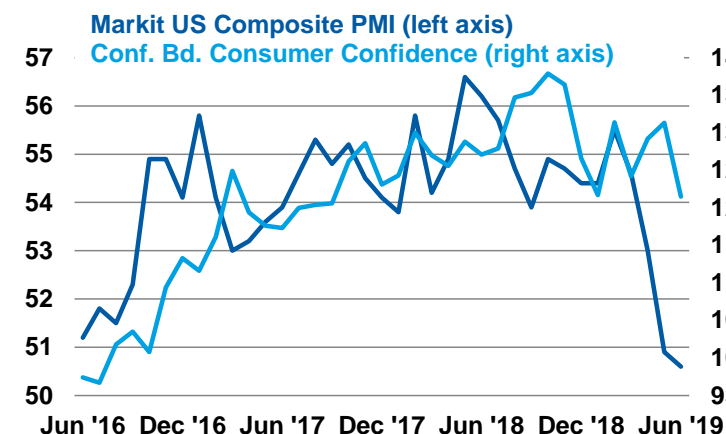
Gold ETFs May Glitter, but Not All in the Same Way

With gold's long-awaited upswing—roughly 10% in the past month—investors may be considering ways to invest in the metal (see chart). In our view, exchange-traded funds (ETFs) are among the most efficient vehicles, but they don't all do it the same way. Of the 16 US-listed ETFs (excluding leveraged/inverse and those with mixed allocations), eight hold gold bullion, seven invest in mining or exploration companies and one uses futures. Several of the bullion ETFs are highly liquid and have dependably tracked spot prices, before fees. Notably, however, exposure to bullion through ETFs typically entails a collectibles tax. The mining and exploration company ETFs often have bigger price swings than the metal itself—in both directions. The futures ETF, while taking steps to mitigate costs related to futures curve volatility, requires K-1 tax reporting. Realizing these distinctions is the first step in building precious metals exposure via ETFs.—*John F. Duggan*



Source: Bloomberg as of June 30, 2019

Businesses Are Leading the Consumer in Signaling Stalling Economic Momentum

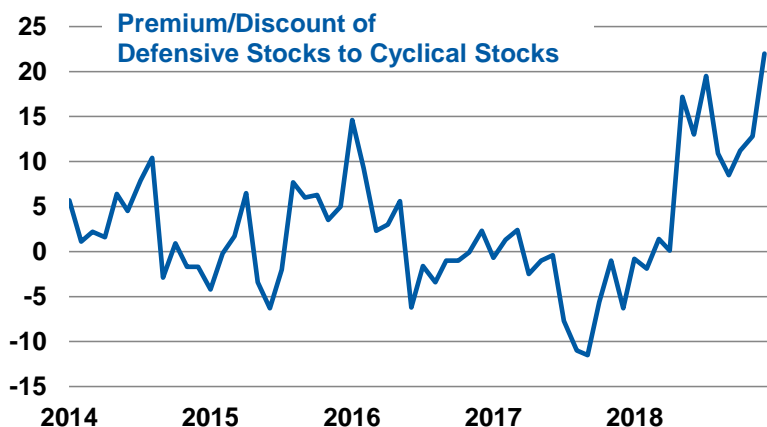


Source: Bloomberg as of June 27, 2019

June's initial reading of the Markit US Composite Purchasing Managers' Index (PMI), a gauge of business sector activity, declined for a fourth consecutive month to 50.6, a multi-year low and just above the threshold of 50 that signifies expansion versus contraction. Interestingly, when plotted against the Conference Board Consumer Confidence Index, this PMI indicator appears to lead the Conference Board's measure in signaling slowing economic momentum. What could be driving this divergence in business and consumer sentiment? Ongoing trade tensions might partially explain the divide. The uncertainty stemming from the disputes between the US and its trading partners may have disproportionately weighed on companies, which may be reluctant to make new investments with the looming threat of new tariffs. Meanwhile, to date, US consumers have faced limited consequences from these trade concerns, as companies have largely absorbed the cost increases associated with the existing tariffs. —*Spencer J. Cavallo*

Defensive Stocks Show Extremely High Valuations Relative to Cyclical

When equity investors grow concerned about the outlook for the economy, the traditional playbook says to rotate into equity sectors considered to be more "defensive," such as consumer staples and utilities, and away from sectors whose performance historically has tied closely to GDP growth, such as financials and industrials. In many late-cycle environments, investors undertake this move in hopes of experiencing relative outperformance. Eventually, as concerns over the economic outlook become pervasive, the valuations of these defensive sectors may become extreme, reducing their attractiveness and possibly eroding their defensive qualities. Based on price/earnings ratios, defensive stocks appear expensive relative to their cyclical counterparts, selling at a 22% premium (see chart). This relative overvaluation of defensives versus cyclicals warrants careful monitoring and may serve as a useful barometer of overall market sentiment.—*Lisha Ge*



Source: Bloomberg as of June 27, 2019

How Our New Risk Score Ranks Managers

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Conventional wisdom and the financial media often highlight active managers' prowess in security selection—the ability to identify “top trades.” However, this obsession with picking stocks may focus too much on an often ephemeral skill while neglecting the discipline that contributes to long-term consistency and quality.

Our analysis suggests the most

successful active managers have tailored their investment processes around portfolio construction, blending security selection into a disciplined risk management framework. As a result, we have developed a proprietary methodology to gauge managers' effectiveness in risk management. Based on extensive historical analysis, we evaluate over 18,000 strategies across 54 categories by ranking them according to several quantitative markers. We take a weighted average of these individual rankings to compute each manager's Risk Score, having found that managers with higher Risk Scores have historically produced more attractive subsequent risk-adjusted returns, particularly under adverse conditions.

The Risk Score complements our Adverse Active AlphaSM 2.0 and Value

Score methodologies, which we released in 2018 (see table). Considering the three scores simultaneously may provide helpful signals on managers' prospective value-added. We believe combining these quantitative rankings with the holistic due diligence of Morgan Stanley Global Wealth Management Global Investment Manager Analysis (GIMA) may improve the potential for identifying high-quality active managers.

Sorting managers by the effectiveness of their risk management. The Risk Score methodology uses markers that have been historically instrumental in identifying active managers with effective risk management. Based on qualitative and quantitative evidence, we believe active managers with effective risk management should deliver consistent excess returns, maximizing potential opportunities while limiting potential risks. As a result, the Risk Score methodology considers three groups of features to identify such managers: upside opportunity, downside mitigation and consistency in delivering risk-adjusted returns.

We have developed the Risk Score to

Comparing Our Three Manager Scoring Tools

Tool	Adverse Active Alpha 2.0	Risk Score	Value Score
What underlying logic supports the approach?	Investors may benefit from those managers with meaningful differentiation from their benchmarks and show consistent skill in their active decision-making	Effective risk management defines managers' long-term outcomes, helping them to benefit on the upside while limiting the downside	As with other purchasing decisions, rational investors assess managers' value proposition relative to their actual costs
What forward-looking measure of quality does it seek to measure?	Capacity for alpha generation, focusing on risk-adjusted excess returns	Skill in managing total return risk, considering both upside opportunity and downside risk	“Excess value,” defined as the manager's “fair value” expense ratio less its actual expense ratio
How does it evaluate manager quality?	Active management, alphas and consistency	Upside capture, downside mitigation and consistency	Active management, risk-adjusted performance and risk management
What type of returns does it consider in its calculations?	Gross	Net	Gross returns in its calibration to determine net returns from the “excess value”

Source: Morgan Stanley Wealth Management Portfolio Analytics

support manager selection decisions, focusing on identifying high-quality active managers who are distinguished by their effective risk management. Many empirical studies have highlighted the shortcomings of selecting one period's highest-returning managers and anticipating a similar outcome into the future. In response, we have designed the Risk Score to track quantitative measures of quality risk management, which have historically translated into attractive risk-adjusted returns for forward-looking periods.

The Risk Score focuses on a critical consideration for manager selection—effective risk management—by evaluating managers according to several quantitative measures. At its core, this approach stands upon the fundamental intuition that disciplined, results-driven investment processes may allow higher-quality managers to separate from their peers over time.

As such, we have identified several quantitative markers to assess the quality of active managers' risk management:

- **Upside opportunity.** Capturing solid upside potential through disciplined active management
- **Downside mitigation.** Minimizing potential disappointments in absolute and excess returns
- **Consistency.** "Quality" risk-adjusted returns that suggest a repeatable, skillful investment process

Please refer to table above to follow our calculations. For each underlying manager, we compute the manager's percentile ranking within the asset class on each marker ("Percentile in Asset Class"). We then multiply the weights for each marker by each percentile—for example, 20% x 0.87 for the active-management marker—and sum them to determine a raw weighted average (0.87 in this case). We then rerank the managers from this raw weighted average, with this manager scoring in the 98th percentile and thereby leading to a "green" rating (ranking in the top 40%).

Encouragingly, our historical survey suggests that those managers tagged with the green designation did achieve

Risk Score Methodology for a Sample US Tax-Exempt Intermediate Fund Manager

Category	Marker	Weight	Percentile in Asset Class
Upside Potential	Active Management	40%	0.87
	Fees-to-Tracking Error		0.95
Downside Mitigation	Performance in Adverse Periods	40	0.94
	Returns-to-Average Drawdown		0.97
	Volatility of Volatility		0.05
Consistency	Sharpe Ratio	20	0.97
	Sortino Ratio		0.92
	Up-Down Capture		0.96
Weighted Average			0.87
Reranked			0.98

Source: Morningstar, Morgan Stanley Wealth Management Portfolio Analytics as of March 31, 2019

attractive forward-looking performance in subsequent three-year periods, having studied the 25-year period from 1993 through 2018. These benefits seemed evident across multiple asset classes, for both equities and fixed income, along several dimensions of historical risk-adjusted returns, suggesting that the Risk Score has potential to assist with manager selection.

Extending our toolkit for scoring managers. To support our integrated portfolio construction approach, we have developed a suite of manager scoring tools, which seek to rank managers by perceived quality across traditional equity and fixed income asset classes. The Risk Score, described here, completes this suite and complements our two existing tools: Adverse Active Alpha (AAA) 2.0 and the Value Score.

The Risk Score complements both AAA 2.0 and the Value Score by searching for those active managers with more effective portfolio construction and risk management processes. We consider three dimensions of risk management—capturing potential, mitigating downside risks and delivering consistent performance—in the Risk Score.

Importantly, we believe that the Risk Score helps to flag those managers more

likely to experience drawdowns, which may lead to significant disappointment for investors.

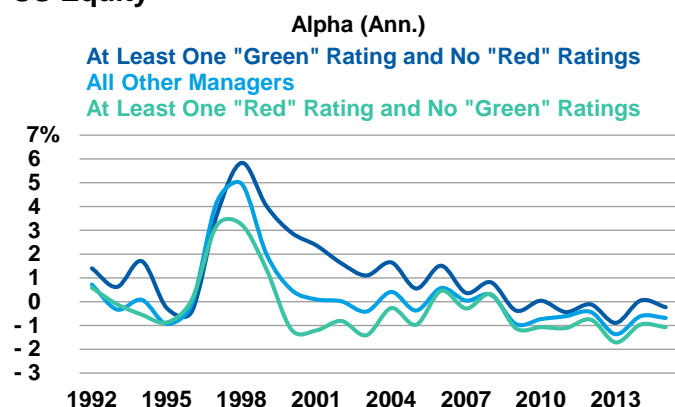
These scoring tools therefore address three critical dimensions of what may indicate a high-quality active manager: performance, risk management and value. While the tools' methodologies share common inputs, their differentiated objectives point to their independence, and we have found empirically that their conclusions do show meaningful differentiation in outputs.

Moreover, our analysis has found that their complementary approaches may provide compounded value-added over time. We recommend that investors focus their allocations to those managers that have achieved at least one green score and no red scores (bottom 20% on any of the three).

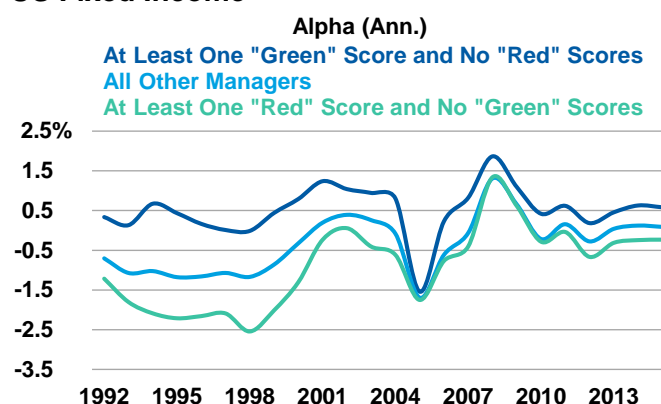
The chart on page 12 shows the historical consistency with which this approach has sorted higher-quality managers, indicated by forward-looking alpha generation, for both US equity and fixed income managers. The charts display the annualized alpha for the average manager in each group for 24 overlapping rolling three-year periods, starting as of Jan. 1, 1993, and ending Dec. 31, 2018, for three separate groups of managers, based

Using the Three Scores Together for Major Equity-Like and Fixed Income Asset Classes

US Equity



US Fixed Income



*We computed these forward-looking annualized alphas by processing survivorship bias-free manager returns and assets data from the Morningstar and proprietary databases, including both mutual fund and separately managed account. The data allows us to study the period from Jan. 1, 1993, to Dec. 31, 2018. Our analysis reviews rolling three-year realized windows to make projections on subsequent three-year windows, aligning with investors' anticipated holding periods.

Source: Morningstar, Morgan Stanley Wealth Management Portfolio Analytics as of March 31, 2019

on the manager scoring tools' rankings calculated as of Dec. 31 of the year immediately preceding the period's start date. The US equity grouping includes the nine Morningstar-defined major style boxes, while the US fixed income cohort covers both taxable and tax-exempt managers across credit quality and duration.

Using the Risk Score in portfolio construction. Once investors have determined to hire an active manager in a given asset class, they face the portfolio-related question of the manager's benchmark-relative risk level. For example, in US large-cap value, an investor may consider managers across deep, traditional and relative value subcategories. Owing to its underlying calculations, these three scores intend to identify higher-quality managers along the

spectrum of benchmark-relative risk levels.

While security selection may dominate popular impressions of active managers, they will struggle to deliver consistent, long-term success without effective risk management. The Risk Score gauges the effectiveness of managers' risk management against other strategies in each asset category by looking at upside potential, downside mitigation and consistency. On a stand-alone basis, the Risk Score has historically differentiated among manager quality, with highly rated managers having delivered superior risk-adjusted performance and greater success in adverse periods.

The Risk Score completes our manager scoring toolkit, complementing AAA 2.0 and the Value Score. Along with other qualitative and quantitative due diligence, these manager scoring tools' ratings

should facilitate manager selection, potentially boosting portfolio-level risk-adjusted returns. Weighing the signals from multiple scores may assist with sorting among potential options by identifying managers' particular strengths and weaknesses through the tools' quantitative lenses.

By complementing other due diligence resources, these manager-scoring tools may contribute to maximizing the odds for successful manager selection and portfolio construction, potentially boosting our clients' long-term results. ■

For the complete report, "Risk Score: Ranking Managers on Upside Opportunity, Downside Mitigation and Consistency," contact your Financial Advisor.

REITs as a Defensive and Diversification Play

More than a decade after the US real estate boom led the country and globe into financial crisis, the idea of investing in real estate still may not appeal to some investors. However, Jon Cheigh, head of global real estate and senior global portfolio manager at Cohen & Steers, explains that real estate investment trusts (REITs) and other real estate securities are operating much more conservatively these days. In fact, their defensive traits may work well for those with late-cycle worries. Cheigh paints a generally rosy picture of the asset class domestically as well as globally, and notes such nontraditional properties as cell towers and data centers are coming into the REIT universe. He spoke with Morgan Stanley Wealth Management's Tara Kalwarski. This is an edited version of their conversation.

TARA KALWARSKI (TK): What are your broad thoughts on REITs and real estate companies?

JON CHEIGH (JC): Over the long run, this asset class has tended to outperform overall equities, but there are times when it's doing better and times when it's doing worse. While real estate stocks have done well over the last three to five years, the reality is that they have underperformed the broad equity market.

We think real estate is in an interesting spot right now. Valuations are fair relative to historical averages, and certainly fair versus other equities. We are later in the overall economic cycle—probably somewhere in the second half of the game—and when we look at how real estate has performed in the latter parts of a business cycle, what we tend to find is that

real estate stocks do better than the broad equity markets.

The biggest reason for that is the earnings and dividend growth of these companies tends make them quite defensive. As economic growth decelerates, we see investors increasingly turning to REITs given their steady stream of lease-based revenue. Of course, the predictability of these revenues depends on property type. Health care REITs tend to have the longest lease durations and thus some of the best revenue visibility. Hotels and apartments have typically much shorter leases, and other property types fall in between.

TK: REITs are often mentioned as dividend plays. Why is that?

JC: In exchange for an exemption from corporate income tax, REITs are obliged to pay out at least 90% of their taxable income to shareholders as dividends. As a result, their average dividend yield tends to surpass that of most other equities. As of May 31, the weighted-average yield on the US REIT market was 3.8%, compared with 2.0% for the S&P 500.

TK: Real estate is highly sensitive to interest rates. How are low rates affecting the market, and what would happen to REITs if they normalized?

JC: Lower rates have provided a tailwind to REIT share prices of late. Part of the multi-year underperformance of REITs versus equities that began to reverse in late 2018 was attributable to investor concerns about an unwinding of Quantitative Easing and a resumption of interest rate increases by the Federal Reserve. In the extreme low-rate environment of the past decade, investors generally treated REITs as proxies for

bonds, which exacerbated the underperformance. We continue to believe REITs are best viewed as total-return investments.

What's more, history demonstrates that rising rates may not necessarily impair performance, especially if those rising rates are the product of economic growth, which is one of the most important drivers of demand for most REIT property types.

Finally, new property types such as cell towers, data centers and alternative housing have made the US REIT market structurally less cyclical, potentially less rate sensitive overall, and more tied to long-term growth trends such as the rise of e-commerce and demographic changes. Nontraditional property sectors—those not including office, retail, apartments and industrial—now make up more than half of the US REIT market capitalization.

TK: What are your thoughts regarding the relative attractiveness of global versus US REITs?

JC: Looking at the three major regions for where we see fundamentals as well as valuations being the healthiest, would be Asia first, the US second, and Europe third. It's difficult to generalize global versus US and then further by region, but there are places like Hong Kong and Tokyo where the office REIT market is growing between 5% and 7% a year. In the US, it's growing more at an inflationary-type level of 3% or so.

While a few years ago Europe was growing relatively quickly relative to its history, that began to slow down in 2018. Though it's not going to be a huge negative for the property market, at the margin it's a relative negative versus what we see in the US as well as in Asia.

TK: Where are you seeing opportunities across the different real estate sectors?

JC: In general, we think the global economy is healthy, which means jobs are being formed, which means that generally people need somewhere to live. Residential REITs have not seen some of

the secular issues that the retail REIT market is seeing due to e-commerce, that hotels are seeing because of Airbnb and, at the margin, that office is seeing because of WeWork. Residential is enjoying good rental growth at a global level.

In the US, we went from an oversupplied situation in 2008 to an undersupplied situation in 2019. Landlords are enjoying the ability to raise rents at a higher-than-inflationary level in apartment REITs or REITs that own single-family homes.

A theme we believe has the potential to generate above-average earnings growth over the next three to five years is things that are benefitting from e-commerce, mobile commerce and 5G communications, including data centers and cell tower REITs.

We also think it's important to be more concentrated, and to cover companies on a local level. As we analyze businesses, it's important to make sure that our people are speaking the language, understanding the culture and building relationships with the management teams.

TK: What areas are you avoiding and why?

JC: Retail real estate, for reasons I mentioned earlier. We were contrarians three and a half years ago, owning little to no retail at a time when people were complacent about what e-commerce would mean for brick-and-mortar stores—but we have been avoiding retail in the US, the UK, within Europe as well as in Australia. It's rare to have a real estate trend that is so global, but in our opinion, the undesirability of retail is a global story.

People's instinct when something has gone down a lot is that it must be the time to buy. While that can sometimes be a good instinct, I don't think that's the case in this situation. In the same way that people bought banks in post 2010 or they bought homebuilders thinking they were at the bottom, the reality is that sometimes these things take many years to go through a corrective process. There will probably

be some rallies, but I think the trajectory for brick-and-mortar retail is still negative for the next few years.

TK: What are the diversification benefits of investors owning real estate securities in an investment portfolio versus owning real estate through their homes?

JC: Most individual residences are meant for consumption, not investment, and most do not generate income as REITs do via their leases with tenants.

Historically there's been little direct correlation between how one's personal residence is going to appreciate versus either a US REIT portfolio or a global real estate portfolio. When you think about global real estate, a portfolio might be investing in 60 to 80 different securities. Each of those companies might own 50 to 1,000 different properties. They're highly diversified by towns, neighborhoods and property types. That is why real estate in the long run is diversified not only against one's house value; it's diversified relative to how other equities are performing.

Many people might invest in a global equities portfolio, and they may feel they've diversified their exposure. The reality is the correlation between US equities and global equities has increased a lot because the world has become much more global. The supply chains are global, the customers are global, the brands are global. The diversification story for global equities is not as strong the last 10 years.

The reason diversification still works for global real estate is because we're investing in companies that own a specific apartment building in a specific city in Germany, or they own a specific shopping center in a specific part of Hong Kong. Because real estate is still local, REITs in one country can behave very differently than REITs in another country. That's what diversification is and that's what investors want when they put together a portfolio.

TK: Are there common questions investors are asking you?

JC: One is: "I worry about real estate—retail is such a big thing, and isn't that bad?" Looking at US REITs, for example, the reality is that within this group, there are REITs centered on cellular towers and data centers, student housing and health care facilities. They're the ones that have grown a lot in the last five or 10 years. For US REITs, the retail industry at this point is only 11% of the index while cell towers are 15% of the index. Things like warehouses are 8%—because all this e-commerce stuff has to pass through a warehouse somewhere in the US.

TK: In terms of REITs over a longer-term period, what major trends or broad themes do you see driving growth in the sector?

JC: There's the technology side, which has been a big driver of data centers and tower REITs, and to some degree the industrial sector; that's been a tailwind and, of course, it's been a headwind for e-commerce.

I think demographics are also important. We have the baby boomers, who are very helpful for businesses targeting a 60-to-75-year-old demographic. That's part but not all of health care. Things like medical office buildings are going to do well; things like RV parks or manufactured housing parks will do well. There's even a certain amount of leisure hotels that will do well.

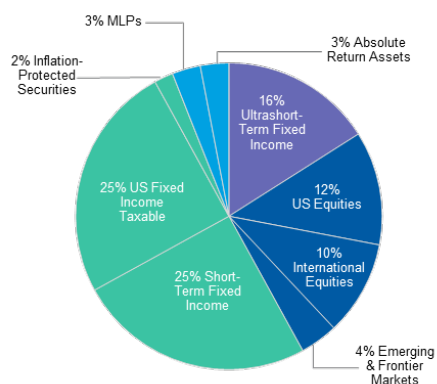
Then there are millennials, a second population boom, and that has helped apartments up until now. I think over time it's going to evolve to help the single-family rental market as this generation ages into their 30s. We're not building enough houses. We will likely have a lot of demand and not enough new supply. ■

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

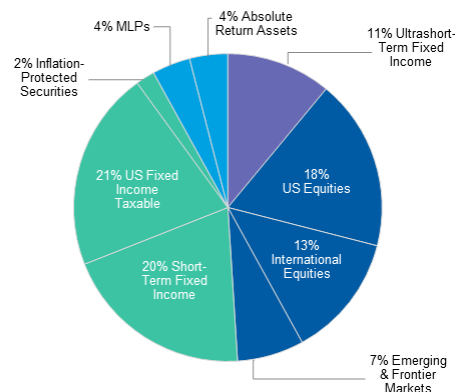
Global Investment Committee Tactical Asset Allocation

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

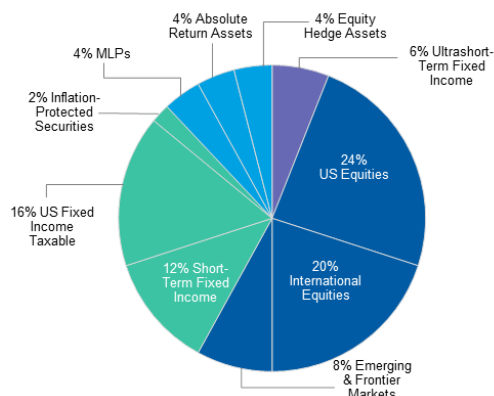
Wealth Conservation



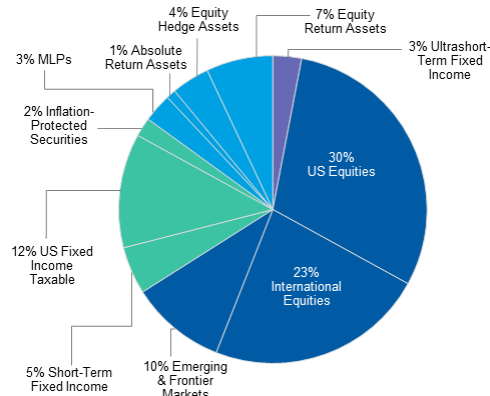
Income



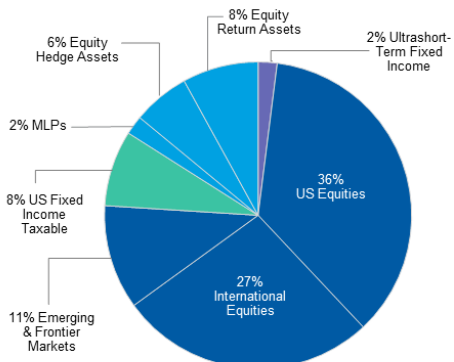
Balanced Growth



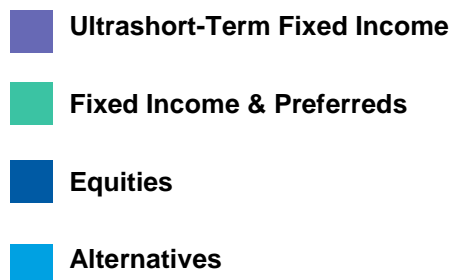
Market Growth



Opportunistic Growth

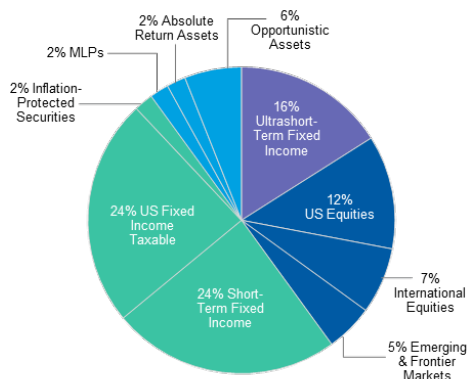
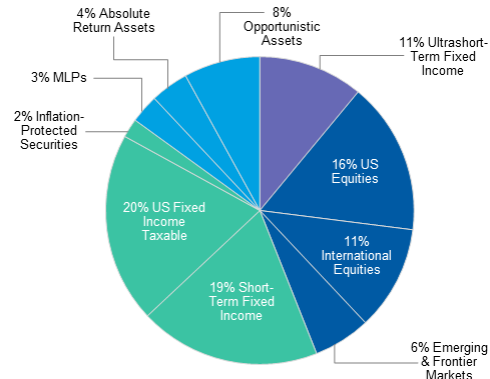
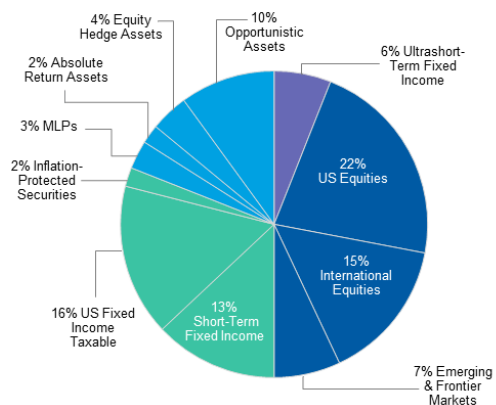
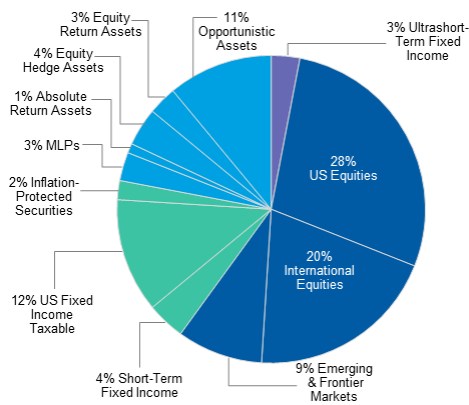
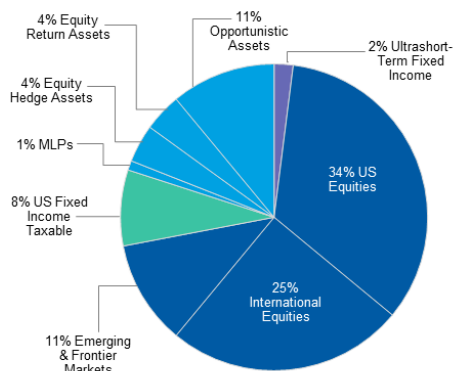
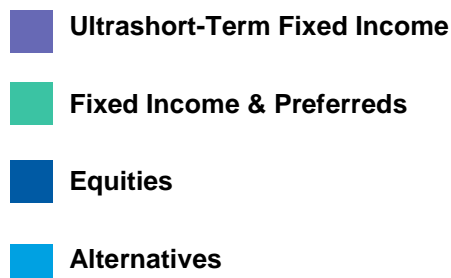


Key



Source: Morgan Stanley Wealth Management GIC as of June 30, 2019

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

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

Source: Morgan Stanley Wealth Management GIC as of June 30, 2019

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Underweight	While the benchmark S&P 500 has recently made an all-time high, higher risk indexes like the small-cap Russell 2000 Index are well below the high made last year. Meanwhile, sector leadership has come from defensive and high-quality sectors, which is indicative of a market that is not as bullish as it may appear. We think this is due to both economic and earnings growth, have slowed materially this year and are apt to weigh on US stocks in the third quarter. Our year-end base case price S&P 50 target remains 2,750.
International Equities (Developed Markets)	Overweight	We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are likely to drive more fiscal policy action in both regions, especially in Europe, which will allow the central banks to exit their extraordinary monetary policies and help valuations to rise.
Emerging Markets	Overweight	After a difficult first 10 months of 2018, emerging market (EM) equities have performed relatively well, a positive sign for future leadership. With our view for the US dollar to make a secular top this year, global nominal GDP growth should accelerate faster than the US GDP, particularly as China's fiscal stimulus takes hold. This should disproportionately benefit international equities, led by EM equities.
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. We are also increasingly concerned that credit spreads do not reflect the current earnings recession in the US nor the significant leverage now present on corporate balance sheet. Therefore, we are underweight US investment grade.
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 the recent collapse in real yields from the Fed's pivot, these securities offer little relative value in the context of our expectations for global growth to eventually accelerate, oil prices to trough and the US dollar to top. In short, inflation risk is underpriced.
High Yield	Underweight	High yield bonds have rebounded with equity markets this year as the Fed pivoted to a more dovish policy. Since February, high yield has underperformed investment grade as it starts to reflect earnings recession risk in the US. With a zero weighting in high yield since January 2018, we will revisit our allocation to high yield bonds during 2019 if spreads widen appropriately.
Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded this year. With oil prices recovering and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. Global supply shortages from Iranian sanctions 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. With the recent surge in volatility, these strategies could perform better on a relative basis.

Source: Morgan Stanley Wealth Management GIC as of June 30, 2019

***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.**

ON THE MARKETS

The **Global Investment Committee (GIC)** is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

Chetan Ahya, Chris Baxter, Vijay Chandar, Jonathan Garner, Lisha Ge, Matthew Hornbach, Nicholas Lentini, Susan McDowell, Olga Pujara, Hans Redeker, Graham Secker and Ellen Zentner are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.

Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following:

<https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

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.

ON THE MARKETS

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.

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

ETF Investing

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs, along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund or mutual fund before investing. The prospectus contains this and other important information about the mutual fund. To obtain a prospectus, contact your Financial Advisor or visit the mutual fund company's website. Please read the prospectus carefully before investing.

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

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.

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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.

Although they are backed by the full faith and credit of the U.S. Government as to timely payment of principal and interest, **Treasury Bills** are subject to interest rate and inflation risk, as well as the opportunity risk of other more potentially lucrative investment opportunities.

CDs are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum of \$250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g. individual account, joint account, IRA etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information visit the FDIC website at www.fdic.gov.

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

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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.

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.

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.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

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

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