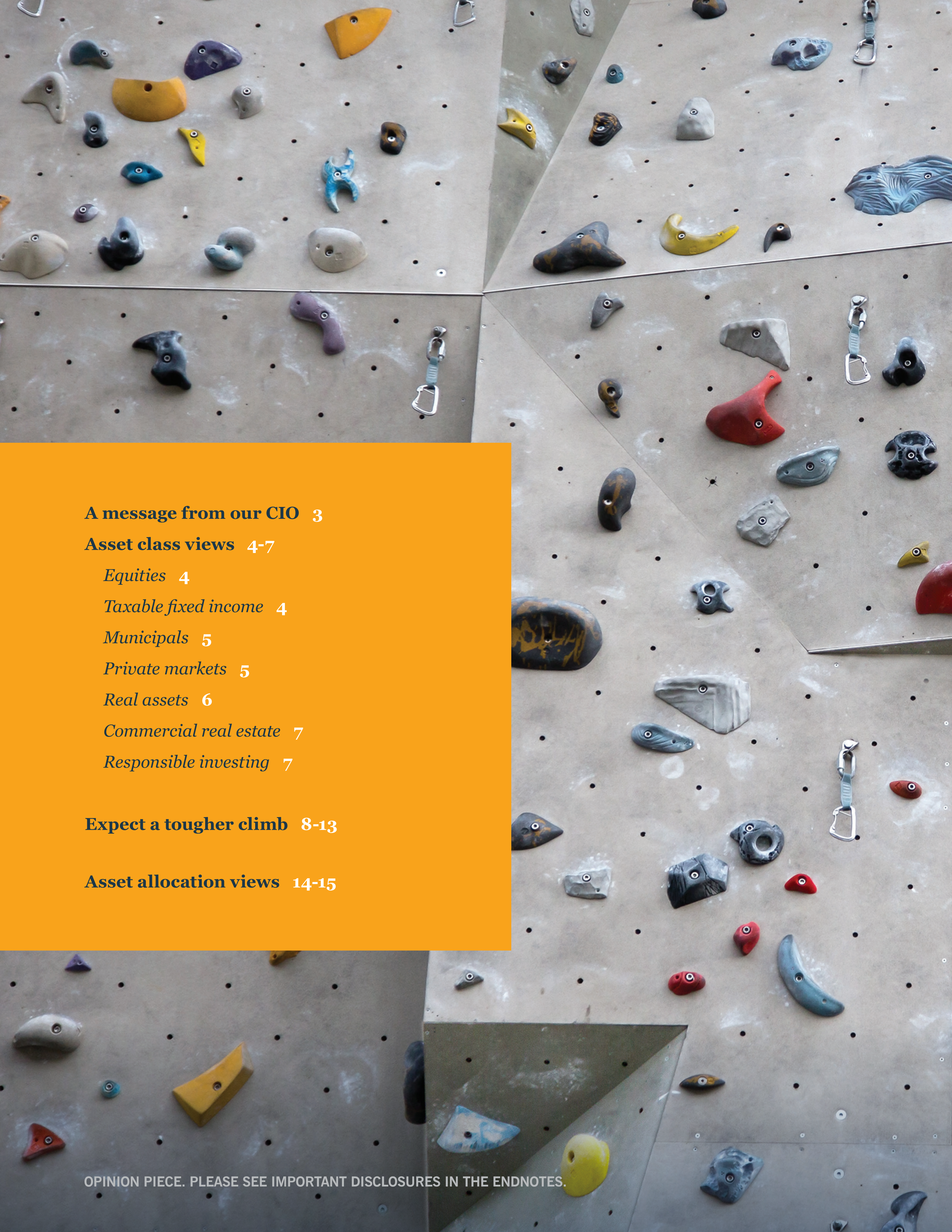
nuveen
A TIAA Company

2019

GLOBAL INVESTMENT COMMITTEE OUTLOOK

Expect a tougher climb

Slower growth. Rising rates. More volatility. 2019 looks to be a year that could be challenging for investors. Yet we believe the markets offer a range of opportunities, and we are finding a number of investment ideas for our clients.



2019 OUTLOOK

Staying invested as risks rise

Throughout 2018, Nuveen's Global Investment Committee (GIC) suggested clients remain in a risk-on mode, even as we pointed to rising risks to our pro-growth outlook. We haven't substantially changed our views that select opportunities still exist across markets, but we do acknowledge that conditions are likely to get more challenging from here.

Jose Minaya
Chief Investment Officer

We have been adjusting some of our portfolios to prepare for a more defensive environment but remain hyperaware of a critical point: Market conditions may shift, but our clients' long-term investment objectives typically do not. So our 2019 GIC Outlook, *Expect a tougher climb,* attempts to answer a key question: How can we and our clients stay invested as the world gets tougher? (The short answer: Stay **actively** invested.)

We'll start with the good news: We think global growth will slow in 2019, but we don't believe the world's major economies will enter recession. At the same time, we think financial conditions will be tighter around the world as interest rates rise and as we see growing trade restrictions. Important clarification, however: Slower growth and tighter financial conditions do not mean a "risk-off" world. At least not yet.

Likewise, as you'll see in the following sections, our most senior investors think valuations for many risk assets (specifically equities and some fixed income credit sectors) are more attractive now than they were when we started 2018: Interest rates have risen, yields have climbed, credit spreads have widened and equity valuations have fallen. That creates opportunities.

As a result, in most cases our investment leaders are expecting modestly better returns across asset classes compared to what we saw in 2018. We are continuing to find good investment ideas across public and private markets. In sum: 2019 is likely to be a balancing act. Our investment teams are focused on finding opportunities to buy and own high quality assets—without becoming too defensive in their approach.

At our recent GIC meeting, however, we also spent quite a bit of time asking the question: *What if we're wrong?* What happens if growth slows more than we expect or if geopolitical issues (such as rising trade restrictions or a messy Brexit) worsen? As stewards of our clients' assets, we believe it is our obligation to ask these sorts of questions and find ways to prepare our clients' portfolios for possible downside risk. We are looking more closely at defensive growth names in our growth equity portfolios—without undertaking a major rotation into "value" or other sectors. And we are focusing on higher credit qualities in some of our fixed income portfolios.

So what to expect in the New Year? Overall, we suggest our clients strike a balance between optimism and being defensive, to approach markets cautiously but remain invested and, above all, to work with an investment manager who has the tools, insights and flexibility to manage through what could be a challenging 2019.

We'd love to hear your views as well. We welcome the opportunity to talk about your portfolio goals and challenges and how we can better help you meet your goals. We encourage you to contact your Nuveen relationship manager with any feedback, or please visit us at nuveen.com or nuveenglobal.com.

EQUITIES

2019 will likely be a stock picker's market

Saira Malik
Equities

- While we remain positioned for a continued bull market, we are reducing exposure to select momentum growth stocks with frothy valuations. Bond proxy sectors appear expensive given their lower growth rates. However, we have been selectively buying high quality companies in traditionally defensive sectors such as health care and consumer staples, while evaluating hard-hit sectors such as financials and energy.
- We believe we are in the late innings of the bull market, but the cycle is not over yet. We see market corrections as buying opportunities and continue to emphasize quality growth companies and cyclical sectors. If a recession comes earlier than expected, amid higher rates or inflation, investors would be less willing to pay premium multiples for growth. Market neutral, defensive, quality and yield strategies should become more compelling in such an environment.
- Recent market volatility was driven by concerns over the timing of the peak of the economic cycle, tariff rhetoric and unease over higher inflation and higher interest rates. Following the market's recent downturn, valuations have contracted to attractive levels. However, we believe the markets will remain in a trading range until most headwinds subside.
- Given expected volatility and a heightened focus on valuations, we expect 2019 to be a stock picker's market. Returns should mainly come from companies with strong fundamentals trading at reasonable valuations.

BEST IDEAS: *We see attractive opportunities in high quality companies with attractive valuations and strong free cash flow. Our focus will be on identifying and selecting individual stocks based on fundamental research.*

TAXABLE FIXED INCOME

Positioning for late-cycle trends

Bill Martin
Taxable Fixed Income

- Treasury yields have risen since mid-year, with wider credit spreads leading to negative year-to-date returns in fixed income markets. We remain defensive, although we believe a near-term recession is unlikely and credit markets should remain stable into 2019.
- Credit spreads should be supported into the higher rate environment, as domestic growth has been pulled forward in the current cycle. Net supply in domestic investment grade and high yield bonds will likely trend lower in 2019, as the market adjusts to higher rates and merger and acquisition volumes subside.
- We favor investment grade credit, preferring higher quality BBB rated securities and financials over industrials. We are upgrading quality in high yield corporates. Senior loans remain attractive over the long term for their shorter duration, higher yield profiles.
- Within structured asset classes, we favor seasoned commercial mortgage-backed securities with more permanent capital support and shorter duration, high quality asset-backed securities. However, we remain underweight mortgage-backed securities based on relative value.
- Emerging markets continue to struggle due to persistent dollar strength and higher U.S. interest rates. Geopolitical risks centered on trade tensions, Brexit and a harder-than-anticipated landing in China may generate volatility. Notwithstanding those risks, we see opportunities in select higher yielding emerging sovereign and credit markets where current spreads more than compensate for the macro fundamental risks.

BEST IDEAS: *We favor BBB rated bonds and the financial sector, as well as shorter-duration high yield corporates, bank loans and asset-backed securities. We also like preferred securities. Local emerging markets with attractive real rates, benign inflation trends and steeper yield curves offer opportunities.*

MUNICIPALS

Expecting stronger returns in 2019

John Miller
Municipals

- Rising Treasury yields generally pressured municipal bond returns lower throughout 2018. However, municipals proved more resilient than other fixed income asset classes for several reasons: higher coupons with higher income distributions, improving credit quality, moderate new issue bond supply and the longer-term benefits of the 2017 tax reform legislation.
- New issue supply was down less than expected, although net new issue supply was negative due to municipalities calling and maturing more bonds than they issued. Refunding supply declined, partially due to the new tax laws. New money issuance somewhat offset the decline. Municipalities are more confident in their cash flows and are willing to borrow money to upgrade infrastructure to support economic and population growth.
- We continue to favor credit risk overall. The municipal revenue environment is strong, credit ratings upgrades exceed downgrades and defaults remain low. The Puerto Rico, tobacco, utility and land secured sectors saw the highest returns in 2018. While we believe Puerto Rico and tobacco returns should moderate in 2019, other sectors such as health care, transportation and education should lead more balanced sources of returns distributed more evenly across sectors.
- We expect Fed policy moderation and more stable and possibly lower inflation and commodity prices. As markets discount these shifts, U.S. Treasuries should stabilize in the first half of 2019, benefiting municipals.

BEST IDEAS: *We believe the steepness of the municipal yield curve will cause longer-term bonds to outperform over time. We expect high yield municipals to continue outperforming due to spread narrowing and better income cushion versus interest rates.*

PRIVATE MARKETS

Challenging markets require selectivity and proprietary access

Heather Davis
Private Markets

- Private market conditions have become more challenging, with stiff competition for deals accompanied by rising interest rates and possible slower economic growth. Private equity demand remains strong as investors seek the sector's diversification and absolute return advantages. Private debt continues to attract record fundraising on its history of predictable cash flows and low default rates. However, we believe rising multiples on equity deals, combined with demand-driven yield compression and weaker debt covenants, are forcing investors to become even more selective.
- Overall, smaller companies in the middle market appear attractive because investors can negotiate covenants and have more control over company management. Middle-market opportunities include private equity, direct equity co-investments, mezzanine debt and senior loans. Relationships with private equity general partners and access to their proprietary deal flow are important in helping investors to identify companies with better credit profiles. In a rising-rate environment, non-cyclical companies with strong cash flows are better able to cover higher debt service costs.
- Private debt is generally more attractive than equity in a maturing economic cycle, as it offers structural and collateral protection in the event of a default. Direct loans offer covenant protection, a senior position in the capital structure and can offer floating rates. In addition, selective infrastructure and energy project finance deals offer stable, long-term cash flows.
- Risks to the outlook include the potential for a global recession and rising interest rates, which put pressure on valuations and returns.

BEST IDEAS: *We favor structured or preferred equity solutions for high-growth middle market companies. "Green" credit products in renewable energy are in high demand from European investors.*

REAL ASSETS

Benefits of global diversification in the late cycle

Justin Ourso
Private Real Assets

Jay Rosenberg
Public Real Assets

- U.S. and global economic growth continue to support real assets, but valuations in certain markets and risks posed by rising interest rates and tariffs require investors to be highly selective. In private farmland and timberland markets, global diversification offers the potential for higher returns and could mitigate the effects of the strong dollar and tariffs. In public real assets, continued economic expansion favors growth-oriented sectors in the U.S. and developed markets that are less sensitive to rising interest rates.
- Low commodity prices for corn and oilseeds, a strong dollar and trade disputes continue to weigh on U.S. row-crop farmland returns, but may create buying opportunities. Attractive opportunities exist in U.S. permanent crops and non-U.S. row-crop markets. Tariffs have caused a divergence in soybean prices, for example, giving Brazilian farmers an export advantage over those in the U.S. Although quality opportunities exist across many farmland sectors and regions, their relative attractiveness tends to be deal-specific. Permanent crop development projects in Australia and South America offer counter-seasonal production, competitive cost structures, water diversification and free-trade agreements with key importers. In addition, agribusiness investments in clean, healthy protein continue to benefit from growing consumer demand.
- U.S. timberland performance has benefited from a sustained recovery in domestic demand and strong export demand in the Pacific Northwest and South. Although U.S. South performance overall has struggled, the outlook for returns is positive in specific sub-regional markets. Non-U.S. timberland continues to be an important component of any diversified timberland portfolio and can improve risk-return efficiency. Markets outside the U.S. may offer faster tree growth, access to strong forest product industries and lower costs of production. A shortage of native tropical hardwoods, such as teak and mahogany, has created opportunities for high-value investments in sustainable plantations in Central and South America.
- Public real assets markets late in the cycle favor companies with high and stable cash flows, strong balance sheets and the ability to self-fund growth. Real estate opportunities include global rental housing, e-commerce logistics and industrial facilities and student housing. Global infrastructure subsectors likely to benefit from continuing economic growth include technology, waste, commuter and freight rail and toll roads.
- In commodity markets, trade disputes have depressed prices in industrial metals and agriculture, but potential easing of U.S–China tensions could lead to a rebound in 2019. Energy markets, which were volatile in late 2018, are likely to improve as supplies tighten. OPEC production cuts of up to or exceeding 1 million barrels per day are expected and U.S. production growth is expected to slow in the long term. Overall, commodity markets historically have improved in rising-rate environments and late-stage economic expansions.
- Risks to the outlook include a stronger U.S. dollar, continuing trade tariffs, inventory growth across commodities and a more rapid transition to slower growth and recession.

BEST IDEAS: *We favor global agriculture's defensive characteristics in the late cycle. Commodity trading strategies using proprietary algorithms may capitalize on pricing inefficiencies. Also attractive are industrial real estate related to e-commerce and real assets hybrid securities offering high income with relatively low interest-rate sensitivity.*

COMMERCIAL REAL ESTATE

Structural change creates opportunities in the late cycle

Mike Sales
Real Estate

- Real estate fundamentals are expected to remain solid in 2019, despite the market's late cycle, rising interest rates and structural change disrupting the office and retail sectors. Positive global growth forecasts and an overall balance of supply and demand continue to support net operating income and property values. Commercial real estate continues to attract capital, with stable income returns generally exceeding those available in fixed income. However, little or no capital appreciation can be expected and putting new capital to work remains challenging.
- Structural change driven by demographics, technology and consumer trends are creating opportunities to add alpha. We expect global cities benefiting from advanced technology, sustainable development and rising urbanization to outperform through changing market cycles. The upheavals impacting office and retail are generating demand for high-tech buildings with flexible office space and light industrial warehouses. We believe some of the best opportunities exist in alternative sectors, such as data centers and manufactured housing.
- Residential apartments globally are benefiting from strong demand among middle-income families and millennials priced out of home ownership. Global real estate debt's stable income returns and lower volatility have offered risk protection for real estate equity portfolios.
- Risks to the outlook include underestimating the need to "future proof" portfolios by incorporating exposure to emerging new sectors, such as providers of flexible office space and co-living apartment buildings.

BEST IDEAS: *We favor investing in 90 global cities offering scale, growth, sustainability and resilience. Attractive sectors include global real estate debt, global industrial and apartment, student housing in Europe and manufactured housing in the U.S.*

RESPONSIBLE INVESTING

Responsible investing (RI) = Performance + risk management

Amy O'Brien
Responsible Investing

- Investor demand and overall growth have soared—and performance is why investors are buying. Per Nuveen's research, Responsible Investing (RI) assets under management grew nearly 40% from $8.7 trillion in 2016 to $12 trillion in 2018. For the fourth year in a row, our Annual Responsible Investing survey has revealed continuing strong interest in responsible investing among investors, particularly millennials (93% of millennials vs. 78% of non-millennials). And, for the first time, the top reason for investing in RI is "better performance" (49%) followed by "align with my values" (44%).
- Public scrutiny on responsible business practices is a driving force for RI. 2018 has been a year of corporate scandals. The "governance" (G) in environmental, social and governance (ESG) is designed to manage and mitigate downside risk. As companies navigate new pitfalls—from data security breaches to business ethics to #MeToo controversies—using alternative data sets such as ESG in valuation models can help spot risks that other analyses might overlook.
- ESG data make the intangible tangible. Traditional valuation models like discounted cash flow can help assess financial risks, but they often lack the ability to capture the complete picture. Intangible assets—which are impacted by financially material ESG risks and opportunities—now comprise as much as 87% of the market value of the S&P 500, according to merchant bank Ocean Tomo. We've been able to identify breakthrough ideas with our proprietary views on materiality and engagement for uniform quality ESG data (market, policy and company).

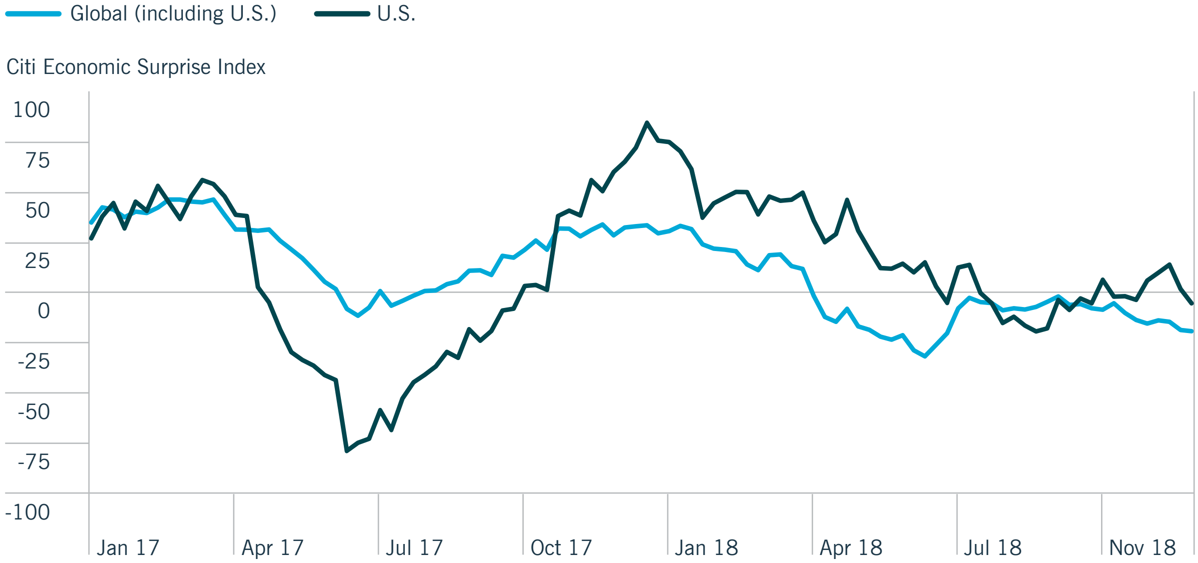
BEST IDEAS: *We prefer investments in green bonds and equity and fixed income strategies that favor ESG leaders. We also suggest a focus on specialized RI strategies such as low carbon, ESG municipals and other strategies customized to help meet investor preferences.*

Expect a tougher climb

Brian Nick
Chief Investment Strategist

- Global (and U.S.) growth will slow but shouldn't turn negative in 2019
- We expect most asset classes to see slightly better performance next year
- We think investors should stay invested and keep putting money to work
- Investment selectivity will be crucial in 2019

Exhibit 1: The U.S. economy was the only positive "surprise" in 2018



Source: Bloomberg, Citi. The Citi Economic Surprise Index gauges the extent to which economic data releases diverge from consensus forecasts, with rising index levels indicating more upside surprises. A "0" score indicates economic reports that met consensus expectations. Reports that exceed expectations are given a "1" and those that fall short receive a "-1." The index calculates the net score of all economic reports on a weekly basis. Data as of 30 Nov 2018.

2018 in review — Let's not do that again

Despite solid global economic growth, 2018 turned out to be the most challenging year for investors in a decade. The U.S., the world's largest economy, expanded at its fastest pace of this cycle. Sales and profits climbed for global corporations, while central banks kept interest rates at well-below-normal rates. Yet, as we near the end of 2018, few major asset classes have outperformed cash. What happened?

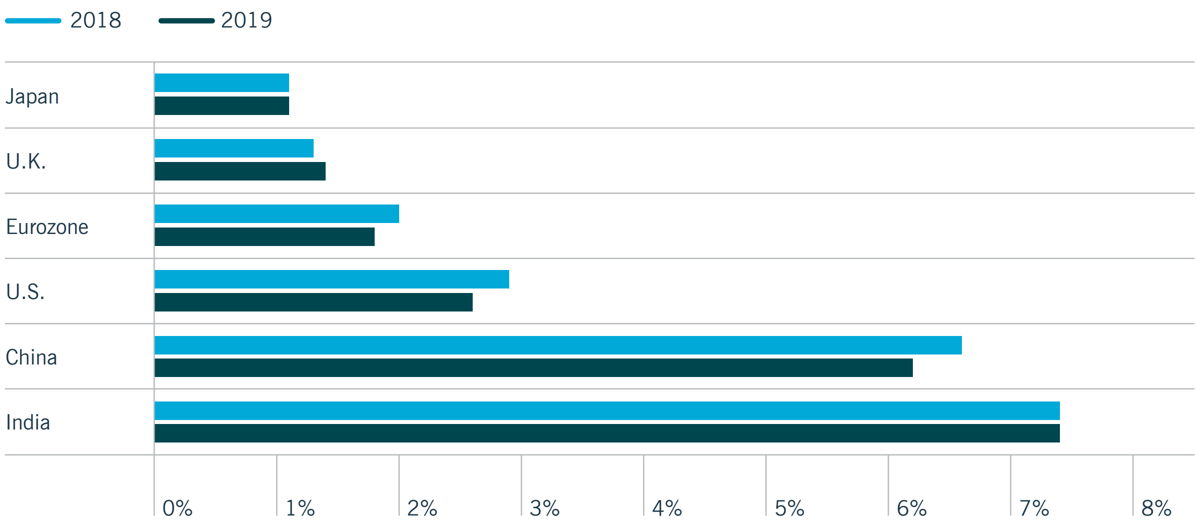
This much is true: U.S. economic growth surpassed our expectations coming into the year. The Tax Cuts and Jobs Act, passed late in 2017, sent economists and Wall Street analysts scrambling to estimate its effects. We now know that U.S. consumer spending and private investment surged — at least temporarily — as tax rates fell. U.S. corporate profits rose by over 25% in the second and third quarters. But as Exhibit 1 shows, in contrast to 2017, positive economic surprises (i.e., economic performance relative to expectations) were essentially limited to the U.S. Results in the rest of the world were disappointing.

We feel this disappointment wasn't due to any single factor, but rather to a confluence of moderate headwinds. Higher global tariffs and uncertainty about more on the way restricted country market access and drove up costs. Rising U.S. interest rates and a stronger U.S. dollar stressed the global financial system, and China's economic policy in particular, by encouraging capital flight. It's no wonder investors began to focus on the crosscurrents and fading tailwinds that we anticipated would hit in 2019 a bit ahead of schedule. And, as investment managers, it's time we did the same.

What's in store for investors in 2019?

Let's start with what Nuveen's Global Investment Committee does not expect to see in 2019: a recession in a major economy. But — there's always a "but" — economic growth is set to slow in both the U.S. and China while failing to bounce back convincingly in the eurozone, Japan or United Kingdom (Exhibit 2). This slower growth tips the balance of risks toward the negative. An unusual amount of uncertainty remains on key questions like the direction of corporate credit spreads and the U.S. dollar, but we are more confident that market returns will improve only moderately from their lackluster 2018 showing. Despite this — or, rather, because of it — our investment teams are focused on finding opportunities to buy and own high quality assets without becoming too defensive in their approach. They're walking a fine line, to be sure.

Exhibit 2: Slightly slower global growth expected in 2019



Source: Blue Chip Economic Indicators. Data as of 30 Nov 2018.

Fading tailwinds, stiffer headwinds

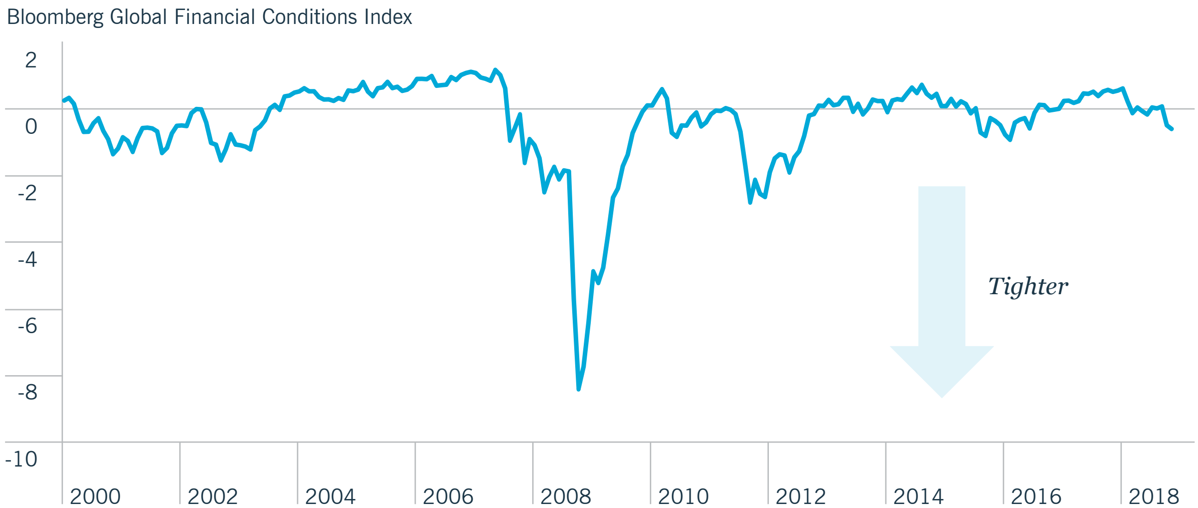
Global growth received a boost in 2018 when the U.S. opted for a late-cycle fiscal expansion, borrowing nearly $1 trillion to fund tax cuts and federal spending. Nuveen estimates that in 2018, these measures added more than 0.5% to U.S. gross domestic product (GDP) growth and helped lift S&P 500 sales and profits. But most of the positive effects of this stimulus have already begun to wear off and will vanish almost entirely by 2020. In their place we'll find tighter financial conditions (Exhibit 3) thanks to rising interest rates, wider corporate bond spreads, falling equity market valuations and, yes, new and rising taxes on international trade.

We think increased selectivity within asset classes, with a focus on quality and valuation, will yield the best results.

We're also discovering that the parts of the 2017 tax bill meant to serve as more than just a short-term stimulus may not be achieving their intended results. Stronger U.S. private investment early in 2018 gave way to disappointing capital spending growth by the third quarter as companies became more wary of spending on new software and equipment. Residential investment has also been a drag, and slower home price appreciation has put a cap on construction. If the investment boom is truly tapped out and worker productivity growth remains low, rising wages — the product of a tight U.S. labor market — will become a stiffer headwind for corporate profitability.

Where might the world turn in 2019 to replace the boost it's just received from the U.S.? China's government has attempted a large monetary and fiscal stimulus to help support its economy amid attempts to de-risk its financial system. We should be seeing the effects of that effort more in 2019, which could produce upside surprises to growth in Asia. In addition, we're looking for signs of economic strength in Brazil on the back of some pro-growth reforms and for low inflation to pave the way for another year of robust growth in India.

Exhibit 3: Global financial conditions are tighter on rising rates and a stronger U.S. dollar



Source: Bloomberg. The Global Financial Conditions Index measures market conditions across money markets, bond markets and equity markets. The scores compare current market conditions to the historical average, with lower numbers indicating tighter financial conditions. Data as of 30 Nov 2018.

"Slower" doesn't mean "negative"

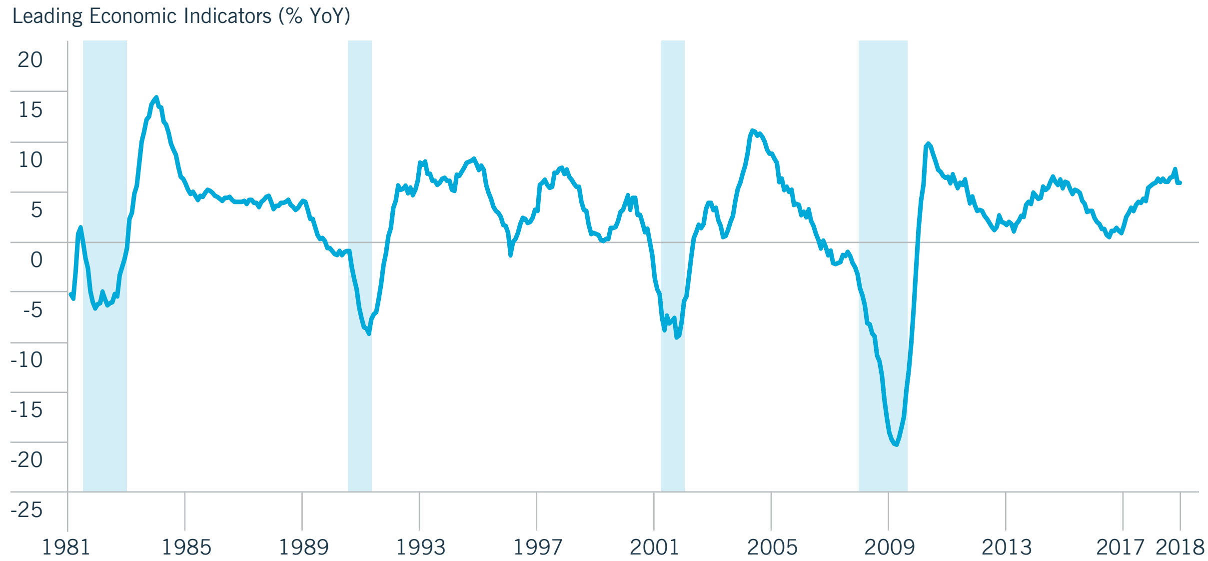
Expectations are not particularly high for growth in developed markets outside the U.S. in 2019—and that may actually be a good thing. With less room to disappoint, the eurozone and Japan are positioned to deliver above-trend growth while keeping monetary policy exceptionally accommodative—historically a friendly operating backdrop for companies and the investors who own their stocks. These markets may also benefit from a pause—if not a reversal—in the trend of the strongly rising U.S. dollar. While a strong dollar provides a temporary advantage to international firms selling into the U.S., it also raises the cost for borrowers with dollar liabilities and drives investment flows away from many places that need them.

Of course, the fate of the dollar may rest primarily in the hands of the Federal Reserve. The Fed has been slowly but steadily raising short-term interest rates for three years and seems primed to hike at least twice more in 2019. In the Fed's view, the currently low unemployment rate could generate higher inflation, which demands tighter policy. With rates rising in the U.S. but flat or down in most of the rest of the world, the dollar has been far and away the best-performing currency. We think it is now well above its fair value and could remain so unless and until the Fed shows signs of slowing or other central banks become less accommodative. Keep in mind that even if the Fed stops raising rates, its ongoing balance sheet shrinkage will effectively continue the tightening process. The resulting increase in the supply of high quality bonds—aided and abetted by a booming federal deficit—could push up longer-term interest rates and corporate borrowing costs.

A broader base for growth should help cushion against a global recession—technically defined as negative GDP growth for two consecutive quarters—despite a deceleration in both the U.S. and China. In our view, there is little chance the U.S. will go into recession before late 2020 given continued strength in consumer and business activity confidence, especially the strong labor market. We would expect to see a material degradation in these and other leading indicators at least a year before the economy begins to contract (Exhibit 4). And while it's not hard to find areas of risk that could eventually contribute to a recession, we don't see the types of massive macroeconomic imbalances that helped turn the past two recessions into genuine market crises.

Why do we care so much whether growth merely slows from its current pace or turns negative? Recessions, or so-called "hard landings," have historically been associated with 20%+ drops in equity markets, falling interest rates and sharply higher unemployment. Decelerations, also referred to as "soft landings," have not.

Exhibit 4: Leading indicators suggest the U.S. expansion still has legs



Source: Conference Board, Bloomberg. The Leading Economic Indicators Index is produced by the Conference Board and is a composite of economic data. Negative readings indicate a growing possibility of a recession. The data show year-over-year changes in this index. Shaded areas indicate recessions. Data as of 30 Nov 2018.

Most investable assets are now available at lower prices

It's hard to put a happy face on the swoon in global risk assets that occurred during the fourth quarter of 2018. As of this publication, few major asset classes have bested cash this year — never a welcome development for an investor (let alone an investment manager). If this cloud does have a silver lining, it's that financial markets are already pricing in a moderate global slowdown heading into 2019. So while our investment committee is far from ebullient in its outlook, our investment leaders generally expect better returns in their respective markets next year.

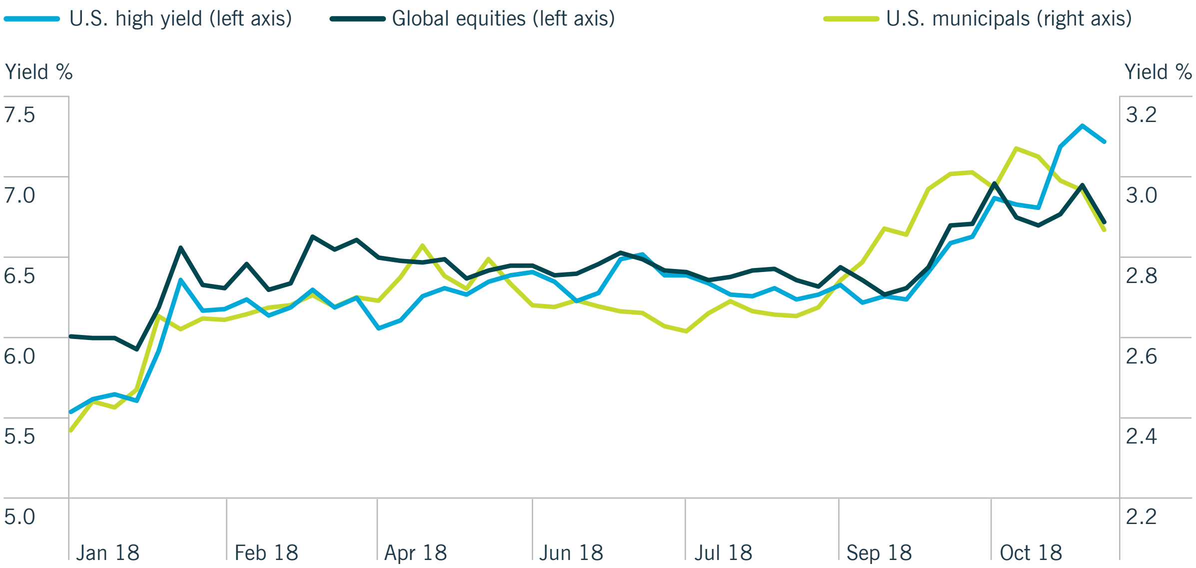
One reason for this is that most publicly traded assets offer higher yields today than they did a year ago (Exhibit 5). Interest rates have risen, and credit spreads have widened. In addition, global equity valuations have fallen, in some cases substantially. And while there are important exceptions, like wheat and natural gas, most commodity prices will end 2018 lower than where they began. In short, during a year in which economic fundamentals generally improved, market prices remained flat or fell. This creates value.

The crucial question is whether investors who buy risk assets at this stage — cheaper though they may be—would be better served by moving to cash and awaiting an even more attractive entry point. We don't think so. But given our view that both economic and earnings growth are likely to slow over the medium term, relying on broad market trends to boost portfolio values may no longer suffice. Instead, we think increased selectivity within asset classes, with a focus on quality and valuation, will yield the best results.

What if we're wrong?

At its year-end meeting, the Nuveen Global Investment Committee coalesced around a cautiously optimistic outlook for 2019. At the same time, we also took time to discuss a critical question for our clients: What if we are wrong, especially on the downside? What would that look like in the real world and what would that mean for Nuveen's clients? Most likely, we'd see a flatter yield curve, driven by sharply higher short-term rates (the Fed's response to perceived overheating, perhaps) or sharply lower long-term rates, typically a product of recession risk. In this scenario, credit spreads would widen, earnings and stock valuations would be lower, and the direction of the U.S. dollar would be uncertain.

Exhibit 5: Average yields for major asset classes are higher heading into 2019



Source: Bloomberg. **Representative indexes: U.S. high yield:** Bloomberg Barclays High Yield Corporate Bond Index; **Global equities:** MSCI All Country World Index; **U.S. municipals:** Bloomberg Barclays Municipal Bond Index. Indexes are unavailable for direct investment. Please see endnotes for index definitions. Data as of 30 Nov 2018.

Our downside scenario also includes an unanticipated escalation of event risk in two key areas: Brexit and trade. The U.K. seems determined to leave the European Union (EU) in March, but the precise nature of its departure is still a huge source of uncertainty for global investors, particularly throughout Europe. A "crashing out" scenario—one in which the U.K. exits without a deal in place to manage the transition and tips itself into recession or, worse, stagflation—is not our base case, but it remains a serious risk until Parliament agrees to a plan.

Tariffs also seem destined to plague markets for at least another year. The steady escalation in the tit-for-tat between the U.S. and China, resulting in higher bilateral taxes on a broader basket of imported goods, has produced no clear winner but plenty of losers: U.S. producers facing higher costs and Chinese consumers and businesses losing access to U.S. farm and energy output. The negotiations at this point appear to hinge more on politics than economics, which means the resolution of this dispute is beyond our current ability to forecast. But should new U.S. tariffs spread beyond measures that have already been announced or threatened, the damage to the U.S. economy and investor sentiment could be severe.

Virtually the only refuge for investors seeking positive returns during a period of acute event risk or recession is long-duration, high quality bonds. On the equity side, while few stocks could eke out positive returns in a bear market, defensive sectors like consumer staples and health care would likely beat technology and financials. Moreover, established commercial real estate and defensive real assets like farmland could help provide at least a partial shield against the forces of the public markets.

Conclusion: seeking quality at a fair price in a slowing world

When the dust clears, the global economy in 2019 may not behave all that differently than it did in 2018, but we are hopeful for better investment returns across most public and private asset classes. The world is slowing, but only gradually. Furthermore, we believe a global recession and bear market are still at least a few years away, leaving room for portfolios with risk assets to benefit. The preceding views from our GIC members on their respective asset classes provide some of Nuveen's best thinking about specific investment opportunities, while the perspective from our Solutions team in the following serves as a roadmap for investors looking to optimize their portfolios for a particular outcome.

2019 Outlook

Cross-asset views and portfolio construction from the Nuveen Solutions team

With the asset class outlooks and investment themes offered by the GIC as a key input, the Solutions team formulates views on cross-asset risk-adjusted return potential over the next 12 months. Once our views are established, we then consider how these views translate into portfolio positioning for two of the most common challenges our clients face: growth and income. Given differences in time horizon and investment mandate, in some cases these views may not perfectly coincide with the broader thematic views from the GIC. We also remind investors that these ideas are meant to be incorporated in the context of a diversified, outcome-focused portfolio and not in isolation.

Frank van Etten
Asset Allocation and Solutions

Highlights

- The data show a healthy U.S. economy, and our risk indicators suggest a low probability of entering a high volatility regime. But there are a number of factors causing increased market uncertainty in 2019, and we think investors can modify their equity and fixed income allocations to seek improved outcomes.
- We favor the defensive nature of U.S. large cap growth versus the cyclicality of U.S. large cap value. We also have a bias toward U.S. small caps given current valuations. Outside of the U.S., we prefer emerging markets vs. developed markets. EM should benefit if the Fed adopts a more gradual tightening pace and if the U.S. dollar weakens.
- We expect the 10-year U.S. Treasury yield will remain range bound (3% to 3.25%) over the near future. With limited upside in long rates, we are upgrading U.S. aggregate bonds to neutral. Non-U.S. developed fixed income markets remain unattractive given current yield levels and asymmetric risk/return profiles.
- With credit spreads compressed, we don't believe that investors are being adequately compensated for the risks in U.S. high yield and leveraged loans. EMD offers attractive yield and, like EM equity, should benefit from dollar weakness and a more dovish Fed. We expect high yield municipal bonds to outperform their taxable equivalents given a steeper municipal yield curve and a continued decline in municipal bond issuance.
- While the U.S. housing cycle is advanced, higher quality core properties should provide stable income and act defensively in a portfolio. Higher rates have caused us to increase our return forecast for middle market loans; seniority in cap structure should lead to better outcomes than public loans in the event of credit market weakness.

Cross-asset views:	Negative		Neutral		Positive
Equity					
U.S. Equity			○		
U.S. Large Cap Growth				●	
U.S. Large Cap Value		●			
U.S. Small Cap				●	
Non-U.S. Developed Markets		●			
Emerging Markets Equity				●	
Fixed Income					
U.S. Short-Term Fixed Income			○		
U.S. Aggregate Fixed Income			○		
U.S. Investment Grade Corporates			○		
Investment Grade Municipal Bonds			○		
TIPS			○		
Leveraged Loans		●			
U.S. High Yield Corporates		●			
Preferred Securities			○		
Non-U.S. Developed Fixed Income	●				
Emerging Markets Debt				●	
High Yield Municipal Bonds				●	
Alternative Asset Classes					
U.S. Core Real Estate			○		
Mid-Market Loans				●	
U.S. Timber		●			

Downgrade from last quarter

Upgrade from last quarter

For growth-oriented investors

- We retain a neutral position in global equities in growth-oriented portfolios given heightened market uncertainty.
- Within U.S. equities, we favor growth over value within large cap. Additionally, we prefer small cap over large cap.
- We are more favorable on emerging markets equities relative to non-U.S. developed markets due to the better long-term growth prospects.

For income-oriented investors

- Within fixed income, we see heightened risk in U.S. corporate credit markets over the next 12-months, and are now less favorable on U.S. high yield and leveraged loans. We remain neutral on duration.
- Emerging market debt is historically attractive from a yield perspective. Potential U.S. dollar weakness in 2019, caused by a more dovish Fed, could provide a tailwind.
- High yield municipals can act as a strong diversifier, and remain attractive from a tax-exempt yield standpoint.

The views above are for informational purposes only and relate to cross-asset views only (a comparison of the relative merits of each asset class based on the Solutions Team's assessment). These do not reflect the experience of any Nuveen product or service. Upgrades and downgrades reflect quarterly shifts in these views.

About Nuveen

Nuveen, the investment manager of TIAA, offers a comprehensive range of outcome-focused investment solutions designed to secure the long-term financial goals of institutional and individual investors. Nuveen has $988 billion in assets under management as of 30 Sep 2018 and operations in 16 countries. Its affiliates offer deep expertise across a comprehensive range of traditional and alternative investments through a wide array of vehicles and customized strategies.

For more information, please contact your financial professional or visit our website.
U.S. investors: **nuveen.com** ***Non-U.S. investors:*** **nuveenglobal.com**

Endnotes

Source: FactSet and Bloomberg for market and economic data

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her advisors.

The views and opinions expressed are for informational and educational purposes only as of the date of production/writing and may change without notice at any time based on numerous factors, such as market or other conditions, legal and regulatory developments, additional risks and uncertainties and may not come to pass. This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. Past performance is no guarantee of future results. Investing involves risk; principal loss is possible.

This information does not constitute investment research as defined under MiFID. In Europe this document is issued by the offices and branches of Nuveen Real Estate Management Limited (reg. no. 2137726) or Nuveen UK Limited (reg. no. 08921833); (incorporated and registered in England and Wales with registered office at 201 Bishopsgate, London EC2M 3BN), both of which entities are authorized and regulated by the Financial Conduct Authority to provide investment products and services. Please note that branches of Nuveen Real Estate Management Limited or Nuveen UK Limited are subject to limited regulatory supervision by the responsible financial regulator in the country of the branch. In Asia this information is solely for use with professional investors (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong. This information is distributed by Nuveen Hong Kong Limited (BJH146) and has not been reviewed by the Securities and Futures Commission of Hong Kong.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

Glossary

The **Bloomberg Barclays Municipal Bond Index** covers the USD-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and pre-refunded bonds. The **Bloomberg Barclays High Yield Corporate Bond Index** is an unmanaged index considered representative of non-investment-grade bonds. **The MSCI ACWI (All Country World Index)** is a free float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of developed and emerging markets. The **S&P 500 Index** is a capitalization-weighted index of 500 stocks designed to measure the performance of the broad domestic economy. **Nuveen's Third Annual Responsible Investing Survey**: Nuveen commissioned Harris Poll and was conducted online from June 1 - 27, 2017 among 1,012 affluent investors. (U.S. residents over age 21 with $100,000 in investable assets (excluding workplace defined contribution accounts or real estate), who consider themselves the decision maker for financial decisions and who currently work with a financial advisor). A **covenant** is a promise in an indenture, or any other formal debt agreement, that certain activities will or will not be carried out. **Algorithmic trading** refers to automated trading by computers which are programmed to take certain actions in response to varying market data. **Alpha** is a measure of performance on a risk-adjusted basis. **Middle market** refers to medium-sized businesses (neither small nor large).

A word on risk

All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Equity investing involves risk. Foreign investments are also subject to political, currency and regulatory risks. These risks may be magnified in emerging markets. Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk, including the possible loss of principal. The value of the portfolio will fluctuate based on the value of the underlying securities. There are special risks associated with investments in high yield bonds, hedging activities and the potential use of leverage. Portfolios that include lower rated municipal bonds, commonly referred to as "high yield" or "junk" bonds, which are considered to be speculative, the credit and investment risk is heightened for the portfolio. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. As an asset class, real assets are less developed, more illiquid, and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties. Socially Responsible Investments are subject to Social Criteria Risk, namely the risk that because social criteria excludes securities of certain issuers for non-financial reasons, investors may forgo some market opportunities available to those that don't use these criteria. Investors should be aware that alternative investments including private equity and private debt are speculative, subject to substantial risks including the risks associated with limited liquidity, the use of leverage, short sales and concentrated investments and may involve complex tax structures and investment strategies. Alternative investments may be illiquid, there may be no liquid secondary market or ready purchasers for such securities, they may not be required to provide periodic pricing or valuation information to investors, there may be delays in distributing tax information to investors, they are not subject to the same regulatory requirements as other types of pooled investment vehicles, and they may be subject to high fees and expenses, which will reduce profits. Alternative investments are not suitable for all investors and should not constitute an entire investment program. Investors may lose all or substantially all of the capital invested. The historical returns achieved by alternative asset vehicles is not a prediction of future performance or a guarantee of future results, and there can be no assurance that comparable returns will be achieved by any strategy.

Nuveen, LLC provides investment advisory services through its affiliates.

nuveen
A TIAA Company

GPE-GIC1Q-0119D 681518-INV-Q-12/19 4648_1118