

2018 FOURTH QUARTER OUTLOOK

(Still) no signs of slowing

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At midyear, Nuveen's Global Investment Committee (GIC) and our partners in the firm's Solutions team offered the view that global investors by and large should remain in a risk-on mode, even as we pointed out that some cracks were starting to appear in that bullish view. Moving into the fourth quarter, we still believe investors will do best by sticking with pro-growth, risk-on positions, but we acknowledge that changes over the past few months have affected our outlook from here.

In our fourth-quarter investment outlook, (*Still*) no signs of slowing, we point out that the risks that seemed most pressing three months ago (the U.S. moving into a late-cycle expansion and worries about rising interest rates and inflation) have since given way to concerns about U.S. and global growth divergence and even greater uncertainty about trade.

Before diving into our outlook, a reminder about the mission of Nuveen's GIC: The Global Investment Committee brings together the most senior investment leaders from across Nuveen's investment platform covering virtually every asset class to share insights and to discuss and debate market and economic developments and themes that matter to our clients. We do NOT drive a "house view" for Nuveen's investment teams, but rather seek to make each other better investors. Where there is consensus among our investment leaders, we point it out. Where there isn't, we explain why. And our Solutions team seeks to turn our insights into action by explaining how our views can be expressed in portfolios seeking various outcomes.

Back to our latest outlook and concerns about growth: Investors are witnessing a growing dispersion between U.S. stocks and equities in other markets: It seems evident to us that either the U.S. market must correct, or the rest of the world needs to catch up. For now, we are leaning more toward the view that the U.S. still offers further upside potential, but we are increasingly focused on valuation pressures.

Trade policy and tariffs (and the associated unknowns) have become more urgent since midyear as the actual dollar amount of tariffs has grown. We're concerned about where these issues are heading, but we don't think trade issues will end the current global expansion. We also see the potential for upside surprises that could help areas such as emerging markets should trade issues grow less pressing.

So where does that leave our clients? We continue to have a neutral-to-positive view toward stocks, and see opportunities in the U.S. and in emerging markets. We generally favor fixed income credit sectors, but also note that as interest rates continue to rise, some government bond markets are starting to look more attractive from an income perspective. Supply/demand dynamics make municipal bonds attractive, especially in the high yield and longer-duration spaces. In other asset classes, we're focusing on quality and value within real estate, are seeing strong demand for corporate deal activity that is driving private investments and see multiple opportunities in public and private real assets. So in sum, our investment professionals are continuing to find opportunities and, for the most part, are leaning into risks while keeping a close eye on potential downsides.

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



Jose Minaya *Chief Investment Officer*

(Still) no signs of slowing—GIC investment themes





Brian Nick *Chief Investment Strategist*

Expansion on track amid offsetting policy risks

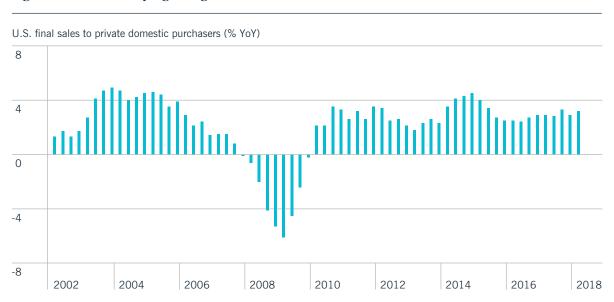
The last few months have brought more good news for the U.S. economy and U.S.-based investors, but somewhat less reassurance about the situation abroad. Stripping away the noisier parts of GDP growth (i.e., trade and inventory changes), U.S. growth has been gradually accelerating (Figure 1), thanks to resurgent consumer demand and increased business capital spending. While far from a "miracle," U.S. growth appears strong and sturdy, meaning the expansion will likely last — at least through the end of next year.



At the same time, we see risks to our constructive outlook, particularly from slower growth in both the European Union and China compared to last year. These, the world's second- and third-largest economies, should benefit from low interest rates, weaker currencies and, in China's case, more fiscal stimulus. But trade risks could lead to more downside on their large, open economies than they do for the U.S., creating potential headwinds.

Amid these crosscurrents, Nuveen's GIC is focused on two questions that lie at the heart of the global economic outlook. First, what will be the impact of increased protectionism in both word and deed? Second, will the U.S. achieve sustainably stronger growth through higher levels of investment and, eventually, worker productivity?

Figure 1: Solid underlying U.S. growth but not a "miracle"



Source: Bloomberg, Bureau of Economic Analysis, as of Q218.

Theme 1: Tariffs will (probably) not end the expansion

When we published our Midyear Outlook in early July, only a small number of new tariffs (taxes on imports) were in place. With the bilateral tit-for-tat between the U.S. and China still escalating, however, the mostly negative impacts of tariffs on currency, commodity and equity markets have become more apparent. What is less evident is whether the cumulative effects of protectionism will meaningfully slow the global economy and, more specifically, if tariffs will contribute to the end of the 10-year-old U.S. economic expansion.

Let's start with what we can observe most clearly: Tariffs are leading to higher input costs for manufacturers using steel or aluminum, and to lower profits for farmers whose market access has been restricted by China's retaliatory measures. If you're looking for an unexpected "winner" in the U.S.-China trade war, take a look at Brazilian farmers, who now have far less competition selling to the Chinese, the world's number-one consumers of soybeans. Of course, as these farmers turn a tidier profit, U.S. producers and Chinese consumers are squeezed (Figure 2). Nuveen's global holdings of

farmland — including our soybean-growing properties in Brazil — have unexpectedly been thrust into the global economic policy arena.

Will the effects of the already-enacted tariffs eventually transition from the anecdotal to the empirical? The likelihood increases as the basket of goods eligible for tariffs widens. It increases further still if the Democrats regain control of one or both houses of Congress, forcing the Trump Administration to pursue more policy goals through executive means like tariffs. To date, however, there's been little evidence in either survey data or real activity that the U.S. is slowing down. The Institute for Supply Management's manufacturing index hit a 14-year peak in August, and private spending by consumers and businesses has been bolstered by high confidence and lower tax rates. Hiring remains robust, even as the pool of available workers shrinks.

Of course, things may change quickly if the dollar value of Chinese imports to the U.S. eligible for taxation grows from its current \$250 billion to over \$500 billion next year, as the president has suggested, or if the tariff rates are raised from 10% to 25% as planned. Taxing all U.S. imports from China will put further pressure on supply chain costs, but it will raise the more easily observable prices of consumer goods like apparel and smartphones. Higher prices could make the tariffs feel more like a snake bite than the mosquito bite they have amounted to thus far for consumers.

 U.S. soybean price (left axis) Brazil soybean price (right axis) \$ per bushel BRL per 60kg 2,000 100 1,750 80 1,500 60 1,250 40 1,000 20 750 0 500 2010 2011 2012 2013 2014 2015 2016 2017 2018

Figure 2: Trade policy is distorting global commodity markets

Source: Bloomberg, CEPEA, as of 14 Sep 2018

Other countries may already feel snake-bitten by protectionism. The stronger U.S. dollar has put stress on emerging market (EM) coffers, especially those with large dollar debts. That EM weakness, which is centered on, but not exclusive to, China, hurts Europe more than it does the U.S., given the region's volume of trade with developing economies. And while it's difficult to determine the extent to which trade tensions have hindered global equity market returns this year, non-U.S. markets clearly have fared worse than they would have otherwise.

Despite our concerns, we are not ready to declare this a "trade war," a definition we reserve for when global trade shrinks relative to overall global economic activity as countries turn inward. We last saw this during the Great Depression. At the moment, despite the headlines, global trade is actually on the rise, and U.S. imports in particular have surged due to the extra income individuals and businesses alike are receiving from last year's round of tax cuts. When Americans have more money to spend, they tend to buy more imports.

Theme 2: Capex will (probably) not extend the expansion

If tariffs are the main source of downside risk to our outlook, the ongoing acceleration in private-sector investment is the key to our upside scenario. Higher worker productivity has the potential to produce a longer and stronger expansion. In contrast to the path we've seen in prior cycles, private investment (excluding residential construction) decelerated from 2011 through most of 2016. As a result, the U.S. capital stock, including buildings, equipment and software is older today than it has been in decades, limiting worker productivity growth.

Through a mixture of tax incentives and necessity, private capital spending began to speed up in the second half of 2016 and continued to exhibit impressive levels of growth through the first half of 2018. When businesses identify a shortage of skilled workers as their primary barrier to expansion, as they have for several years now, they often attempt to find ways to generate more output from the existing workforce. That trend is displayed in Figure 3.

Will improved productivity push the U.S. economy to a faster natural rate of growth, unleashing greater prosperity without higher inflation costs over the next several years? We're open to the possibility, but still

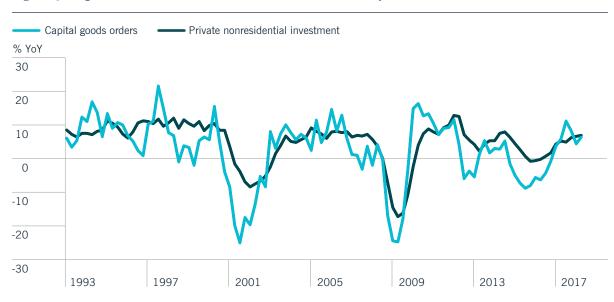


Figure 3: Capex boost is unusual this far into an economic cycle

Source: Bloomberg, Bureau of Economic Analysis, as of Q218

need to see more data. August's employment report showed the fastest year-over-year increase in average hourly earnings (2.9%) since 2009. That wage growth, however, barely kept pace with inflation, as measured by the consumer price index (CPI), over the same period. Stagnant or declining real wage growth is not a sign of increasing productivity. On the contrary, the Employment Cost Index, a quarterly gauge of labor costs, continues to accelerate.

There are also real-world considerations for companies currently considering making costly and risky investments. Higher interest rates and rising input costs due to tariffs are two reasons not to invest. They need to be balanced against two arguments in favor: new tax code incentives and a tight labor market. According to the National Federation of Independent Business, a large and growing percentage of businesses expects to undertake some form of capital spending over the next 6-12 months. If they fail to follow through (for whatever reason) the capex boom we hope will extend into the 2020s may fizzle prematurely.

Theme 3:

Investors are paying top dollar for peak U.S. growth. So where do we see opportunities?

Regardless of how long this expansion lasts and what ultimately ushers in its demise, in many respects we have probably already seen its peak. U.S. GDP growth is likely to slow from its 4.2% second-quarter level, bringing the pace of the global expansion down gently with it. In addition, the earnings growth of S&P 500 Index companies, which hit 25% year-over-year in the second quarter, will not sustain that torrid pace when the "one-and-done" effect of reduced corporate tax rates fades in 2019.

Similarly, the U.S. dollar has appreciated to a surprising extent this year, thanks to robust U.S. growth fueled by the Tax Cuts and Jobs Act of 2017. Rising U.S. interest rates — in both absolute terms and relative to the rest of the world — tend to attract capital, and so they have. As a result, U.S. investors have done less well holding overseas assets, most notably equities. In fact, dollar strength, which had been associated with positive equity market performance starting shortly after the 2016 presidential election, has now resumed its

vs. S&P 500 Index vs. MSCI All-Country World Index

52-week correlation: Fed Broad Dollar Index vs. equities

Figure 4: U.S. dollar has returned to its "risk-off" roots



historical role as a "risk-off" signal (Figure 4). The dollar's rise in 2018 has come amid improving odds for a further rate hikes from the Fed and the increased risk of disruptive trade policies, both of which present at least moderate risks to global stocks.

So are investors overpaying for assets tied to U.S. growth? That's a potential risk. The discounts available on stocks in the eurozone, Japan and most emerging markets are among the highest we've seen in the past decade, and with the U.S. dollar near its one-year peak, the entry point for overseas investing looks all the more attractive. Meanwhile, while valuations on U.S. shares have eased modestly from January's multi year high, declining U.S. profits growth may lead to decelerating returns on domestic markets going forward.

Our GIC members, who manage money across a wide variety of asset classes and geographies, are placing even greater emphasis on active risk, finding pockets of opportunity rather than taking what the markets are giving them:

- In GLOBAL EQUITIES, we continue to find value, notably in emerging markets. India, in particular, stands out, as its economy is less exposed to crisis-plagued countries like Turkey and Argentina. However, we also believe that, for now, U.S. equities offer well-balanced growth and — ironically — less exposure to trade risks.
- Our **FIXED INCOME** managers are encountering multiple risks, from rising interest rates to narrower U.S. credit spreads to EM turmoil. We expect the pace of Treasury curve flattening to slow as longer-term rates finally begin to rise on stronger inflationary pressures. Although credit spreads could tighten further, the lows for the cycle may be behind us. Our fixed income portfolios are still generally tilted toward high yield and EM credit, with overall average duration at, or slightly below, the benchmark's.
- outlook has not changed since June. The steepness of the muni yield curve, in contrast to the Treasury curve, makes owning longer-duration securities more attractive. New issuance remains negative for the year, helping support prices of bonds already in the market. After years of avoiding the commonwealth altogether, we are also starting to see very select opportunities in Puerto Rico municipals. We've adopted some new positions here, but remain heavily underweight across client portfolios.

- GLOBAL REAL ESTATE MARKETS are signaling that late cycle is indeed approaching, if not already here, bringing with it slower price appreciation and leading us to emphasize quality and value. One theme we're exploring is needsbased property: senior care, student housing and logistics. At the same time, we're avoiding the structural slowdown in retail.
- Our PRIVATE MARKETS teams continue to see strong demand for deals, leading to higher pricing in an environment in which M&A activity and refinancing have slowed. Much of the current U.S. deal activity is in energy markets, making it more important to find investments that can withstand an eventual downturn.
- For our **REAL ASSET PORTFOLIOS**, on the public side we seek assets tied to higher growth with less regulatory risk, while insisting on fair compensation for incurring rate risk within the REIT space. On the private side, despite the overhang of trade risks, we are optimistic about global farmland, as well as oil and industrial metals prices. Conversely, we are more cautious on certain sectors of U.S. agriculture and commodity price-focused businesses related to it as long as China's tariffs remain in place.

Looking ahead: At some point, conditions will get tougher

U.S. markets have been on something of a sugar high in 2018, thanks to the near-doubling of the federal budget deficit through tax cuts and additional spending. But what happens when the sensation begins to wear off?

We expect slower economic growth and lower investment returns on U.S. assets as we move into 2019, and for a slightly better story in the rest of the world. This convergence may start to be evident as soon as this quarter. So while there are no signs of slowing yet in the U.S., we are preparing for an eventual uphill climb.

2018 Fourth Quarter Outlook

Cross-asset views and portfolio positioning 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 in to 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

Cross-asset views — highlights:

- We see a low probability of entering in a high volatility regime, which typically accompanies a pullback in equity prices. Thus, we maintain a neutral-to-positive view on equities. Over the next year, we believe U.S. equities will continue to outperform non-U.S. developed markets, fueled by stronger earnings growth and economic momentum. While valuations in large cap value are attractive, we prefer large cap growth given where we are in the economic cycle. We also think prices in emerging markets represent an attractive entry point.
- Government bonds, particularly those of non-U.S. developed counties, offer
 limited return potential compared to credit sectors given current interest rate
 levels. We see limited room for price appreciation in U.S. corporate bonds, but also
 don't see a catalyst for significant spread widening. We have a favorable view on
 preferred securities, given their upside price return potential and think high yield
 municipal bonds are likely to outperform their taxable equivalents given a steeper
 municipal yield curve and a continued decline in municipal bond issuance.
- Among alternatives, U.S. core real estate should benefit from continued economic
 strength and income opportunities look solid. We also think middle market loans
 offer attractive relative value compared to public leveraged loans. While U.S. timber
 has positive attributes for long-term investors, we view it as less attractive over the
 next 12 months given our muted inflation outlook.



Downgrade from last quarter

Upgrade from last quarter

Cross-asset views:	\(\) Negative	Neutral	Positive >
Equity			
U.S. Equity			•
U.S. Large Cap Growth			•
U.S. Large Cap Value		0	
U.S. Small Cap			•
Non-U.S. Developed Markets		0	
Emerging Markets Equity			•
Fixed Income			
U.S. Short-Term Fixed Income		0	
U.S. Aggregate Fixed Income			
U.S. Investment Grade Corporates		0	
Investment Grade Municipal Bonds		0	
TIPS		0	
Leveraged Loans		0	
U.S. High Yield Corporates		0	
Preferred Securities			
Non-U.S. Developed Fixed Income			
Emerging Markets Debt		0	
High Yield Municipal Bonds			•
Alternative Asset Classes			
U.S. Core Real Estate		0	
Mid-Market Loans			
U.S. Timber			

Portfolio positioning views for investors — The below reflects general positioning for the two most common outcomes we hear from our clients: growth and income.

For growth-oriented investors:

- Overweight global equities, particularly U.S. equities, based on continued strong earnings growth, and focus on emerging markets given an attractive entry point.
- Given trade tensions and the potential for near-term currency volatility and more muted growth expectations, we recommend neutral to slightly underweight positions in non-U.S. developed equities.
- Within fixed income, we suggest maintaining neutral (or policy) weights to credit sectors, as the fundamental backdrop remains supportive of current spread levels. We do suggest moving up in the quality spectrum where possible as we move closer to the end of the cycle.
- For those growth investors with a more cautious outlook, an allocation to longer duration Treasuries as a hedge against an equity market pullback, could be particularly attractive with the 10-year yield above 3%.

For income-oriented investors:

- We think income investors holding equities should maintain neutral/policy weightings.
- Within fixed income, we would suggest modestly adding to longer duration bonds if the yield on the 10-year Treasury holds above 3%.
- Those willing to take on more risk to achieve more income may want to focus on emerging market debt, which looks attractive from a valuation standpoint.
- Tax-sensitive investors may also generate higher tax-equivalent income through a diversified municipal bond allocation. We are constructive on municipal high yield and short duration high yield, and suggest pairing these allocations with higher quality tax-exempt bonds to balance between credit and interest rate risks.

About Nuveen

Nuveen, the investment manager of TIAA, offers a comprehensive range of outcome-focused investment solutions for the long-term financial goals of institutional and individual investors. Nuveen has \$973 billion in assets under management as of 30 June 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 visit nuveen.com.

Data Sources: FactSet and Bloomberg

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Past performance is no guarantee of future results. Performance results are not intended to represent any Nuveen investment or predict future investment performance. Prospective clients should review their investment objectives, risk tolerance, tax liability and liquidity needs before choosing a suitable investment style or manager. 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. In addition, investing in securities of developing countries involves greater risk than, or in addition to, investing in developed foreign countries. Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income.

An investment in any municipal or taxable fixed income portfolio should be made with an understanding of the risks involved in investing in bonds. The value of the portfolio will fluctuate based on the value of the underlying securities. If sold prior to maturity, bonds are subject to gain/losses based on the level of interest rates, market conditions and credit quality of the issuer. As interest rates rise, bond prices fall. Clients should contact their tax advisor regarding the suitability of tax-exempt investments in their portfolio. Income from municipal bonds may be subject to the alternative minimum tax (AMT) and/or state and local taxes, based on their state of residence. High yield or lower-rated taxable and municipal bonds carry greater credit risk and are subject to greater price volatility.

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.

Reference to financial stability does not apply to investment products offered.

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