

# Outlook

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Investment Management Division

*Taking Stock of Our 2018 Outlook:*  
**(Un)Steady as She Goes**

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The ebb and flow between steady and unsteady factors continues unabated.



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Dear Clients,

As many of you know, we do not typically release a midyear update of our annual *Outlook*. This year, however, we are deviating from the norm. Since we published our 2018 *Outlook* report, *(Un)Steady as She Goes*, the tug-of-war between the steady factors supporting the financial markets and the unsteady undertow threatening to undermine them has continued unabated. When market participants focus on the steady factors, such as growth in world economies and corporate earnings, the equity markets appreciate; when investors' focus shifts to the unsteady undertow, such as global geopolitical tensions and increasing populism, volatility rises and equity markets depreciate.

The US equity market, as measured by the S&P 500, has returned 5.9% through July 20. At first look, it appears that our 2018 forecast of a 7% expected return for US equities may well be on track. However, this total return masks a high level of market volatility. On February 6, volatility as measured by the VIX index reached a 2018 intraday peak of 50, a level that has been exceeded only 1% of the time since the inception of the VIX in 1990.

This heightened volatility has been evident in the large daily and weekly swings in equity markets. After rallying by as much as 8% in the first three weeks of 2018, the S&P 500 declined nearly 12% between January 26 and February 9. About a month later, the market registered another decline of about 9%—albeit after rising nearly 11%.

Heightened volatility has also been evident in the total returns of countries and sectors in the cross-hairs of the “trade war” rhetoric. Chinese large-capitalization A-share stocks, as measured by the CSI 300 Index, have declined 11.8% this year, while US auto stocks have underperformed the S&P 500 by 12.5% in 2018.

These spikes in volatility and large swings in equity markets in the presence of worrisome geopolitical headwinds have prompted clients to ask whether our tactical recommendation to stay fully invested in equities at their customized strategic allocation is still valid. We believe that our recommendation to stay fully invested does remain valid and has been so since November 2013, when we entered the ninth decile of US equity valuations.

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Similarly, the current state of domestic political discourse in the US and questions about the strength of the nation's institutions have prompted some clients to question our view of US preeminence. We believe that this view is still accurate—tweets notwithstanding. In turn, we continue to recommend that clients' strategic allocations reflect an overweight to US equities and an underweight to developed and emerging market equities relative to their respective market capitalizations.

In this brief midyear *Outlook*, we take stock of the steady factors and the unsteady undertow and review the pertinent information driving our recommendations above.

We wish you a restful rest of summer.

The Investment Strategy Group



The tug-of-war between the steady factors and the unsteady undertow persists.

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## Overview

In our 2018 *Outlook*, we discussed six steady factors supporting the outlook:

- Economic Growth
- Equity Markets
- Strong, Relatively Steady and Broad-Based Earnings Growth
- Regime Shift in Inflation Volatility
- Low Probability of Recession
- Disdain for This Rally

We also highlighted six unsteady factors threatening the outlook:

- Domestic Politics
- Rise of Populism
- Terrorism
- Increasing Threat of Cyberattacks
- Rising Geopolitical Tensions
- Bitcoin and the Unsteady Cryptocurrency Mania

While data on the global economy and financial markets continues to point to a “steady as she goes” outlook, the increase in geopolitical tensions between the US and China, the rise of radical populist parties in countries such as Italy and Mexico, and deteriorating geopolitics in the Middle East, where a third of the world’s oil is produced, have contributed to an increase in market volatility, weak returns in certain equity and currency markets, and heightened unease among investors. Against this backdrop, assets have continued to flow out of US equities and into bonds, reflecting the persistent disdain for the US equity rally. This year has also seen inflows into developed and emerging market equities—surprising given the uncertain impact of the election results in Italy and Mexico, depreciating

emerging market currencies, and declining developed and emerging market equities.

News of the unsteady factors will dominate the airwaves for the foreseeable future. However, we believe that, at this time, we can invest client assets only on the basis of fundamental long-term drivers of equity markets embodied by the steady factors. The undertow is unpredictable, changing direction rapidly. It was only 11 months ago, in August 2017, that President Donald Trump responded to North Korea’s threats by saying “they will be met with fire and fury like the world has never seen”<sup>1</sup> and a prominent geopolitical expert with an extensive military background assigned a probability of 50% to a military conflict with North Korea.<sup>2</sup> Today, the likelihood of a military conflict with North Korea has significantly receded—to “near-zero,” according to the Eurasia Group.<sup>3</sup> Had we reduced equity exposure in August 2017 in response to the very unsteady headlines of the time, we would have missed 15.3% of US equity returns. We instead chose to focus on the fundamental long-term drivers of economic growth and equity earnings as a guide to remaining invested.

Of course, there may well be a time when the unsteady undertow becomes too strong and overwhelms the steady factors, or when the steady factors point to a less attractive outlook. But halfway through 2018, we do not think that time has yet arrived. In fact, there has been improvement in many of the steady factors. Let’s examine those.

### Taking Stock of the Steady Factors

We begin with a review of the changes to our growth outlook and the continued low probability of recession. We include an update on our view of muted inflation, limited further increases in interest rates and improving equity market valuations. We then turn to the steady and broad-based growth in earnings that underpins this bull market, particularly in the US. Finally, in response to some client concerns about the level of credit growth in the US, we conclude our review of the

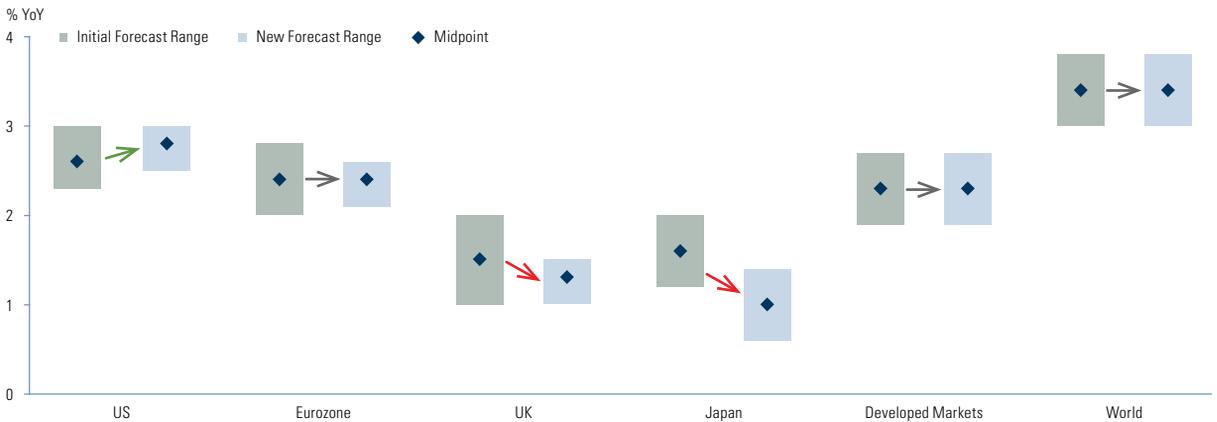
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**Data on the global economy and financial markets continues to point to a “steady as she goes” outlook.**

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## Exhibit 1: ISG 2018 Developed Market Growth Forecasts

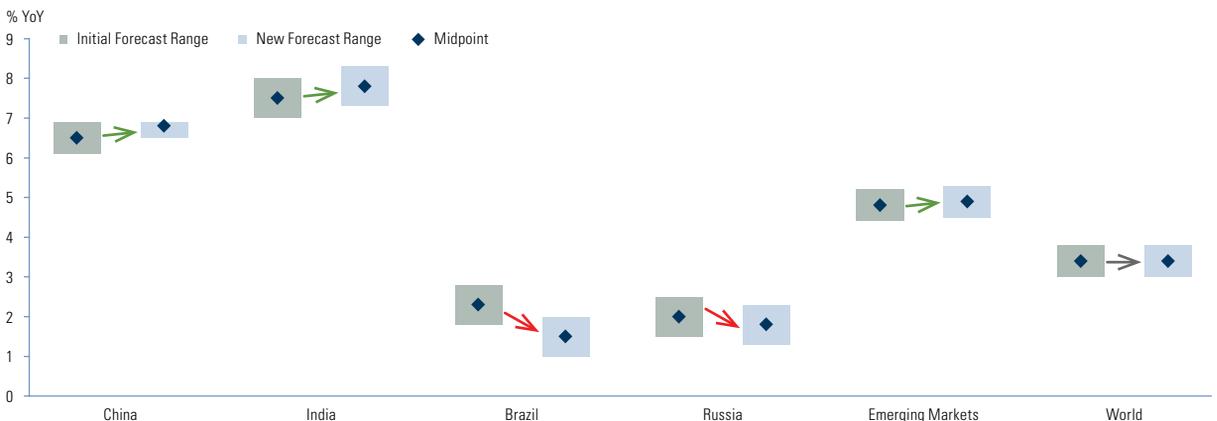
We have raised our forecast for the US, but we expect slower growth in the UK and Japan this year.



Data as of July 20, 2018.  
Source: Investment Strategy Group.

## Exhibit 2: ISG 2018 Emerging Market Growth Forecasts

We expect faster growth in China and India but weaker recoveries in Brazil and Russia.



Data as of July 20, 2018.  
Source: Investment Strategy Group.

steady factors with an assessment of the extent of growth in government debt and corporate and consumer credit.

### Global Economic Growth

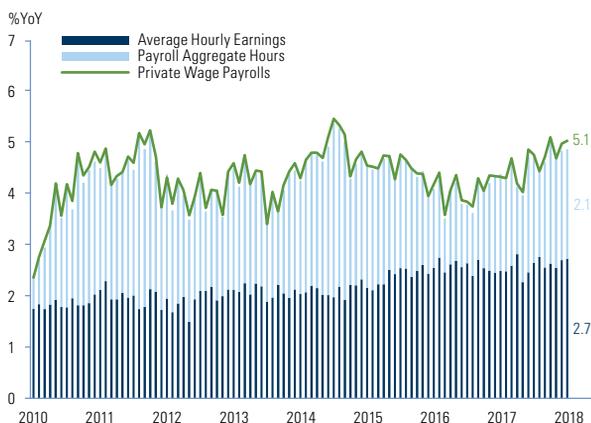
As with our 2018 *Outlook*, we focus on key developed and emerging market countries but place a greater emphasis on the US because it has the largest share of global GDP (24%, at \$19 trillion) and the largest share of global equities (54%, at \$25 trillion). Further, with its large and widening current

account deficit (at \$466 billion), the US is a driver of growth elsewhere in the world and, therefore, has a greater impact on financial markets. In addition, the Investment Strategy Group has consistently had a strategic overweight to US assets.

As shown in Exhibits 1 and 2, we have raised our 2018 growth forecasts for the two largest economies in the world: the midpoint of our US growth rate forecast was raised by 0.2 percentage point (pp) to 2.8%, and the midpoint of our China forecast increased by 0.3 pp to 6.8%. Japan and

### Exhibit 3: US Wage Payroll Growth

Robust employment and wage growth are supportive of private consumption.



Data as of June 2018.  
Source: Investment Strategy Group, Haver.

### Exhibit 4: US Business Investment

Lower taxes and high profit margins have boosted business investment.



Data as of Q1 2018.  
Source: Investment Strategy Group, Haver.

Brazil were revised down the most, followed by drops in the UK and Russia. Netting out these revisions, our 2018 global growth forecast remains unchanged at 3.4%.

The new figure implies that the US economy will grow 0.5 pp faster than it did in 2017. Furthermore, with positive second-quarter GDP growth—likely near 4%—this continuing expansion is now in its 10th year, officially becoming the second-longest expansion in the post-WWII period.

Importantly, US growth has been broad-based without any evidence of major economic imbalances. While some of the faster growth this year is attributable to the Tax Cuts and Jobs Act of 2017, our midyear upward revision is partially attributable to the boost from the Bipartisan Budget Act and the Consolidated Appropriations Act of 2018, and other increases to spending caps that total \$668 billion over 10 years, of which more than \$300 billion will be spent in 2018 and 2019.

Robust employment and wage growth has led to steady aggregate payroll income growth of about 5% (see Exhibit 3), which in turn has supported private consumption. Business investment has also continued a steady climb at 6.8% year-over-year growth (see Exhibit 4), supported by the corporate tax cuts and strong profit margins.

### In other developed economies:

- Eurozone: The 2.4% midpoint of our growth forecast remains unchanged, but rising trade tensions and the populist election results in Italy have meaningfully reduced the probability of any upside, in our view.
- Japan: We have lowered our forecast of Japan's GDP growth significantly, from 1.6% to 1.0%, as a result of very weak first-quarter growth (-0.6%), which has been attributed to inclement weather and the timing of the Chinese Lunar New Year. (Exports to China tend to decrease during the New Year, and because the holidays this year began in mid-February, which was later than in 2017, this had an outsized effect on first-quarter growth in Japan.) Leading indicators point to a rebound in the economy; however, the slowdown in credit growth suggests that the business cycle in Japan may be peaking.
- United Kingdom: We have marginally lowered our UK growth forecast due to a soft first quarter which, like growth in Japan, may have been due to inclement weather. Headwinds such as rising oil prices and British pound appreciation are partially offset by the lower probability of a hard Brexit. In fact, the pendulum has swung toward a soft Brexit and

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occasional whispers of “no Brexit.” However, there also remains significant uncertainty with respect to the stability of the current UK government and the direction of the Brexit negotiations.

#### In emerging markets:

- We have revised our aggregate growth forecast higher by 0.2 pp. This revision was driven by an increase in China and India to 6.8% and 7.8%, respectively, but partially offset by downward revisions in Brazil to 1.5% and in Russia to 1.8%.
- Monetary policy remains accommodative across the key countries, and the inflation outlook is benign.
- Some emerging market currencies, such as the Mexican peso, Brazilian real, Turkish lira and Russian ruble, have continued to depreciate—by as much as 23%. While currency depreciation improves the export competitiveness of these countries, it also increases the risk of inflation, raises the cost of imports, burdens governments and companies with a higher cost of servicing their external debt, and often leads to capital outflows.
- Country-specific dislocations such as those in Venezuela and Argentina have affected other countries in the region and, in the case of Venezuela, even impacted the tightness of the oil market.
- US trade wars with China and Mexico (discussed below in the review of the unsteady undertow) have raised economic policy uncertainty with unknowable outcomes.
- While the pace of credit growth has slowed, there remain significant imbalances in China. Debt/GDP remains high at about 280%, and the rebalancing of the economy is progressing very slowly, with investment still a larger share of GDP than consumption. China’s domestically driven risks, however, are not of any immediate concern.

Our short- and long-term concerns about most emerging market countries remain unchanged, reinforcing our view that it is best to maintain only a small strategic allocation to emerging markets.

#### Low Probability of Recession in the US

Such a generally favorable economic growth backdrop and the high level of the Goldman Sachs Global Investment Research (GIR) current activity indicators imply that the likelihood of a US recession in 2018 is close to zero. Over the next 12 months, through mid-2019, we believe the probability of a recession remains at about 10%, based on the Investment Strategy Group recession risk models.<sup>4</sup> This level is unchanged from our estimate at the beginning of 2018.

While the risk of recession remains unchanged, the underlying drivers have shifted. Favorable financial conditions, rising building permit trends and increases in the Conference Board Leading Economic Index, as shown in Exhibits 5, 6 and 7, respectively, suggest a reduced risk of recession.

However, this reduction has been offset by cyclical factors, such as a very strong labor market and improving wages, that reduce slack in the economy. As shown in Exhibit 8, the unemployment rate for May—at 3.75%—was at the lowest level seen since December 1969. This rate has since moved to 4.0% due to an increase in labor force participation.

Exhibit 9 shows how real disposable income has risen steadily across all quintiles of income earners, including the lowest quintile. While a strong labor market and improving wages are good for the economy in the short term, they also increase the prospects of higher inflation and a faster pace of

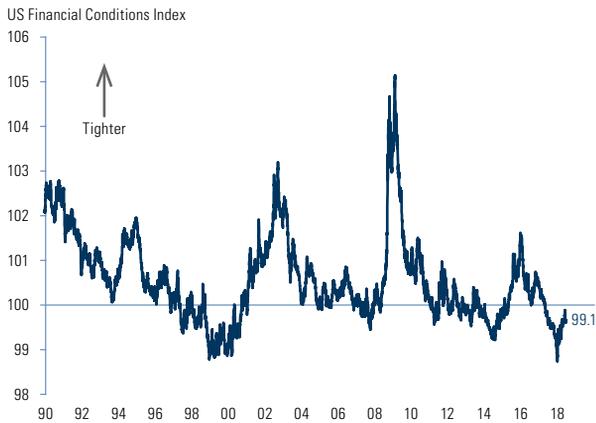
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**The likelihood of a US recession in 2018 is close to zero. Over the next 12 months, through mid-2019, we believe the probability of a recession remains at about 10%.**

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### Exhibit 5: US Financial Conditions Index

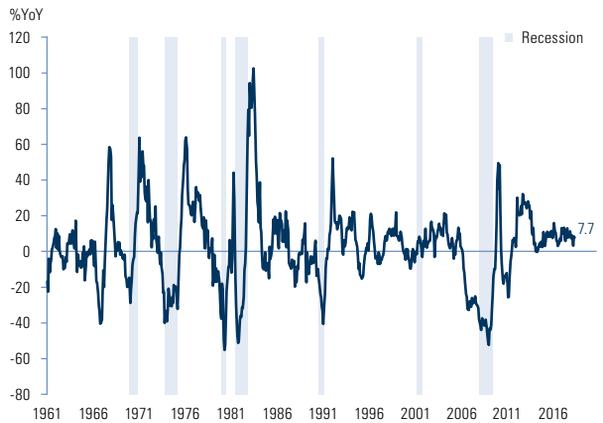
Despite modest recent tightening, financial conditions remain easy.



Data as of July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 6: US Single-Family Building Permits

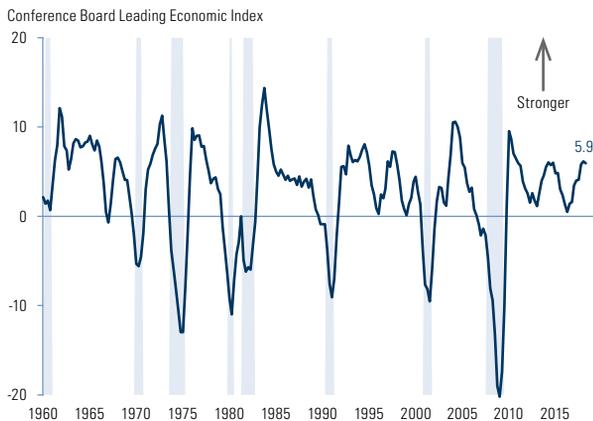
Continued growth in permits suggests low odds of a recession.



Data through June 2018.  
Source: Investment Strategy Group, Haver.

### Exhibit 7: Conference Board Leading Economic Index (LEI)

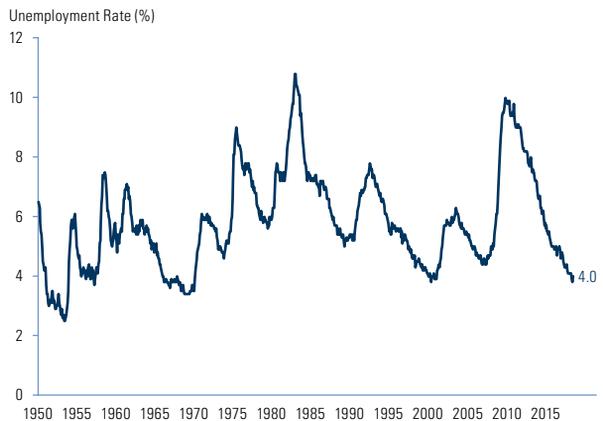
The annual change in the LEI was negative prior to the onset of the last 7 recessions.



Data through June 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 8: US Unemployment Rate

Unemployment near 5-decade lows points to reduced slack in the US economy.



Data through June 2018.  
Source: Investment Strategy Group, Haver.

interest rate hikes by the Federal Reserve—which in turn increase the odds of a recession.

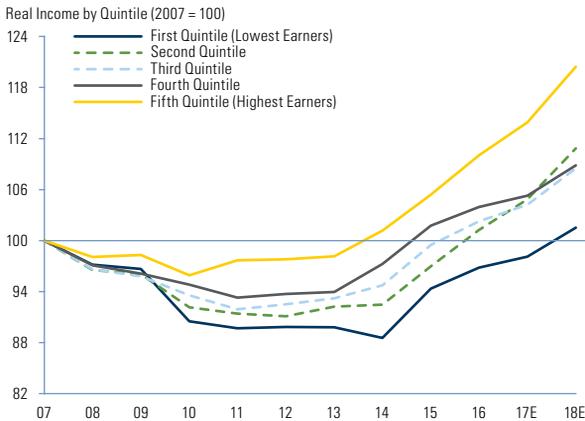
### The Flattening Yield Curve Does Not Signify an Imminent Recession

A frequently asked question is whether the flattening Treasury yield curve, driven by continuing Federal Reserve interest rate hikes, is foretelling

a recession. Federal fund rate increases have not always derailed economic expansions in the past: of the 14 tightening cycles in the US since WWII, nine led to recession and five did not. However, while a tightening cycle may not foretell a recession, the difference in the yield levels between one- and 10-year Treasuries (known as the spread) has been a harbinger of recessions when it is near zero or

## Exhibit 9: Real Disposable Income Across US Income Quintiles

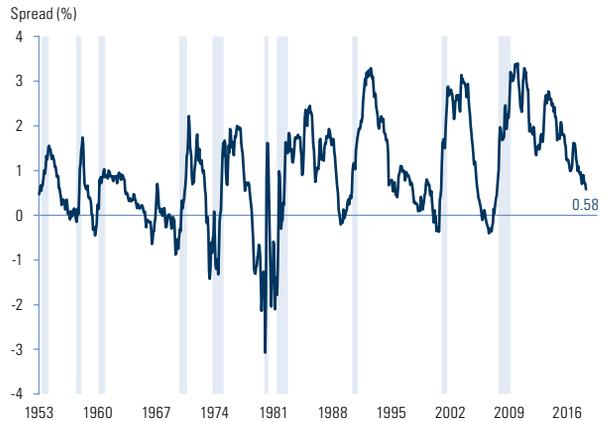
Disposable income has risen steadily across all quintiles of income earners.



Data as of 2016, ISG estimates for 2017–18.  
Source: Investment Strategy Group, U.S. Census Bureau, Empirical Research Partners.

## Exhibit 10: 1-10 Year US Treasury Yield Spread

We do not believe that the flattening yield curve is foretelling a recession.



Data as of July 20, 2018.  
Source: Investment Strategy Group, Haver.

negative, as shown in Exhibit 10. That difference now stands at 0.58%. This level is far from near zero or negative, especially in a low inflation regime.

Two studies, one by the Federal Reserve Bank of New York<sup>5</sup> and another by the Federal Reserve Board of Governors,<sup>6</sup> suggest that the declining risk premium for taking maturity risk in the bond market (which could be due to declining inflation expectations, low volatility of inflation, and demand for long-maturity assets by US pension plans and insurance companies) probably reduces the absolute level at which the yield curve spread signals an imminent recession. A more recent Federal Reserve Board study, “(Don’t Fear) The Yield Curve,”<sup>7</sup> provides an alternative measure based on forward rates implied by the yield curve; this measure, which the authors call “near-term forward spread,” eliminates the impact of the declining risk premium. This spread currently stands at about 80 basis points and puts the probability of a recession one year from

now at 15–20%. Most importantly, once this curve inverts, the stock market typically peaks about one year later.

Other Federal Reserve studies that look at the yield curve and other financial indicators assess the recession probability as between zero and 30%.

### Continued Low Inflation and Low Volatility of Inflation

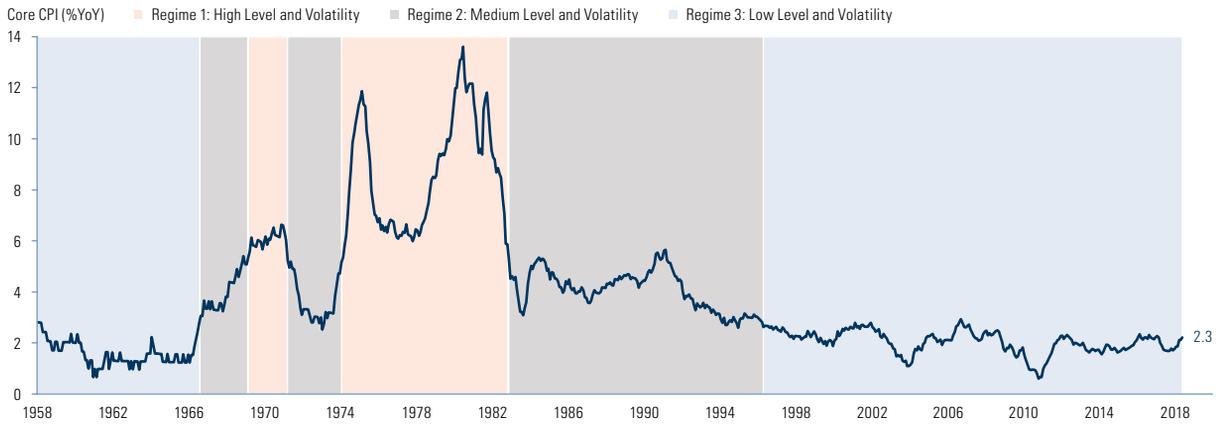
The outlook on inflation is critical to our probability of recession as well as to our view of equity valuations. First, if inflation were to meaningfully rise, the pace of interest rate hikes by central banks would pick up, which would, in turn, increase the likelihood of recession. Recall that Federal Reserve tightening of monetary policy led to nine of the 11 post-WWII recessions in the US. Second, as we discuss below, if inflation were to shift outside today’s regime of low and stable inflation (see Exhibit 11), current valuations would become a concern.

Inflation has remained low and relatively stable in key developed and emerging market countries. As shown in Exhibit 12, core inflation in the Group of Seven (G-7: Canada, France, Germany, Italy, Japan, UK, and US) has

**The outlook on inflation is critical to our probability of recession as well as to our view of equity valuations.**

## Exhibit 11: US Inflation Regimes

We have been in a regime of low inflation and low inflation volatility since April 1996.



Data through June 2018.  
 Note: Based on core consumer price inflation.  
 Source: Investment Strategy Group, Robert Shiller.

## Exhibit 12: G-7 Core Inflation

Developed market core inflation has remained in a tight range since 2014.



Data through May 2018.  
 Note: Showing the three-month moving average of core inflation.  
 Source: Investment Strategy Group, Haver.

remained in a tight range since 2014 and currently stands at 1.7%.

In emerging markets, headline inflation has been steadily declining since 2011 and currently stands at 3.5% (see Exhibit 13). In China, the second-largest economy in the world and the largest among emerging markets, headline inflation is even lower, at 1.9%. We use headline inflation because it is

## Exhibit 13: Emerging Market Headline Inflation

Inflation in developing countries has been steadily declining since 2011.



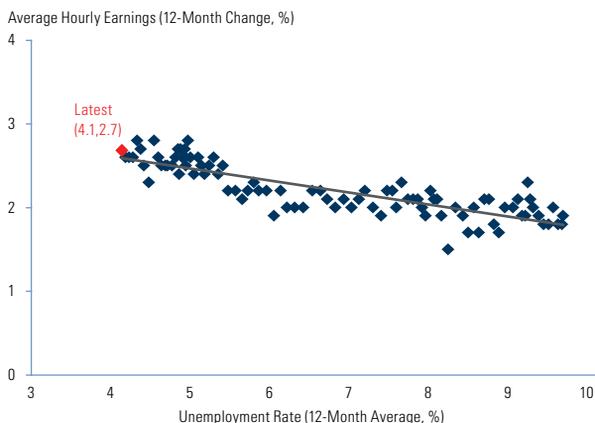
Data through May 2018.  
 Note: Showing the three-month moving average of headline inflation.  
 Source: Investment Strategy Group, Haver.

the measure that is targeted by the central banks of many emerging market countries, and food tends to be a much larger component of household expenditures in these countries.

Core inflation in the US (excluding the more volatile food and energy components) has stayed in a similarly tight range since 2014, and currently stands at 2.3%. The preferred Federal Reserve Board

### Exhibit 14: US Unemployment Rate and Wage Growth

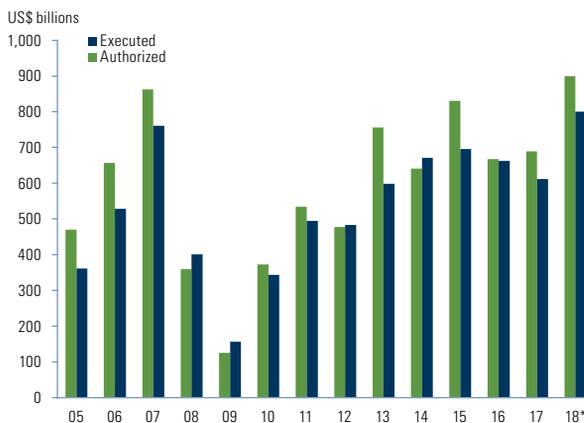
The Phillips curve has been relatively flat since the global financial crisis.



Data from October 2009 through June 2018.  
Source: Investment Strategy Group, Haver, Datastream.

### Exhibit 15: US Annual Share Buyback Activity

Buyback authorizations and executions are on track to hit a record in 2018.



Data as of June 25, 2018.  
Source: Investment Strategy Group, Goldman Sachs Corporate Buyback Trading Desk.  
\* Goldman Sachs Corporate Buyback Trading Desk projection.

metric, the deflator of core Personal Consumption Expenditures, stands at 2.0%. We expect core inflation to rise to 2.5% in the US by year-end as continued labor market improvement increases wage growth, health-care inflation normalizes from recent policy-induced declines and recent energy price increases feed through to overall inflation.

We expect US inflation to remain at subdued levels despite declining unemployment rates and the increase in oil prices. While we expect the unemployment rate to decline further, we do not see any evidence of significant upward wage pressures at this time. As shown in Exhibit 14, the Phillips curve—the relationship between wage growth and the unemployment rate—has been relatively flat since the global financial crisis of 2008–09.

With respect to the impact of changes in oil prices on inflation, our colleagues in GIR estimate that a sustained 10% rise in oil prices increases headline CPI by about 0.2% and core inflation by a negligible 0.04% within a year.<sup>8</sup> Thus, as a result of oil price rises since the trough levels in early 2016, we expect US core inflation to increase by 0.1–0.2% by early 2019.

With little threat of rapidly rising inflation, we think the Federal Reserve is likely to hike interest

rates one more time this year, for a total of three hikes. If growth or inflation surprise to the upside, a fourth hike is possible. We expect 10-year Treasury yields to range between 2.75% and 3.25%, which is marginally higher than our prior forecast.

### Broad-Based Earnings Growth

The favorable economic backdrop, fiscal stimulus, easy monetary policy, higher oil prices and muted inflation provided a significant boost to corporate earnings across the globe in the first quarter of 2018.

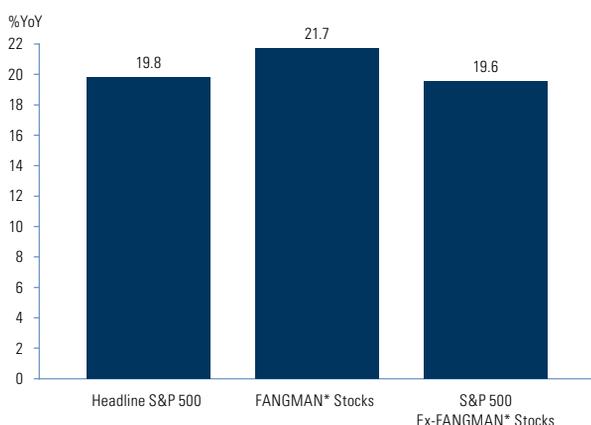
Earnings exceeded expectations in the US, Europe and Japan, and matched expectations in emerging market countries.

In the US, S&P 500 earnings grew by 25%. About 13 pp of the earnings growth was attributable to tax cuts. More importantly, 12 pp was due to sales growth of 8.5% and to improving corporate margins that are at their highest levels in over a year. Earnings grew across all sectors in the US, with the energy sector posting a 96% increase, albeit from depressed levels, followed by materials and information technology at 44% and 34%, respectively. Our earnings growth estimate for 2018 remains unchanged at 16%.

## Exhibit 16: Full-Year 2018 Earnings

### Growth Forecast

S&P 500 earnings growth should be strong even excluding the FANGMAN stocks.



Data as of June 2018.

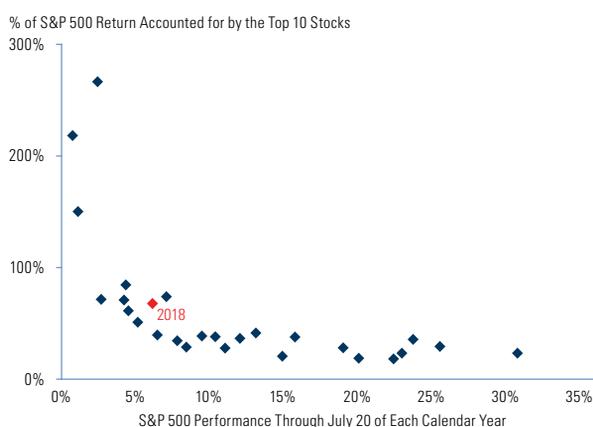
Source: Investment Strategy Group, Factset.

\* FANGMAN=Facebook, Apple, Netflix, Google, Microsoft, Amazon, Nvidia.

Past performance is no guarantee of future results

## Exhibit 17: Share of S&P 500 Return Contributed by Top 10 Performing Stocks

The top 10 performers always represent a disproportionate share of S&P 500 gains when returns are low.



Data through July 20, 2018.

Note: Based on returns through July 20 since 1986 and excluding years with negative returns.

Source: Investment Strategy Group, Factset.

Such robust earnings from tax cuts and standard business operations supplemented by repatriated profits have prompted US companies to authorize and execute record levels of stock repurchases in the first quarter of 2018. As shown in Exhibit 15, the Goldman Sachs Corporate Buyback Trading Desk projects \$900 billion of buyback authorizations and \$800 billion of executed buybacks in 2018, both of which would be all-time records.

We should also note that, contrary to popular belief, high-profile technology stocks are not the sole drivers of S&P 500 earnings growth. The popular grouping of FAANGs has now been replaced by FANGMAN: Facebook, Apple, Netflix, Google, Microsoft, Amazon and Nvidia. As shown in Exhibit 16, these stocks are forecast to grow 2018 earnings by 21.7%, compared to the S&P 500 earnings growth of 19.8%. Excluding the FANGMAN basket, the S&P 500 earnings growth is forecast to be only marginally lower, at 19.6%. While FANGMAN stocks represent about 17% of S&P 500 market capitalization, they account for only 10% of earnings.

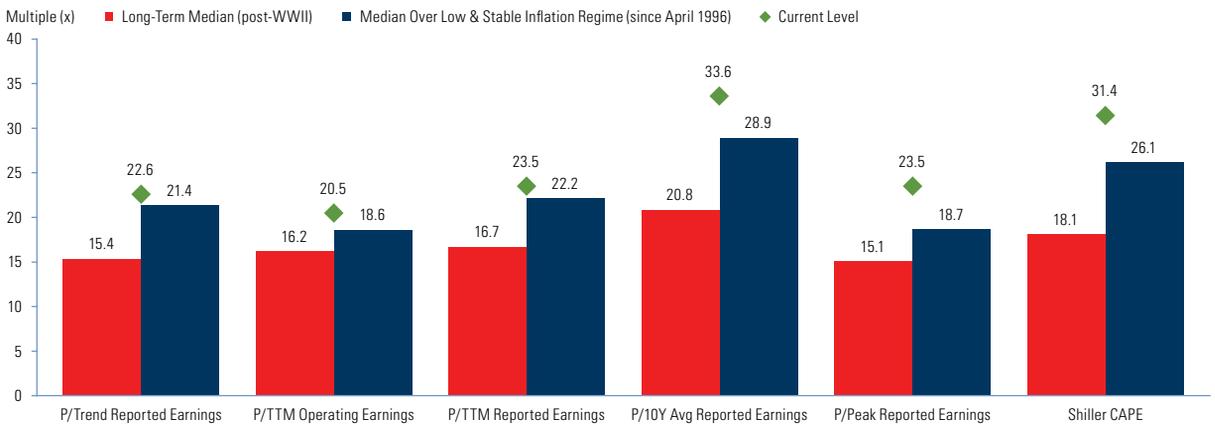
In sharp contrast to last year, FANGMAN stocks do account for a disproportionate share of this year's market gains. However, we think this

disproportionate share primarily reflects a small denominator in the ratio. As mentioned earlier, the S&P 500 has returned 5.9% in 2018. As shown in Exhibit 17, when returns are low, the top 10 stocks always represent a disproportionate share of S&P 500 returns. Such is the case now. Excluding FANGMAN stocks, the S&P 500 returned 2.4% in the same period. However, such a low return should not be confused with declining market breadth, which would be a bearish technical signal. In fact, the S&P 500's cumulative Advance-Decline Line has continued to make new all-time highs—exactly the opposite of the narrowing breadth that is typically seen at market peaks.

**In Europe**, earnings grew by 9%, exceeding consensus expectations of 6%. Earnings growth was broad-based across sectors, with energy expanding by 31%, followed by information technology at 21% and materials at 17%. Only one sector, utilities, posted a decline in earnings. Our earnings growth forecast for 2018 remains unchanged at 8%, but recent political instability in Italy and decelerating growth in the UK increase the risk of slower growth in earnings.

## Exhibit 18: S&P 500 Valuation Multiples

US equities look less expensive in the context of the current inflation regime.



As of June 30, 2018.

Source: Investment Strategy Group, Robert Shiller.

In Japan, earnings grew by 12%, marginally exceeding consensus expectations. Similar to the situation in Europe, earnings growth was broad-based across sectors, with the telecommunications sector growing earnings by 29%. Only the materials sector posted a decline. Our 2018 earnings growth forecast of 6% remains unchanged.

Of note, Japanese companies continued to improve profit margins, which stood at 6.1% in the first quarter of 2018. From the meager 1–2% levels of the 1980s and 1990s, margins have risen steadily after the global financial crisis. A combination of cyclical and structural factors has driven this increase, including supportive domestic economic growth, slower growth in wages relative to sales, a reduction in Japan’s corporate tax rate and a move by some large-capitalization Japanese companies to international accounting standards.

In emerging markets, earnings grew by 12%, in line with expectations. However, the growth was concentrated in the energy, materials and information technology sectors at 27%, 17% and 27%, respectively. Consumer discretionary earnings were hit by Hyundai and Kia’s falling sales in China, a result of geopolitical tensions between South Korea and China due to the deployment of the US Army’s Terminal High-Altitude Area Defense (THAAD) system in South Korea. Utilities also

posted a significant decline in earnings owing to the higher energy costs. Despite the weakness in these two sectors, we have raised our 2018 earnings growth forecast to 11% due to higher commodity prices this year and the base effect of lower earnings in 2017.

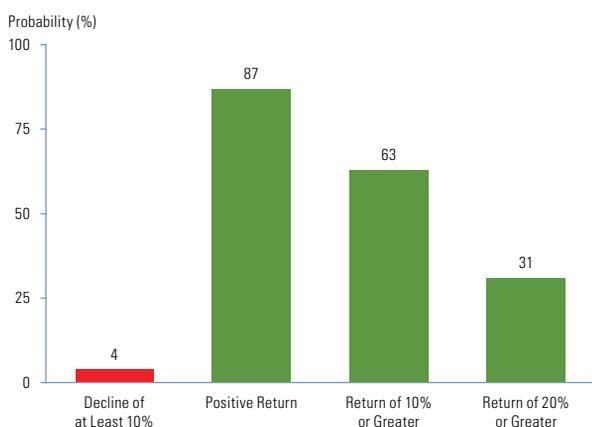
### Implications for Equity Markets

While earnings have grown at a steady pace and mostly exceeded expectations in the first quarter of 2018, skeptics have seen the glass as half empty and warn of peak earnings. We agree that the pace of earnings growth is likely to slow, but that is not the same as stating that earnings have peaked and, by implication, so have equity markets. We maintain our 16% earnings growth forecast for the US in 2018 and estimate a 7% earnings growth rate for 2019. As a result of such earnings growth, we expect the level of earnings per share to rise, albeit at a slower pace. Even with our base case of some multiple contraction this year and next, we expect US equities to provide a total return of about 7% in 2018 and about 5% in 2019. There are three factors supporting this view:

- Equities have traded at higher multiples in periods of low and stable inflation. In Exhibit 18, we provide an update comparing current market valuations to those of periods of low

## Exhibit 19: Odds of Various S&P 500 One-Year Total Returns During US Economic Expansions

The likelihood of positive US equity returns is high when the economy is growing.



Data as of December 31, 2017.  
Note: Based on data since 1945.  
Source: Investment Strategy Group, Bloomberg.

and stable inflation. While current valuations may seem high when compared to long-term medians, they are substantially less so when compared to the median levels seen since April 1996, when the US entered a period of low and stable inflation. Across the six metrics, US equities are about 13% overvalued when factoring in the current inflation regime. We are not making a case that equities are cheap; we are simply stating that they are not as expensive as they appear when valued in the context of low and stable inflation and therefore we do not recommend an underweight at this time.

2. While Treasury yields have increased and are close to the midpoint of our 2018 range of 3%,

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**We recommend clients remain invested in US equities due to steady earnings growth in an expanding economy coupled with a low and stable inflation environment that keeps interest rates in check.**

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we do not believe that they have increased to a level that will derail this bull market. Historically, 10-year Treasury yields have averaged about 5% before negatively impacting equities. Currently, the strong economic environment is boosting earnings sufficiently to offset the impact of higher interest rates. Moreover, about 90% of S&P 500 debt is fixed and only 10% matures each year. Thus, it will take a number of years of higher interest rates before the aggregate interest expense of US companies meaningfully increases. We believe that in the current economic and inflation environment, interest rates closer to 4% may become a limiting factor, but at this point we are far from that level.

3. Ongoing economic growth has overwhelmingly favored positive equity returns in the past, with high odds of positive returns and low odds of large losses (see Exhibit 19). In fact, only one quarter of US bear markets have occurred during expansions. Moreover, equity returns have remained favorable until about five months prior to the onset of an economic contraction, highlighting the penalty for prematurely exiting the market in the absence of elevated recession risks.

To conclude, we recommend clients remain invested in US equities due to steady earnings growth in an expanding economy coupled with a low and stable inflation environment that keeps interest rates in check. While some may dismiss our continued recommendation to stay invested as a blind endorsement of a buy-and-hold strategy, it actually reflects the low odds we have placed, and

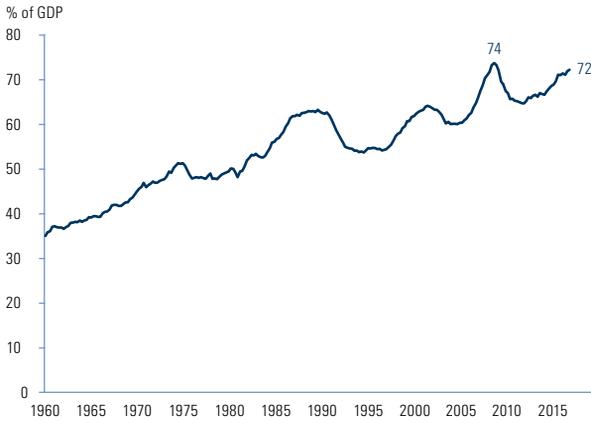
continue to place, on a recession in the US. A significant increase in these odds would likely provide the trigger—which has been lacking thus far—to shift to an underweight position in equities.

### **Credit Growth Is Not Yet a Risk**

As far back as early 2013, then-Federal Reserve Governor Jeremy Stein garnered attention for his warnings of possible overheating in the credit markets.<sup>9</sup>

## Exhibit 20: US Nonfinancial Corporate Debt

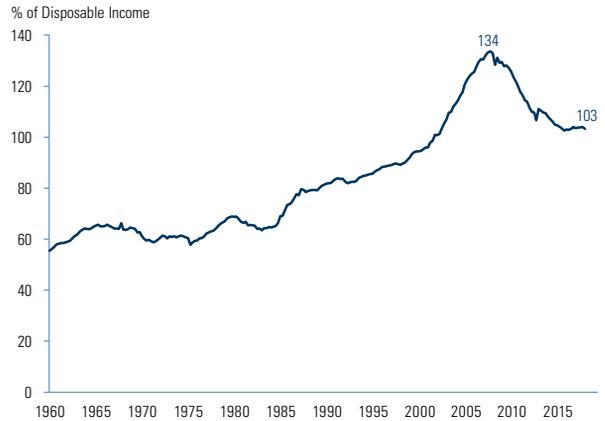
Corporate debt is approaching prior-cycle peak levels, but we do not see this increase as alarming.



Data through Q1 2018.  
Source: Investment Strategy Group, Haver.

## Exhibit 21: US Household Debt

Consumer deleveraging is well advanced, removing a headwind to growth.



Data through Q1 2018.  
Source: Investment Strategy Group, Haver.

Concerns about such overheating due to easy credit have continued ever since.

While we see some very early signs of a marginal increase in credit risk, and certainly acknowledge that we are quite far along into an expanding credit cycle—in line with the long economic recovery—we think it is too early to adjust portfolio weights or worry about a credit crisis derailing economic growth.

We examine the increase in debt in three areas: corporate debt, household debt and government debt.

**Corporate Debt:** While financial sector debt has fallen to 20-year lows, nonfinancial corporate debt has steadily increased since 2012 and is approaching prior-cycle peak levels (see Exhibit 20). Such an increase in debt may appear alarming, but we do not find it so, for a number of reasons:

- About 90% of the growth in the nonfinancial sector debt is fixed-rate debt, so exposure to rising rates is limited.
- Only 11% of nonfinancial debt outstanding matures over the next two years, so refinancing risk is also limited.
- The two sectors with the largest increase in debt ratios relative to their long-term averages

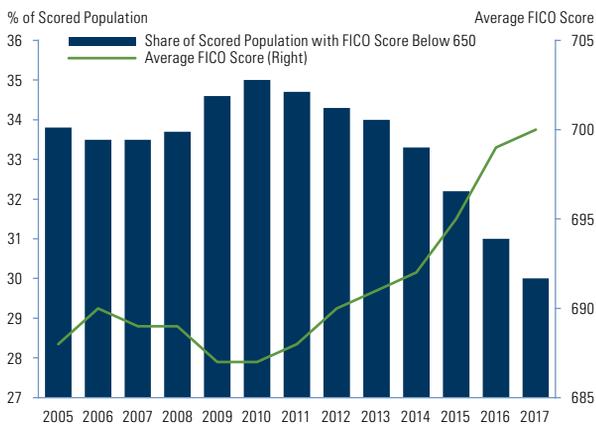
are health care and information technology. Both sectors have among the best interest coverage ratios in the economy. For example, the information technology sector has an earnings-to-interest expense coverage of 20 times, meaning the earnings before interest, taxes, depreciation and amortization are 20 times as great as the interest expense. The comparable number for the overall S&P 500 is only 10 times. As widely reported, many technology companies had historically issued debt in lieu of repatriating their overseas earnings at high tax rates and, thus, are not unduly leveraged to pose any kind of systemic risk.

- Empirical Research Partners, a well-respected third-party research firm, has shown that while total debt in corporate America (ex-financials) has increased, net debt in some sectors, such as information technology, has actually decreased due to robust cash flow generation.<sup>10</sup>
- Interest coverage ratios in both high yield and investment grade corporate credit stand near 25-year highs.

**Household Debt:** US household debt as a percentage of disposable income has decreased substantially since the peak levels seen in the global financial crisis, as shown in Exhibit 21. Debt as a percentage

## Exhibit 22: US FICO Scores

The average FICO score of US borrowers has reached a post-crisis high.

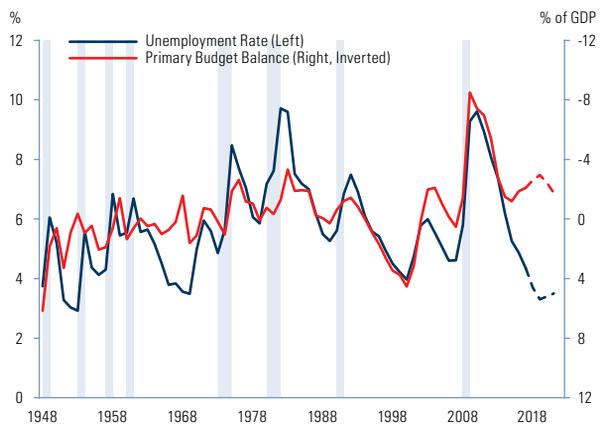


Data as of 2017.

Source: Investment Strategy Group, Fair Isaac Corporation.

## Exhibit 23: US Primary Budget Balance vs. Unemployment Rate

It is unusual for the budget deficit to deteriorate at times of economic expansion.



Data as of June 2018.

Note: Unemployment rate forecast from GIR; primary budget balance forecast from OMB. Shaded areas denote periods of recession.

Source: Investment Strategy Group, Goldman Sachs Global Investment Research, OMB, Department of Labor.

of disposable income has decreased from above 130% to 103%, and the debt service ratio is at two-decade lows as a result of low debt levels and low interest rates.

The credit profile of borrowers has also improved. As shown in Exhibit 22, the average FICO credit score of US borrowers has reached a post-global financial crisis high of 700. Furthermore, the portion of the population with FICO scores below 650 has decreased from 35% in 2010 to 30% in 2017. As robust employment and a steady increase in wages have finally increased the income of the bottom quintile of income earners to pre-crisis levels, FICO scores may well continue to improve.

Less favorably, we have seen a small increase in 90-day delinquency rates in auto loans and credit card loans among subprime borrowers.<sup>11</sup>

Most of the growth in subprime auto loan origination has been in specialty finance companies, so the banking sector is unlikely to be materially affected by the slight increase in delinquencies. Furthermore, auto loan originators have been reducing their lending to subprime borrowers over the last three years, and

we do not believe that rising delinquencies will be a source of systemic risk.

Similarly, the increase in charge-offs due to credit card defaults has occurred in banks that are not among the 100 largest banks by assets. These smaller banks account for 2% of all credit card debt, so an increase in their charge-offs is also not a source of systemic risk for the US economy or the US consumer, in our view.

**Government Debt:** While the Trump administration Tax Cuts and Jobs Act (TCJA) of 2017 and the Consolidated Appropriations Act of 2018 have provided a boost to economic growth in 2018 and are expected to continue to do so in 2019, they have also increased the budget deficit from 3.5% of

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**Congress has expanded the budget deficit at a time when debt-to-GDP is already elevated as a result of the global financial crisis. This is the exact opposite of past policies.**

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GDP in 2017 to 4.0% in 2018, and to an expected 5.2% by 2019.<sup>12</sup> As can be seen from Exhibit 23, it is unusual for the budget deficit to grow at times of economic expansion.

In a report titled “What’s Wrong with Fiscal Policy?” our colleagues in GIR highlighted that “federal fiscal policy is entering uncharted territory.”<sup>13</sup> Congress has expanded the budget deficit at a time when debt-to-GDP is already elevated as a result of the global financial crisis. This is the exact opposite of past policies, when Congress typically raised taxes and cut spending when the economy strengthened and debt levels were high. The problem with introducing a fiscal boost at a time of economic strength is twofold:

- When the US economy inevitably falls into a recession sometime in the future, the deficit will have to expand even further from its already wide levels.
- We are approaching a time when mandatory spending is projected to increase due to Social Security, Medicare, Medicaid and income-support programs.

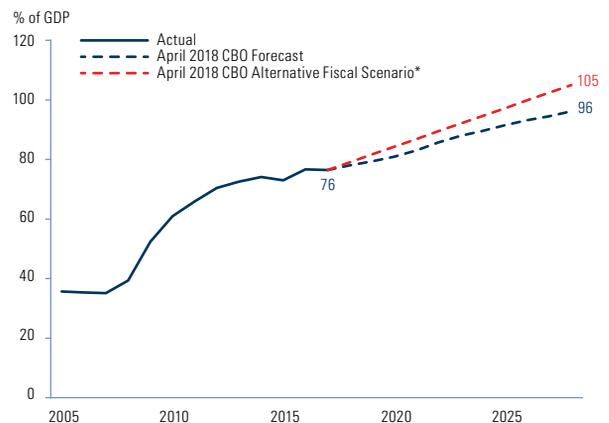
As shown in Exhibit 24, debt-to-GDP is projected to rise from its current level of 76% to between 96% and 105%, depending on Congressional Budget Office assumptions. While the US can fund its budget deficit and debt levels given its global reserve currency status, no one knows the tipping point at which debt levels become unsustainable. Our colleagues in GIR estimate the tipping point to be somewhere between 160% and 180% of GDP.<sup>14</sup>

In the short term, the federal budget deficit and rising debt levels are not concerns and do not change our 2018 outlook. However, at some point in the future, fiscal reform will become necessary.

While the steady factors, from broad-based economic and corporate earnings growth to low and stable inflation to contained credit growth, have improved, the unsteady undertow has ebbed and flowed and remains as unpredictable today as it was at the end of 2017. We now turn to a review of this unsteady undertow.

## Exhibit 24: US Debt-to-GDP Ratio Projections Through 2028

US debt levels are expected to rise more rapidly due to the passage of TCJA and the 2018 spending deal.



Data as of June 2018.

Source: Investment Strategy Group, CBO, Committee for a Responsible Federal Budget (CRFB).

\* Assumes that Congress extends expiring tax cuts and continues discretionary spending at its current level.

## Taking Stock of the Unsteady Undertow

In our 2018 *Outlook*, we highlighted six factors creating an unsteady undertow that would, in turn, affect financial markets throughout the year:

- Domestic Politics
- Rise of Populism
- Terrorism
- Increasing Threat of Cyberattacks
- Rising Geopolitical Tensions
- Bitcoin and the Unsteady Cryptocurrency Mania

In this midyear report, we focus on the three factors that have strengthened the undertow: domestic politics, rising geopolitical tensions and the rise of populism.

With respect to the other factors, we note that our views and the actual level of activity with respect to terrorism and the increasing threat of cyberattacks have not changed, so in the interest of brevity, we direct you to our [2018 Outlook](#).

Similarly, our view that cryptocurrencies would not retain value in their current incarnation remains intact and, in fact, has been borne out

### Exhibit 25: Bitcoin Price Index

Bitcoin prices have declined 61% from their December 2017 highs.



Data through July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 26: Ether Price Index

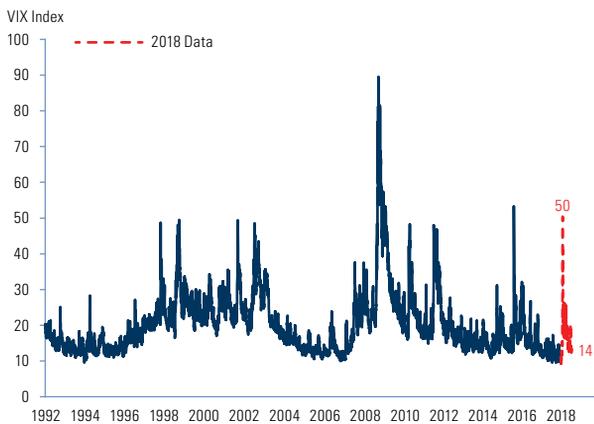
Our view that cryptocurrencies will not retain their value in their current incarnation remains intact.



Data through July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 27: VIX Index Historical Daily Highs

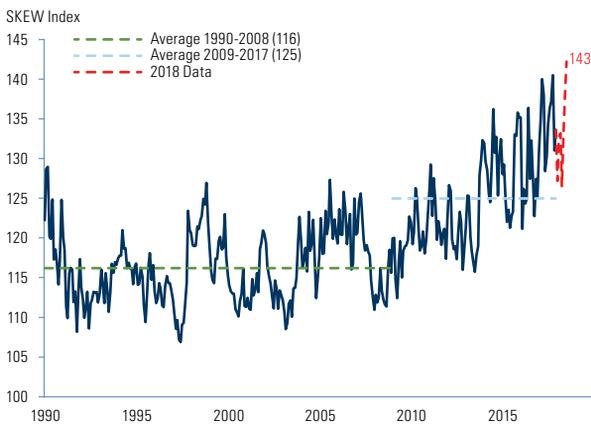
Implied volatility has been trending down since the February spike.



Data through July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 28: CBOE Volatility SKEW

Skew, a measure of market fear premium, has risen to an all-time high in July.



Data through July 20, 2018.  
Source: Investment Strategy Group, CBOE, Datastream.

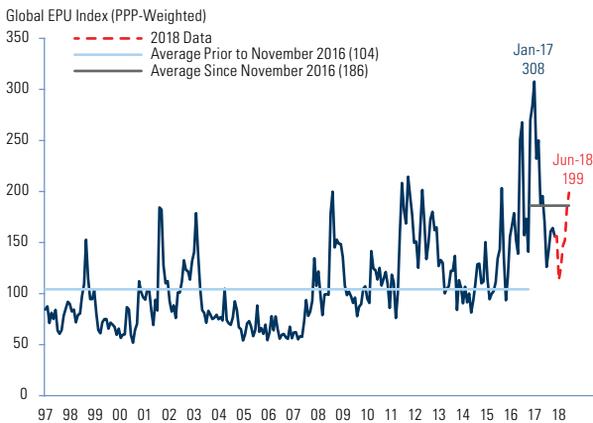
much sooner than we expected. Bitcoin prices have dropped more than 60% from a December 2017 intraday high of \$19,511 to \$7,351 (see Exhibit 25), and Ether prices have declined nearly 70% from an early-January intraday high of \$1,432 to \$450 (see Exhibit 26).

We expect further declines in the future given our view that these cryptocurrencies do not fulfill any of the three traditional roles of a currency:

they are neither a medium of exchange, nor a unit of measurement, nor a store of value. Importantly, we continue to believe that such declines will not negatively impact the performance of broader financial assets, because cryptocurrencies represent just 0.3% of world GDP as of mid-2018. In fact, we believe that they garner far more traditional media and social media attention than is warranted.

## Exhibit 29: Global Economic Policy Uncertainty (EPU) Index

Policy uncertainty has increased since President Trump's election.



Data through June 2018.

Note: Global EPU Index uses PPP-adjusted GDP Weights.

Source: Investment Strategy Group, Economic Policy Uncertainty Index ([www.policyuncertainty.com](http://www.policyuncertainty.com)).

Let us now turn to the three unsteady factors that have impacted, to a varying extent, real economies and financial markets this year. To assess whether these factors are already reflected in financial markets, we begin with a review of three indicators of market fear and uncertainty.

The picture is mixed. As shown in Exhibit 27, VIX—the most widely used measure of market risk—peaked at an intraday high of 50 on February 6, as a result of broad selling by volatility- and momentum-driven strategies, but it has been trending down since. In fact, VIX reached a recent low of just under 12, which is in the bottom 11th percentile historically.

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**While we cannot isolate the impact of higher economic policy uncertainty in the post-Trump era, we believe that a prolonged period of such high uncertainty will be a drag on global growth.**

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In contrast, CBOE Volatility SKEW—a more precise measure of the fear premium priced in the market—had remained elevated for most of this year and rose even further more recently. Its July 2018 average of 143 is the highest monthly average in the index's history, as shown in Exhibit 28.

Similarly, a third indicator—the Global Economic Policy Uncertainty (EPU) Index—has risen from its 2017 year-end level of 156 to 199 more recently. As shown in Exhibit 29, the level of policy uncertainty has risen to levels not seen even during the global financial crisis. Prior to President Trump's election, the historical average of the global EPU Index was 104, but in the post-election period, the global EPU Index has averaged 186, or 78% higher. While such uncertainty has had minimal, if any, impact on the US economy thus far, it has certainly affected non-US financial markets to a greater extent (see “Rising Geopolitical Tensions: The Trade Wars” below). Moreover, at some point, too much uncertainty tends to dampen consumer, business, and, eventually, investor confidence.

The developers of the EPU Index (Scott Baker of Northwestern University, Nicholas Bloom of Stanford University and Steven Davis of the University of Chicago) have shown that an economic policy uncertainty shock of 90 points reduces gross fixed investment in the US by about 6% within two quarters and lowers GDP by just over 1%.<sup>15</sup> While we cannot isolate the impact of higher economic policy uncertainty in the post-Trump era, we believe that a prolonged period of such high uncertainty will be a drag on global growth.

### US Domestic Politics

Shortly after the inauguration of President Trump, we hosted a three-part series of client calls on the implications of the Trump presidency on domestic policies, trade policy, geopolitics and financial markets. On one of our calls, Ian Bremmer, founder and president of Eurasia Group, provided a framework for understanding the Trump

### Exhibit 30: Eurasia Group Framework for Understanding the Trump Administration

With the benefit of hindsight, the Eurasia Group’s framework was particularly insightful.

Eurasia Group Framework	
“Politics as Usual”	“Unprecedented”
Key cabinet appointments	“Incompetence”
ACA “repeal and replace”	“Conflict of interests”
Regulatory rollback in energy, finance, environment	“Authoritarianism”
Corporate tax reform and tax rate reduction	“... on foreign policy President Trump is ripping up the playbook.”
	North Korea? Russia?

Source: Investment Strategy Group, Ian Bremmer, “Argument: Trump Foreign Policy Is New Thinking,” Eurasia Group, February 6, 2017; Ian Bremmer, “Understanding Trump,” Eurasia Group, February 27, 2017.

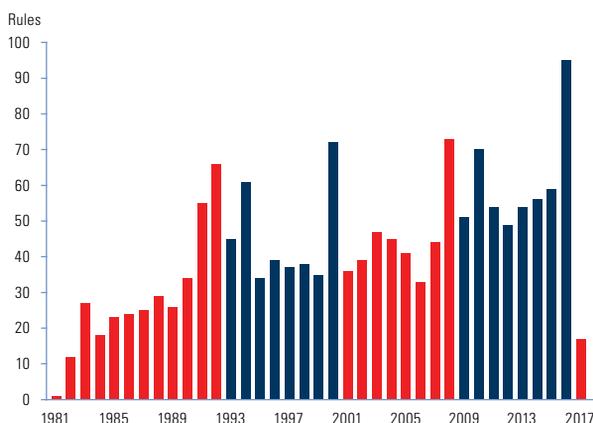
administration, which is shown, as presented on March 12, 2017, in Exhibit 30. With the benefit of hindsight, the framework has proved particularly insightful.

Ian Bremmer suggested we should expect some aspects of the Trump presidency, such as regulatory rollback, corporate tax reform and tax rate reduction, to follow a “politics as usual” path that one could expect under any Republican presidency. And as he predicted, corporate tax reform and lower tax rates have already occurred. Similarly, we have seen some regulatory rollback. For example, the Office of Regulatory Affairs has shown a drop in the number of new economically significant rules to the lowest level since 1982 (see Exhibit 31), and the share of small businesses that cite government regulation as the single greatest problem they face has decreased from a recent peak of 24% under the Obama administration to 14% under the Trump administration.<sup>16</sup>

While these “politics as usual” developments have boosted the steady factors, the unsteady undertow has also been affected by what Ian Bremmer has called the “unprecedented” aspects of the Trump administration. Here, he warned us to expect unprecedented policies particularly in

### Exhibit 31: Economically Significant Rules Issued in the US by Presidential Year

The number of rules issued in 2017 was the lowest since 1982.



Data through December 31, 2017.  
Note: Bar colors correspond to the president’s political party; red = Republican, blue = Democratic.  
Source: Investment Strategy Group, George Washington University Regulatory Studies Center.

foreign affairs, where “President Trump is ripping up the playbook.”

The current trade war actions and threats are a case in point.

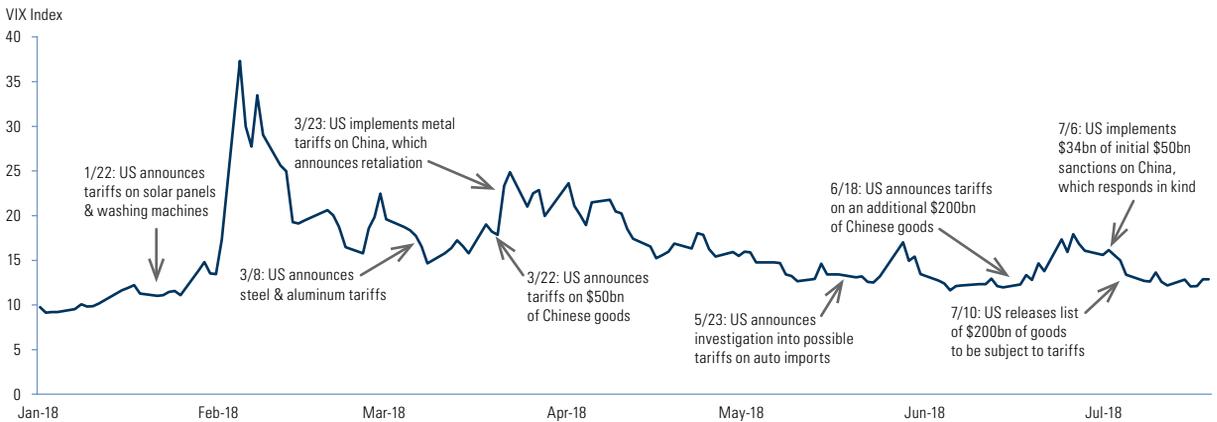
### Rising Geopolitical Tensions: The Trade Wars

Since March 2018, the US has announced a series of tariffs based on national security and intellectual property theft concerns targeting US allies and China that apply to over \$800 billion, or 35%, of US goods imports. If all the tariffs are implemented, the effective rate of US tariffs on imports would rise from its current level of 2.2% to around 6.0%, a level not seen since 1971.

Assessing the impact of the tariffs announced by the US and the retaliatory responses by China, Europe, Japan, Canada and Mexico on each country and region’s economy, currency and equity market is virtually impossible. This is because non-trade-related economic activities have also had effects, concurrent with these tariff announcements. For example, VIX has spiked on a few occasions after tariffs were announced or implemented (such as the steel, aluminum and auto imports under Section 232, and the intellectual-property-related products under Section 301), but

### Exhibit 32: VIX Index and Major Trade Policy Events

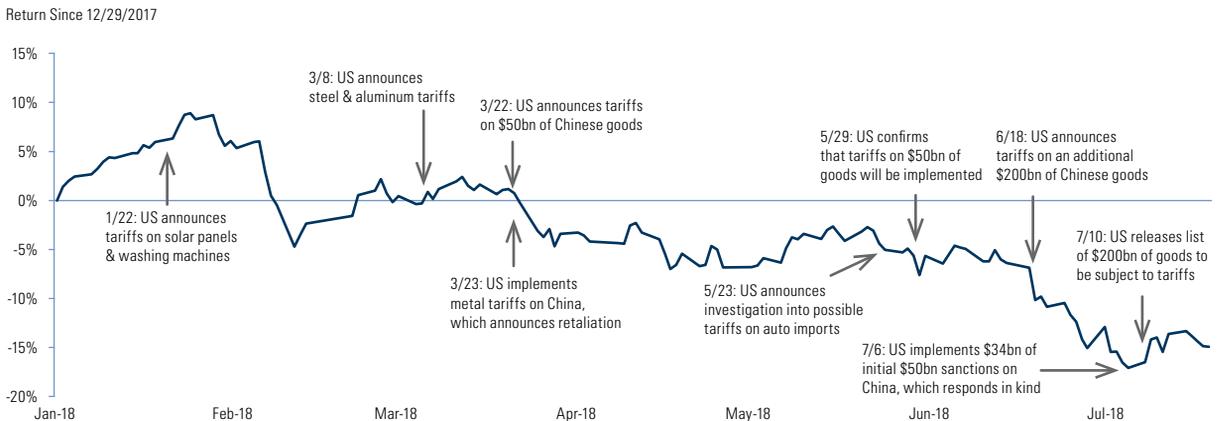
Trade actions taken by the US in 2018 have not led to a sustained increase in implied US equity volatility.



Data through July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

### Exhibit 33: CSI 300 Index Performance and Major Trade Policy Events

Chinese equities have declined more than 20% from their January highs.



Data through July 20, 2018.  
Source: Investment Strategy Group, Bloomberg.

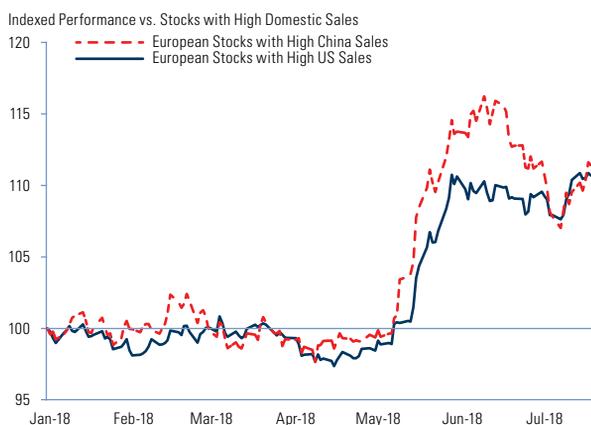
generally settled lower after a day or two once other more important economic news calmed the markets (see Exhibit 32).

In China, trade restrictions have had a more measurable impact, but do not completely explain financial market declines either. As shown in Exhibit 33, large-capitalization domestically listed stocks, as measured by the CSI 300 Index, have dropped more than 20% from their highs in early 2018. Some of the biggest moves coincided with the tariff announcements, such as the 3.8% drop on March

22–23, the 2.1% decline on May 30 and the 3.5% drop on June 18, when the US trade war rhetoric escalated to include tariffs on an additional \$200 billion of imports. However, this cumulative decline of more than 20% is also a reflection of China’s slowing economy as a result of the government’s effort to temper credit growth and reduce activities in the shadow banking sector. For example, much of the decline in Chinese equities in mid-June was attributable to weaker fixed asset investment and retail sales data releases. In fact, quarterly growth in

### Exhibit 34: Performance of European Equity Baskets by Sales Exposure

European stocks with high US and China sales have outperformed more domestic-facing firms.



Data through July 20, 2018.  
Source: Investment Strategy Group, Goldman Sachs Global Investment Research, Bloomberg.  
Past performance is no guarantee of future results

China is expected to slow significantly in the second half of this year relative to the first half. This being the case, the downdraft in Chinese equities is as much a reflection of slowing domestic growth rates as it is the trade wars.

It is also difficult to assess the overall impact of the trade wars when we examine the performance of baskets of stocks that should be most sensitive to trade wars. For example, baskets of European stocks with high sales to the US and China have outperformed European stocks with high domestic sales by 11% this year, as shown in Exhibit 34. Even more starkly, a basket created by our colleagues in GIR of US technology, media and telecommunications stocks with a high portion of imported components has actually outperformed the broader US information technology sector this year, implying that the threat of escalating trade wars has

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**The downdraft in Chinese equities is as much a reflection of slowing domestic growth rates as it is the trade wars.**

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### Exhibit 35: Mexican Peso Performance Since US Presidential Election

US trade actions have contributed to peso volatility.



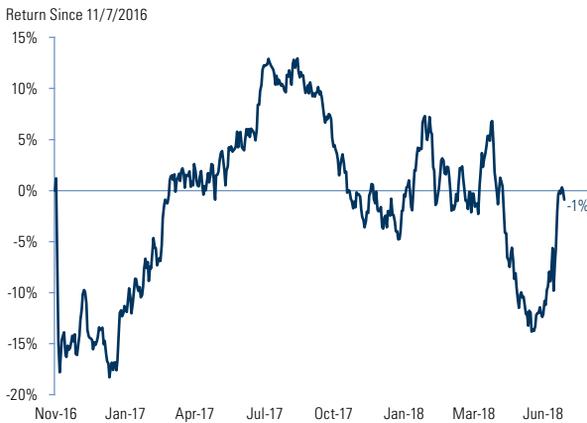
Data through July 20, 2018.  
Note: Showing the USD/MXN exchange rate.  
Source: Investment Strategy Group, Bloomberg.

not affected their performance. Yet, in contrast, US stocks with high international and China sales have lagged the broader S&P 500 in 2018, as have stocks of companies with high aluminum and steel input costs (also a target of recent US tariffs).

Another example of the uncertain impact of the Trump administration trade war can be seen in the performance of the Mexican currency and equity market (see Exhibits 35 and 36). After the US election in November 2016, the peso depreciated 20% in about two months, driven by concerns that President Trump could terminate the North American Free Trade Agreement (NAFTA) given his harsh rhetoric during the campaign.<sup>17</sup> The peso subsequently appreciated to pre-election levels in 2017, only to depreciate again by about 11% after the announcement of US steel and aluminum tariffs on March 8, 2018. Meanwhile, the Mexican equity market is roughly unchanged this year, registering a return of -0.5% in local-currency terms. Despite the threats of tariffs, the attacks on NAFTA and the election of a populist president on July 1, it is notable that the Mexican equity market has been relatively stable and the currency has appreciated about 3% thus far in 2018.

### Exhibit 36: Mexican Equity Returns Since US Presidential Election

Stocks in Mexico are roughly flat this year despite threats of US tariffs and attacks on NAFTA.



Data through July 20, 2018.  
Note: Showing MSCI Mexico Index returns.  
Source: Investment Strategy Group, Bloomberg.

The starkest impact of the trade wars is seen in the auto sector. The US auto sector has lagged the S&P 500 by 12.5% in 2018, and European auto stocks have lagged the Euro Stoxx 50 by 7.5% over the same period.

How should we interpret these mixed results?

First, we should note the irony of these trade actions. While the Trump administration is implementing these tariffs to reduce the trade



Stocks of auto companies have underperformed in 2018 given threats of US tariffs.

deficit, this goal may be offset by the fiscal stimulus. According to an IMF study, a positive fiscal shock of 1% of GDP widens the trade deficit by about 0.7% over the course of 10 quarters and boosts the US dollar by about 8% over six quarters.<sup>18</sup> Hence, the Trump administration’s tax reform and fiscal stimulus passed in 2017 and early 2018 are expected to widen the trade deficit of \$552 billion in 2017 by as much as \$60 billion. To provide some context, this figure is three times as large as the average annual increase in the US trade deficit since 2010. And notably, the trade deficit has already widened by \$21 billion in the first quarter of 2018 relative to the same period in 2017.

Second, given the complexity of the global supply chain, the extent of the slowdown resulting from the trade wars is highly uncertain.

Third, US policy toward China has become less accommodative and, as a result, we should expect US-China relations to be a greater source of market volatility in the future, even if trade tensions subside. As highlighted in our January 2016 *Insight* report, [Walled In: China’s Great Dilemma](#), the US policy has been one that “values China’s economic and political integration in the liberal international order,” according to geopolitical experts.<sup>19</sup> Yet those same experts recommended, as early as 2015, that the US shift its strategy toward “more muscular balancing and smarter engagement.”<sup>20</sup> Many US policymakers and business leaders share that sentiment.

It is worth noting that pro-trade economists correctly point out that the actual trade deficit with China is lower than the headlines indicate.<sup>21</sup> They argue that the \$375 billion figure for 2017 could be about one-third lower because China is assembling products using non-Chinese components, such as in the case of the Apple iPhone.

Fourth, the long-term estimates of the impact of the trade wars (or trade frictions or trade skirmishes—the nomenclature is immaterial) on global GDP is unknowable with any degree of precision. We do not know where



Deteriorating US-China trade relations should remain a source of market volatility.

the final tariffs—both US and retaliatory tariffs—will land. We also do not know how companies and consumers will adjust their behaviors, and importantly, we do not know whether financial conditions will tighten meaningfully in response to the trade wars. For example, a significant and sustained drop in US equity markets would have an impact on the United States' \$19 trillion economy equal to that of a 10% tariff on \$200 billion of Chinese imports—if not an even greater impact.

Given these uncertainties, estimates of the economic effects of tariffs vary considerably and are driven by different assumptions. Our colleagues in Global Investment Research estimate a 0.4% decline in US GDP if global tariffs are raised by 5% and US equity markets decline by 10%.<sup>22</sup> The IMF estimates



Odds of a US-North Korea military conflict have declined in light of diplomatic efforts.

US GDP could decline by 1% if the US imposes 10% additional tariffs on all imported goods.<sup>23</sup> The OECD estimates a decline of 2.2% if the US, China and Europe impose 10% tariffs on the rest of the world.<sup>24</sup> As long as the tariff wars are contained, these more significant drops will be avoided.

### **Rising Geopolitical Tensions:**

#### **North Korea and Iran**

The uncertainty of trade wars is mirrored in the uncertainty of US geopolitical relations with North Korea and Iran.

With respect to North Korea, the US has made its way from “fire and fury” on August 8, 2017,<sup>25</sup> to a broad goal of denuclearization of the Korean Peninsula at the June 12, 2018, summit between President Trump and North Korea's leader Kim Jong Un,<sup>26</sup> to North Korean accusations on July 8, 2018, of “gangster-like tactics” by the US and increasing “risk of war.”<sup>27</sup> There are no tangible commitments from North Korea regarding surrendering its nuclear and long-range missile program yet, and it seems unlikely that Secretary of State Mike Pompeo and his team will easily settle for no real progress on denuclearization. Tensions are bound to increase again in the next year or so after midterm elections. Ultimately, Eurasia Group believes that the US will recognize North Korea as a de facto nuclear state.<sup>28</sup>

With respect to Iran, President Trump has opted for a far more aggressive approach by withdrawing from the Iranian nuclear agreement (formally known as the Joint Comprehensive Plan of Action), imposing sanctions on Iran and threatening secondary sanctions on companies that do business with Iran. His administration has stated that it wants “zero” imports of Iranian oil by all countries.<sup>29</sup> Given that China and India import around 45% of Iran's oil exports, it is hard to imagine that such a target will be achieved, especially if

China faces reduced supply from Libya and Venezuela and if India requests the same waivers it had under the Obama administration. On the other hand, given rising pressures on trade with the US, China may opt to accommodate the US to some extent by reducing its oil imports from Iran as part of possible trade negotiations.

The Trump administration will not want to see oil prices spike as they did in the 1970s after the Arab oil embargo and again after the Iran-Iraq war following the Iranian Revolution. Both oil-price spikes helped trigger US recessions, as shown in Exhibit 37. Therefore, it may not be prudent US policy to target eliminating all 2.5 million barrels a day of Iranian exports, since there is currently not enough sustainable excess capacity elsewhere to offset it (see Exhibit 38).

The path forward with Iran is fraught with danger. The key question is whether Iran will decide to negotiate with the US. Sanctions and pressure brought Iran (in 2015) and North Korea (in 2018) to the negotiating table, but North Korea



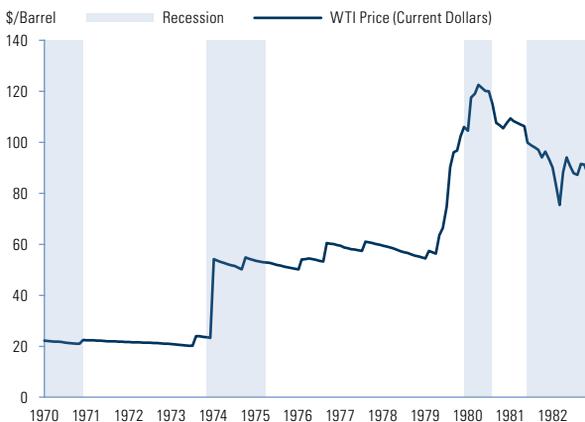
The US wants allies to cut their Iranian oil imports to zero by November.

had the strong arm of China to influence leader Kim Jong Un. In both of those instances, the US had also marshaled broad multinational support. Getting such a coalition to isolate Iran to the same extent is unlikely, given US tariffs targeted against China and European industries as well as the United States' unilateral abrogation of the nuclear deal.

While it is impossible to predict the outcome of this confrontation, most analysts agree with former Defense Secretary Ash Carter that "US-Iran

### Exhibit 37: Oil Prices and US Recessions

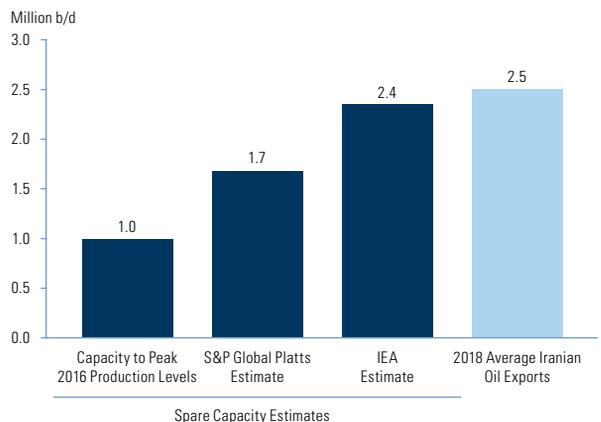
Spikes in oil prices contributed to US recessions in the 1970s and 1980s.



Data through 1982.  
Source: Investment Strategy Group, St. Louis Federal Reserve, BLS, Bloomberg.

### Exhibit 38: Middle Eastern OPEC Countries' Spare Oil Production Capacity Estimates

There is limited spare capacity to offset potential Iranian oil losses.



Data as of June 2018.  
Note: Spare capacity estimates exclude Iran.  
Source: Investment Strategy Group, S&P Global Platts, IEA, Bloomberg.

relations are set to deteriorate in 2018.”<sup>30</sup> However, another experienced policymaker, Zalmay Khalilzad, US ambassador to Afghanistan, Iraq and the United Nations under the George W. Bush administration, charted a possible course of action in a June 13, 2018, [article](#) in the *Washington Post* titled “Why Iran Will Choose to Negotiate With Trump,”<sup>31</sup> in which he offered insights into why Iranians should respond positively to this administration’s willingness to negotiate with them. Some reform-minded Iranians share this view. Faezeh Hashemi Rafsanjani, whose late father was president of Iran and considered a “pillar of the Islamic Republic,”<sup>32</sup> has publicly stated that “we should not act passively and [instead] enter into negotiations with the US soon...before the situation gets worse.”<sup>33</sup>

While pursuing this course of action is probably least destabilizing for Iran, the region, global economies and the financial markets, it is virtually impossible for the Investment Strategy Group to assign a probability to the likelihood of Iran pursuing such a course.

We also cannot begin to assess this administration’s policy toward Iran with any degree of confidence. If we use the Trump administration’s unexpected statements and actions in the G-7 Summit in Quebec in early June<sup>34</sup> and in the NATO Summit in Brussels in mid-July<sup>35</sup> as a guide, we would not expect successful negotiations to be likely. On the other hand, if we use the joint press conference with President Vladimir Putin in Helsinki on July 16 as a guide, when President Trump said that “diplomacy and engagement is preferable to conflict and hostility,”<sup>36</sup> then we can be optimistic.

The risks to our clients’ portfolios come from higher oil prices in the short term and the cost of greater military engagement in the Middle East in the long term. All the military engagements in the region have cost the US over \$4 trillion through fiscal year

2017.<sup>37</sup> We can only assume that further military engagement with a more significant foe will lead to greater market volatility.

### **The Populist Elections in 2018**

In our 2018 *Outlook*, we stated that, despite the failure of extreme candidates such as Geert Wilders of the Netherlands and Marine Le Pen of France in 2017, it was premature to ring the death knell of populism. We stated that not only have the factors that had led to the emergence of populism persisted, but some have grown in importance: globalization, increased income inequality, fear of immigrants, and job insecurity as a result of technological progress and automation. Our view is unchanged, and recent election results in Italy and Mexico support its validity.

In Italy, the Five Star Movement and Northern League formed a coalition government after prolonged negotiations. However, many geopolitical experts believe that new elections are inevitable over the next six to 18 months, since there is infighting among the coalition partners and their respective bases have significant ideological differences.<sup>38</sup> What these two parties have in common is a questioning of the value of Italy’s membership in the Eurozone and proposals to loosen fiscal policy that would breach the European Union’s fiscal deficit limit of 3% of GDP. While Italy has moved out of the headlines, it is only a matter of time before budgetary and



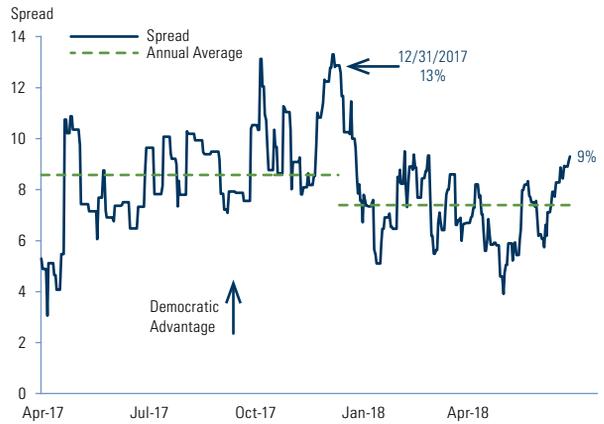
We expect that populism will continue to rise, as seen in election results in Italy.



Polls currently point to a divided US government after the 2018 midterm elections.

**Exhibit 39: Generic Congressional Ballot Polling**

The Democratic polling advantage has narrowed in 2018.



Data through July 20, 2018.  
Source: Investment Strategy Group, FiveThirtyEight.

immigration policy clashes with the European Commission lead to renewed market volatility in Italy and the broader Eurozone.

In Mexico, on July 1, populist candidate Andrés Manuel López Obrador won the presidential election on a campaign of eliminating corruption, raising wages and re-nationalizing the oil and gas industry. His party, Morena, and its two coalition partners have a 53% majority in the Senate and a 62% majority in the Chamber of Deputies. It is quite possible that this administration will abandon fiscal discipline and market reforms,<sup>39</sup> which would be a drag on financial assets.

We believe that populism in developed and emerging market countries will continue to rise. In May 2018, the Center for American Progress and the American Enterprise Institute released two reports under a joint project called “Defending

Democracy and Underwriting the Transatlantic Partnership.” The reports, titled “Drivers of Authoritarian Populism in the United States”<sup>40</sup> and “Europe’s Populist Challenge,”<sup>41</sup> examine political, economic, cultural, racial and immigration factors in the US and in Europe. The authors conclude that the “threat of authoritarian populism will not recede unless a new generation offers a credible agenda for improving people’s lives that is more appealing to the public than the populist alternative.”<sup>42</sup>

It will take years, if not decades, to address the concerns of populist supporters—whether in the US, Europe or emerging market countries. Hence, authoritarian populist regimes, and the economic policy uncertainty and market volatility they bring, will be the mainstay of the global backdrop for the foreseeable future. In our view, the only effective

investment strategy for our clients is to make sure they have the right strategic asset allocation to withstand unforeseen shifts and shocks.

**Authoritarian populist regimes, and the economic policy uncertainty and market volatility they bring, will be the mainstay of the global backdrop for the foreseeable future.**

**Midterm Elections in the US**

Given the backdrop of what the Center for American Progress and the American Enterprise Institute—which represent opposite ends of the political spectrum—

## Exhibit 40: US Asset Class Performance and Government Composition: 1979–2018

Large-cap returns have been weaker in periods of divided government, but the results are not statistically significant.

	Large Cap Equity	Small Cap Equity	Aggregate Bonds	1-Month T-Bill
<b>Annualized Performance</b>				
Full Period	12.4%	13.1%	7.3%	4.4%
Divided Government (336 months)	10.8%	9.5%	8.8%	4.8%
United Government (138 months)	16.4%	21.8%	3.6%	3.4%
<b>Divided vs. United Government</b>				
Mean	-5.6%	-12.2%	5.2%	1.4%
Significance	75%	94%	99%	> 99%

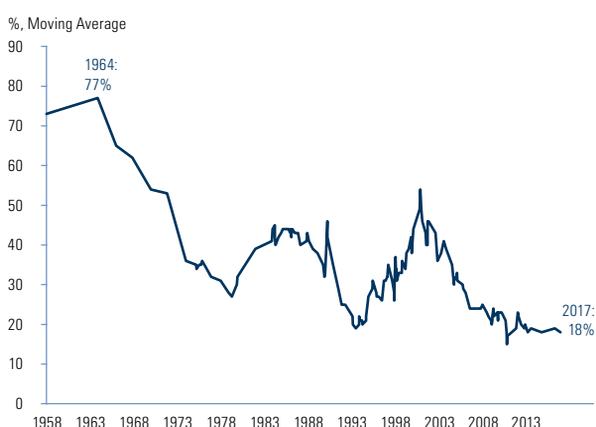
Data through June 30, 2018.

Note: United government occurs when the presidency and both houses of Congress are controlled by the same political party.

Source: Investment Strategy Group, Bloomberg, FTSE Russell.

## Exhibit 41: Public Trust in US Government

The electorate has grown increasingly discontent with the government.



Data through December 31, 2017.

Note: Respondents who trust the government always or most of the time.

Source: Investment Strategy Group, Pew Research Center, National Election Studies, Gallup, ABC/Washington Post, CBS/New York Times, CNN.

have called “authoritarian populism” in the United States, midterm elections take on greater significance than usual. As shown in Exhibit 39, Democrats had a 13-point advantage at the end of 2017, but that advantage has declined to nine points. Based on polling data, forecasters assign a 60% probability that the Democrats will win a majority in the House of Representatives, but only a 30% probability that they will win the Senate. However, as our clients know, polling data this early in the cycle does not reliably reflect the final outcome. In the 2010 midterm elections, Republicans had a lead in the polls for most of the year and ended up with a seven-point advantage in the actual elections, whereas in 2014, the polls

showed a very close race but Republicans won with a six-point advantage.

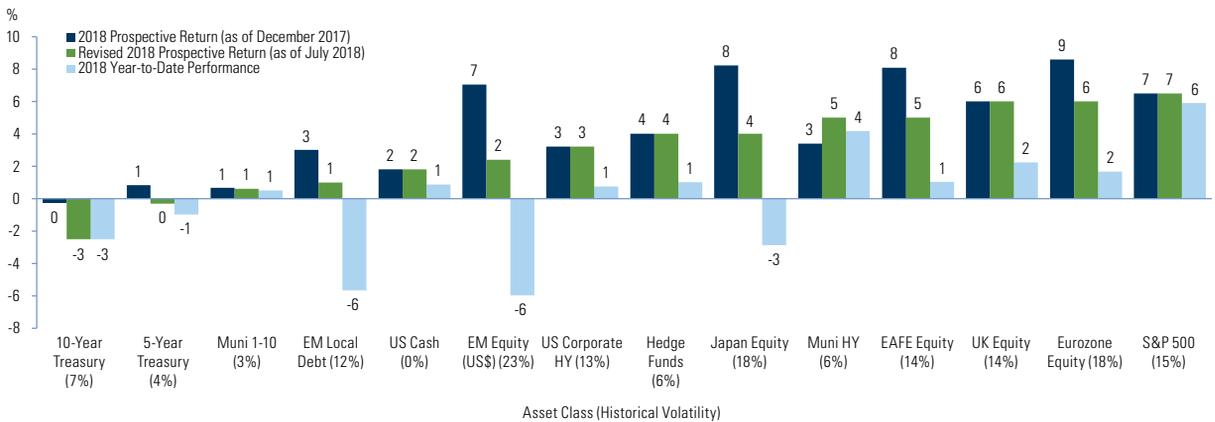
It is not clear whether a divided government is unfavorable for US equities. As shown in Exhibit 40, US equities, both large- and small-capitalization stocks, have lagged when the US government has been divided between Republicans and Democrats, compared with periods of united government. While the results are statistically significant for small-capitalization stocks, that is not the case for large-capitalization stocks. Hence, even if we knew the outcome of the elections, we would not adjust our tactical asset allocation based solely on that.

It is helpful to keep in mind that the US electorate is generally discontent with the government. As shown in Exhibit 41, trust in the government has declined from a peak level of 77% in October 1964 to 18% in December 2017, according to the Pew Research Center. One can better understand these numbers by examining real income growth (including cash transfer payments such as unemployment benefits) by income cohorts. The bottom quintile in the US has not yet earned as

**Forecasters assign a 60% probability that the Democrats will win a majority in the House of Representatives, but only a 30% probability that they will win the Senate.**

## Exhibit 42: ISG Prospective Total Returns

Our expected returns are below historical realized averages.



Data as of July 20, 2018.

Note: Historical volatility is measured over the current regime of low and stable inflation, beginning in April 1996.

Source: Investment Strategy Group. See endnote 43 for list of indices used.

Forecasts have been generated by ISG for informational purposes as of the date of this publication. There can be no assurance the forecasts will be achieved. Indices are gross of fees and returns can be significantly varied.

much as it did in 2001 after adjusting for inflation, even after the second-longest expansion in US history. The second quintile did not reach 2001 levels of income until 2016. Unless income growth rates improve for the lower quintiles over time, various forms of populism from the left or the right will be part of the political landscape for years.

To summarize our review of the unsteady undertow, geopolitical tensions have increased substantially across most regions, with the exception of North Korea, where they have temporarily eased. In our base case, the unsteady undertow will not derail US growth or the US equity markets. We are more concerned about the impact of slower growth in China, the weaknesses in emerging markets, and the continued domestic and intra-regional tensions in the Eurozone, where populism is likely to take a greater toll on non-US markets.

As a result, we have revised our expected returns for 2018, as shown in Exhibit 42. We continue to recommend a strategic overweight to US equities, implying an underweight to EAFE and emerging market equities. Tactically, we maintain a greater allocation to US assets through US banks, US high yield bonds, US master limited partnerships and the US dollar, and a smaller allocation to EAFE equities.

## Key Takeaways

The US economic expansion and equity bull market have each entered their 10th year. On a global basis, all 45 countries tracked by the Organisation for Economic Co-operation and Development have continue to generate positive economic growth. Yet the tug-of-war between what we had identified in our January 2018 *Outlook* as the steady factors supporting the financial markets and the unsteady factors hampering economic growth has intensified.

As we explain in our midyear update, we expect this tug-of-war to go on unabated. Given the tremendous uncertainty that emanates from the unsteady undertow, we believe that our clients should review their strategic asset allocation to make sure it is appropriate for their risk tolerance in these uncertain times.

We present seven key takeaways from our midyear *Outlook*:

- The steady factors, including broad-based economic growth, strong corporate earnings, and contained credit growth, continue to improve.
- Inflation has remained low and stable, and the recent increase in core inflation will not move us out of the current low and stable regime.
- While equity valuations remain high, they are supported by steady earnings growth and low and stable inflation.
- We assign a 10% probability to a recession in the US in the next 12 months, and we do not believe that the flattening of the yield curve implies an imminent recession.
- The unsteady undertow has strengthened as geopolitical tensions have increased substantially across most regions (with the exception of North Korea, where they have temporarily eased) and trade wars have escalated.

- 
- While we don't think the unsteady undertow will derail US growth and US equity markets, we are concerned about the slower growth in China, the weakness in emerging markets, and the continued domestic and inter-regional tensions in the Eurozone, where populism is likely to take a greater toll on non-US markets.
  - We have lowered our 2018 expected returns for emerging market and Eurozone assets while our US equity forecast remains unchanged. We have also lowered our expected returns for US Treasuries while our municipal bond forecast remains unchanged (see Exhibit 42). As a result of these shifts, we have slightly lowered our expected return for a moderate-risk, well-diversified taxable portfolio, from 4.5% to 4.0% in 2018.

## Abbreviations Glossary

**b/d:** barrels per day

**BLS:** [US] Bureau of Labor Statistics

**[Shiller] CAPE:** cyclically adjusted price-to-earnings ratio

**CBO:** Congressional Budget Office

**CPI:** consumer price index

**CRFB:** Committee for a Responsible Federal Budget

**EAFE:** Europe, Australasia and the Far East

**EM:** emerging market

**EPU:** Economic Policy Uncertainty

**FAANGs:** Facebook, Amazon, Apple, Netflix and Google

**FANGMAN:** Facebook, Apple, Netflix, Google, Microsoft, Amazon and Nvidia

**G-7:** Group of Seven

**GDP:** gross domestic product

**GIR:** [Goldman Sachs] Global Investment Research

**GTI:** Global Terrorism Index

**HY:** High yield.

**IEA:** International Energy Agency

**IMF:** International Monetary Fund

**ISG:** [Goldman Sachs] Investment Strategy Group

**LEI:** [Conference Board] Leading Economic Index

**MSCI:** Morgan Stanley Capital International

**NAFTA:** North American Free Trade Agreement

**OECD:** Organisation for Economic Co-operation and Development

**OMB:** [US] Office of Management and Budget

**OPEC:** Organization of the Petroleum Exporting Countries

**pp:** percentage point

**PPP:** purchasing power parity

**S&P:** Standard & Poor's

**TCJA:** Tax Cuts and Jobs Act

**THAAD:** Terminal High-Altitude Area Defense

**TTM:** Trailing 12 Months

**VIX:** CBOE Volatility Index

**WTI:** West Texas Intermediate

**YoY:** year-over-year

## Notes

1. Peter Baker and Choe Sang-Hun, "Trump Threatens 'Fire and Fury' Against North Korea if It Endangers U.S." *New York Times*, August 8, 2017.
2. Barbara Demick, "Escalating Tension Has Experts Simulating a New Korean War, and the Scenarios Are Sobering," *Los Angeles Times*, September 25, 2017.
3. Ian Bremmer, "eg update," Eurasia Group, June 18, 2018.
4. The Investment Strategy Group's proprietary recession model is an average of several models that incorporate economic data, survey data such as purchasing managers indices and indicators such as the Conference Board Leading Economic Index.
5. Joshua V. Rosenberg and Samuel Maurer, "Signal or Noise? Implications of the Term Premium for Recession Forecasting," Federal Reserve Bank of New York, July 2008.
6. Peter Johansson and Andrew Meldrum, "Predicting Recession Probabilities Using the Slope of the Yield Curve," Board of Governors of the Federal Reserve System, March 2018.
7. Eric Engstrom and Steven Sharpe, "(Don't Fear) The Yield Curve," Board of Governors of the Federal Reserve System, June 2018.
8. Daan Struyven, "US Daily: Q&A On Oil Prices and the US Economy," Goldman Sachs Global Investment Research, May 15, 2018.
9. Jeremy C. Stein, "Overheating in Credit Markets: Origins, Measurement, and Policy Responses," speech at the "Restoring Household Financial Stability after the Great Recession: Why Household Balance Sheets Matter" research symposium, February 7, 2013.
10. Rochester Cahan and Yu Bai, "Stock Selection: Research and Results May 2018—Debtors' Prison Part II: Who Does Time in a Recession?" Empirical Research Partners, May 29, 2018.
11. Federal Reserve Bank of New York. "Quarterly Report on Household Debt and Credit," May 2018.
12. Alec Phillips and Blake Taylor, "US Economics Analyst: What's Wrong with Fiscal Policy?" Goldman Sachs Global Investment Research, February 18, 2018.
13. Ibid.
14. Alec Phillips and Blake Taylor, "US Economics Analyst: The Budget Deficit: What's the Worst That Could Happen?" Goldman Sachs Global Investment Research, May 20, 2018.
15. Scott R. Baker, Nicholas Bloom and Steven J. Davis, "Measuring Economic Policy Uncertainty," National Bureau of Economic Research, October 2015. [www.policyuncertainty.com](http://www.policyuncertainty.com).
16. Based on data from the National Federation of Independent Business.
17. Maggie Severns, "Trump Pins NAFTA, 'Worst Trade Deal Ever,' on Clinton," *Politico*, September 26, 2016.
18. Adina Popescu and Ipppei Shibata, "Spillovers from US Government Spending Shocks," International Monetary Fund, October 2017.
19. Robert D. Blackwill and Ashley J. Tellis, "Revising U.S. Grand Strategy Toward China," Council on Foreign Relations, March 2015.
20. Aaron L. Friedberg, "How Should the US Respond to China's Rise?" *Gavekal Dragonomics*, November 2015.
21. David Hoffman and Erik Lundh, "China Center Research Brief: 'Huge' Trade Deficit Smaller than Thought," Conference Board, April 2018.
22. Sven Jari Stehn, Nicholas Fawcett, Manav Chaudhary and Jan Hatzius, "Trade Wars: The Big Picture," Goldman Sachs Global Investment Research, March 11, 2018.
23. Derek Anderson, Benjamin Hunt, Mika Kortelainen, Michael Kumhof, Douglas Laxton, Dirk Muir, Susanna Mursula and Stephen Snudden, "Getting to Know GIMF: The Simulation Properties of the Global Integrated Monetary and Fiscal Model," International Monetary Fund, February 2013.
24. Organisation for Economic Co-operation and Development, "OECD Economic Outlook," Volume 2016, Issue 2, December 2016.
25. Peter Baker and Choe Sang-Hun, "Trump Threatens 'Fire and Fury' Against North Korea if It Endangers U.S." *New York Times*, August 8, 2017.
26. White House, "Joint Statement of President Donald J. Trump of the United States of America and Chairman Kim Jong Un of the Democratic People's Republic of Korea at the Singapore Summit," June 12, 2018.
27. Jessica Donati and Andrew Jeong, "North Korean Nuclear Talks Are Thrown Off Balance as Accounts by U.S. and Pyongyang Clash," *Wall Street Journal*, July 7, 2018.
28. Scott Seaman, Todd Mariano and Michael Hirson, "Outcome of Pompeo Visit Does Not Increase Danger of Near-term Collapse of Engagement," Eurasia Group, July 8, 2018.
29. Lesley Wroughton and Doina Chiacu, "U.S. Pushes Allies to Halt Iran Oil Imports, Waivers Unlikely," Reuters, June 26, 2018.
30. The Honorable Ashton Carter (former United States Secretary of Defense), in a conference call with the Investment Strategy Group, January 16, 2018.
31. Zalmay Khalilzad, "Why Iran Will Choose to Negotiate With Trump," *Washington Post*, June 13, 2018.
32. Najmeh Bozorgmehr, "Leading Iranian Reformer Warns of Crisis Unless Republic Acts," *Financial Times*, June 24, 2018.
33. Ibid.
34. Roberta Rampton and Jean-Baptiste Vey, "Trump Torpedoes G7 Effort to Ease Trade Spat, Threatens Auto Tariffs," Reuters, June 9, 2018.
35. Valentina Pop, Laurence Norman and Robert Wall, "Trump Unsettles NATO Allies With Demands as He Backs Alliance," *Wall Street Journal*, July 12, 2018.
36. White House, "Remarks by President Trump and President Putin of the Russian Federation in Joint Press Conference," July 16, 2018.
37. Neta C. Crawford, "United States Budgetary Costs of Post-9/11 Wars Through FY2018: A Summary of the \$5.6 Trillion in Costs for the US Wars in Iraq, Syria, Afghanistan and Pakistan, and Post-9/11 Veterans Care and Homeland Security," Brown University, November 2017.
38. Federico Santi and Mujtaba Rahman, "Italy's Day of Reckoning Has Merely Been Postponed," Eurasia Group, June 1, 2018.
39. Daniel Kerner, Carlos Petersen and Ana Abad, "Lopez Obrador's Agenda Will Become More Negative for Investors Over Time," Eurasia Group, July 16, 2018.
40. Dalibor Rohac, Liz Kennedy and Vikram Singh, "Drivers of Authoritarian Populism in the United States," Center for American Progress and American Enterprise Institute, May 10, 2018.
41. Matt Browne, Dalibor Rohac and Carolyn Kenney, "Europe's Populist Challenge," Center for American Progress and American Enterprise Institute, May 10, 2018.
42. Center for American Progress, "CAP and AEI Team Up to Defend Democracy and the Transatlantic Partnership," May 10, 2018.
43. These forecasts have been generated by ISG for informational purposes as of the date of this publication. Total return targets are based on ISG's framework, which incorporates historical valuation, fundamental and technical analysis. Dividend yield assumptions are based on each index's trailing 12-month dividend yield. They are based on proprietary models and there can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this publication. The following indices were used for each asset class: Barclays Municipal 1-10Y Blend (Muni 1-10); BAML US T-Bills 0-3M Index (Cash); JPM Government Bond Index Emerging Markets Global Diversified (Emerging Market Local Debt); HFRI Fund of Funds Composite (Hedge Funds); MSCI EM US\$ Index (Emerging Market Equity); Barclays US Corporate High Yield (US High Yield); Barclays US High Yield Loans (Bank Loans); MSCI UK Local Index (UK Equities); MSCI EAFE Local Index (EAFE Equity); S&P Banks Select Industry Index (US Banks); TOPIX Index (Japan Equity); Barclays High Yield Municipal Bond Index (Muni High Yield).

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