We expect the following in 2019:

- The Fed to follow its December rate rise with three to four additional hikes
- U.S. 10-year Treasury yield at 3.0% by the end of 2019
- An inversion of the U.S. yield curve that will create recession risks for 2020
- U.S. gross domestic product (GDP) growth of 2.0% for 2019
- Volatile equity markets that deliver mid-single-digit returns; better potential in Europe and Japan than the U.S.
- U.S. dollar to have modest upside potential; Japanese yen to be the strongest major currency

Late cycle, but not end of cycle

2018 has been a challenging year in most asset classes as investors adjusted to trade wars, China growth uncertainties, unstable European politics and a succession of Fed rate hikes. These issues will continue into 2019, with the added complexity that GDP and profit growth is likely to be slower in the U.S., while inflation pressures will build.

The key issue is that the end of the cycle is getting closer. The current U.S. expansion will become the longest on record if it continues to July 2019, which seems likely.

The danger zone for a U.S. recession is 2020. The yield curve will probably invert during 2019 if, as we expect, the Fed raises interest rates another three to four times. The chart below shows that every
recession in the past 50 years has been preceded by the 10-year U.S. Treasury yield falling below the two-year yield. An inverted curve is a powerful indicator because the bond market is signaling that the Fed will soon move to reduce interest rates.

Bear markets don’t normally start until around six months before a recession, so equity markets still have some potential upside. Monitoring recession risks will be critical, however, to avoid buying a dip that turns into a prolonged slide.

### Spread between U.S. 10-year & 2-year bonds

![Chart showing the spread between U.S. 10-year and 2-year bonds from 1965 to 2015. A bar at 2001 indicates recession.

Source: Thomson Reuters Datastream, as of November 22, 2018.

### Making America great…until 2020

An important reason for the strength in the U.S. economy and corporate earnings in 2018 has been the Trump administration’s fiscal stimulus.

The chart below shows the U.S. unemployment rate and the government fiscal deficit as a share of GDP. High unemployment usually means a large deficit as the government stimulates the economy. The deficit is small when the unemployment rate is low. By adding fiscal stimulus when the unemployment rate is below 4%, the Trump administration is doing something that has never been done before. The International Monetary Fund (IMF) forecasts the fiscal deficit will reach 5.0% of GDP in 2019, which would be unusually large for an economy beyond full capacity.
The peak economic boost from the fiscal stimulus will be seen in late 2018 and early 2019, but the stimulus becomes a drag on the economy in 2020. The mid-term election results, with the Republican party losing control of the House of Representatives, likely means the Trump administration will be unable to push through more tax cuts.

**A rotation away from the U.S.**

The story of 2018 was U.S. growth leadership relative to other regions, in large part because of the Trump stimulus. This helped U.S. equities outperform other markets and the U.S. dollar to appreciate.

Japan and Europe disappointed in 2018. A succession of natural disasters (earthquake, typhoon and floods) caused Japan’s GDP growth to be negative in Q3, while we now know Europe’s economy was unsustainably strong at the end of 2017, making a slowdown likely. The problems in Italy, European bank exposure to Turkey, and Europe’s trade links to China meant it underperformed industry consensus forecasts. The most recent issue for Europe was the implementation of new emissions standards for motor vehicles. This caused a contraction in Q3 German GDP as manufacturing output plunged.
Both Japan and Europe should rebound from these temporary setbacks. For Japan, rising household incomes from jobs and wage growth, and strong business confidence mean above-trend growth is still a good bet. Regarding Europe, Italy and Brexit are ongoing headwinds for the region, but credit growth is picking up and financial conditions remain broadly supportive of growth.

Japan and Europe aren’t likely to grow faster than the U.S. in 2019, but we believe they have potential to outperform pessimistic expectations.

China’s stimulus won’t be that stimulating

China’s economy is on track for GDP growth of around 6.5% in 2018, its slowest since 1990. It faces headwinds from high indebtedness, slowing property construction, poor demographics and the trade war with the United States.

China responded to its last two downturns, in 2009 and 2015, with massive fiscal and credit stimulus. These efforts came at a price: China’s debt-to-GDP ratio rose from 140% in 2008 to over 250% at present, creating concerns about financial stability.

Stimulus is underway, but it is unlikely to be as large and effective as previously. It should, however, be enough to keep growth near 6% for 2019.

Asset class preferences

Our cycle, value and sentiment investment process results in an overall neutral view on global equities.

- We have an underweight preference for U.S. equities, mostly driven by expensive valuation. The cycle is broadly neutral but is likely to be under downward pressure later in 2019. The sell-off in late 2018 has triggered some contrarian oversold signals, so there is scope for a tactical bounce.
- We’re more positive on non-U.S. developed equities. Valuation in Japan and Europe is reasonable, and the cycle should be a modest tailwind given that we believe industry consensus expectations are too pessimistic.
- We like the value offered by emerging markets equities, but the threat of trade wars, China slowing, and further U.S. dollar strength keeps us at a neutral allocation. A stronger contrarian signal that investors are turning negative on EM would be a reason to increase allocations.
- High yield credit is expensive and losing cycle support, as is typical this late in the cycle, when profit growth slows and there are concerns about defaults.
- For government bonds, we like the value offered by U.S. Treasuries. Our models give a fair-value yield of 2.7% for the U.S. 10-year bond. German, Japanese and U.K. bonds are very expensive, with yields well below fair value. The cycle is a headwind for all bond markets as inflation pressures build and central banks tighten further — such as the Fed and Bank of England (BOE) — or move away from extreme stimulus — such as the European Central Bank (ECB) and Bank of Japan (BOJ.)
- We like real assets. Real Estate Investment Trusts (REITs) are slightly cheap, while Global Listed Infrastructure (GLI) and Commodities are around fair value. Commodities typically benefit from late-cycle support as inflation pressures build. We expect GLI will benefit from its European focus as the region rebounds. Rising Treasury yields, however, are a headwind for REITs.
The yen is our preferred currency. It’s significantly undervalued, getting cycle support as the BOJ becomes less dovish, and it has contrarian sentiment support from extreme short positions in the market. The euro and British sterling appear undervalued as we move into 2019. The recovery in European economic indicators should support the euro. Sterling will be volatile around the Brexit negotiations but should rebound if a deal is agreed with Europe. It has more upside potential than the euro.

“Bear markets don’t normally start until around six months before a recession, so equity markets still have some potential upside. Monitoring recession risks will be critical, however, to avoid buying a dip that turns into a prolonged slide.”

Andrew Pease
GLOBAL HEAD OF INVESTMENT STRATEGY
The view from the summit

Summiting a mountain can be an awesome experience, particularly on the way up when climbers are more inclined to pull out a camera for a photo or savor the view with a snack break. On descent, though, the mood tends to change if the climber feels exhausted, behind schedule and eager for the downward move to end. The challenge in mountain climbing, as in finance, is to remain vigilant throughout, particularly on the way down when accidents are much more likely to occur.

Writing this outlook at the end of 2018, it feels very much as though we are at the summit of the current U.S. expansion. Real GDP growth in the middle quarters of 2018 logged in north of 3% -- roughly double our estimate of the U.S. economy’s long-term potential. Earnings growth for the S&P 500® Index has been 25% or higher in every quarter this year – a hair-raising pace usually only seen in the bounce out of recessions. And the U.S. Bureau of Labor Statistics shows the unemployment rate stands at a 49-year low. U.S. fundamentals are unequivocally strong right now. The problem is that we think this is as good as it gets for the cycle.

The 2018 midterm elections resulted in a gridlocked Congress. And, given the polarization of U.S. politics today, that outcome all but guarantees no new material tax cuts or spending packages are likely to be enacted through 2020. Furthermore, members of the Federal Reserve’s Board of Governors – while they’re not there yet – are talking about the need to transition monetary policy into
a restrictive setting to ensure the U.S. economy doesn’t overheat. By our estimates, this means that U.S. real GDP growth should mechanically slow from 3% in 2018 to around 2% next year. This creasing of domestic economic activity levels, the punitive base effects from the corporate tax cuts, and accelerating input costs point to an even sharper slowing in U.S. earnings growth from 25% to 8% in 2019.

What we are left to assess is the impact of the slowdown on asset prices. The good news is that the market has already started to do some of the heavy lifting for us. The volatility that we saw in October and November was very much a re-rating of the outlook. Over the last month, industry consensus earnings growth estimates for the S&P 500 Index in 2019 have been marked down from 10.5% to 9%. Those downgrades have been particularly concentrated across mega-cap U.S. technology stocks.

<table>
<thead>
<tr>
<th>Stock</th>
<th>2019 earnings growth: industry consensus</th>
<th>Change in industry consensus estimate: October 15, 2018 to November 19, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>9.9%</td>
<td>-6.4%</td>
</tr>
<tr>
<td>Amazon</td>
<td>34.6%</td>
<td>-11.8%</td>
</tr>
<tr>
<td>Microsoft</td>
<td>13.3%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Facebook</td>
<td>0.9%</td>
<td>-15.1%</td>
</tr>
<tr>
<td>JP Morgan</td>
<td>8.6%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Johnson &amp; Johnson</td>
<td>5.8%</td>
<td>-0.0%</td>
</tr>
<tr>
<td>Exxon</td>
<td>21.3%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Alphabet</td>
<td>12.5%</td>
<td>-8.4%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>12.5%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Walmart</td>
<td>-2.5%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Netflix</td>
<td>57.5%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>9.0%</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

Source: Thomson Reuters Datastream, as of November 19, 2018. The Institutional Brokers’ Estimate System (IBES) is a database that gathers and compiles the different estimates made by stock analysts on the future earnings for the majority of U.S. publicly traded companies.

We view the recent selloff more as a healthy retrenchment in investor sentiment than being indicative of an imminent collapse in the U.S. economy. For example, the downgrades to Apple’s stock in the fourth quarter appear to be driven by concerns about the order book for their latest model of iPhones. These are BIG businesses, but their problems appear idiosyncratic in nature (for now). We also see the U.S. and global consumer in a robust position as 2018 ends with strong income growth, declining unemployment rates and confidence. However, we’ll remain vigilant.

We see greater downside risk to the macro outlook as we peer into the early part of 2020. By then our expectation is that the yield curve will have already inverted, the Fed will have transitioned its monetary policy to a restrictive setting, and the tailwinds from tax cuts and increased government spending will have been fully exhausted. Coupled with what are still expensive valuations in U.S. equities, we are operating as risk managers rather than risk takers. Over the last 50 years, U.S.
equities have never peaked more than 13 months before an economic recession. If our timing is roughly right in terms of when those macro vulnerabilities manifest, it’s still too early for the equity market to have peaked. As such the path of least resistance looks higher. Still, we’ve entered a very risky phase of the business cycle.

Regarding interest rate markets, we feel quite confident the Fed will keep hiking in the face of recent market turbulence, particularly since its dual mandate of full employment and price stability has effectively been achieved. For a central banker, that means it’s time to get interest rates back to normal levels. And if our forecast for gradually accelerating inflationary pressures is right, it will also be time to take the punch bowl away. We forecast a rate hike in December 2018 and three to four hikes in 2019. Fixed income markets have turned more pessimistic in recent weeks. As such our Fed call leaves us with a bias for a flatter curve and modestly higher rates tactically. However, with recession risks lurking in 2020, our 12-month ahead forecast of the U.S. Treasury yield is still hovering around 3% -- and it’s likely to be a bumpy journey to that target.

**Strategy outlook**

- **Cycle:** Neutral. While current economic and earnings growth rates are strong, we look for a sharp deceleration in 2019 as fiscal stimulus fades away. We are encouraged that industry consensus expectations have started to move in this direction. But this is not the stage of the cycle to be taking big bets on U.S. equities.
- **Valuation:** Very expensive. We’ve upgraded our valuation assessment by a notch with the selloff in October and November. But assuming a mean reversion lower in corporate profit margins over the next 10 years, our risk premium estimates for the S&P 500 Index remain very unattractive.
- **Sentiment:** Slightly positive. Price momentum has faded recently but the speed and magnitude of the market selloff has triggered a few of our contrarian oversold signals. This suggests some scope for a tactical bounce. We’d note the market does not look as oversold as it did in early 2016.
- **Conclusion:** We maintain a modest underweight preference for U.S. equities in global portfolios, primarily on the back of their expensive valuations.

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1Source: Russell Investments’ calculations based on data from Thomson Reuters Datastream (for the S&P 500 Index) and the National Bureau of Economic Research, as of Nov. 20, 2018.

“We don’t expect a major stumble in 2019, but we have entered the more dangerous phase of the economic cycle. Stay vigilant.”

Paul Eitelman

SENIOR INVESTMENT STRATEGIST, NORTH AMERICA
Transient and recurrent headwinds

Eurozone economic growth slowed sharply from a quarterly pace of 0.7% in Q1 2018 to 0.2% in the three months ending in September. A significant part of the deceleration was probably due to transient factors, in particular a drop in car production after a change in environmental regulation. The German Federal Ministry for Economic Affairs and Energy estimates the switch to the new regulations depressed German GDP by up to 0.4% quarter-on-quarter in Q3. A reversal of that special effect should help eurozone GDP to rebound in late 2018 and into 2019.

Italy has become a greater risk for eurozone prospects over recent months. The new coalition government between the left-leaning Five Star Movement and right-of-center League political parties submitted a draft 2019 budget that was badly received by bond markets. A proposed budget deficit of 2.4% of GDP was three times that targeted by the previous government. In response to Italy’s perceived laxity, the European Commission initiated an “excessive deficit procedure”, a mechanism designed to rein in profligate euro-area member countries.
As we show in the chart above, the spread between Italian and German 10-year government bonds jumped sharply after the coalition was formed and continued to rise above 3% as the standoff between Italy and the European institutions escalated. We believe Italy will eventually cave in to demands for a lower deficit, but probably only after a period of even higher Italian bond yields and market volatility. This case for “Italy will get worse before it gets better” could be a recurring headwind over the next few months. In our view, a more benign resolution will be found as 2019 progresses.

**Strategy outlook**

- **Cycle**: Slightly positive. We expect 8% growth in earnings-per-share for the eurozone equity markets in 2019, which would be a positive outcome for investors relative to what they have experienced over the past two decades. To achieve that profit increase, eurozone GDP growth needs to stay at or slightly above the long-run potential of around 1.5%, which we think is very achievable. The main risks to the benign cycle view are the budget conflict between Italy and the EU, a disorderly Brexit, and an escalation of the global trade war. Our base case is for these three risks to fade during the course of 2019.

- **Valuation**: Neutral. Eurozone equity valuations are neutral relative to their own history as of December 2018, but quite depressed compared to the U.S. market. Income potential from European stocks look tempting for U.S. investors, with the currency-hedged dividend yield on the MSCI EMU (European Monetary Union) Index approaching 6% as of November 21, 2018.
- **Sentiment**: Slightly positive. Slightly positive euro-area equities have moved into negative terrain in late 2018. While this is a warning signal, our contrarian indicators suggest the decline could be overdone. Several price-based technical indicators are sending buy signals, such as the Relative Strength Index and the Bollinger Band. In addition, the Citigroup Economic Surprise index for the euro area dipped below -50 on October 30, which is the threshold to trigger an oversold signal. Data surprises are now so bad that a rebound is becoming likely, probably through a combination of improving growth indicators and lower economist expectations.

- **Conclusion**: Investors may be forgiven for growing wary of the many head fakes that the European equity markets have dealt them. According to the Bank of America Merrill Lynch Fund Manager survey published on November 13, a majority of participants seem to have thrown in the towel and are now below their average historical allocation to eurozone stocks. From a contrarian perspective, that bodes better for the asset class. We remain constructive on eurozone equities, especially relative to the U.S. market.

“Investors may be forgiven for growing wary of the many head fakes that the European equity markets have dealt them. We remain constructive on eurozone equities, especially relative to the U.S. market.”

**Van Luu**

HEAD OF CURRENCY & FIXED INCOME STRATEGY
Looking toward to another solid year for the Asia-Pacific region, we expect emerging Asia to deliver more than 10% earnings growth, while Japan is well-placed to exceed modest industry consensus expectations. Politics will be a key theme for the region, with elections to be held in India, Indonesia, the Philippines and Australia. The outcome of trade negotiations between the U.S. and China remains the key risk.

We think China will be able to deliver GDP growth of 6%. The economy faces headwinds of high indebtedness, slowing property construction, poor demographics and a confrontational U.S. stance on trade. However, we think the stimulus from the Chinese government and work surrounding its infrastructure-focused Belt and Road Initiative will mitigate these concerns.

Indian economic growth is expected to remain around a very healthy 7.5% in 2019, driven by household consumption and some solid capital expenditure. The general election is set for March 2019, and opinion polls held in late 2018 by Indian agencies indicate it is going to be a close race. This could incentivize some pre-election spending promises, and some corresponding upside surprise. On monetary policy, we expect the Reserve Bank of India to keep rates on hold.

The South Korean economy should maintain a decent growth rate of 2-3%, with some fiscal stimulus in the form of higher social spending likely. With GDP growth running close to potential, and inflation close to the target, we are likely to see the Bank of Korea raise rates at least once through 2019.
Australian growth is likely to slow, albeit still above trend. The key focus for 2019 is going to be the housing market, given elevated prices are starting to slip, household indebtedness is high, and the tax regime for housing is likely to tighten. While this is a risk for the economy, there is a large pipeline of infrastructure work in place, the labor market is expected to remain strong, and support is expected to come from commodity prices. With inflation and wages gradually rising, and the labor market at full employment, we think the Reserve Bank of Australia will have the scope to raise rates once in 2019.

The New Zealand economy continues to face the challenges of falling population growth, a slowing housing market and depressed business confidence, which is being driven by uncertainty around future government policy. We don’t expect the Reserve Bank of New Zealand to make any monetary policy changes in 2019, while we will be closely watching the 2019 federal budget for signs of less fiscal spending from the Labour Party-led government.

Japanese growth should see a boost from reconstruction efforts following a year of natural disasters in 2018, along with construction work ramping up for the 2020 Olympics. The extremely tight labor market should provide a boost to consumption (as wages start to rise), as well as capital expenditure (as firms try to improve labor productivity). Our key watchpoint will be the consumption tax hike that is scheduled for October 2019, which has the potential to elicit some front-loading in the lead-up, followed by a fall-off. We expect Japanese bond yields will gradually edge up from a very low base, as inflation continues to slowly move higher.

An escalation of the trade war remains a key risk to the region, as a slowdown in China would have large knock-on effects given the interconnectedness of Asian trade. Our central case is that this would slow, but not derail, regional growth.

### Export growth (year on year)

![Export growth chart](chart_url)

*Source: Thomson Reuters Datastream, as of November 15, 2018.*
Investment strategy

For regional equities, we assess business cycle, value and sentiment considerations as follows:

- **Business cycle:** The fundamentals of the region remain intact, with Chinese growth still decent despite a slight slowdown.
- **Valuation:** Across the region, valuations are fair to attractive. Japanese and Chinese equities stand out as attractive, while Australian equities are close to fair.
- **Sentiment:** Our view is that the recent volatility surrounding trade headlines and Wall Street weakness will fade and allow the market to focus on the opportunities and value that are present in Asia-Pacific.
- **Conclusion:** Our outlook on the region for 2019 remains cautious, but positive, given decent economic fundamentals and good value. Risks around a trade war remain a headwind.

“An escalation of the trade war remains a key risk to the region, as a slowdown in China would have large knock-on effects given the interconnectedness of Asian trade. Our central case is that this would slow, but not derail, regional growth.”

Graham Harman
SENIOR INVESTMENT STRATEGIST
In the currency markets, attention is now shifting to the Fed outlook for 2019. Over recent weeks, Fed officials have generally conveyed a steady message pointing to three to four rate hikes for 2019, which is in line with our own view. In contrast, the Fed Funds futures as of December 2018 have priced less than two hikes. We think the continuing divergence between our team’s Fed call and market pricing warrants a stronger dollar in the short term. As we show in the chart below, the growing difference in 2-year interest rates between the U.S. and the G9 countries has been a tailwind for the U.S. Dollar Index (DXY) throughout 2018.

“We believe investors should not try to ride the dollar wave with too much enthusiasm.”

Van Luu
HEAD OF CURRENCY & FIXED INCOME STRATEGY
However, we believe investors should not try ride the dollar wave with too much enthusiasm. First, the greenback has become more expensively valued. As of October 2018, the trade-weighted and inflation-adjusted U.S. dollar exchange rate calculated by the Bank of International Settlements stands around 14% above its average since 1990.

Secondly, we have long argued that a stretched net long position in USD index futures could be an impediment to a sustained U.S. dollar rally. As of November 22, the Commodities and Futures Trade Commission’s data shows a speculative net long in the U.S. Dollar Index futures at 69% of open interest. This is in the 99th percentile of observations, which means in only 1% of months has the net long position been at that level or higher.
Looking at the historical performance of the USD index when positions reach such extremes, we find they are not very predictive in the near term (1-3 months) but imply negative average returns over a 12-month horizon with a hit rate of 73%. Our analysis suggests that positioning does not stand in the way of a stable or stronger dollar in the near term, but it is a big obstacle over a 12-month horizon.

**Other major currencies**

**Euro (EUR)**
We see the euro outlook as almost the mirror image of U.S. dollar prospects. In the short term (over the next three months), the budget standoff between Italy and the European Commission is a significant headwind. However, we expect a compromise to emerge that should allow the euro to recover during the course of 2019.

**U.K. pound sterling (GBP)**
The 29th of March 2019 looms large as the date when the U.K. is due to leave the European Union (EU). While the British government has been able to agree to a deal with the EU that secures the terms of exit and a 20-month transition period, its passage through parliament is not certain at all. Sterling could suffer if the parliamentary Brexit vote fails. We do not expect the deal to pass at the first attempt, but to be followed by another Commons vote or even a second referendum that helps to avoid a no-deal Brexit. Sterling could then rally from a lower level toward its fair value of 1.40 against the dollar.

**Japanese yen (JPY)**
Long Japanese yen is our highest-conviction currency view. Attractive valuation and its defensive...
characteristics make it our preferred G10 currency in 2019 when it could be a helpful diversifier during periods when risky assets sell off.

**Emerging Market (EM) currencies**

Most EM currencies have been battered at some point or another this year amid a noxious blend of strong dollar, rising global bond yields and country-specific crises. Argentina and Turkey are the “basket cases” for countries that have inflicted pain on themselves through loose economic policies and the build-up of macroeconomic imbalances. The escalating trade war between the U.S. and China has dragged down the currencies of Asian economies that compete with China and are tightly linked to global manufacturing supply chains.

The good news is that EM currencies have fallen to attractive valuation levels, in our view. In the chart below, we plot the valuation score for two EM currency baskets, one weighted according to the MSCI Emerging Markets Index, the other according to the JP Morgan Government Bond Index-Emerging Markets. Our proprietary valuation indicator flags both EM currency baskets as very cheap vis-à-vis the U.S. dollar. This valuation buffer may partly explain why EM currencies held up well during the stock market sell-off in October and November. We are encouraged by the resilience and stick with our cautiously optimistic attitude toward EM currencies.

**Cheap valuations in EM currencies provide a buffer against trade war and other global risks**

![Chart showing valuation scores for EM currencies]

Source: Russell Investments, Thomson Reuters Datastream, as of October 31, 2018. Emerging market equity is proxied by the MSCI Emerging Markets Index and emerging markets fixed income by the JP Morgan Government Bond Index-Emerging Markets (which tracks local currency bonds issued by emerging market governments.) Indexes are unmanaged and cannot be invested in directly. Returns represent past performance and are not a guarantee of future performance.

1The G9 currencies are the G10 excluding the U.S. dollar and comprise the Australian dollar, Canadian dollar, Swiss franc, euro, U.K. pound, Japanese yen, New Zealand dollar, Norwegian kroner and Swedish krona.
The U.S. is in the second-longest economic expansion since the 1800s, and historically the S&P 500 Index has generally peaked six months before the onset of a recession. Given the age of the economic cycle, getting a clear read on recession risk is crucial. The Business Cycle Index (BCI) model uses a range of economic and financial variables to estimate the strength of the U.S. economy and to forecast the probability of recession. The BCI index as of November 23, 2018, estimates the probability of recession in the next 12 months is around 25%—a level which signals caution, but not an outright warning.

**BCI model historical forecasted recession probabilities**

*Source: Russell Investments, as of November 2018.
Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.*
Short-term (three-month) recession risks are very low, given the strong labor market, still-easy financial conditions, and strong economic growth. At the 12-month horizon, the model recommends that investors remain alert but not alarmed. We are closely monitoring the data, but until recession risk is especially elevated (i.e. probabilities are in the warning zone), we believe leaning out of risky assets at this point is premature. A key watchpoint for longer horizons is the slope of the yield curve, which is an input into the BCI model and a reliable leading indicator. The 10-year U.S. Treasury yield is determined by the term premium and the average expected short rate over the 10-year period. When the 10-year yield falls below short-term yields, the market is pricing a growth slowdown in the future where the Fed is forced to cut rates. The yield curve hasn’t inverted yet, but it has uncomfortably flattened. Continued flattening will put upward pressure on the model’s recession probabilities.

There can be a significant negative impact in being defensive in your portfolio too late, but also a cost in being defensive too early. We conclude that we’re late in the cycle but not at the end of the cycle, and the risk of a near-term U.S. recession is still relatively low.

A cause for pause

Equity markets experienced a solid amount of negative return in the fourth quarter, but the U.S. market remains expensive in late 2018. This has put our measures of momentum close to zero and our signal for equity versus fixed income at a level resembling 2007. However, while this is a scary place for models to be, the macroeconomic backdrop is much different in 2018. In 2007 the yield curve was inverted, and our business cycle index was signaling recession.

**EAA* U.S. equity vs. U.S. fixed income aggregate signal**

![Graph showing EAA U.S. equity vs. U.S. fixed income aggregate signal]

Source: Russell Investments, as of November 2018.

Standard deviation is a measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation.

* Enhanced Asset Allocation (EAA) is a capability that builds on a Strategic Asset Allocation (SAA) by incorporating views from Russell Investments' proprietary asset class valuation models. EAA is based on the concept that sizable market movements away from long-term average valuations create opportunities for incremental returns. The EAA Equity Fixed Income Aggregate Signal is based on the S&P 500 Index and Bloomberg Barclays U. S. Aggregate Bond Index.
Within our cycle, value and sentiment investment framework we make the following overarching assessments based on our quantitative models.

- **Business cycle**: The business cycle remains strong, though the risk of a recession is gradually increasing as we near the end of the cycle.
- **Valuation**: Equities seem to be fairly valued, according to our Fed model that compares U.S. treasury yields to the equity earnings yield.
- **Sentiment**: Momentum has decreased significantly, which puts it to near zero as of the end of October 2018.

While a possible market correction needs to be respected, we believe as of November 30, 2018, it is not something to go overboard about, given broader context. But—given the end of cycle payout is low and some warning signs are there—we believe a cautious stance is prudent. That said, if the equity market rebounds, then the caution could be waved. This would take a few months to confirm so in the meantime this is simply a cause for pause while we wait and see.

“There can be a significant negative impact in being defensive in your portfolio too late, but also a cost in being defensive too early. We conclude that we’re late in the cycle but not at the end of the cycle, and the risk of a near-term U.S. recession is still relatively low.”

**Kara Ng**

SENIOR QUANTITATIVE INVESTMENT STRATEGY ANALYST
No model or group of models can offer a precise estimate of future returns available from capital markets. We remain cautious that rational analytical techniques cannot predict extremes in financial behavior, such as periods of financial euphoria or investor panic. Our models rest on the assumptions of normal and rational financial behavior. Forecasting models are inherently uncertain, subject to change at any time based on a variety of factors and can be inaccurate. Russell believes that the utility of this information is highest in evaluating the relative relationships of various components of a globally diversified portfolio. As such, the models may offer insights into the prudence of over or under weighting those components from time to time or under periods of extreme dislocation. The models are explicitly not intended as market timing signals.

Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

The Business Cycle Index (BCI) forecasts the strength of economic expansion or recession in the coming months, along with forecasts for other prominent economic measures. Inputs to the model include non-farm payroll, core inflation (without food and energy), the slope of the yield curve, and the yield spreads between Aaa and Baa corporate bonds and between commercial paper and Treasury bills. A different choice of financial and macroeconomic data would affect the resulting business cycle index and forecasts.

Investment in global, international or emerging markets may be significantly affected by political or economic conditions and regulatory requirements in a particular country. Investments in non-U.S. markets can involve risks of currency fluctuation, political and economic instability, different accounting standards and foreign taxation. Such securities may be less liquid and more volatile. Investments in emerging or developing markets involve exposure to economic structures that are generally less diverse and mature, and political systems with less stability than in more developed countries.

Currency investing involves risks including fluctuations in currency values, whether the home currency or the foreign currency. They can either enhance or reduce the returns associated with foreign investments.

Investments in non-U.S. markets can involve risks of currency fluctuation, political and economic instability, different accounting standards and foreign taxation.

Bond investors should carefully consider risks such as interest rate, credit, default and duration risks. Greater risk, such as increased volatility, limited liquidity, prepayment, non-payment and increased default risk, is inherent in portfolios that invest in high yield ("junk") bonds or mortgage-backed securities, especially mortgage-backed securities with exposure to sub-prime mortgages. Generally, when interest rates rise, prices of fixed income securities fall. Interest rates in the United States are at, or near, historic lows, which may increase a Fund’s exposure to risks associated with rising rates. Investment in non-U.S. and emerging market securities is subject to the risk of currency fluctuations and to economic and political risks associated with such foreign countries.

The S&P 500, or the Standard & Poor’s 500, is a stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ.
Performance quoted represents past performance and should not be viewed as a guarantee of future results.

Indexes are unmanaged and cannot be invested in directly.

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The MSCI All Country World Index is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world. The MSCI ACWI is maintained by Morgan Stanley Capital International, and is comprised of stocks from both developed and emerging markets.

The Citigroup Economic Surprise Indices are objective and quantitative measures of economic news. They are defined as weighted historical standard deviations of data surprises. A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating industry consensus. The indices are calculated daily in a rolling three-month window.

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