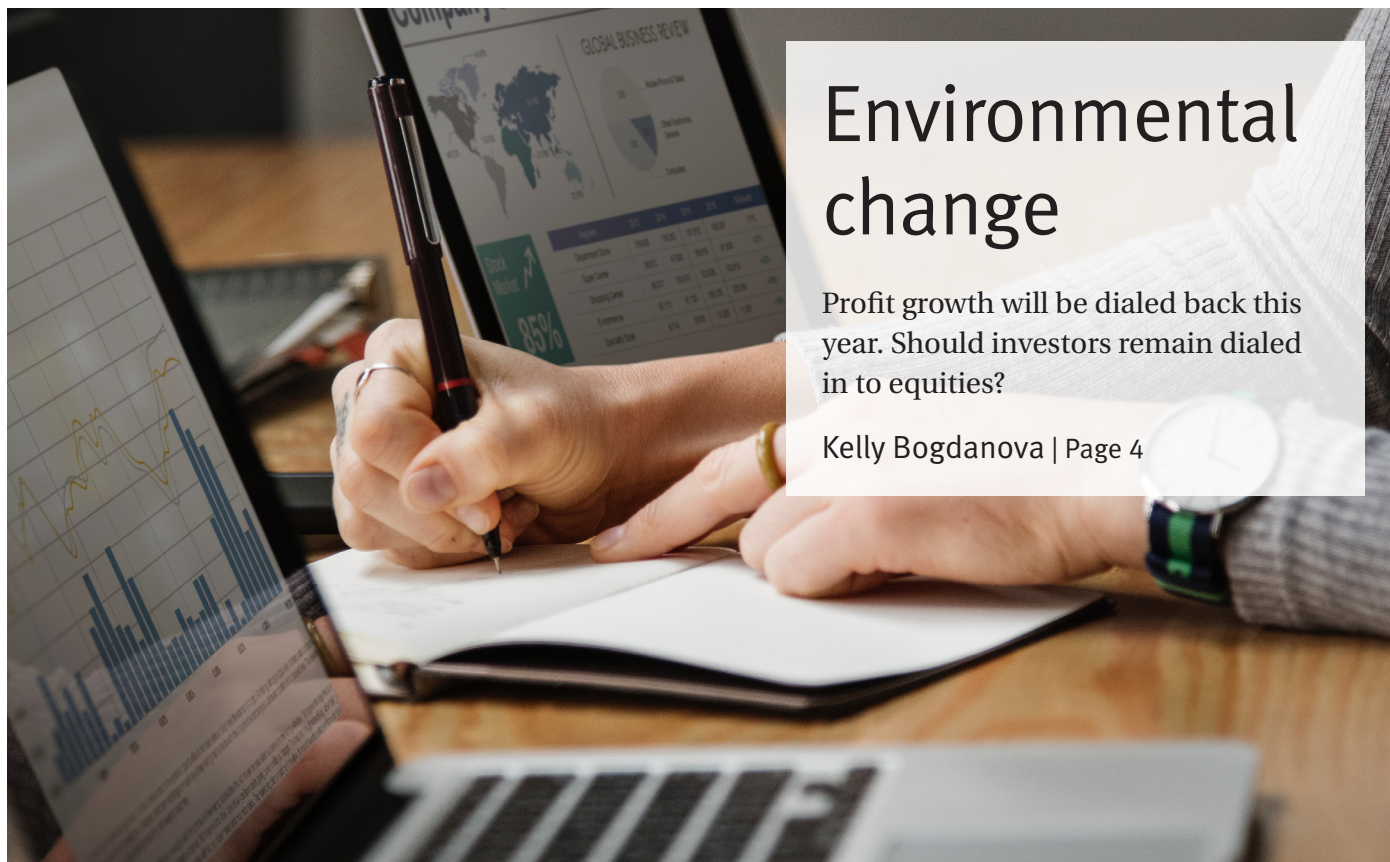


Global Insight

Perspectives from the Global Portfolio Advisory Committee



Environmental change

Profit growth will be dialed back this year. Should investors remain dialed in to equities?

Kelly Bogdanova | Page 4



Global equity
Committed to a realistic outlook



Global fixed income
Central banks play the waiting game



Currencies
U.S. dollar: Dimmer outlook



Commodities
Oil: WTI down but not out

For important and required non-U.S. analyst disclosures, see page 22.



Wealth Management

Table of contents

4 Environmental change

What a difference a year can make for the profit outlook, as uncertainties are clipping momentum. But while earnings growth will be dialed back, we look at why investors should remain dialed in to equities with a constructive—yet vigilant—stance.

8 Global equity: Committed to a realistic outlook

Rather than trying to read the minds of central bankers, we believe other factors will prove more useful in navigating equity markets over the coming year or two. We expect stock markets will reach new highs in the next 12 months, leaving us comfortable having a full allocation committed to equities. However, it's not a time to be piling in.

13 Global fixed income: Central banks play the waiting game

Global central bank policy tightening plans that were recently frozen aren't expected to thaw soon due to growing concerns about the economic outlook and lingering uncertainty around a number of key issues.

Inside the markets

3 *RBC's investment stance*

8 *Global equity*

13 *Global fixed income*

17 *Currencies*

18 *Commodities*

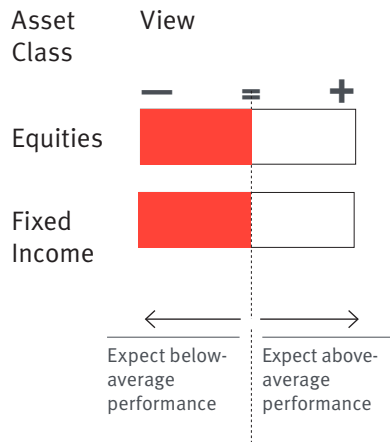
19 *Key forecasts*

20 *Market scorecard*

All values in U.S. dollars and priced as of market close, January 31, 2019, unless otherwise stated.

RBC's investment stance

Global asset views



See “Views explanation” below for details

Source - RBC Wealth Management

Equities

- The U.S. equity market has rallied forcefully and other markets have bounced following a difficult Q4 and steep December selloff. Amid the correction and subsequent rebound, the global and U.S. economies have slowed. Corporate earnings, revenue, and profit margin trends have also moderated.
- The softer fundamentals come as the economic expansion is in the late stages. It is important to distinguish between slow, unimpressive GDP growth (which seems to be shaping up for 2019) and very low or negative growth (which is not yet on the radar screen). In our assessment, certain industry and geographic segments are stumbling, but major regions are not tumbling toward recessions. We would maintain overall equity exposure at the Market Weight or benchmark level in portfolios—a stance we would characterize as constructive, but vigilant.

Fixed income

- The Federal Reserve has taken great pains to walk back December comments that seemed to suggest more rate hikes would arrive early in 2019. The just-completed January meeting all but confirmed policy will be on hold until later this year. Comments from Fed Chair Jerome Powell also suggested the possibility of no additional rate hikes as the Fed monitors both domestic and global data/events. In our opinion, the Fed’s patience will limit any significant move higher in U.S. interest rates.
- We have shifted our global fixed income recommendation to Market Weight from Underweight in light of limited upside to rates, dovish global central bank policy, and the desire to take a defensive stance as we move through the late stage of the economic cycle. We maintain a focus on quality and recommend intermediate duration positioning.

Views explanation

(+/=/-) represents the Global Portfolio Advisory Committee’s (GPAC) view over a 12-month investment time horizon.

+ Overweight implies the potential for better-than-average performance for the asset class or for the region relative to other asset classes or regions.

= Market Weight implies the potential for average performance for the asset class or for the region relative to other asset classes or regions.

– Underweight implies the potential for below-average performance for the asset class or for the region relative to other asset classes or regions.

Environmental change



Kelly Bogdanova
San Francisco, United States
kelly.bogdanova@rbc.com

The breakneck pace of 2018’s profit growth is receding in the rearview mirror, and a variety of factors should further clip momentum. But while earnings growth will be dialed back, we look at why investors should remain dialed in to equities with a constructive—yet vigilant—stance.

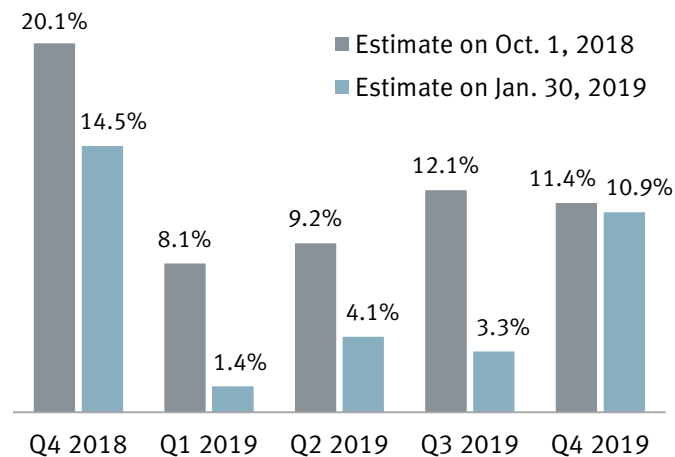
Amid the noise from the stock market correction and subsequent rebound, a notable shift in the operating environment has taken place affecting many U.S.-based companies. Corporate earnings, revenue, and profit margin trends have moderated in Q4 2018, and we expect the momentum will dial back further in 2019. Given the old Wall Street adage, “Earnings are the mother’s milk of stocks,” this is worth investors’ attention. Over the long term, earnings drive equity prices.

While much of the deceleration in the revenue and earnings outlooks was likely factored into stock prices late last year during the sharp U.S. and global equity selloff, earnings-related headlines could become amplified this year and surprises could lead to additional volatility. Economic softness at home and abroad, tariff uncertainties, the more complex political backdrop in Washington, and the rapidly waning effect of the corporate tax cut are leaving management teams less certain about growth prospects. We think a constructive yet *vigilant* stance is appropriate. Therefore, despite reasonable valuations we remain Market Weight U.S. equities, rather than make aggressive new commitments.

Reasonable retreats

The forecast for 2019 S&P 500 earnings growth has declined from 10% y/y last October, to 5.2% currently, according to the consensus of Wall Street analysts. The new, lower estimate equates to \$170 per share, which we think is appropriate and achievable.

Change in consensus forecasts for quarterly S&P 500 earnings growth (y/y)



Forward earnings growth estimates have come down meaningfully. Expectations now seem reasonable to us.

Source - RBC Wealth Management, I/B/E/S data from Refinitiv; data as of 1/30/19

Thus far, there are few signs an “earnings recession” (outright earnings decline) could unfold this year.

Thus far, there are few signs an “earnings recession” (outright earnings decline) could unfold this year. If the Fed refrains from raising interest rates too far, too fast, as it has signaled recently, and if some tariff risks recede, the \$170 estimate could end up being too low. But 5.2% estimated growth doesn’t leave much room for missteps or negative tariff or economic developments.

Consensus revenue and profit margin expectations have moderated as well, but to a lesser extent. The 2019 S&P 500 revenue growth forecast retreated from 5.4% in October to 4.7% currently, and margin growth from 17.2% to 16.8%. Both of these lowered estimates are reasonable, in our view.

Cautious clues

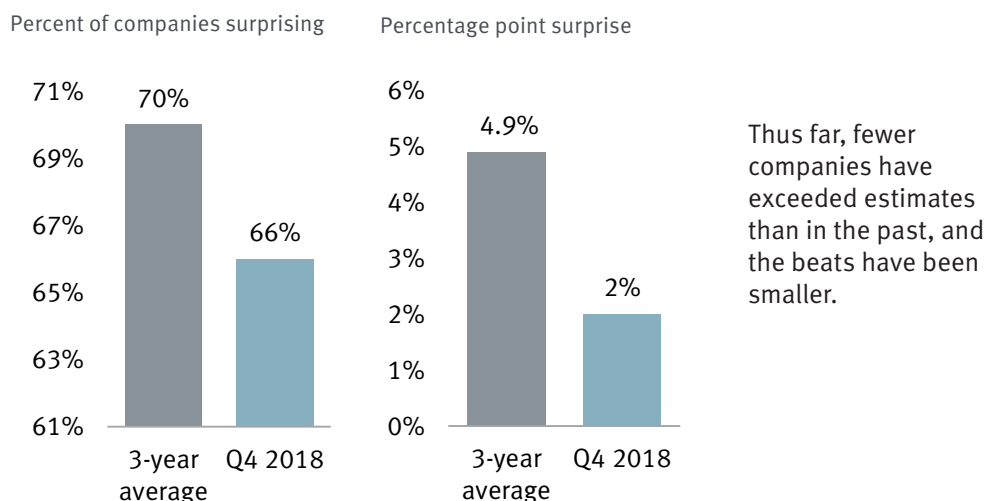
The Q4 2018 earnings season is underway and the developments provide hints about how this year could unfold. Overall results and management guidance have been better than expected, especially in light of the negative sentiment that prevailed just before the reporting season began.

On conference calls, executives’ comments have been positive on balance, but appropriately restrained given the multiple macro uncertainties. Management teams normally don’t have much incentive to go out on a limb with their forecasts, and they have even less now.

More companies have described demand for products and services as healthy rather than mixed or weak—a good sign for overall economic growth. The proportion of cautious remarks represents 34% of firms among those that have commented on demand trends thus far, according to RBC Capital Markets. A number of executives have pointed to softer European momentum. Tariff challenges have been mentioned by a small group, but still don’t seem like much of a factor, at least at this stage.

Q4 earnings and revenue beat rates are tracking modestly below the preceding quarter, but the magnitude of the beats—the percentage upside to estimates—is lagging. For example, earnings are exceeding the consensus forecast by 2.0%,

S&P 500 Q4 earnings surprises



Source - National research correspondent, FactSet, Thomson Financial; data as of 1/30/19 with 38% of S&P 500 market cap having reported Q4 2018 earnings

much lower than the 4.9% average during the past three years. Nevertheless, the Q4 trend has improved as more companies have reported results, and that figure could rise as the earnings season progresses.

RBC Capital Markets notes wage/benefit pressures are being most frequently cited as headwinds for profit margins. This is interesting given wage growth is not showing up as being problematic in broader economic data. Other expense categories have generally been neutral-to-favorable, so any wage/benefit pressures at the company level are largely being absorbed.

Macro murkiness?

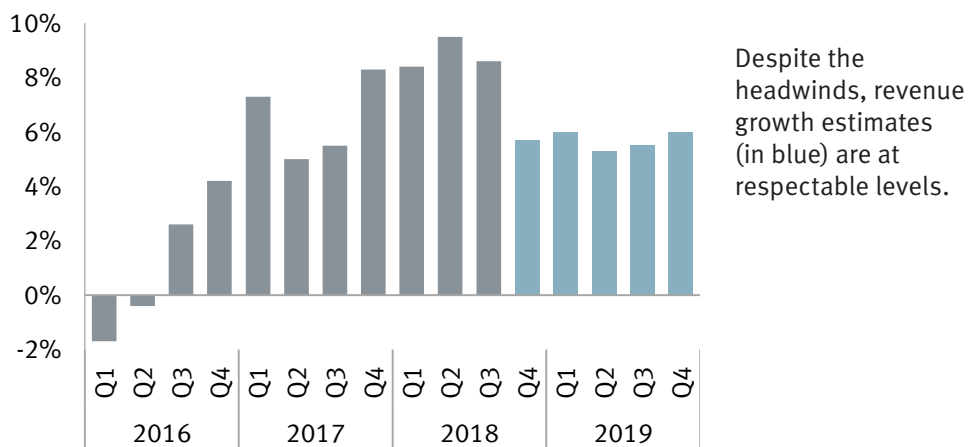
In addition to Q4 trends, challenging prior-year comparisons and important economic trends point to slowing earnings growth in 2019, in our view.

The corporate tax cuts, which represented a roughly 7–8 percentage point boost to the bottom line in 2018, will drop out of the 2019 data. Even though companies will still realize the benefits of low taxes, they will no longer be a factor in the year-over-year growth calculation.

Also, robust 2018 growth of 20%+ pushed earnings up to an elevated level that will be difficult to exceed by any meaningful degree, in our view.

S&P 500 revenue growth (y/y)

Actual in gray, consensus estimates in blue



Source - RBC Wealth Management, I/B/E/S data from Refinitiv; data as of 1/30/19

Year-over-year arithmetic aside, pockets of weakness in the domestic and global economies, including overall slower rates of growth, are factors.

U.S. housing, for example, has been soft for months and took another step backward in December when sales of previously owned homes fell 10% y/y and transactions retreated to the lowest level in three years. Auto sales have fallen too. Domestic manufacturing activity and new orders—a key leading indicator—declined notably in December, and capital spending intentions have softened lately. Business sentiment has pulled back, albeit from a very high level, in the U.S. and other major economies.

RBC Global Asset Management has trimmed its 2019 U.S. GDP growth forecast from 2.50% to 2.25%, further below its 2.9% estimate for last year. GDP should be supported by ongoing, positive consumer trends. By no means would an economy expanding around the 2.25% level be troubling, but it would be below the average of previous expansion cycles.

Global growth will likely be softer this year too. Europe's largest economies—Germany, the U.K., France, Italy—are in the midst of a malaise for a variety of reasons. China faces ongoing challenges from slower economic momentum, debt constraints, and U.S. tariffs. An executive of FedEx, one of the most economically sensitive, globally oriented U.S. companies, put it best on an earnings conference call recently, “The peak for global economic growth now appears to be behind us.”

S&P 500 companies with overseas revenues are much more tied to Europe than China or broader Asia, but slowing in these two large economic regions tends to dampen overall corporate prospects.

Constructive condition

The earnings outlook is murkier than it was a year ago. While recent estimate cuts have likely been factored into stock prices, economic uncertainty and policy risks related to trade/tariffs, the Fed, and the complex political backdrop in Washington leave room for surprises in 2019.

As long as modest U.S. GDP growth of 2% or so remains feasible and Europe and China stay near their current subdued trends without much more slippage, we believe the S&P 500 can eke out mid-single-digit earnings growth in 2019. Reasonable valuation levels of 16.5x trailing earnings and 15.9x the forward \$170 consensus forecast, which is slightly below RBC Capital Markets' estimate, provide an appealing, albeit less exciting, investment environment. We believe it supports a Market Weight position in both U.S. equities and total equity exposure in portfolios.

Our long-standing view remains that investors should give equities the benefit of the doubt as long as the economic, credit, and earnings cycles are favorable for stocks. Five of our six favorite forward-looking U.S. recession indicators are signaling the expansion will persist for at least the next 12 months or so. The other indicator is in neutral territory. None are signaling an imminent recession.

Given the U.S. economic cycle looks increasingly to be in its late stages, a higher level of investor vigilance is warranted.

The earnings outlook is murkier than it was a year ago.

Committed to a realistic outlook

The stock market swoon from September onward bottomed out around Christmas day. As the indexes cascaded lower over those three months, just about everyone, including the White House, decided that Fed policy was to blame. Our view is that it was a confluence of several factors, of which Fed policy was probably not the most important. Looking at these factors, in our view, will prove more useful in navigating equity markets over the coming year or two than focusing solely on reading the minds of central bankers.

Here are some of the developments that contributed to the decline:

- **Market leaders slumped:** Some ultrahigh-capitalisation technology highfliers got tagged, which arguably kicked things off. Very bad press around social media privacy/regulation issues, the pricking of the Apple iPhone sales invincibility balloon, and stretched valuations conspired to produce a sudden lurch lower among several high-profile securities. The deep drop persuaded many fund managers they'd rather not have these names appear in year-end holdings, which produced more selling.
- **Recession scare:** As more stocks joined in the decline, investors became fearful markets were signaling a recession was imminent. Fed rate hikes were in danger of inverting the yield curve (pushing short-term interest rates above long-term bond yields), the occurrence of which previously has been a reliable

Equity views

Region	Current
Global	=
United States	=
Canada	=
Continental Europe	=
United Kingdom	=
Asia (ex-Japan)	=
Japan	+

+ Overweight = Market Weight – Underweight
Source - RBC Wealth Management

indicator that a U.S. recession is on the way. These fears sent a broader group of stocks into a second, deeper decline. This despite the fact that (a) the yield curve didn't invert (and hasn't) and (b) historically, when it has inverted the ensuing recession is still about a year away from starting.

[For the record, we subscribe to the idea that if the yield curve inverts, a recession and bear market are on the way. If it were to invert, we would counsel a more defensive stance for equity portfolios. But history shows there is no prize for anticipating an inversion ahead of it actually occurring. There have been several near misses in the past where it came close and no recession followed. There was also one instance, in the mid-1960s, where an outright inversion produced a sharp slowdown but no recession.]

- **Tax-loss selling:** Stock markets did very well from early 2016 into the summer of 2018. The S&P 500 rose by some 62% between February 2016 and September 2018. Many investors booked sizable, taxable

Jim Allworth
Vancouver, Canada
jim.allworth@rbc.com

Kelly Bogdanova
San Francisco, United States
kelly.bogdanova@rbc.com

Patrick McAllister, CFA
Toronto, Canada
patrick.mcallister@rbc.com

Frédérique Carrier
London, United Kingdom
frederique.carrier@rbc.com

Jay Roberts, CFA
Hong Kong, China
jay.roberts@rbc.com

capital gains along the way. As stocks fell in the correction, opportunities arose to offset these gains by realizing capital losses. The selloff intensified in December, at least in part, in response to this tax-loss selling. The low trade of the correction occurred on the next-to-last day such trades would settle within the 2018 tax year.

- Uncertainty about earnings beyond 2018:** We think the main answer as to “why” the market declined is that investors were shifting their focus to the earnings picture for 2019 and 2020.

So far, 2018 S&P 500 earnings look to have risen by 22% y/y to \$161.50. About eight percentage points were the (highly certain) contribution of the U.S. corporate tax cut. The rest flowed from the solid revenue gains delivered by most corporations and flagged well ahead of time by the very upbeat management guidance that prevailed even before the tax cut idea had been floated. Corporate optimism was not confined to the U.S.—confidence readings were high throughout Germany and much of Europe, in Canada despite NAFTA concerns, and in Japan.

Through much of 2018, investors expected much of that earnings

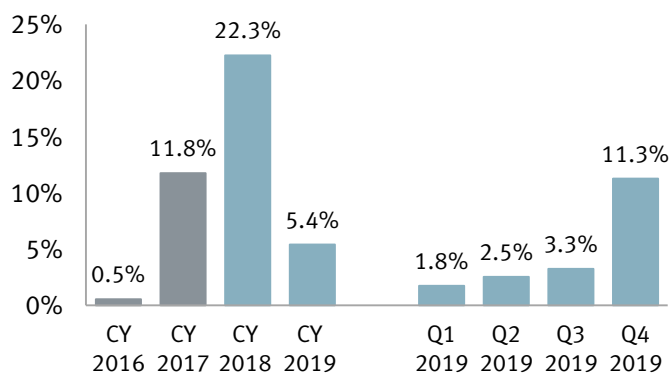
optimism and momentum to carry through 2019. But later in the year they were faced with two facts: the U.S. tax cuts would no longer figure into the year-over-year growth arithmetic, while at the same time corporate optimism everywhere was becoming more mixed, influenced by tariff distortions, U.S.-China trade and political tensions, a more complicated landscape in Washington, D.C., fractious European and U.K. politics, and energy market dislocations.

- Valuations sagged:** For the S&P 500, last September’s peak valuation of almost 19x trailing earnings looked rich but not completely untenable as long as 2018’s revenue and earnings momentum could be counted on to continue on through 2019. Once those expectations started to fray, the valuation premium came off the market multiple in a hurry. At the correction low in late December, the price-to-earnings (P/E) multiple on trailing earnings had fallen to 14.4x, a 24% drop from the peak three months earlier.

Back at the peak of the stock market, consensus S&P earnings estimates for 2019 were at a lofty \$179, up an energetic 10% from the expected

Corporate earnings outlook (y/y change)

Actual in gray, estimates in blue



While S&P 500 earnings growth has slowed from 2018 levels, mid-single-digit growth in 2019 appears reasonable with an acceleration anticipated as 2019 ages.

Source - RBC Wealth Management, I/B/E/S data by Refinitiv; data through 1/31/19

2018 figure (we were at \$173). That consensus figure has now fallen to \$170 per share, up only 5% (we are at \$171).

Valuations and estimated earnings growth rates have fallen for other developed country markets as well, in some cases to levels below those prevailing in the U.S. Slowing growth, weaker Purchasing Managers' Indexes (economic activity indexes), and trade distortions/uncertainty are most often cited as the source of the equity market retrenchment outside the U.S. Weaker first-half GDP growth may bring earnings estimates somewhat lower everywhere.

This developing mix of lower earnings expectations, a more subdued corporate outlook, and weaker-than-previously expected economic data has pretty much put the kibosh on the plans of the Fed, the Bank of Canada, the Bank of England, and the European Central Bank to raise rates anytime in 2019. In our view, that should permit developed economies to post positive GDP growth rates on a year-over-year basis into 2020. China, for its part, is aggressively easing on most fronts including monetary policy.

Importantly, five of the six indicators that we track in our U.S. recession scorecard continue to give readings that suggest this longest of all economic expansions has further to run. The sixth, the yield curve, we rate at "neutral."

We expect the combination of moderate earnings growth together with some modest expansion of P/E multiples from today's undemanding levels will allow most broad market averages to post new highs over the coming 12 months. We are comfortable having a full allocation (i.e., Market

Weight) committed to equities in a balanced portfolio. But we are not persuaded that this is a time to be piling in. Rather, we believe it is a time to let established equity positions continue to work for the portfolio, by way of rising dividend payments and internal compounding of shareholders' equity.

Regional highlights

United States

- What a difference a month makes. The S&P 500 tumbled 9.2% in December only to rally 7.9% in January. The biggest factor that changed the market's mood was Fed Chairman Jerome Powell's about-face as he shifted from hawk to dove on interest rates. While equity investors have every reason to view the Fed with a healthy dose of skepticism—it has been unable to engineer an economic soft landing more times than it has succeeded—it seems Powell appreciates the economy's vulnerabilities and will be slow to lift rates too far too fast, at least for now.
- RBC Global Asset Management recently lowered its 2019 U.S. GDP forecast to 2.25% from 2.50%. The consensus estimate is still at 2.50%, but we think it will come down. Even with challenges of slower manufacturing and housing momentum and also tariff risks, GDP should be supported by positive consumer trends. An economy expanding around the 2.25% level would be below the average of previous expansion cycles, but enough to support at least modest market returns, in our view.
- We anticipate mid-single-digit S&P 500 earnings growth this year. The index trades at a reasonable price-to-earnings ratio of 15.8x based on RBC Capital Markets' 2019 forecast of \$171

per share. We remain comfortable holding U.S. equity exposure at the Market Weight or benchmark level in portfolios.

Canada

- The domestic-specific challenges facing Canada are well-documented and frequently discussed in this publication (e.g., household leverage, energy market access, and economic competitiveness). However, with the Canadian equity benchmark's valuation at a sizeable discount to the U.S. market, we believe long-term investors could be rewarded if a "less bad" scenario unfolds. Accordingly, we maintain a Market Weight recommendation.
- We continue to expect Canadian bank earnings growth to slow due to a deceleration in loan growth, diminishing returns from cost efficiency initiatives, and a normalization in credit losses. The industry projections for a gradual rise in credit losses could be subject to downside risk associated with a correction in the housing market and/or weak energy prices. Whereas the banks traded close to their long-term price-to-earnings (P/E) valuation of 11.5x for most of 2018, the group now offers some compensation for a slower earnings growth profile and credit risk with a P/E closer to 10x earnings.
- The discount of Canadian heavy oil relative to the West Texas Intermediate benchmark has compressed from a record high of roughly \$50/barrel (bbl) in October to its current level of approximately \$10. Mandatory crude oil production curtailments in Alberta will help cushion this discount from the exaggerated levels experienced in 2018 but we believe the current

discount is too narrow. RBC Capital Markets expects it to average approximately \$20/bbl through 2020, reflective of the cost to ship a barrel from Western Canada to the U.S. Gulf Coast refinery complex via rail.

Continental Europe & U.K.

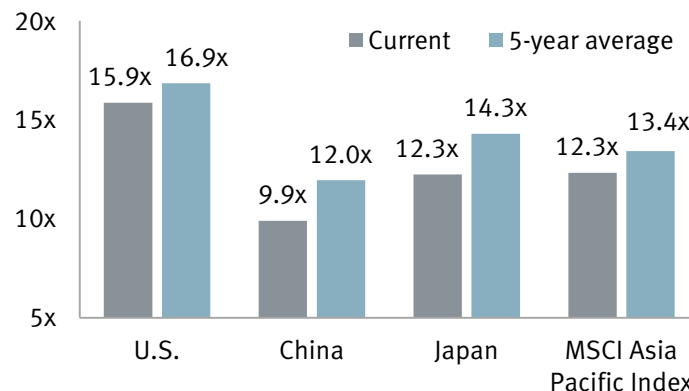
- We are maintaining our Market Weight positions on both Europe and the U.K. The long-awaited rebound in Q4 euro area economic activity has failed to materialize, forcing European Central Bank (ECB) President Mario Draghi to acknowledge risk is on the downside. At the ECB's recent meeting, he pointed to global and sector-specific issues but reiterated that unemployment is falling and wages are growing, while fiscal policy is being more supportive. The consensus FY2019 corporate earnings growth estimate of 8.5% y/y seems a little ambitious given this more subdued economic momentum. We expect this estimate will be revised downwards as revenue and margin drivers appear less promising than over the past 18 months. We continue to favour Health Care in particular as valuations remain undemanding.
- In the U.K., political upheaval continues, shedding little light on the expected Brexit outcome. Despite her deal being overwhelmingly rejected by the House of Commons, Prime Minister Theresa May seems intent on continuing on the same path in the hope that as the deadline approaches more Members of Parliament will be tempted to support her deal, for lack of another alternative. This brinkmanship strategy could increase the probability of a "no-deal" exit—whereby the U.K. leaves the EU without a trade agreement

with the EU in place—an outcome with the greatest immediate negative impact on the economy. Should the prospects of a no-deal departure decrease, we would be more favourable towards domestic stocks which we believe offer good value. For now, we continue to prefer Energy, Health Care, and Life Insurance.

Asia

- The MSCI AC Asia Pacific Index recovered some ground in January. From its 2018 low on December 25, the index is up 10.2%. The market narrative is dominated by China. Investors are focused on these issues: What kind of a trade deal, if any, will the U.S. and China hammer out? To what extent is the recent slowdown in Chinese economic data due to the trade dispute versus domestic deleveraging or other domestic factors? To what extent will China continue to ease policy? And, how much of all this is priced into equity markets?
- This is a complex situation with many moving parts. We think that the combination of policy support (tax cuts, for example), in which the Chinese authorities have a strong track record, and relatively low stock valuations should support the market. However, catalysts that might lead to significant upside in stocks are difficult to identify. With respect to trade negotiations, we believe there is a chance some kind of deal will be done. However, we also think there is very little likelihood of all U.S. demands being met, causing relations to remain strained.
- Within Asia, we maintain a preference for Japan, especially in light of the recent decline in share prices. The TOPIX traded in a range for most of 2018. Indeed, at the start of October, it was modestly higher. It corrected swiftly in Q4, by 18%, due to the selloff in global equities, Japan's high proportion of economically-sensitive (cyclical) stocks, and appreciation in the yen. The index valuation is now compelling, in our view. The price-to-earnings ratio is at 12.3x, its lowest level under the Abe administration, despite steady earnings. The price-to-book ratio is 1.15x, among the lowest in past years, despite return on equity, a key measure of company profitability, being close to a cycle high.

Forward P/E ratios by region

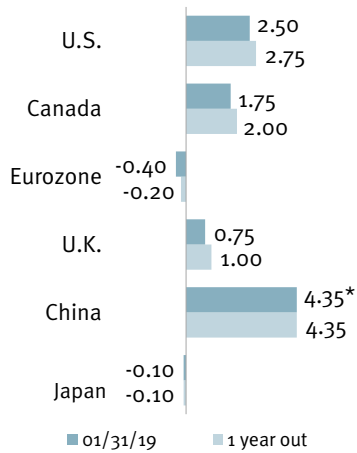


Asian equities appear reasonably valued relative to their U.S. peers and their own historical trends.

Index definitions: S&P 500 (U.S.), Shanghai Composite (China), TOPIX (Japan)
Source - RBC Wealth Management, Bloomberg; data through 1/31/19

Central banks play the waiting game

Central bank rate (%)



*1-yr base lending rate for working capital, PBoC
Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, RBC Global Asset Management

Global central bank policy tightening plans that were recently frozen aren't expected to thaw soon due to growing concerns about the economic outlook and lingering uncertainty around a number of key issues.

Just three months ago, markets were priced for a 98% possibility the Federal Reserve would raise rates at least once in 2019. At the end of January, the percentage stood slightly above 20%. The European Central Bank was thought to be on the road to normalizing policy as the potential for a rate hike in 2019 was nearing 75%, but the market now sees those plans being delayed, pricing less than a 40% possibility of a hike this year. It's a similar story for the Bank of Canada and the Bank of England, while China is actually taking steps to increase stimulus in its economy.

While central banks lie in wait, what might officials be looking for? In the U.S., the labor market remains robust with few signs of excessive inflation in the pipeline. But the Fed will also be looking for signs that the recent deterioration in certain economic data is only temporary, and that the month-long government shutdown didn't cause lasting economic damage.

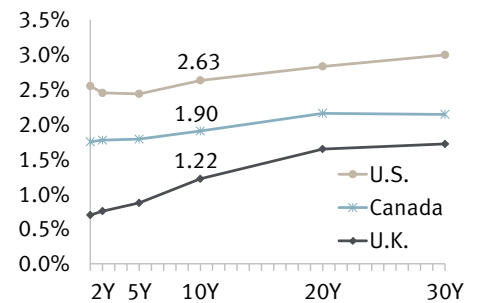
The European Central Bank has cited downside risks to growth as the composite Purchasing Managers' Index for the eurozone fell sharply throughout 2018, and is now at risk of slipping below 50—the level at which activity is contracting. The Bank of England continues to contend with the impact

Fixed income views

Region	Gov't Bonds	Corp. Credit	Duration
Global	=	+	5–7 yr
United States	=	+	5–7 yr
Canada	=	=	3–5 yr
Continental Europe	=	+	5–7 yr
United Kingdom	=	=	5–7 yr

+ Overweight = Market Weight – Underweight
Source - RBC Wealth Management

Sovereign yield curves



Source - Bloomberg

on the economy of the uncertain Brexit outcome.

As such, it seems the landscape in 2019 is different than what central banks might have expected. In our view, it's entirely possible that the Fed's rate hike cycle is nearing an end, while the plans of other banks to launch the normalization process may be postponed. All of this should keep a lid on global yields over the intermediate term, while giving fixed income investors one less thing to worry about.

Tom Garretson, CFA
Minneapolis, United States
tom.garretson@rbc.com

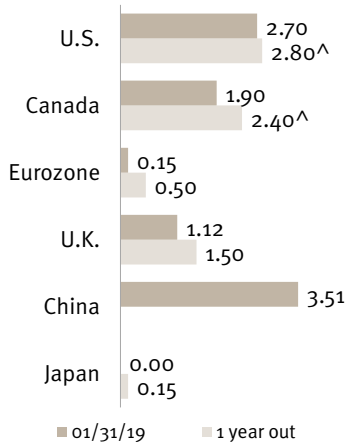
Bill Kuehn, CFA
Minneapolis, United States
william.kuehn@rbc.com

Christopher Girdler, CFA
Toronto, Canada
christopher.girdler@rbc.com

Alastair Whitfield
London, United Kingdom
alastair.whitfield@rbc.com

Chun-Him Tam
Singapore, China
chunhim.tam@rbc.com

10-year rate (%)



Note: Eurozone utilizes German Bunds.
 Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, RBC Global Asset Management
[^]Under review

Regional highlights

United States

- As expected, the Fed did not raise rates at the January meeting. We maintain our view that it will put the rate hike cycle on pause through at least the summer, if not for the rest of the year. This meeting focused on the Fed's balance sheet, as expectations grow that the Fed is also already nearing a decision to stop the shrinkage process. With the Fed taking a pause on raising rates while exploring options for the balance sheet, we think yields will struggle to move materially higher, with the 10-year Treasury yield likely to remain range-bound between 2.50%–2.80%.
- Speculative-grade corporate bonds have come out of the gates strong in 2019, returning 4.52% in January as credit spreads tightened by 103 basis points, one of the biggest monthly rallies we have seen this cycle. Investment-grade corporate bonds have yet to rally to the same extent and hold better relative value to speculative-grade bonds. We would now bias portfolios toward BBB-rated credits as the extra yield investors receive over A-rated credits has widened to 0.70%. With risk sentiment improved and credit spreads at cycle averages, we think

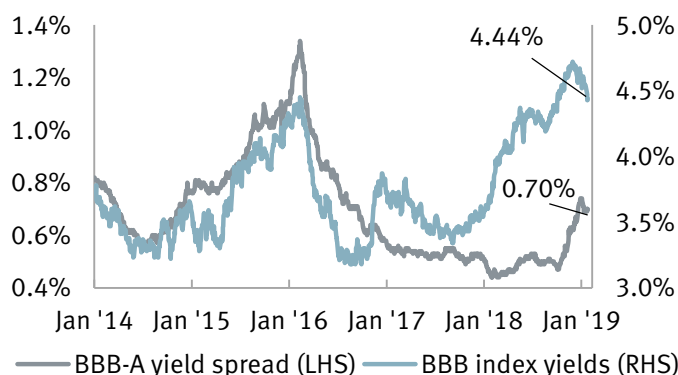
it makes sense to lock in 4%+ yields, near the highest levels markets have offered since 2011.

- The municipal bond market continued to post positive returns following December's 0.61% rally as principal and interest payments continued to outpace new supply. Looking forward, muni investors will have an opportunity to put new money to work as RBC Capital Markets projects a \$5B bump in new issuance to \$345B in 2019. The muni yield curve remains much steeper than the Treasury yield curve, and we recommend investors extend out into longer-dated munis to increase yield and invest at more attractive valuations.

Canada

- Government of Canada yields continued to move lower in January despite an improvement in global risk sentiment. The bond market is pricing in a slowdown of growth in Canada, driven by weaker energy prices and households that are expected to pull back on spending as they service high levels of debt. Barely one Bank of Canada rate hike is priced in for the rest of the cycle. Recent data suggest growth has indeed slowed in the fourth quarter. It

Value has emerged in BBB-rated corporate credit



Bias portfolios towards BBB-rated credit as the extra yield investors receive over A-rated credit has widened.

Source - RBC Wealth Management, Bloomberg; data through 1/26/19

is too early to tell if this is temporary or if economic slack may be opening up more permanently. Given we are at a later stage in the cycle, we think either scenario lends itself to prioritizing safety. We remain biased to discounted federal bonds and are wary of taking on excessive interest rate risk when inflation expectations are well below the five-year average.

- Investment-grade spreads have stabilized after their largest calendar year widening since 2008 as fixed income investors shunned credit risk in 2018. The Canadian new issue market is slowly reopening and our attention is firmly on the banks, which look to issue a considerable amount of Basel III eligible senior bonds (so-called “Bail-in” bonds). How the market digests this issuance is likely to set the tone for corporate credit in Canada this year. We continue to operate with a higher quality bias as we edge toward the end of the cycle.
- Preferred shares have bounced since hitting two-and-a-half-year lows in late December, but implied credit spreads remain elevated. We are finding a number of interesting opportunities but counsel selectivity given the mounting concerns of a global slowdown.

Continental Europe & U.K.

Europe

- The European Central Bank (ECB) left its forward guidance unchanged, but described growth risks as “tilted to the downside” due to “softer external demand and some country specific factors.” This suggests that the normalisation of monetary policy and a possible first interest rate hike may be further postponed beyond the current guidance. Much

has already been discounted in the market, with pricing of the first hike currently pointing to early 2020. The next set of ECB staff projections in March will likely downgrade inflation and GDP estimates further, making this expectation more entrenched, in our view.

- The ECB messaging further reinforces our expectation for German Bund yields to remain relatively range-bound for the foreseeable future. We continue to maintain our Market Weight exposure to European fixed income and a modest Overweight on corporate credit. Key to the latter will be the evolution of corporate fundamentals flowing from the moderation in economic growth.

U.K.

- In the U.K., recent comments from Bank of England (BoE) Governor Mark Carney that the Fed has moved rates into the neutral range will play into the BoE’s own plans to raise rates in the short-to-medium term.
- There are also other factors that are likely to push back expectations on monetary policy tightening towards the latter part of this year. While wage inflation has picked up and the labour market has tightened, with unemployment reaching 4%, both headline and core inflation have moderated and economic growth has slowed. This is also predicated around the Brexit fog clearing. For now, we expect Gilt yields to remain contained and maintain a Market Weight on U.K. Gilts and credit.

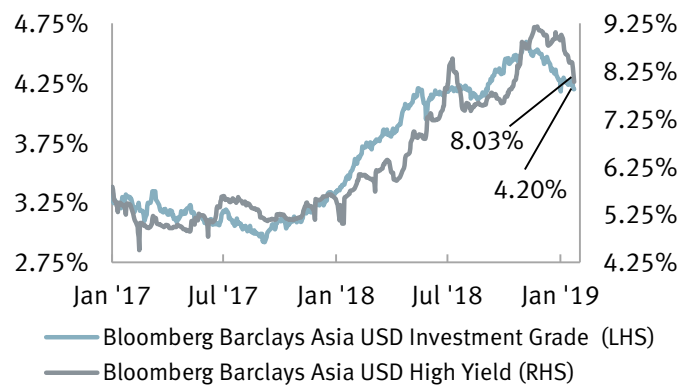
Asia

- While Asia credit spreads were mostly under pressure throughout 2018, in particular in the last quarter, the Asia credit market was well supported by the rebound in risky assets in January.

- However, we remain cautious as we are not yet convinced this rally can last for all of 2019. The pain may well return before the market improves on a more sustainable basis. We would wait before adopting an outright positive bias.
- We expect Asia credit spreads to trade range-bound over the next 12 months, allowing investors to receive coupons but little in the way of capital gains. The focus should be on avoiding defaults.
- After the correction in Q4 2018, we now prefer Asian high-yield compared to investment-grade bonds mainly due to attractive valuations. The significantly higher yield (about 8% for the J.P. Morgan JACI High Yield Index) offers a good return and the low duration acts as a comfortable buffer if the market corrects. We emphasize that credit quality differentiation has become even more important. Within high-yield, we prefer BB-rated names.
- A lot depends on China, which makes up around 50% of the market. Due to the ongoing trade war, we believe China will slow down the deleveraging process and seek to boost its domestic economy. The latest 100 basis points cut in banks' reserve requirement ratio confirms our view. This should help alleviate the tight financing conditions in China, benefiting the broader credit market.

We prefer Asian high-yield over investment-grade bonds

Bloomberg Barclays Asia USD bond index yields



At 8% yields, we view valuations as attractive in high-yield bonds and prefer BB-rated names.

Source - RBC Wealth Management, Bloomberg; data through 1/28/19

Currency forecasts

Currency pair	Current rate	Forecast Dec 2019	Change*
Major currencies			
USD Index	95.57	97.38	2%
CAD/USD	0.76	0.75	-1%
USD/CAD	1.31	1.33	2%
EUR/USD	1.14	1.16	2%
GBP/USD	1.31	1.25	-5%
USD/CHF	1.13	1.03	-9%
USD/JPY	108.89	125.00	15%
AUD/USD	0.72	0.67	-7%
NZD/USD	0.69	0.63	-9%
EUR/JPY	124.65	145.00	16%
EUR/GBP	0.87	0.93	7%
EUR/CHF	1.13	1.20	6%
Emerging currencies			
USD/CNY	6.69	7.50	12%
USD/INR	71.08	80.00	13%
USD/SGD	1.34	1.44	7%

* Defined as the implied appreciation or depreciation of the first currency in the pair quote.

Examples of how to interpret data found in the Market Scorecard.

Source - RBC Capital Markets, Bloomberg

U.S. dollar: Dimmer outlook

The 2018 uptrend in the U.S. dollar looks set to turn in 2019 as the prominent drivers of dollar strength fade. The easing of fiscal stimulus should usher in moderating U.S. growth, which alongside a less aggressive path of policy tightening points to more muted dollar performance in 2019. The addition of the U.S. government shutdown could be a harbinger of the political frictions to come, which, in turn, could further dampen dollar sentiment, in our opinion.

Euro: Bright spots remain

A deteriorating growth backdrop is keeping the euro at relatively depressed levels to start 2019. There remain bright spots, however, as building wage pressures and a modest growth recovery could see the central bank raise its key policy rate by year end. With financial markets having shifted away from anticipating such a policy move in 2019, we see scope for the euro to trend modestly higher closer to the end of the year.

British pound: Brexit bites

The risk of the U.K. leaving the European Union on March 29 without a deal appears low; however, given that this outcome remains possible—which would be significantly negative for the economy—we stay cautious on

the outlook for the pound. Should a deal be reached that would allow for a transition period, as we expect, sterling is likely to find support, although remain at low levels reflecting the lingering uncertainty over the future trade relationship with the EU.

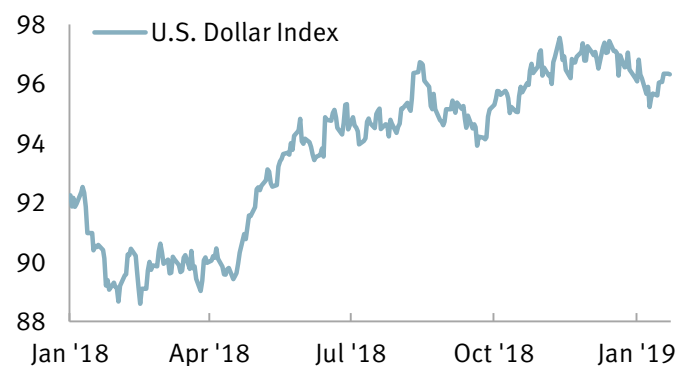
Canadian dollar: On pause

After losing more than 8% of its value against the U.S. dollar in 2018, the Canadian dollar kicked off the new year in recovery mode, posting the strongest gains amongst the G10 currencies. Firmer oil prices and improved risk appetite abetted the outperformance; however, economic headwinds on the back of energy price weakness will likely keep policy rates unchanged in early 2019, potentially limiting any further upside for the currency.

Japanese yen: Driving in neutral

A strong rally in the final weeks of 2018 saw the yen earn the status of being the only major currency to advance against the U.S. dollar last year. A dramatic shift lower in market expectations for the path of Federal Reserve rate hikes alongside a global equity rout underpinned the rally. Choppier market conditions in 2019 point to further support for the yen; however, domestic headwinds could cap any currency gains, in our view.

Tempering our U.S. dollar outlook for 2019



The U.S. dollar dominance of 2018 is likely to fade in 2019 as market conditions shift.

Laura Cooper
London, United Kingdom
laura.cooper@rbc.com

Source - Bloomberg, RBC Wealth Management

Commodity forecasts

	2019E	2020E
Oil (WTI \$/bbl)	55.85	64.00
Natural Gas (\$/mmBtu)	3.00	2.75
Gold (\$/oz)	1,300	1,300
Copper (\$/lb)	2.63	3.00
Soybean (\$/bu)	9.21	9.64
Wheat (\$/bu)	5.18	4.90

Source - RBC Capital Markets forecasts (oil, natural gas, gold, and copper), Bloomberg consensus forecasts (soybean and wheat)

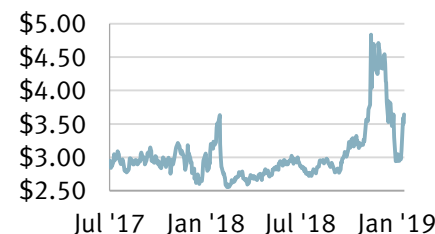
Oil — WTI: Down but not out

- Crude lost over a third of its value in Q4 and about 14% in 2018, driven by concerns over excess global supply and a slowdown in Chinese manufacturing activity. Effective January 2019, OPEC and its partners agreed to curtail production by 1.2 million barrels per day for a period of six months. RBC Capital Markets believes the pullback in oil prices has been overdone and is constructive on the outlook for 2019.



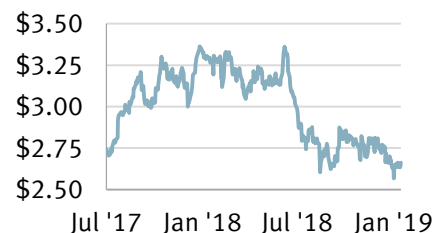
Natural gas — Qatar hero anyone?

- Qatar, an OPEC member for more than 50 years, left the organization effective January 2019. Qatar is focusing its efforts on LNG and plans to grow production from 77 million tonnes per annum (mtpa) to over 100 mtpa. Qatar's share of the global LNG supply (about 26% in 2018) is greater than the collective contribution of Russia's and Saudi Arabia's supply to the global oil market. In North America, lower storage levels led to a short-term price rally near end-2018. Inventories and prices have since normalized in early 2019.



Copper — Living up to its red nature

- Copper prices were dragged through the mud in 2018 (down approximately 20%) due to escalating trade disputes between the world's two largest economies and slower growth in China, which consumes about 50% of worldwide copper production. Prices will likely remain range-bound until evidence emerges that China's many stimulus measures over the past couple of quarters are having the desired effect on GDP growth.



Gold — Time to shine?

- Despite the return of volatility in 2018, the Fed's hawkish stance in 2018 effectively placed a ceiling on gold prices. Historically, gold and real interest rates have a strong negative correlation; thus, higher rates would likely be a drag on gold's performance. Last year the Fed hiked its overnight rate four times, raising the fed funds rate to a range of 2.25%–2.50%. The market sees the Fed as being more dovish in 2019.



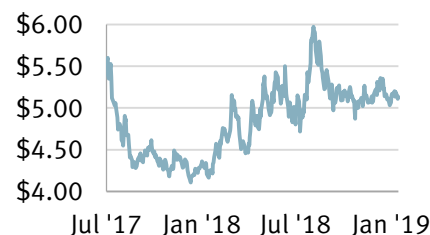
Soybean — Neutral sentiment

- Prices have rebounded by roughly 10% since hitting a low of \$8.14/bushel in 2018. The potential of lower yields in Brazil and rising harvest pressures in South America could provide momentum for prices in the near term. However, U.S.-China negotiations remain a larger uncertainty. Prices are unlikely to get too far ahead of themselves until clarity arrives on the latter.



Wheat — Warmer weather

- Some market participants believe Russia could cut exports following a drought that affected crops in 2018. This was quickly dismissed by its agriculture minister in mid-January; but, soft limits could be implemented to control supplies. Russia is the world's second-largest net exporter of wheat and shipments are expected to increase by 13% y/y, according to the Russian agriculture ministry.

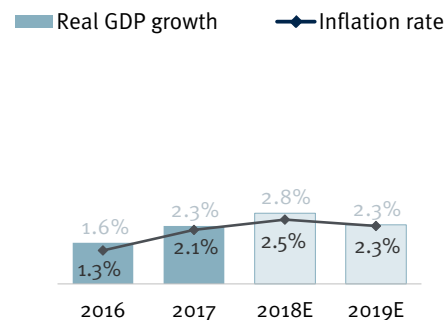


Richard Tan, CFA
Toronto, Canada
richard.tan@rbc.com

Source - RBC Wealth Management, Bloomberg; date range: 7/3/17–1/16/19

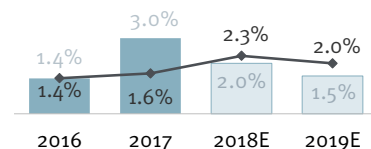
United States — Temporary reopening

- After 35 days, the government has temporarily reopened until February 15. The shutdown cost a tiny \$11B in Q1 GDP growth and delayed many economic data releases; however, investor focus remains on monetary policy and the U.S. & China trade dispute. Consumer confidence fell modestly, but business confidence rose and was reflected in the solid employment gains in November and December, now reinforced by 304,000 new hires in January.



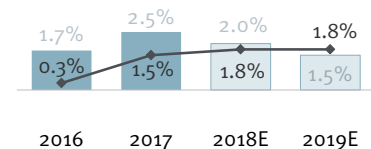
Canada — Cautious policy

- The BoC delivered a cautious tone for the second consecutive policy meeting, citing potential slack that might arise due to the recent drop in commodity prices. Such a development is expected, although not guaranteed, to have a temporary negative effect on growth and recent data (retail sales, wholesale trade) is supporting this. The labor market remains solid, core inflation is at target, but the economic outlook is somewhat uncertain.



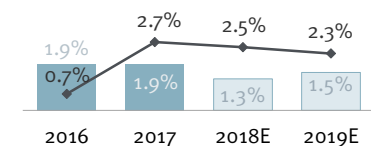
Eurozone — Growth slowdown

- ECB President Mario Draghi said the economic outlook looks weaker than anticipated, although not bad enough to warrant additional monetary stimulus. The IMF revised its eurozone 2019 growth forecast sharply lower, with the most serious stutter coming from Germany, revised lower by 0.6% to 1.3% y/y amid soft consumer demand and weak factory production after the introduction of stricter emission standards for cars.



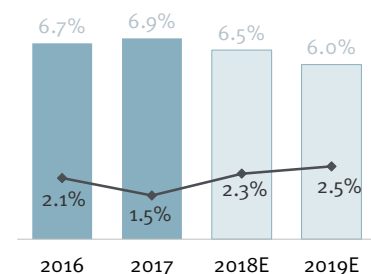
United Kingdom — Brexit uncertainty

- The Brexit drama continues. Prime Minister Theresa May ripped up her Brexit plan in a bid to keep her party united. A “Plan B” supported by Parliament will likely have a rough ride in the EU. Both industrial and manufacturing production data slumped; however, the U.K. manufacturing PMI surprisingly rose to six-month highs. The market has built in no expectations of a 2019 rate hike as the inflation outlook remains balanced around the 2% y/y target.



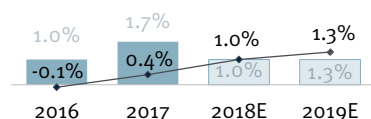
China — Tariff-induced slowdown

- China’s economy slowed for an eighth straight month as weaker global demand and decelerating factory production undercut growth; Q4 GDP growth fell to 6.4% y/y, the slowest pace since the financial crisis. Trade negotiations continued in late January despite the U.S. charging Huawei Technologies with stealing technology and violating sanctions on Iran. While progress has been made on trade deficits, disagreement on larger structural issues remains.



Japan — Policy unchanged

- The BoJ held the policy rate at -0.10% as well as left bond-buying amounts unchanged. Some BoJ members cited that recent stock market volatility might have been suggesting a potential economic downturn so careful monitoring needed. The economic outlook looks increasingly gloomy as weakening exports and a planned sales tax hike are expected to weigh on growth.



Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, RBC Global Asset Management

Market scorecard

Index (local currency)	Level	1 month	YTD	12 month
S&P 500	2,704.10	7.9%	7.9%	-4.2%
Dow Industrials (DJIA)	24,999.67	7.2%	7.2%	-4.4%
NASDAQ	7,281.74	9.7%	9.7%	-1.8%
Russell 2000	1,499.42	11.2%	11.2%	-4.8%
S&P/TSX Comp	15,540.60	8.5%	8.5%	-2.6%
FTSE All-Share	3,825.62	4.1%	4.1%	-7.5%
STOXX Europe 600	358.67	6.2%	6.2%	-9.3%
EURO STOXX 50	3,159.43	5.3%	5.3%	-12.5%
Hang Seng	27,942.47	8.1%	8.1%	-15.0%
Shanghai Comp	2,584.57	3.6%	3.6%	-25.7%
Nikkei 225	20,773.49	3.8%	3.8%	-10.1%
India Sensex	36,256.69	0.5%	0.5%	0.8%
Singapore Straits Times	3,190.17	4.0%	4.0%	-9.7%
Brazil Ibovespa	97,393.74	10.8%	10.8%	14.7%
Mexican Bolsa IPC	43,987.94	5.6%	5.6%	-12.8%
Bond yields	1/31/19	12/31/18	1/31/18	12 mo. chg
US 2-Yr Tsy	2.458%	2.488%	2.141%	0.32%
US 10-Yr Tsy	2.629%	2.684%	2.705%	-0.08%
Canada 2-Yr	1.775%	1.863%	1.838%	-0.06%
Canada 10-Yr	1.879%	1.967%	2.289%	-0.41%
UK 2-Yr	0.756%	0.752%	0.664%	0.09%
UK 10-Yr	1.219%	1.277%	1.510%	-0.29%
Germany 2-Yr	-0.564%	-0.610%	-0.526%	-0.04%
Germany 10-Yr	0.149%	0.242%	0.697%	-0.55%
Commodities (USD)	Price	1 month	YTD	12 month
Gold (spot \$/oz)	1,321.20	3.0%	3.0%	-1.8%
Silver (spot \$/oz)	16.06	3.7%	3.7%	-7.4%
Copper (\$/metric ton)	6,151.25	3.4%	3.4%	-13.1%
Uranium (\$/lb)	20.90	-0.5%	-12.6%	-7.7%
Oil (WTI spot/bbl)	53.79	18.5%	18.5%	-16.9%
Oil (Brent spot/bbl)	61.89	15.0%	15.0%	-10.4%
Natural Gas (\$/mmBtu)	2.81	-4.3%	-4.3%	-6.0%
Agriculture Index	289.41	1.9%	1.9%	1.2%
Currencies	Rate	1 month	YTD	12 month
US Dollar Index	95.5780	-0.6%	-0.6%	7.2%
CAD/USD	0.7619	3.9%	3.9%	-6.2%
USD/CAD	1.3125	-3.8%	-3.8%	6.6%
EUR/USD	1.1448	-0.2%	-0.2%	-7.8%
GBP/USD	1.3109	2.8%	2.8%	-7.6%
AUD/USD	0.7273	3.2%	3.2%	-9.7%
USD/JPY	108.8900	-0.7%	-0.7%	-0.3%
EUR/JPY	124.6500	-0.9%	-0.9%	-8.0%
EUR/GBP	0.8732	-2.9%	-2.9%	-0.2%
EUR/CHF	1.1381	1.1%	1.1%	-1.6%
USD/SGD	1.3456	-1.3%	-1.3%	2.6%
USD/CNY	6.6961	-2.7%	-2.7%	6.5%
USD/MXN	19.1056	-2.8%	-2.8%	2.7%
USD/BRL	3.6471	-6.0%	-6.0%	14.4%

Small caps and the Tech/Healthcare-heavy NASDAQ provide early 2019 U.S. leadership

U.S. interest rates hold steady after Fed meeting in late January

Oil prices rally as the U.S. establishes sanctions on Venezuela's largest producer

Equity returns do not include dividends, except for the Brazilian Ibovespa. Equity performance and bond yields in local currencies. U.S. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/USD is the exception). Currency returns quoted in terms of the first currency in each pairing. Examples of how to interpret currency data: CAD/USD 0.76 means 1 Canadian dollar will buy 0.76 U.S. dollar. CAD/USD -6.2% return means the Canadian dollar has fallen 6.2% vs. the U.S. dollar during the past 12 months. USD/JPY 108.89 means 1 U.S. dollar will buy 108.89 yen. USD/JPY -0.3% return means the U.S. dollar has fallen 0.3% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 1/31/19.

Research resources

This document is produced by the Global Portfolio Advisory Committee within RBC Wealth Management's Portfolio Advisory Group. The RBC Wealth Management Portfolio Advisory Group provides support related to asset allocation and portfolio construction for the firm's investment advisors / financial advisors who are engaged in assembling portfolios incorporating individual marketable securities. The Committee leverages the broad market outlook as developed by the RBC Investment Strategy Committee, providing additional tactical and thematic support utilizing research from the RBC Investment Strategy Committee, RBC Capital Markets, and third-party resources.

Global Portfolio Advisory Committee members:

Jim Allworth – Co-chair; Investment Strategist, RBC Dominion Securities Inc.

Kelly Bogdanova – Co-chair; Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group U.S., RBC Capital Markets, LLC

Frédérique Carrier – Co-chair; Managing Director, Head of Investment Strategies, Royal Bank of Canada Investment Management (U.K.) Limited

Mark Bayko, CFA – Head, Portfolio Management, RBC Dominion Securities Inc.

Craig Bishop – Lead Strategist, U.S. Fixed Income Strategies Group, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Laura Cooper – Head of FX Solutions and Strategy, Royal Bank of Canada Investment Management (U.K.) Limited

Janet Engels – Head of Portfolio Advisory Group U.S., RBC Wealth Management, RBC Capital Markets, LLC

Tom Garretson, CFA – Fixed Income Portfolio Strategist, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Christopher Girdler, CFA – Fixed Income Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group, RBC Dominion Securities Inc.

Patrick McAllister, CFA – Canadian Equities Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group – Equities, RBC Dominion Securities Inc.

Jay Roberts, CFA – Head of Investment Solutions & Products, RBC Wealth Management Hong Kong, RBC Investment Services (Asia) Limited

Alan Robinson – Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group – U.S. Equities, RBC Capital Markets, LLC

Alastair Whitfield – Head of Fixed Income - British Isles, Royal Bank of Canada Investment Management (U.K.) Limited

The RBC Investment Strategy Committee (RISC) consists of senior investment professionals drawn from individual, client-focused business units within RBC, including the Portfolio Advisory Group. The RISC builds a broad global investment outlook and develops specific guidelines that can be used to manage portfolios. The RISC is chaired by Daniel Chornous, CFA, Chief Investment Officer of RBC Global Asset Management Inc.

Additional Global Insight authors:

Bill Kuehn, CFA – Fixed Income Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Chun-Him Tam – Head of UHNW Solutions & Head of Fixed Income Asia, Royal Bank of Canada, Singapore Branch

Richard Tan, CFA – Canadian Equities Associate Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group – Equities, RBC Dominion Securities Inc.

Required disclosures

Analyst Certification

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Important Disclosures

In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC which is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada.

Non-U.S. Analyst Disclosure: Jim Allworth, Mark Bayko, Christopher Girdler, and Patrick McAllister, employees of RBC Wealth Management USA’s foreign affiliate RBC Dominion Securities Inc.; Frédérique Carrier, Laura Cooper, and Alastair Whitfield, employees of RBC Wealth Management USA’s foreign affiliate Royal Bank of Canada Investment Management (U.K.) Limited; Chun-Him Tam, an employee of Royal Bank of Canada, Singapore Branch; and Jay Roberts, an employee of RBC Investment Services (Asia) Limited contributed to the preparation of this publication. These individuals are not registered with or qualified as research analysts with the U.S. Financial Industry Regulatory Authority (“FINRA”) and, since they are not associated persons of RBC Wealth Management, they may not be subject to FINRA Rule 2241 governing communications with subject companies, the making of public appearances, and the trading of securities in accounts held by research analysts.

In the event that this is a compendium report (covers six or more companies), RBC Wealth Management may choose to provide important disclosure information by reference. To access current disclosures, clients should refer to <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2> to view disclosures regarding RBC Wealth Management and its affiliated firms. Such information is also available upon request to RBC Wealth Management Publishing, 60 South Sixth St, Minneapolis, MN 55402.

References to a Recommended List in the recommendation history chart may include one or more recommended lists or model portfolios maintained by RBC Wealth Management or one of its affiliates. RBC Wealth Management recommended lists include the Guided Portfolio: Prime Income (RL 6), the Guided Portfolio: Dividend Growth (RL 8), the Guided Portfolio: ADR (RL 10), the Guided Portfolio: All Cap Growth (RL 12), and former lists called the Guided Port-

folio: Large Cap (RL 7), the Guided Portfolio: Midcap 111 (RL 9), and the Guided Portfolio: Global Equity (U.S.) (RL 11). RBC Capital Markets recommended lists include the Strategy Focus List and the Fundamental Equity Weightings (FEW) portfolios. The abbreviation ‘RL On’ means the date a security was placed on a Recommended List. The abbreviation ‘RL Off’ means the date a security was removed from a Recommended List.

Distribution of Ratings

For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm’s own rating categories. Although RBC Capital Markets, LLC ratings of Top Pick/Outperform, Sector Perform, and Underperform most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same

Rating	Count	Percent	Investment Banking Services Provided During Past 12 Months	
			Count	Percent
Buy [Top Pick & Outperform]	876	54.92	234	26.71
Hold [Sector Perform]	642	40.25	111	17.29
Sell [Underperform]	77	4.83	7	9.09

because our ratings are determined on a relative basis.

Explanation of RBC Capital Markets, LLC Equity Rating System

An analyst’s “sector” is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst’s view of how that stock will perform over the next 12 months relative to the analyst’s sector average.

Ratings: Top Pick (TP): Represents analyst’s best idea in the sector; expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio.

Outperform (O): Expected to materially outperform sector average over 12 months. **Sector Perform (SP):** Returns expected to be in line with sector average over 12 months.

Underperform (U): Returns expected to be materially below sector average over 12 months. **Restricted (R):** RBC policy precludes certain types of communications, including an investment recommendation, when RBC is acting as an advisor in certain merger or other strategic transactions and in certain other circumstances. **Not Rated (NR):** The rating, price targets and estimates have been removed due to applicable legal, regulatory or policy constraints which may include when RBC Capital Markets is acting in an advisory capacity involving the company.

Risk Rating: The **Speculative** risk rating reflects a security’s lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or

limited operating history that result in a higher expectation of financial and/or stock price volatility.

Valuation and Risks to Rating and Price Target

When RBC Wealth Management assigns a value to a company in a research report, FINRA Rules and NYSE Rules (as incorporated into the FINRA Rulebook) require that the basis for the valuation and the impediments to obtaining that valuation be described. Where applicable, this information is included in the text of our research in the sections entitled “Valuation” and “Risks to Rating and Price Target”, respectively.

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of RBC Capital Markets, LLC, and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets, LLC and its affiliates.

Other Disclosures

Prepared with the assistance of our national research sources. RBC Wealth Management prepared this report and takes sole responsibility for its content and distribution. The content may have been based, at least in part, on material provided by our third-party correspondent research services. Our third-party correspondent has given RBC Wealth Management general permission to use its research reports as source materials, but has not reviewed or approved this report, nor has it been informed of its publication. Our third-party correspondent may from time to time have long or short positions in, effect transactions in, and make markets in securities referred to herein. Our third-party correspondent may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any company mentioned in this report.

RBC Wealth Management endeavors to make all reasonable efforts to provide research simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. In certain investment advisory accounts, RBC Wealth Management or a designated third party will act as overlay manager for our clients and will initiate transactions in the securities referenced herein for those accounts upon receipt of this report. These transactions may occur before or after your receipt of this report and may have a short-term impact on the market price of the securities in which transactions occur. RBC Wealth Management research is posted to our proprietary Web sites to ensure eligible clients receive coverage initiations and changes in rating, targets, and opinions in a timely manner. Additional distribution may be done by sales personnel via e-mail, fax, or regular mail. Clients may also receive our research via third-party vendors. Please contact your RBC Wealth Management Financial Advisor for more information regarding RBC Wealth Management research.

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management’s

Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our website at <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2>. Conflicts of interests related to our investment advisory business can be found in Part 2A Appendix 1 of the Firm’s Form ADV or the RBC Advisory Programs Disclosure Document. Copies of any of these documents are available upon request through your Financial Advisor. We reserve the right to amend or supplement this policy, Part 2A Appendix 1 of the Form ADV, or the RBC Advisory Programs Disclosure Document at any time.

The authors are employed by one of the following entities: RBC Wealth Management USA, a division of RBC Capital Markets, LLC, a securities broker-dealer with principal offices located in Minnesota and New York, USA; by RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Toronto, Canada; by RBC Investment Services (Asia) Limited, a subsidiary of RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Hong Kong, China; and by Royal Bank of Canada Investment Management (U.K.) Limited, an investment management company with principal offices located in London, United Kingdom.

Third-party disclaimers

The Global Industry Classification Standard (“GICS”) was developed by and is the exclusive property and a service mark of MSCI Inc. (“MSCI”) and Standard & Poor’s Financial Services LLC (“S&P”) and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

References herein to “LIBOR”, “LIBO Rate”, “L” or other LIBOR abbreviations means the London interbank offered rate as administered by ICE Benchmark Administration (or any other person that takes over the administration of such rate).

Disclaimer

The information contained in this report has been compiled by RBC Wealth Management, a division of RBC Capital Markets, LLC, from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Wealth Management, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Wealth Management’s judgment as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment

advice. This material is prepared for general circulation to clients, including clients who are affiliates of Royal Bank of Canada, and does not have regard to the particular circumstances or needs of any specific person who may read it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. To the full extent permitted by law neither Royal Bank of Canada nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior consent of Royal Bank of Canada. In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC. Additional information is available upon request.

To U.S. Residents: This publication has been approved by RBC Capital Markets, LLC, Member NYSE/FINRA/SIPC, which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. RBC Capital Markets, LLC, is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC. International investing involves risks not typically associated with U.S. investing, including currency fluctuation, foreign taxation, political instability and different accounting standards.

To Canadian Residents: This publication has been approved by RBC Dominion Securities Inc. RBC Dominion Securities Inc.* and Royal Bank of Canada are separate corporate entities which are affiliated. *Member-Canadian Investor Protection Fund. ©Registered trademark of Royal Bank of Canada. Used under license. RBC Wealth Management is a registered trademark of Royal Bank of Canada. Used under license.

RBC Wealth Management (British Isles): This publication is distributed by Royal Bank of Canada Investment Management (U.K.) Limited and RBC

Investment Solutions (CI) Limited. Royal Bank of Canada Investment Management (U.K.) Limited is authorised and regulated by the Financial Conduct Authority (Reference number: 146504). Registered office: Riverbank House, 2 Swan Lane, London, EC4R 3BF, UK. RBC Investment Solutions (CI) Limited is regulated by the Jersey Financial Services Commission in the conduct of investment business in Jersey. Registered office: Gaspé House, 66-72 Esplanade, St Helier, Jersey JE2 3QT, Channel Islands, registered company number 119162.

To Hong Kong Residents: This publication is distributed in Hong Kong by Royal Bank of Canada, Hong Kong Branch which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission ('SFC'), and RBC Investment Services (Asia) Limited, which is regulated by the SFC. Financial Services provided to Australia: Financial services may be provided in Australia in accordance with applicable law. Financial services provided by the Royal Bank of Canada, Hong Kong Branch are provided pursuant to the Royal Bank of Canada's Australian Financial Services Licence ('AFSL') (No. 246521).

To Singapore Residents: This publication is distributed in Singapore by the Royal Bank of Canada, Singapore Branch, a registered entity licensed by the Monetary Authority of Singapore. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance. If you have any questions related to this publication, please contact the Royal Bank of Canada, Singapore Branch. Royal Bank of Canada, Singapore Branch accepts responsibility for this report and its dissemination in Singapore.

© 2019 RBC Capital Markets, LLC - Member NYSE/FINRA/SIPC

© 2019 RBC Dominion Securities Inc. - Member Canadian Investor Protection Fund

© 2019 RBC Europe Limited

© 2019 Royal Bank of Canada

All rights reserved

RBC1524